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Chair: Scientific Authority South African
National Biodiversity Institute
Attention: Ms M Pfab
Private Bag X101
PRETORIA 0001
South Africa

2 September 2019

Dear Ms M Pfab,

**'Non -detriment findings for *Ceratotherium simum simum* (white rhinoceros)
- Consultation in Terms of Section 62(3) of the National Environmental
Management: Biodiversity Act, 2004 (Act No. 10 of 2004)'**

Please find below *"written scientific information relating to"* the proposed Government Notice 1105 *"to publish non-detriment findings for *Ceratotherium simum simum* (white rhinoceros) made by the Scientific Authority"* as notified in Government Gazette, Vol. 650, No. 42660, Department of Environmental Affairs (DEA), dated 22 August 2019.

Please find International Wildlife Bond's (IWB's) submission for consideration by the SANBI here within (submitted by e-mail to m.pfab@sanbi.org.za).

Yours sincerely,

Stephen Alan Wiggins

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Submission to the consultation on the “Non-detriment findings for *Ceratotherium simum* *simum* (white rhinoceros) - Consultation in Terms of Section 62(3) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)”

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1 Introduction

Before any "written scientific information" can be debated, we need a working definition of 'science' so one can determine relevant "scientific information" for consideration within the referenced consultation:

"Science is the pursuit and application of knowledge and understanding of the natural and social world following a systematic methodology based on evidence" - [Science Council](#)

Furthermore, 'science' is not static, but is based upon the best available evidence and should be impartial to politics, or wedded (biased) to any theoretical dogma (such as 'sustainable utilisation') - credible 'science' is impartial:

"Speaking as a scientist, cherry picking evidence is unacceptable.....when public figures abuse scientific argument.....to justify policies that they want to implement for other reasons, it debases scientific culture" - [Stephen Hawking](#)

Based upon the above, let's explore [Notice 1105](#) "to publish non-detriment findings [(NDF)] for *Ceratotherium simum simum* (white rhinoceros) made by the Scientific Authority" and the recommendation to explore rhino horn trade "for primarily non-commercial" purposes.

Notice 1105, Table 1 NDF 6 "National Abundance" surmises that there are some 20,375 (Emslie et al., 2016) white rhinoceros within South Africa, and the "largest captive breeding operation for white rhinoceros has a population of 1,517 (as of November 2017) animals."

However, is it estimated that the captive rhinoceros population within South Africa totals some 6,000 animals:

".....some 6,000 rhinos live on privately owned farms (Knight 2016, DEA 2014). Many of them are regularly dehorned in anticipation of trade and dependent on supplementary food (Warren 2015)" - "[Pointless - A quantitative assessment of supply and demand in rhino horn and a case against trade](#)," NABU International Foundation for Nature, paper authored by Barbara Mass.

The "Summary of Findings" given in the referenced Notice 1105/Gazette 42660 concludes:

"It is however highly unlikely that current investment from government, external donors and private rhinoceros owners in the protection of this species can be sustained



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*in the long term, and it is recommended that a legal trade in rhinoceros horn as an alternative source of funds be explored. The export, **for primarily non-commercial purposes**, of rhinoceros horn that has been legally sourced, either through natural mortalities and/or horn harvest from wild populations, or from captive breeding facilities, will not be detrimental to the survival of the species in the wild provided that (1) the income derived from these exports contributes directly to the conservation of wild rhinoceros populations and (2) the captive breeding facilities meet the Scientific Authority's approved criteria for the captive breeding of white rhinoceros. Considering the data and information presented in this NDF, it is clear that *C. simum simum* does not meet the biological criteria for inclusion in Appendix I of CITES and a proposal to effect a straight Appendix II listing (i.e. without an annotation) can be considered. The registration of captive breeding facilities in accordance with CITES Resolution Conf. 12.10 (Rev. CoP15) in order to allow for the commercial trade in rhinoceros horn can also be considered.”*

It would appear that the intent of Notice 1105 is to utilise the assertion that “*specimens bred in captivity*” are only afforded Appendix II protection under the Convention on International Trade in Endangered Species of Flora and Fauna (CITES) - Notice 1105 suggests that a blanket Appendix II protection of rhinoceros bred in captivity would permit the export of harvested/natural attrition rhino horn, in addition to the current permission to export live rhinos and hunting trophies of wild/captive source:

*“The South African population of *Ceratotherium simum simum* (white rhinoceros) is included in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), for the exclusive purpose of allowing international trade in live animals to appropriate and acceptable destinations and the export of hunting trophies. All other specimens, including the horn, are deemed to be specimens of species included in Appendix I, meaning that the export of specimens for commercial purposes is prohibited (Article III). **However, specimens bred in captivity for commercial purposes are deemed to be specimens of species included in Appendix II (Article VII) of CITES and therefore may be traded.** In terms of Article IV of the Convention, an export permit shall only be granted for an Appendix II species when a Scientific Authority of the State of export has advised that such export will not be detrimental to the survival of that species.”*

The [Convention first applied to *Ceratotherium simum simum* \(white rhinoceros\) on 1 July 1975, with the species listed at Appendix I](#). However, on 16 February 1995, South Africa's



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white rhinoceros population (wild or captive) received exemption to an Appendix II listing, with the caveat that the exemption was:

*"For the exclusive purpose of allowing international trade in live animals to appropriate and acceptable destinations and hunting trophies. **All other specimens [including any harvested or natural attrition stockpiled rhinoceros' horn and derivative product] shall be deemed to be specimens of Appendix I and the trade in them shall be regulated accordingly.**"*

In 1977, CITES introduced a ban on all international commercial trade in rhinoceros horn and their products - where under [Article I](#) definitions "'Trade" means export, re-export, import..."

This 1977 ban has not been rescinded by CITES since 1977, despite some CITES signatory countries (Parties) challenging the ban on commercial trade in rhinoceros horn - most recently at the CITES, eighteenth Conference of the Parties (CoP 18) held in Geneva, August 2019:

At the CoP18, Proposal 8 was [rejected at the committee \(25 August 2019\) and plenary \(27 August 2019\) stages](#). The Kingdom of Eswatini (formerly Swaziland, which made a similar submission to [CoP17 with Proposal 7](#)) [resubmitted a submission, Proposal 8, "To remove the existing annotation on the Appendix II listing of Eswatini's southern white rhino population"](#) and for:

"... Eswatini to sell from existing stock 330 kg of rhino horn to licenced retailers in the Far East and also up to 20 kg p.a., including harvested horn, to those retailers"

Therefore, as recently as the 27 August 2019, CITES signatories have again rejected any international rhinoceros horn trade proposals on the grounds that such trade is likely to be detrimental to the species.

Since the CoP18 rejection of Proposal 8 on 25/27 August 2019, 40 years after CITES 1977 ban on international commercial trade in rhinoceros horn and derivative products, 24 years since South Africa's 1995 white rhinoceros population (wild or captive) received a caveated exemption to an Appendix II listing, Notice 1105 now seeks to overturn the 1995 caveat set for South Africa's white rhinoceros population's Appendix II listing – namely:

Notice 1105 seeks to apply CITES [Article VII, Paragraph 4](#):



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*“Specimens of an animal species included in Appendix I bred in captivity for **commercial purposes**, or of a plant species included in Appendix I artificially propagated for commercial purposes, shall be deemed to be specimens of species included in Appendix II.”*

Whereby, the South African National Biodiversity Institute’s (SANBI’s) hypothesis is that Article VII, Paragraph 4 somehow overturns the [February 1995 exemption South Africa’s white rhinoceros population to an Appendix II listing](#) where the following caveat remains valid:

“All other specimens [including any harvested or natural attrition stockpiled rhinoceros’ horn and derivative products] shall be deemed to be specimens of Appendix I and the trade in them shall be regulated accordingly” – ie. whether the intended trade is commercial, or non-commercial, this caveat to the Appendix I listing (and CITES 1977 trade ban) applies to rhinoceros horn and derivative product.

Therefore, it is disputed that the assertion made at Notice 1105 statement that *“specimens bred in captivity for commercial purposes are deemed to be specimens of species included in Appendix II (Article VII) of CITES **and therefore may be traded**”* can somehow overturn the caveat set against such trade in the 1995 exemption of South Africa’s white rhinoceros populations.

In addition, Notice 1105 is claiming that proposed trade is only being orchestrated *“for **primarily non-commercial purposes**”* (it is duly noted that this is not a definitive *“non-commercial,”* but only *“primarily non-commercial”* which would suggest leeway to accommodate some element of *“commercial purpose”* within the trade envisaged by Notice 1105).

So, [Article VII, Paragraph 4](#) would not appear to be applicable anyway, as it only applies to *“animal species included in Appendix I bred in captivity for **commercial purposes**.....”*:

South African white rhinoceros bred in captivity can’t be bred for exclusively commercial purposes to satisfy Article VII, Paragraph 4 whilst simultaneously, the harvested horns from the same captive bred rhino are somehow deemed only to be traded for non-commercial purposes.



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The proposed rhino horn trade to be explored within Notice 1105 is either being proposed to facilitate trade for non-commercial, or commercial purpose. It can't be both, or it can't be commercial trade poorly disguised as "*primarily non-commercial*:"

"The term 'commercial purposes' should be defined by the country of import as broadly as possible so that any transaction which is not wholly 'non-commercial' will be regarded as 'commercial'" - [CITES Resolution Conf. 5.10 \(Rev. CoP15\)](#)

Clearly, the whole spirit of Notice 1105 "*The export, **for primarily non-commercial purposes, of rhinoceros horn***" is a poor attempt to disguise potential international rhino horn trading, in contravention of the [February 1995 exemption South Africa's white rhinoceros population to an Appendix II listing](#) and in contravention of the CITES 1977 ban on all international commercial trade in rhinoceros and their products - where under [Article I](#) definitions "'Trade' means export, re-export, import..."

Regardless, of the above 'anomaly' in Notice 1105's logic and the contestable reliance of Notice 1105 on the applicability of [Article VII, Paragraph 4](#), there are also a number of elements within the Notice 1105 that have strong scientific counter arguments. These counter arguments suggest any trade in rhinoceros horn could be detrimental to the species and therefore, any export permit would not be permitted by CITES regardless of any "**for primarily non-commercial purposes**" intent whether genuine, or disingenuous.

1.1 The Need for Income from a Legal Rhino Horn Trade

Notice 1105 states "*It is however highly unlikely that current investment from government, external donors and private rhinoceros owners in the protection of this species can be sustained in the long term.*"

The financial contribution private rhinoceros owners (captive bred rhino) make to the protection of the wild species is questionable, when these private rhinoceros owners businesses are commercial endeavours – which they have to be to meet the overriding [Article VII, Paragraph 4](#) "*commercial purposes*" criteria to make the use of this Article applicable. Perhaps the private rhinoceros owners' commercial burden of maintaining 6,000 privately owned rhinoceros (bred primarily for speculative gain and the hope of lucrative international trade) is perhaps the overriding motivation behind Notice 1105's intent to trade rhinoceros horn?



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This is not dis-similar from the DEA's [unlawful](#) 'lion bone trade' quota being established based upon lion breeders' stockpiles/commercial ambitions, not science or any altruistic conservation imperative - ".....because they [the lion breeders] have surplus stockpiles of lion bones and they want to get rid of them" - "[Dodgy skeleton traders and lion slaughterhouses exposed in damning report](#)," Don Pinnock, Daily Maverick, 19 July 2018

It should be borne in mind, that no one forced any rhino breeder to breed rhino, and/or breed rhino numbers to a financially unsustainable levels in the speculative, commercial hope that one day the CITES 1977 ban on all international commercial trade in rhinoceros horn and derivative products would be lifted (and the rhino breeders and the State would make "*stupendous*" financial gains from commercial sales of stockpiled rhino horn):

The idea behind [Rhino Coin](#) is to create a speculative index (as per any cryptocurrency) for rhino horn based upon the buy/sell orders for the underlying physical commodity - rhino horn held in a vault. Of course, those seeking to profit would like to see the index rise, embracing the old trading adage buy low, sell high.....the suggestion by those promoting Rhino Coin being speculators are "[betting that the international rhino horn trade ban will one day fall away, and that horn can then be sold at a stupendous mark-up in Asia.](#)"

Note: Rhino Coin is developed and promoted in association with leading rhino farmer and pro-trade advocate John Hume.

Such breeding/stockpiling endeavours were no doubt established with the prospect of profiteering from rhino horn looking commercially favourable in the future, not because of some purely altruistic imperative to protect and conserve the wild species.

The fact that such captive breeding business ventures have not reached fruition and have the increasing burden of financing anti-poaching measures, should not be used as an excuse to force through a trade mechanism that has no scientific merit – ie. there is scientific proof counter to the SANBI's evidence within Notice 1105 Table 1, NDF 25 "*Effectiveness of strict protection measures*" – ie. the proposed legal trade in rhino horn could be detrimental to the species.

There is an implied assumption within the SANBI's evidence such trade "*will not be detrimental to the survival of the species*" if certain pre-conditions are met. But the pre-conditions proposed do not in themselves provide any guarantees such rhino horn trade "*will not be detrimental to the survival of the species.*"



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1.2 *"(1) the income derived from these exports contributes directly to the conservation of wild rhinoceros populations"*

Where is the SANBI's evidence that income derived by "these exports" (be that from private, or State-owned rhino horn stockpiles and harvested rhino horn re-supply) will contribute directly to the conservation of wild rhinoceros populations and such income not absorbed in profit taking, or diverted into other State funding unrelated to wild rhinoceros' conservation? Where is the mechanism to guarantee such a claim?

Where is the acknowledgment of the science/evidence (given at Paragraph 2 below) that any rhinoceros horn trade could potentially increase the threat to rhinoceros (wild/captive) by stimulating demand, potentially increasing the commodity value of rhino horn (as demand is legitimised) and thus increase the poaching risk to wild and captive rhinoceros?

1.3 *"(2) the captive breeding facilities meet the Scientific Authority's approved criteria for the captive breeding of white rhinoceros"*

One only has to look at the DEA's failure to even consider animal welfare in the setting of the 'lion bone trade' quota to see that animal welfare is not a priority when it comes to 'sustainable utilisation.'

In August 2019, the Pretoria High Court concluded ([Judgment, Case No. 86515/2017, dated 6 August 2019](#)) that the DEA's lion bone quotas set for 2017/18 were unlawful and unconstitutional because animal welfare was not considered (by the then Minister) to be a function in the Minister's decision making – the DEA's approach has been proven to be a fallacy in contravention of the Republic of South Africa's Constitution.

The lack of adequate regulation of animal welfare within privately owned, captive breeding facilities is clearly illustrated by the fact that the self-declared, independent custodians of lion breeding welfare, the South African Predator Association (SAPA) own council member, Jan Steinman is being prosecuted for animal cruelty:

"Although SAPA [[South African Predator Association](#) - the Third Respondent in the above case] claims that no welfare issues exist among their member lion



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facilities, earlier this year, as an example to the contrary, the owner of a facility in the North West Province (a SAPA member and member of their Council [[Jan Steinman](#)]) was charged by the NSPCA with animal cruelty. Inspectors found 27 lions with severe mange, two lion cubs unable to walk due to Meningoencephalitis, obese caracal unable to groom themselves, overcrowded and filthy enclosures, inadequate shelter, lack of water, and parasitic conditions” - [“Public Participation Submission of the Coalition to Stop the Captive Breeding and Keeping of Lions and Other Big Cats for Commercial Purposes,”](#) June 2019

In March 2019, the [Department of Environment, Forestry and Fisheries \(DEFF\)](#) (officially charged with overseeing welfare of captive bred lion facilities) reported that nearly 40% of the 227 registered lion breeding facilities inspected in four of the Provinces were non-compliant with regulations and many were operating with expired permits. Yet the vast majority of the latter expired permits were subsequently renewed without further follow-up recommendations, penalty or work to ensure full on-going compliance. How does this poor standard of oversight instil any confidence that the DEFF is any better at overseeing captive rhino breeding facilities?

If the proposed rhino horn trade stimulates further expansion of rhino breeders in South Africa, where is the evidence/trust that safeguards are in place within South Africa to ensure animal welfare is at the forefront of the DEFF’s systems/thinking, or that any self-declared custodian of captive animal welfare can be trusted?

The National Council of SPCAs is not convinced that the re-opening of the domestic rhino horn trade in 2015 helps animal welfare, let alone any *“primarily for non-commercial”* purposes international trade now proposed:

“We fear that if the judgment stands, a further consequence will be our rhino will become farmed animals. Unethical practices may be used to increase profits, which are likely to include confining animals to the smallest spaces possible, feeding animals unnatural diets, and physically altering or maiming animals to prevent them from injuring one another when confined in limited spaces.”

“Above all, rhinos are wild animals. Captivity, confinement and manipulation are foreign and stressful to them” - [NSPCA](#)



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1.4 Introductory Conclusions

The SANBI's recommendation *"that a legal trade in rhinoceros horn as an alternative source of funds be explored"* would appear to be based only on cherry-picked claims that such trade will be non-detrimental to the species, to support a pro-trade policy stance:

To reiterate *"Speaking as a scientist, cherry picking evidence is unacceptable.....when public figures abuse scientific argument.....to justify policies that they want to implement for other reasons, it debases scientific culture"* - [Stephen Hawking](#)

There is a statement within Notice 1105 that:

"A plethora of peer-reviewed papers recently published in the scientific literature also argue for a legal trade in rhinoceros horn to establish a legal, well-regulated international market for trading rhinoceros horn (Biggs et al., 2013; Conrad, 2012; Di Minin et al., 20'15; Ferreira, Pfab & Knight, 2014). Ayling (2013) further argues that "where the knowledge base is poor and existing strategies seemingly ineffectual, one can certainly argue under a precautionary approach that any action that could reduce poaching and quash the illegal trade ought to be tried."

This 'pro-trade' evidence is not fully expanded, or specific examples of success in other wildlife trade ('sustainable utilisation') scenarios cited – or any reference to the debacle that is the 'lion bone trade' perhaps indicating that such pro-trade *"ought to be tried"* optimism is ill founded in the face of past corruption, incompetence and poorly regulated international trading/animal welfare in wildlife commodities emanating from South Africa.

Table 1, NDF 25 *"Effectiveness of strict protection measures"* of Notice 1105 references Di Minin, E., Laitila, J., Montesino-Pouzols, F., Leader-Williams, N., Slotow, R., Goodman, P.S., Conway, A.J. and Moilanen, A., 2015. *"Identification of policies for a sustainable legal trade in rhinoceros horn based on population projection and socioeconomic models"* Conservation Biology, 29:545 -5 as support for a legal rhino horn trade.



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Enrico Di Minin, an economist at the University of Helsinki, stated in the referenced study that the trade in rhino horn could bring "\$717m USD per annum" to South Africa's economy and help protect its rhino populations. However, this study failed to consider that there could be any link between encouraging a 'legal' trade whilst simultaneously stimulating the negative species' conservation impact of illicit trade to also profit from infiltrating the 'legal' market and the potential demand rise/profitting envisaged. Therefore, this study is hardly a sound endorsement of policy for legal trade in rhinoceros' horn.

The recommendation to explore such trade as a means to help rhino breeders fund their operations is explored at Notice 1105 Table 1, NDF 25 *"Effectiveness of strict protection measures"*, that *"a large portion of the rhinoceros security and enforcement budgets in a number of provinces are funded by international donors and are thus at risk of donor fatigue."* There is a theory espoused within Notice 1105 that any rhino horn trade income could be used to subsidise and fund security.

However, there is a body (a plethora) of science/evidence to suggest any such rhino horn trade could have potentially negative impacts upon species' conservation (explored at Paragraphs 2 and 3 below) and a detrimental impact on species' survival.

Plus, there is the a lack of trust in the ability of the DEFF to prioritise and adequately ensure animal welfare with its [unlawful](#) pursuit of wildlife exploitation in the name of *"sustainable utilisation"* – namely the abhorrent captive lion breeding and lion bone trade industry.



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2 Stimulation of Demand for Rhino Horn

The non-detrimental finding (NDF) analysis contained in the referenced Notice 1105/Gazette 42660, Table 1, NDF 25 *"Effectiveness of strict protection measures"* considers a one-sided review of the likely impact of the probable stimulation of demand from instigating a legal, international rhino horn trade (supposedly for *"non-commercial purposes"*) and the potential impact on the poaching of rhinoceros (both wild and captive/farmed).

There is credible science that says any legal trade will increase profiteering, but not conservation:

Douglas J. Crookes, James N. Blignaut (Department of Economics, University of Pretoria) in their 2015 paper, "[Debunking the myth that a legal trade will solve the rhino horn crisis: A system dynamics model for market demand](#)" concluded *"we find that a legal trade [in rhino horn] will increase profitability, but not the conservation of rhino populations."*

Let's explore four main areas regarding the non-conformist (illicit) market for rhino horn:

- Rhino Horn Price
- Demand Management and Case Studies (elephant ivory and the vicuña)
- Countering Illegal Markets for Rhino Horn
- Can Harvested Rhino Horn Meet Demand if Rhino Horn is 'Destigmatised'?

2.1 Rhino Horn Price

The SANBI (at Notice 1105, Table 1, NDF 25 *"Effectiveness of strict protection measures"*) states:

"MacMillan et al. (2017), after interviewing 1,000 animal traditional medicine (ATM) users in Vietnam concluded that....the introduction of a legal supply of rhinoceros horn has the potential to 'crowd out' rhinoceros horns sourced from poachers..." because of "an anticipated overall fall in price due to the loss of prestige and exclusivity of rhinoceros horn within a legal and regulated trade."

It is noted that the wisdom gathered by *"MacMillan et al. (2017)"* is based upon ATM users' views, not economists, academics or those familiar with non-conformist (illicit)



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market forces. Therefore, how much weight should be given to ATM users' laymen opinions?

The assumption (that ".....legal supply of rhinoceros horn has the potential to 'crowd out' rhinoceros horns sourced from poachers" because of resulting reduced commodity prices) is not supported by economic professionals within academia:

Douglas J. Crooks, James N. Blignaut (Department of Economics, University of Pretoria) concluded that *"demand is relatively insensitive to price...The system dynamics model we developed, indicates that demand is not sensitive to changes in the price of rhino horn. This is consistent with the observations of Milner-Gulland (1993). The implication of this is that lifting the trade ban, even if it results in a reduction in rhino horn price, will not alleviate demand"* - "[Debunking the myth that a legal trade will solve the rhino horn crisis: A system dynamics model for market demand](#)," Economic Research Southern Africa (ERSA), D. J. Crooks and J. N. Bilgnault, Journal for Nature Conservation, Elsevier, Pretoria, 2015

So even if the intention of any legal trade in rhino horn is to reduce the price of the commodity and thus try to disincentivise poaching by reducing its profitability, this leads to a number of flaws in that theory:

- In the DEA's March 2019 presentation, "[Demand Management](#)" it was emphasised that a "[targeted message is needed to change the perceptions on rhino horn in the various audiences](#)" - to reduce the market price of rhino horn to counter the message to poachers that the "price of horn is high" and that "there is money in it" and also to deter speculation that "there is a market" and "rhino are going extinct." This suggests that the aim of any legal trade is to reduce the price for rhino horn.
- Where is the evidence that poaching will not increase regardless of any drop in the value of rhino horn as a commodity, ie. there could be increased poaching volumes to maintain profitability regardless of price reductions?
- But, reducing price can/will increase demand, as rhino horn could potentially become more affordable to a previously economically excluded market element and short-cut the rhino to extinction:

".....if more legal horn goes on the market not only in SA but in Vietnam and China it would create a niche for people who, in the past, could not afford rhino



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horn being sold by black-market dealers. Not only are you increasing the market base in countries that consume the horn but you will make it more affordable, which means the demand for rhino horn is going to go up.... the risk is that if demand increases as more people buy rhino horn and legal trade fails to meet the demand, poaching will spike. Countries with smaller populations of wild rhino will be hardest-hit as they don't have the resources to defend their herds" - ["The economics of rhino horns,"](#) Business Live, 31 August 2017 - Joseph Okori, the Southern Africa Director of the International Fund for Animal Welfare

- However, the consensus among pro-trade advocates would appear to contradict the DEA's 'price reduction philosophy.' Leading pro-trade advocates believe that opening up legal trade will lead to a speculative return for anyone invested in rhino horn, ie. the value of rhino horn will rise, with a *"stupendous mark-up..."* So, this suggests that the private rhino owners' expectations from a legal market are counter to the DEA's stated aim to reduce rhino horn prices:

The idea behind [Rhino Coin](#) is to create a speculative index (as per any cryptocurrency) for rhino horn based upon the buy/sell orders for the underlying physical commodity - rhino horn held in a vault. Of course, those seeking to profit would like to see the index rise, embracing the old trading adage buy low, sell high.....the suggestion by those promoting Rhino Coin being speculators are "[betting that the international rhino horn trade ban will one day fall away, and that horn can then be sold at a stupendous mark-up in Asia.](#)" Note: Rhino Coin is developed and promoted in association with leading rhino farmer and pro-trade advocate John Hume.

In conclusion, even if the value/price of rhino horn is reduced (which is not guaranteed by any legal market intervention – see case studies below at Paragraphs 2.3 and 2.4), this does not guarantee to counter the poachers' incentive:

"Even with the price coming down, there's still a heck of a lot of poaching going on," Douglas-Hamilton ([Save the Elephants](#)) said. "It's important [ivory] prices have come down but it hasn't killed the trade, we're not out of the woods yet" - [Story behind China ivory ban,](#) The Guardian, 29 August 2017



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2.2 Demand Management

The DEA's March 2019 rhino horn trade presentation, "[*Demand Management*](#)" also proposed the theory that demand reduction could be conducted in parallel with legal trade, whereby:

Demand Management - Demand Reduction = Legal Demand - Illegal Demand

The 'theory' that demand reduction can be enacted and demand controlled once demand is legitimised by legal trade is not supported by any independent, peer reviewed science as even plausible. It's a bit like telling people smoking is bad for them (Demand Reduction), whilst simultaneously legally supplying cigarettes (Legal Demand) in an effort to reduce the market price of cigarettes to deter cigarette smuggling's profitability (Illegal Demand) and expecting demand (Demand Management) to be controllable and only offer upside results - the likely outcome in this scenario is higher demand and increased illegal supply.

The problem is what happens if "*Demand Management*" and "*Demand Reduction*" conducted in parallel fail, which equates to "*Legal Demand*" and an exponential rise in "*Illegal Demand?*"

In addition, where is the evidence and economic science to support any claimed conclusion that "*demand*" is "*reversible*" in reality?

If things go wrong, then 'legal' actions are not necessarily easily reversible - past experience proves 'easy reversibility' to be an assumption:

*"Pro-trade proponents have suggested that if things go wrong and poaching escalates further as a result of lifting the ban, rhino horn trade could either be "closed down or restructured" after three or four years. Such plans are both unhelpful and impractical, firstly because it risks setting off an illegal buying and poaching rush to exploit a potentially limited window of opportunity as soon as trade is permitted. Secondly, experience from rising exports of rhino horn as hunting trophies from so called "pseudo hunts" in South Africa has shown that it can take seven years (2003-2009) to recognise and [try to] address such problems" - "[*A quantitative assessment of supply and demand in rhino horn and a case against trade*](#)," Dr Barbara Maas of NABU International, July 2016*



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Economic science suggests that Demand Management/Legal Trade is not the answer if demand reduction is the true intent:

"Our model indicates that less conventional demand management strategies (such as consumer education, behaviour modification), appear to be more effective strategies in managing rhino horn demand than legalising the trade in rhino horns - "[Debunking the myth that a legal trade will solve the rhino crisis: A system dynamics model for market demand](#)," D. J. Crooks and J. N. Bilgnault, Journal for Nature Conservation, Elsevier, Pretoria, 2015

2.3 Failed Demand Management Case Study 1 – Elephant Ivory

It can be argued that CITES' attempted ivory trade intervention strategy increased demand and elephant poaching. Elephant poaching has reached unsustainable levels. African elephant poaching might be stabilising ([2015 CITES data](#)), but not at a level that will allow elephant population numbers to recover - [continent wide elephant numbers are only set to decline \("The Great Elephant Census," 2016\)](#):

It is estimated that 230,000 elephants have been poached between 2009 and 2015, and maybe as few as 500,000 wild elephants now remain (from an early 20th century population of as many as 3-5 million elephants).

In 1989/90 CITES introduced a ban on all ivory trade and 'uplisted' the elephant to CITES Appendix I status.

Prior to the 1989/90 ban, in 1986/87 CITES registered 89.5 tonnes and 297 tonnes respectively, of ivory in Burundi and Singapore. However, by 1997, CITES sought to 'find ways' (delisting relevant elephant populations by country to CITES Appendix II, where only an export license is required) to meet 'demand' for ivory from stockpiles – not dissimilar to any proposed rhino horn trade.

CITES permitted the export of 47 tonnes of 'stockpiled' ivory to Japan from Botswana, Namibia and Zimbabwe. The suggestion is that this initiative gave the tacit message to previous ivory trading and poaching syndicates that *"the game was back on."*



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In 2000, CITES repeated its 1997 'thinking,' when South Africa's elephants were delisted to CITES Appendix II with CITES' blessing and 6 tonnes of 'stockpiled' ivory permitted for export to Singapore in 2002. In addition, in 2002 some 60 tonnes of ivory from South Africa, Botswana and Namibia was 'released' with CITES' blessing to Japan (where ivory controls appeared lacking, with a reported 25% of traders not even registered).

In 2008 (to "quell" demand and "reduce prices") CITES once more blessed 'stockpiles' of ivory for export. Since 2008, ivory demand and prices paid have risen exponentially (the price of ivory rose from USD \$5/kg in 1989 to a wholesale price of USD \$2,100/kg in China in 2014).

The recent clampdown on ivory carving factories in China has significantly lowered the price demanded for ivory, but the pressure applied to the criminal syndicates' margins has not fully crushed on-going poaching of wild elephants to still profit from demand and speculative stockpiling:

"Even with the price coming down, there's still a heck of a lot of poaching going on," Douglas-Hamilton ([Save the Elephants](#)) said. "It's important prices have come down but it hasn't killed the trade, we're not out of the woods yet" - [Story behind China ivory ban](#), The Guardian, 29 August 2017

Conclusion - Market demand and market pricing for ivory has moved contrary to CITES' stated expectation – the release of ivory from stockpiles stimulated demand and the price of the commodity rose. It is estimated that as much as 450 tonnes of poached ivory might have been [trafficked in 2013 alone](#) to meet the demand. Even with more recent market price reductions for ivory, elephant poaching still continues at unsustainable levels. How can any Demand Management proposals for rhino horn trading expect different results from the ivory experience?



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2.4 Failed Demand Management Case Study 2 – The Vicuña

The South American [vicuñas](#) 'Demand Management' should also serve as a lesson as to why any legal wildlife trade strategy's intentions can fail when they meet the hard realities of non-conformist (illicit) market forces.

Many rhino horn trade [advocates](#) (including [John Hume, rhino farmer](#)) falsely tout the Andean vicuña — an iconic South American mammal in the camel family that's related to llamas, alpacas, and guanacos—as an example of successful conservation through sustainable utilisation. The vicuña has a fine, wool coat that was farmed to supply the high-end apparel industry.

Excessive hunting for European markets drove vicuñas to the brink of extinction in the 1960s. The animals were usually shot and the fleeces sheared off their carcasses.

In the early 1970s, CITES and the countries where the vicuñas range in the wild took measures that included a ban on trade in their wool, putting them on a path to recovery. By the 1990s, their numbers had rebounded to more than 200,000 (most of them in Peru), and regulated legal trading in wool resumed. Indigenous families sought to derive their subsistence livelihoods from corralling the migrating vicuña and harvesting their wool coats in a sustainable, non-consumptive manner.

At the time, ecologist Cristian Bonacic, of Pontifical Catholic University of Chile, in Santiago, was at the forefront of developing best practice guidelines for sustainable, ethical, non-consumptive utilisation of vicuñas.

However, the value of vicuña products became so highly prized as demand was stimulated, [that vicuña poachers sought to cash in, with some 5,000 animals slaughtered \(the poachers don't worry about non-consumptive sustainability\) in five years to obtain the animal's wool coats.](#)

This experience has changed ecologist Cristian Bonacic's view of 'sustainable utilisation' and he fears that a legal trade in rhino horn could be catastrophic for the species:



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“Bonacic explains his recent shift away from the notion of sustainable use of wildlife, why a legal trade in vicuña wool has led to more -not less- poaching, and why he thinks a legal trade in rhino horn could be catastrophic for the species” – [“Legalizing Rhino Horn Trade Won't Save Species, Ecologist Argues, What can South Africa's rhino horn trade proponents learn from experiences with the South American vicuña?”](#) Katarzyna Nowa, National Geographic, 8 January 2015

The poaching escalated to the point that by 2015, 90% of exports were found to have been sourced from illegally killed and shaved poached vicuña. Perhaps this is an example of how market dynamics and criminality collude to produce negative results. The ongoing exploitation and plight of the [vicuña](#) still persist.

So, the vicuña as a species was not enhanced by 'utilisation' and 'legal trade' – sustainable utilisation encouraged poaching to profit from the stimulation in demand, threatened those communities that were supposed to profit from the trade and led to thousands of vicuña being slaughtered. Many scientists are concerned that the vicuñas' population levels remain of concern:

“...but most experts agree that there is cause for concern. Vicuña populations now hover at 400,000 to 500,000 animals, but their numbers have remained stagnant or, in the case of Chile, declined over the past two decades” - [“Poaching upsurge threatens south America's iconic vicuña,”](#) Scientific American, 24 November 2015

2.5 Countering Illegal Markets for Rhino Horn

The SANBI states at Notice 1105, Table 1, NDF 25 *“Effectiveness of strict protection measures”* that:

“Two further concerns around the potential effects of legalisation relate to whether legalised trade competes with existing illegal markets or simply creates new parallel ones, and whether legalised trade leads to reduced enforcement against illegal traders.”



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One only has to look at the evidence in a comprehensive report on the ‘legal’ ‘lion bone trade,’ [*“The Extinction Business, South Africa’s ‘Lion’ Bone Trade”*](#) (EMS Foundation and Ban Animal Trading, July 2018) where the conclusion is:

South Africa’s lion bone trade has “...created a situation where the legal trade in ‘lion’ bones is fuelling the illegal trade in lion and tiger bones and providing laundering opportunities for tiger bones in Asian markets.”

What makes the SANBI/DEA think any form of legal trade in rhinoceros’ horn will be immune from fuelling an established and incumbent illicit rhino horn trade when the ‘lion bone trade’ has been such a failure in terms of countering illicit activity?

According to the theory of pro-trade advocates:

“...scarcity caused by trade bans, produces high prices which leads to higher poaching rates. Instead of combating illegal poaching, according to this argument, scarcity should be eliminated through legal supply from wildlife farmers and state stockpiles. Legalising markets would then reduce or even eliminate profitability for poachers while maintaining high returns for legal suppliers.”

This theory is reiterated by the SANBI within Notice 1105, Table 1, NDF 25 *“Effectiveness of strict protection measures,”* the assumption being that markets which are currently dominated by illicit forces, somehow can be countered by legal trade and reach some kind of natural equilibrium:

*“MacMillan et al. (2017), after interviewing 1,000 animal traditional medicine (ATM) users in Vietnam concluded that....the introduction of a legal supply of rhinoceros horn **has the potential to ‘crowd out’ rhinoceros horns sourced from poachers...**”*

These assumptions are not supported by economic professionals within academia - the academic conclusion is that ‘legal’ trade does not potentially counter and combat illicit activity – legal and illegal trade does not necessarily reach a natural equilibrium:

The pro-trade argument “relies on highly unrealistic assumptions, one of which is that legal trade is able to fully substitute for illegal trade. This points to a failure to understand illegal markets. Market legalisation, they suggest, would actually increase demand as well as provide avenues for illegal traders to



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launder poached products.....Governments, economists and conservationists who think they can curb poaching by selling rhino horn and ivory legally have little understanding of macroeconomics or the sophistication of international crime syndicates"- Prof Nadal and Mr Aguayo, "[High-level report calls SA wildlife trade policy reckless](#)," Conservation Action Trust, Don Pinnock, 13 June 2013

Prof Nadal's and Mr Aguayo's 2014 paper "[Leonardo's Sailors: A Review of the Economic Analysis of Wildlife Trade](#)" (The Leverhulme Centre for the Study of Value, Manchester, 2014) sought to "...evaluate the scope and limitations of the economic analysis of wildlife trade that has been carried out in the past three decades." This paper highlights the pro-trade arguments 'misguided' economic theory:

- *"The pro-market argument starts from the premise that poaching and illegal trade are a consequence of trade bans imposed by bodies like CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora)."*
- *"One of the most striking features in the economic analysis of wildlife trade is the level of misinformation concerning the evolution of market theory over the last six decades. To anyone who comes in contact with the corpus of literature on wildlife trade, and in particular the literature recommending the use of market-based policies, the uncritical use of theoretically discredited analytical instruments is a striking revelation. Perhaps the most important issue here is the conviction that markets behave as self-regulating mechanisms that smoothly lead to equilibrium allocations and therefore to economic efficiency. This belief is not sustained by any theoretical result, a fact that is well known in the discipline since at least the early seventies."*

In the 2017 study, Ross Harvey (Senior researcher with SAIIA, PhD at the University of Cape Town, School of Economics) concluded:

"Even if farmed supplies from South Africa satisfied a portion of the demand globally, it will not alter demand among consumers drawn to wild product, or those who are indifferent about the source. South Africa will most likely soon be home to parallel markets, with extensive laundering of illegal horn. That may be acceptable



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to breeders, but it defies reason for those trying to conserve wild rhinos" - "[South Africa's Rhino Paradox](#)," Project Syndicate, 2017

The November 2013 report, "[The Horn of Contention](#)," ("A review of literature on the economics of the rhino horn trade," Economists at Large/IFAW) found the following:

"The formal studies suggest that predicting the outcome of liberalising trade is complex and difficult to determine. Although it may decrease pressure on poaching, as rhino horn becomes increasingly supplied through the non-lethal legal trade, there is also a real risk that trade could drive an increase in poaching through any combination of five mechanisms:

- *Through legal and illegal markets coexisting and interacting in complex ways.*
- *Through reducing the stigma attached to consumption of the product.*
- *By potentially reducing the supply costs of illegal supply.*
- *By potentially facilitating the laundering of illegal supply in with legal supply.*
- *As a result of uncertainty around the response of illegal suppliers to competition from a legal market."*

"The articles from the grey literature are all overtly pro-trade, generally assuming that:

- *Legal markets will "hijack" consumers from illegal markets and that legal and illegal horn would be perfectly substitutable.*
- *Stigma effects are small and that efforts to reduce demand through education and information would be ineffective.*
- *Increased surveillance funded by rhino horn sales would increase poaching costs.*
- *Technical advances such as DNA technology would minimise laundering.*
- *Smugglers with market power would respond to the introduction of a legal trade passively, accepting reduced sales, rather than competing to retain market share."*

"Little empirical evidence is offered to support these views. Under certain conditions these assumptions may hold, but it is unclear if these conditions are in place in either supplying or consuming countries. We suggest further research should be undertaken before any formal steps are taken towards legalising trade in rhino horn."



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The emphasis on law enforcement needs to be much higher up the trafficking chain, this would require actual enforcement for criminal activity in recipient States (China, [Vietnam](#), Laos, Yemen etc). At the moment there are no signs that the historical corruption and complicity in recipient States will change and provide the required focus or visibility anytime soon. As Julian Rademeyer puts it in "[Tipping Point – Transnational organised crime and the 'war' on poaching:](#)"

"Entities like INTERPOL, Europol, CITES and the World Customs Organisation are only as good as the government officials in member states who are delegated to work with them. Again and again, their efforts to target syndicates in multiple jurisdictions are hamstrung by corruption, incompetence, governments that are unwilling or incapable of acting, a lack of information-sharing, petty jealousies and approaches to tackling crime that wrongly emphasise arrests and seizures over targeted investigations and convictions as a barometer of success."

There is little evidence/science that supports any theory that "*legalised trade competes with existing illegal markets.*" However, legal trade mechanisms always make enforcement against illegal activity more challenging – in the absence of legal mechanisms for a given commodity it is easier to see that any trade in that given commodity must be illicit. As soon as there is a blurring and legal mechanisms exist, then [legal and illegal markets coexist and interact in complex ways](#) – thereby "*legalised trade leads to reduced enforcement against illegal traders.*"

However, perhaps the principal problem with the endless campaign to adopt some form of legal 'sustainable utilisation' as the only solution is the notion that it's justified regardless of any imposing law. Modern-day game farmers are a powerful commercial and political lobby and do not see acting on the periphery of legality as 'criminal,' thus exacerbating illicit activity:

"The notion of 'contested legality' was introduced as a legitimisation strategy of important actors who justify their participation in illegal or grey flows of rhino horn based on the perceived illegitimacy of the rhino horn prohibition" - "[A Game of Horns](#)" (page 366), Annette Michaela Hubschle, International Marx Plank Research School on the Social and Political Constitution of the Economy (IMPRS SPCE), Köln, Germany, 2016

This 'mob rule' mentality is also evident within the domestic rhino horn trade (Paragraph 2.5.1) and lion breeders (Paragraph 2.5.2).



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Therefore, it's not just a question of *"legalised trade leads to reduced enforcement against illegal traders"* – those seeking 'legal' trade mechanism for rhino horn, lion bone etc. feel that it is their right to act outside of the law in the first place and exacerbate illicit activity.

Such illicit actions will potentially have an enduring, negative impact on the species' conservation; however such threats/blackmail from breeders should not be used as an excuse to authorise and condone a 'legal' trade or quota that has no scientific merit - the rule of law should override any such illicit activity threats (or else mob rule will be allowed to prevail in the absence of law enforcement and a clear scientific foundation for a legal mechanism).

2.5.1 Domestic Rhino Horn Trade

On 26 November 2015, South Africa's, Pretoria High Court 'approved' a technical challenge by two rhino farmers (John Hume and Johan Kruger) to sell their stockpiles of 'harvested' rhino horn, overturning a 2009 moratorium on such trade.

A 2012 report by [TRAFFIC](#) ("[The South Africa - Viet Nam Rhino Horn Nexus](#)") on the global rhino trade found that when South Africa did allow domestic horn trade, before 2009, much of the privately owned horn went unaccounted for and may have ended up in illegal hands, trafficked outside the country:

"It found that abuses and poor compliance in managing horn stockpiles in government and private hands had helped create a "perfect storm," attracting criminal networks into lucrative rhino poaching" - "[Debate over rhino horn trade ramps up as South Africa ban is lifted](#)," Los Angeles Times, 26 November 2015

The 2009 moratorium was overturned in the High Court on a convenient *"technicality"* that the moratorium had not been well advertised to the public and lacked 'public consultation.' Initially, the High Court's 26 November 2015 ruling was challenged by South Africa's own DEA, but the DEA/DEFF has since failed to try and curtail the domestic rhino horn trade, or back 'public consultation' on the need to re-instate the moratorium:

In an open letter from the [Wildlife Animal Protection Forum South Africa](#) ("[Their Future is Dark" The Rhino Horn Trade 2019](#)) to the DEFF, it questions the DEA's/DEFF's stance:



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“After defending the ban [moratorium on domestic trade] through all the legal processes it remains unclear why the DEA did not attempt to re-advertise its intention to ban the domestic trade in rhino horn with required notice period and circulation of information.

Instead, the DEA, under the leadership of Minister Molewa, chose to focus on developing new legislation which included setting out the requirements for the domestic sales of rhino horn. Numerous organizations in South Africa and internationally appealed against this decision.

A Committee of Inquiry was appointed by the DEA and tasked with producing a report on the viability of the domestic rhino horn trade in South Africa. Apparently the full report was completed in 2016 but only a summary report has ever been made available. We would appreciate access to full report in order for us to understand and evaluate the COI's findings.”

In the meantime, the ongoing domestic trade in rhino horn in South Africa remains open to illegal trafficking and abuse:

[“SA's largest private rhino breeder, John Hume, says seized rhino horns are his property,”](#) IoL, 30 April 2019

“The legal domestic market in South Africa, we believe, is contributing to the poaching of rhinos in South Africa and in neighboring African countries. The legal domestic trade has undermined demand reduction campaigns and enforcement efforts and it has provided potential routes through which illegally obtained rhino horn might be laundered.

The domestic trade in rhino horn weakens the international trade ban under CITES. Over the past two years frequent [shipments](#) of farmed rhino horn from South Africa have been intercepted at international border and recently there have been large scale illegal shipments of farmed rhino horn intercepted within South Africa” - [Wildlife Animal Protection Forum South Africa, “Their Future is Dark” The Rhino Horn Trade 2019](#)



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2.5.2 Captive Lion Breeders

Alarming, within the conclusions at paragraph 6.1 of *South African Lion Bone Trade – Report for the South African National Biodiversity Institute (SANBI)*, ” November 2017 report, the authors exposed the lion breeders’ true intent and motivations to profit regardless of any legal mechanism for a ‘lion bone trade’ – the majority of captive lion breeder respondents expressed a willingness to utilise illicit means to profit if a ‘legal’ mechanism is denied to them:

“The fact that a large proportion of survey respondents have stated that they will seek ‘other markets’ [if no ‘legal’ quota is available] for lion bones should be of concern.

This clearly signals the potential for a parallel illegal market to develop. Should such a market develop closer links with organized criminal enterprise, the effects could be irreversible (as with the rhino horn trade) and result in greater and more widespread threat of focused commercial – scale poaching of felids.”

2.6 Can Harvested Rhino Horn Meet Demand if Rhino Horn is 'Destigmatised'?

Notice 1105, Table 1 NDF 25 “*Effectiveness of strict protection measures*” states:

“In relation to potential 'destigmatization' of rhinoceros horn use in consumer markets, Moyle (2018) however argues that there is no strong empirical or theoretical evidence that stigmatizing demand would be at a sufficient scale that it can compensate for the lack of legal competition”

However, in December 2017's, *Biological Conservation* (Vol. 216, page 60 - 68), a paper was published entitled "[Sustainable rhino horn production at the pointy end of the rhino horn trade debate](#)" authored by Andrew Taylor, Dave Balfour, Diane Kirsty, Brebner Rynette, Coetzee Harriet Davies-Mostert, Peter A. Lindsey, Jo Shaw and Michael't Sas-Rolfes.



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This paper highlights how little is currently known and understood about the viability of any proposed legal, international trade in rhino horn and what could happen if rhino horn is destigmatised (regardless of whether such trade is initially disguised as "primarily for non-commercial" purposes, or not):

"We don't know what will happen to demand if the stigma of buying horn is reduced once it has been legalised. For example, there may be many potential buyers that are not buying because it is illegal, but will start buying if it becomes legal" - [Dr Andrew Taylor](#)

"If there's increased rhino poaching following trade legalization, even for a brief period and at a relatively low level compared with the present, this could be catastrophic for rhinos" - ["Legalizing Rhino Horn Trade Won't Save Species, Ecologist Argues,"](#) K. Nowak, National Geographic, 8 January 2015

The key points from the ["Sustainable rhino horn production at the pointy end of the rhino horn trade debate"](#) paper are given as follows:

Key Point 1 - What happened to South Africa's rhinos in the past?

*"South African populations of black and white rhinos (subspecies *C. s. simum*), both of which had been nearly extinct in the year 1900 due to uncontrolled hunting, grew in numbers over the last 100 years and were not exposed to the same high levels of poaching seen in countries to the north"* - So, the paper confirms uncontrolled hunting led to the rhinos initial demise.

Key Point 2 - "Further research is necessary to assess the likely outcomes of legalising trade"

No one knows (despite propaganda and 'beliefs') that the outcomes of any international rhino horn trade can only be positive.

Key Point 3 - "Conventional legal protection and law enforcement are insufficient at current levels of effort and efficiency"

Agreed, but even a 'legal' trade requires efficient "Conventional legal protection and law enforcement" to combat illicit markets - a 'legal' trade will not help conserve wild rhino if illicit behaviour goes unchecked in parallel to any 'legal' trade. The theory that



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a 'legal' trade will compete and is somehow guaranteed to decimate illicit activity remains unproven.

The international organised criminal networks [that traffic wildlife to fund terrorism](#) are highly unlikely to yield readily to pricing and market competition. Without increased pressure and enforcement too, if margins are squeezed (ie. prices for rhino horn drop), what is to say such networks will not increase volume (more poaching) to maintain income streams?

Key Point 4 - "Legal trade in rhino horn has been proposed but is controversial"

Yes it is.

Key Point 5 - "African rhinos are facing high rates of poaching that is threatening their survival"

Yes they are - successfully tackling poaching is not guaranteed by any flawed, legal rhino horn trading strategy that stimulates demand.

Key Point 6 - "Annual horn production in South Africa is estimated at 5,319 to 13,356 kg"

Michael't Sas-Rolfes (The University of Pretoria and independent economist) has [reportedly said](#) the estimates ["Annual horn production in South Africa is estimated at 5,319 to 13,356 kg"] take into account "uncertainty" surrounding rhino population sizes, mortality rates, horn growth rates and the attitudes of private rhino owners to potential legalisation.

Dr Barbara Maas also assessed the ability of harvested rhino horn stockpiles to meet demand – the conclusion is that if demand is stimulated, then stockpiles (and the ability to replenish from harvested rhino horn to meet demand) could soon be obliterated leaving wild rhino at the mercy of out of control demand:

To illustrate, this upper estimate of 13,356 kg annual availability of rhino horn (at a 50g Traditional Chinese Medicine (TCM) dose) would provide just 267,120 such doses - satisfying just 0.018% of the total estimated Chinese and Vietnam population of 1.471bn (Ref. [World Bank data](#)) with a 50g TCM dose - Reference data/mythology from "[Pointless - A quantitative assessment of supply and demand in rhino horn and a](#)



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[case against trade](#)," NABU International Foundation for Nature, paper authored by Barbara Mass.

"These simple calculations support the notion that lifting the ban on commercial trade in rhino horn is likely to facilitate the extinction of rhinos, rather than support their survival. Illegal rhino horn trade is an international problem that requires a well-coordinated global response comprising a genuine commitment to strong legislation, uncompromising enforcement and creative demand reduction initiatives" - ["A quantitative assessment of supply and demand in rhino horn and a case against trade](#)," NABU International, Barbara Maas, Berlin, 2016

The "[Sustainable rhino horn production at the pointy end of the rhino horn trade debate](#)" co-author, Dr Andrew Taylor of the wildlife in trade programme at the Endangered Wildlife Trust (EWT) [has also highlighted](#) the many unknowns with regard to the demand side's unpredictability, concluding that:

"....the potential size of the consumer market.....may in fact be considerably bigger if rhino horn were legally available." Concluding "It's therefore not reasonable to assume that the potential supply of rhino horn can meet potential demand."

Well indeed, but the unknowns with regard to the viability of any proposed international trade in rhino horn are also expanded upon by Taylor:

"A major problem is that we don't know the true size of the market. Although one could infer the current extent of rhino horn demand from the amount of illegal horn (our estimate was 5,346kg or the equivalent of 909 white rhino horn sets), there are a number of factors that complicate the situation."

"We don't know much about what the horn is being used for - specifically, what proportions are being used for medicinal purposes, what proportions are used for ornaments, and importantly what proportions are being stockpiled for speculation."

"We don't know what will happen to demand if the stigma of buying horn is reduced once it has been legalised. For example, there may be many potential buyers that are not buying because it is illegal, but will start buying if it



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becomes legal. We don't understand the price elasticity of demand for horn - what will happen to the price of horn if there is an increased (legal) supply?

These are things we think [we] need to understand before risking legalising trade."

There is also the question of the 'quality' of the rhino horn itself to meet consumer demand and whether harvested rhino horn meets that demand. [Recent studies](#) published in May 2019 by Professor Vu Hoai Nam Dang and Professor Martin Reinhardt Nielsen have from the University of Copenhagen have determined that the discerning consumers prefer rhino horn that is derived from wild rhino, not farmed or harvested rhino horn.

This clearly runs counter to the Notice 1105, Table 1 NDF 25 "*Effectiveness of strict protection measures*" finding of *MacMillan et al. (2017)* that "...after interviewing 1,000 animal traditional medicine (ATM) users in Vietnam concluded...consumers' strong preference for non-lethal harvesting..." Therefore, the *MacMillan et al. (2017)* consumers' "*strong preference*" for non-lethally harvested rhino horn is disputed.

Furthermore, Douglas J. Crookes, James N. Blignaut (Department of Economics, University of Pretoria) point out ("[Debunking the myth that a legal trade will solve the rhino horn crisis: A system dynamics model for market demand](#)") that game farms may harvest horn every 1.5 years, whereas for poachers it is optimal to kill a rhino and harvest its horn, even at very low rotation intervals:

"This suggests that, even if a rhino poacher encounters a dehorned rhino, it is still [optimal to kill](#) the rhino and take what is left of the stump. This casts further doubt on the effectiveness of a legalized trade".



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3 Proposed Quota for the Export of Rhinoceros Horn for *"primarily non-commercial purposes"*

The Notice 1105 states at Table 1, NDF 14 "Quotas" that *"There is currently no quota for the export of rhinoceros horn for non-commercial purposes."*

How will *"non-commercial purposes"* be assessed as a genuine motivation before any such exportation, or potential abuses for 'commercial purposes' eradicated with any degree of certainty?

CITES definition applies where:

"the term 'commercial purposes' should be defined by the country of import as broadly as possible so that any transaction which is not wholly 'non-commercial' will be regarded as 'commercial'" - [Resolution Conf. 5.10 \(Rev. CoP15\)](#)

It would seem that the assessment of the commercial intent of any rhino horn to be traded by the proposed mechanism *"for primarily non-commercial purposes"* will be left up to the country of import, which means the DEA/DEFF can seek to absolve itself if in fact an importing country (such as [Vietnam](#), or China for example) does in reality import rhino horn for commercial purposes.

This is made more alarming by the Notice 1105 stating at Table 1, NDF 14 "Quotas" *"There is currently no quota for the export of rhinoceros horn for non-commercial purposes."*

Therefore, the proposed *"primarily non-commercial"* rhino horn trade has no cap, or quota, but relies on the integrity of an importing country that such trade is not commercial. Where are the proposed precautionary safeguards that trade masquerading as *"non-commercial"* will not be exploited for commercial purposes? Who will vet any importing entity posing as a university, or museum etc. seeking non-commercial specimens of rhino horn that are subsequently found to be a front (and the rhino horn so imported has indeed been sold on for commercial gain)?

One only has to look at the precedent set by South Africa's lion bone trade flaws to see the potential traceability, verification of the importer and abuse of exported weights on CITES Permit that will potentially exist in any proposed *"primarily non-commercial"* rhino horn trade:



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- Although the official CITES export permits contain a name and address of the supposed exporter and importer, many of the destination addressees and addresses could not be satisfactorily verified, and telephone numbers and identification or passport numbers were often missing - "[The Extinction Business - South Africa's lion bone trade](#)," EMS Foundation & Ban Animal Trading, 2018
- There are also discrepancies between permits issued in South Africa, exports recorded on the CITES Trade Database and what the importing country records as having been received - "[Public Participation Submission of the Coalition to Stop the Captive Breeding and Keeping of Lions and Other Big Cats for Commercial Purposes](#)," June 2019
- Further anomalies have been suspected in the 'lion bone trade' with the number of CITES permits issued allegedly exceeding the actual 2017 quota. Williams and 't Sas-Rolfes (2017) confirm the there is indeed "*sufficient reason to believe that some consignments had more bones than allowed by the [CITES] permits.*" EMS Foundation & Ban Animal Trading, 2018 ("[The Extinction Business - South Africa's lion bone trade](#)") findings showed an average weight per exported skeleton of between 11-30 kg, whereas a full lion skeleton weights on average only 9 kg. One consignment of 71 lion skeletons weighted 1,580 kg or an average of 22 kg per skeleton!

How much "*non-commercial*" trade in rhino horn does the South African National Biodiversity Institute (SANBI) consider to be scientifically justifiable, or is there no intention to establish such precautionary limits?

There is also the postulation given in Notice 1105 that:

".....the Private Rhino Owners Association (PROA) launched Rhino Horn Trade Africa (RHTA), an initiative that will facilitate the legal trade of rhinoceros horn via an online trade desk, which aims to provide a managed, efficient platform from which genuine buyers and sellers can trade in legal, humanely acquired rhinoceros horn."

How will this privately funded RHTA brokerage service (acting on behalf of private rhino owners seeking to sell rhino horn) ensure "*genuine buyers*" of "*non-commercial*" intent?

How will the DEA ensure South Africa oversees CITES compliance? There is an obligation on parties (including the Republic of South Africa and any CITES Management Authority in any



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given signatory country of import) to CITES encompassed at [Article VIII, "Measures to Be Taken by the Parties,"](#) whereby:

"1. The Parties shall take appropriate measures to enforce the provisions of the present Convention and to prohibit trade in specimens in violation thereof.

These shall include measures:

(a) to penalize trade in, or possession of, such specimens, or both; and

(b) to provide for the confiscation or return to the State of export of such specimens."

The obligation on Parties to *"take appropriate measures to enforce the provisions of the present Convention and to prohibit trade in specimens in violation thereof"* includes all Parties' (including South Africa's) adherence not to facilitate trade in contravention of the CITES 1977 ban on all international commercial trade in rhinoceros and their products - where under [Article I](#) definitions *"Trade" means export, re-export, import..."*

3.1 Draft Regulations relating to Domestic Trade in Rhinoceros Horn

The proposed 2018 (Government Notice 986 *"Draft Regulations relating to Domestic Trade in Rhinoceros Horn"* ("draft regulations") as notified in Government Gazette, Vol. 639, No. 41919, Department of Environmental Affairs (DEA), dated 21 September 2018), draft regulations encompassed the issuing of a Permit to potentially facilitate a buyer to export a rhinoceros horn purchased by the exploitation of draft regulations 13.(1)(c) and 13.(2) using the excuse that such export is *"for primarily non-commercial purpose."*

The draft regulations are clearly open to complicit parties (ie. a willing CITES Management Authority importing into [Vietnam](#) for example) to facilitate South Africa in the export of rhinoceros horn under the pretence it is not for commercial purposes, when in reality the use of such loopholes clearly invites abuse purely for commercial purposes.

The spirit of these draft regulations and export mechanisms clearly undermines CITES' 1977 ban on any international rhinoceros horn trade. The arguments opposing opening-



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up this export mechanism have been expanded upon previously in response (Dated 19 October 2018) to the draft regulations, but are reiterated as follows.

Regulation 13.(2) states *"A person may export or re-export rhinoceros horn contemplated in subregulation (1) for primarily non-commercial purpose."* This implies that the draft regulations seek to facilitate commercial, international export provided it is stated on the pre-requisite Permit (in accordance with the *"Biodiversity Act"* (National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004)) that commercial gain is not the primary reason for the export. How will the burden of proof be levelled on any Permit applicant to prove such export is not for commercial purposes, or will each applicant be taken upon their self-declared word alone? How many Permit applications for export would it take for any given person (company or trust) to trigger the notion that such exports are actually for commercial purposes? Clearly, this export loophole is open to potential widespread misuse and abuse when no international agreement exists for the international, commercial trade in rhinoceros horn.

The Permit system outlined at Chapter 7 of the relevant Biodiversity Act provides opportunity for the issuing authority to sanction Permits provided it meets with certain conditions:

- (a) the applicable provisions of this Act;*
- (b) the national environmental management principles;*
- (c) the national biodiversity framework;*
- (d) any other relevant, plan as adopted or approved in terms of Chapter 3;*
- (e) any applicable international agreements binding on the Republic;*
- (f) the Promotion of Administrative Justice Act, 2000 (Act No. 3 of 2000);*
- (g) any requirements that may be prescribed.*

The 1977 CITES ban on the international trade in rhinoceros horn is binding on the Republic of South Africa. So, the export of rhino horn, regardless of any flimsy statement that it is for *"primarily non-commercial purpose,"* is clearly not permissible under the Biodiversity Act's own international obligations. Will Permits be issued 'unconditionally' and if so, how does this comply with Chapter 7, *"PERMITS,"* Part 1, 88.(2)(e), or will CITES' ban on the international trade in rhinoceros horn be wilfully subverted and/or ignored?

There are monitoring criteria proposed at regulation 13.(6), but no clear restrictions stated on the frequency and/or volume of rhinoceros horn that may be exported or re-



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exported via this mechanism/loophole either per person, or as an overall limit - there appears to be no export boundary. What happened to any (but ill-conceived and defined) proposed "export a maximum of two rhinoceros horns" limit contained within the "Domestic Trade in Rhinoceros Horn, or Part, Product or Derivative of Rhinoceros Horn," as notified in Government Gazette, Vol. 620, No. 40601, Notice 74, Department of Environmental Affairs (DEA), dated 8 February 2017?

In the absence of any obvious export boundary limits, how can these latest draft 'Domestic' regulations be seen as anything but a blatant attempt to circumvent the spirit of CITES' 1977 ban on international trade in rhinoceros horn, no doubt with the DEA's anticipated complicity of CITES "Management Authority" in a willing recipient country, such as Vietnam for example.

How does the DEA propose to detect fraud with the pre-condition given at regulations 15.(2)(a) and 15.(2)(d) in any "import permit issued by the Management Authority" and/or 15.(2)(e) "written confirmation from the Management Authority" stipulations? How easy will it be to fabricate or obtain by deception/corruption such paperwork?

3.2 Conclusions on the Proposed Quota for the Export of Rhinoceros Horn for "primarily non-commercial purposes"

Where has the SANBI taken risks associated with an unbounded quota into account in the NDF given (Notice 1105, Table 1, NDF 14 "Quotas") in support of its statement:

"The export, for primarily non-commercial purposes, of rhinoceros horn that has been legally sourced, either through natural mortalities and/or horn harvest from wild populations, or from captive breeding facilities, will not be detrimental to the survival of the species in the wild provided that (1) the income derived from these exports contributes directly to the conservation of wild rhinoceros populations and (2) the captive breeding facilities meet the Scientific Authority's approved criteria for the captive breeding of white rhinoceros.

At the August 2019 CITES, Conference of the Parties (CoP18), Proposal 8 was [rejected at the committee and plenary stages](#). The Kingdom of Eswatini (formerly Swaziland, which made a similar submission to [CoP17 Prop. 07](#)) [resubmitted a submission, Proposal 8, "To remove the existing annotation on the Appendix II listing of Eswatini's southern white rhino population"](#) and for:



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"... Eswatini to sell from existing stock 330 kg of rhino horn to licenced retailers in the Far East and also up to 20 kg p.a., including harvested horn, to those retailers" along with arguments in support of such trade and rhino farming/horn harvesting - but with no independent science that support such trade as not risking stimulating demand and poaching.

So how does the Notice 1105 recommendation to explore unbounded, "*primarily non-commercial*" exports of rhino horn from South Africa correlate with the rejection at CITES CoP18 of a proposal to seek any legal trade in rhino horn (at up to 20kg per annum)?

Conclusion - It can be seen that CITES signatories have now rejected any such legal trade in rhinoceros' horn on the grounds that such trade is likely to be detrimental to the species.



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4 Rhino Horn Stockpiles

Notice 1105, NDF 19 *“Methods used to monitor the harvest”* states *“Reporting of rhinoceros horn stocks within the private sector continue to increase in part due to improved declaration and reporting.”* However, it is acknowledged that such reporting is not necessarily 100% complete:

“A 2014 survey of white rhinoceros owners in South Africa found that privately held stocks totalled 1,697 pieces (6,256 kg) (Balfour, et al., 2016), accounting for approximately 80-85% of the potential estimated weight of stocks expected from natural mortalities (i.e. 7,690 kg). Fear of reporting stockpiles to authorities in some provinces where such information can be leaked to criminals is a factor in under-reporting (Emslie, et al., 2016).”

In 2014, the DEA recommended in *“The viability of legalising trade in rhino horn in South Africa:”*

“Taking into account the facts that the mechanisms for controlling a legal trade in South Africa are not yet in place, that the number of rhino horns in private stockpiles are uncertain, and that some private rhino owners are not yet compliant with permitting regulations, it is likely that lifting the moratorium at the present time will lead to laundering of illegal horn into legal stockpiles as well as smuggling of horn out of the country. These acts would tarnish South Africa’s reputation with CITES Parties and could jeopardise future attempts to legalise international trade in rhino horn.”

A 2016 report from the IUCN Species Survival Commission (IUCN SSC) African and Asian Rhino Specialist Groups and TRAFFIC to the CITES Secretariat pursuant to Resolution Conf. 9.14 (Rev. CoP15) [concluded](#) that South Africa’s stockpiles were not fully compliant with illicit stocks removed from potential laundering within any legal trade:

“South African private sector stocks also continue to increase in part due to improved declaration and reporting. Whilst problems clearly remain regarding their tracking, the discrepancy between reported and estimated horn has narrowed since CoP16. A 2014 survey of white rhino owners in South Africa found that privately-held stocks totalled 1,697 pieces (6,256 kg) (Balfour et al. 2016), accounting for ~80-85% of the potential estimated weight of stocks expected from natural mortalities (i.e. 7,690 kg). Fear of reporting stockpiles to authorities in some provinces where such information can be



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leaked to criminals is a factor in under-reporting. It is also noted that some private sector rhino owners are believed to have sold horns into illegal trade (Huebschle 2016).”

So, this begs the question of how the uncertainty of the “*number of rhino horns in private stockpiles*” has been removed, and thereby mitigated the risk of “*laundering of illegal horn into legal stockpiles as well as smuggling of horn out of the country?*” This is despite the Notice 1105 assurance that “*the RHODIS database to ensure traceability. The system is well managed and rhinoceros horn stock piles are regularly audited.*”

There would still seem to be significant questions regarding the credibility of South Africa’s declared and undeclared rhinoceros horn stockpiles:

“In the interim we ask that the DEFF identify, mark, register secure stockpiles and declare the results. Rumors that South African state stockpiles might have been compromised during State Capture period abound, South Africa’s conservation reputation is at further risk” - - [Wildlife Animal Protection Forum South Africa, “Their Future is Dark” The Rhino Horn Trade 2019](#)



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5 Summary and Conclusions

South Africa's constitutional rights on the issue of 'sustainable' wildlife utilisation are enshrined at Section 24, *"Chapter 2, Bill of Rights, Environment."*

This section refers to ensuring everyone's right *"to an environment that is not harmful to their health or wellbeing;" "to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that"* amongst other criteria *"promote conservation,"* whilst ensuring *"secure ecologically sustainable development and use of natural resources..."*

So, how is the privately owned, 'captive' breeding of some 6,000 rhinoceros for speculative purposes and any proposed legal rhino horn trade considered a *"reasonable legislative"* measure that *"promotes conservation"* when there is a risk that such trade could jeopardising the species' survival?

The Notice 1105 statement that *"It is however highly unlikely that current investment from government, external donors and private rhinoceros owners in the protection of this species can be sustained in the long term, and it is recommended that a legal trade in rhinoceros horn as an alternative source of funds be explored"* is not justification in itself – because funds are needed a legal trade must be established.

In summary:

- What is the guarantee that the *"income derived from these [rhinoceros horn] exports contributes directly to the conservation of wild rhinoceros populations"* – where is the evidence of a mechanism that scientifically guarantees such income will contribute directly to recognisable species' conservation in the wild, and will not just fuel profiteering from the expansion of privately owned, captive rhinoceros exploitation?
- No one forced any rhino breeder to breed rhino, or breed rhino numbers to a financially unsustainable level. Such breeding endeavours were no doubt established with the prospect of profiteering from rhino horn and derivative products (based upon the hope of legal trade) as well as rhino trophy hunting, not because of some purely altruistic imperative to protect and conserve the wild species. The fact that such captive breeding business ventures have not reached fruition and have the increasing burden of financing anti-poaching measures, should not be used as an excuse to force



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through a trade mechanism that has no scientific merit – ie. there is scientific proof counter to the SANBI's evidence within Notice 1105 Table 1, NDF 25 *"Effectiveness of strict protection measures"* - the proposed trade in rhino horn could be detrimental to the species.

- There is the a lack of trust in the ability of the DEFF to prioritise and adequately ensure animal welfare with its [unlawful](#) pursuit of wildlife exploitation in the name of *"sustainable utilisation"* – namely the abhorrent captive lion breeding and lion bone trade industry.
- The SANBI Notice 1105 Table 1, NDF 25 *"Effectiveness of strict protection measures"* quotes *"MacMillan et al. (2017), after interviewing 1,000 animal traditional medicine (ATM) users in Vietnam concluded....an anticipated overall fall in price due to the loss of prestige and exclusivity of rhinoceros horn within a legal and regulated trade."*

Douglas J. Crooks, James N. Blignaut (Department of Economics, University of Pretoria) concluded ("[Debunking the myth that a legal trade will solve the rhino horn crisis: A system dynamics model for market demand](#)") that *"demand is relatively insensitive to price..."*

- The consensus among pro-trade advocates is that opening up legal trade will lead to a speculative return for anyone invested in rhino horn, ie. the value of rhino horn will rise *"[betting that the international rhino horn trade ban will one day fall away, and that horn can then be sold at a stupendous mark-up in Asia.](#)"* So, this suggests that the rhino farmers' expectations from a legal market are counter to the DEA's stated aim to reduce rhino horn prices by legal trade and Demand Management.
- The DEA's March 2019 presentation, *"[Demand Management](#)"* also proposed the theory that demand reduction could be conducted in parallel with legal trade, whereby:

Demand Management - Demand Reduction = Legal Demand - Illegal Demand

This 'theory' is not supported by any independent, peer reviewed science as even plausible. What happens if *"Demand Management"* and *"Demand Reduction"* conducted in parallel fail, which equates to *"Legal Demand"* and an exponential rise in *"Illegal Demand?"*



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Where is the evidence and economic science to support the claimed conclusion that "demand" is "reversible" in reality? If things go wrong, then 'legal' actions are not necessarily easily reversible - past experience proves 'easy reversibility' to be an assumption.

- Case studies (elephant ivory and the vicuña) on Demand Management/sustainable utilisation, do not support a legal trade in rhinoceros horn being able to combat non-conformist (illicit) market forces – quite the opposite; legal trade stimulates demand and fuels illicit activity.
- There are concerns around the potential effects of legalisation relating to whether legalised trade competes with existing illegal markets or simply creates new parallel ones. One only has to look at the evidence in a comprehensive report on the 'legal' lion bone trade, "[The Extinction Business, South Africa's 'Lion' Bone Trade](#)," EMS Foundation and Ban Animal Trading, July 2018 where the conclusion is - South Africa's lion bone trade has "*....created a situation where the legal trade in 'lion' bones is fuelling the illegal trade in lion and tiger bones and providing laundering opportunities for tiger bones in Asian markets.*" There is no evidence to suggest that a legal trade in rhino horn will not fuel illegal trade, quite the opposite is likely – [professionals within academia conclude](#) that 'legal' trade does not potentially counter and combat illicit activity – legal and illegal trade does not necessarily reach a natural equilibrium.
- There are concerns "*whether legalised trade leads to reduced enforcement against illegal traders.*" As soon as there is a blur and legal mechanisms exist, then [legal and illegal markets coexist and interact in complex ways](#) – thereby "*legalised trade leads to reduced enforcement against illegal traders.*"
- However, perhaps the principal problem with the endless campaign to adopt some form of legal 'sustainable utilisation' as the only solution is the notion that it's justified regardless of any imposing law:

"The notion of 'contested legality' was introduced as a legitimisation strategy of important actors who justify their participation in illegal or grey flows of rhino horn based on the perceived illegitimacy of the rhino horn prohibition" - "[A Game of Horns](#)" (page 366), Annette Michaela Hubschle, International Marx



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Plank Research School on the Social and Political Constitution of the Economy (IMPRS SPCE), Köln, Germany, 2016

- Therefore, it's not just a question of *"legalised trade leads to reduced enforcement against illegal traders"* – those seeking 'legal' trade mechanism for rhino horn, lion bone etc. feel that it is their right to act outside of the law in the first place and exacerbate illicit activity. Such illicit actions will potentially have an enduring, negative impact on the species' conservation; however such threats/blackmail from breeders should not be used as an excuse to authorise and condone a 'legal' trade or quota that has no scientific merit - the rule of law should override any such illicit activity threats (or else mob rule will be allowed to prevail in the absence of law enforcement and a clear scientific foundation for a legal mechanism).
- The proposed *"non-commercial"* rhino horn trade has no cap, or quota, but relies on the integrity of an importing country that such trade is not commercial. Where are the proposed precautionary safeguards that trade masquerading as *"primarily non-commercial"* will not be exploited for commercial purposes? The spirit of the draft regulations (Government Notice 986 *"Draft Regulations relating to Domestic Trade in Rhinoceros Horn,"* October 2018) and export mechanisms (Notice 1105) clearly undermines CITES' 1977 ban on any international rhinoceros horn trade.
- The Kingdom of Eswatini (formerly Swaziland, which made a similar submission to [CoP17 Prop. 07](#)) [resubmitted a submission, Proposal 8, "To remove the existing annotation on the Appendix II listing of Eswatini's southern white rhino population"](#) and for... *"Eswatini to sell from existing stock 330 kg of rhino horn to licenced retailers in the Far East and also up to 20 kg p.a., including harvested horn, to those retailers."*

At the August 2019 CITES, Conference of the Parties (CoP18), Proposal 8 was [rejected at the committee and plenary stages](#). Surely, it can be seen that CITES signatories have now rejected such trade proposals twice before on the grounds that such trade is likely to be detrimental to the species.

- Recent [papers](#) highlights how little is currently known and understood about the viability of any proposed legal, international trade in rhino horn and what would happen if rhino horn is destigmatised - *"We don't know what will happen to demand if the stigma of buying horn is reduced once it has been legalised. For example, there*



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may be many potential buyers that are not buying because it is illegal, but will start buying if it becomes legal” - [Dr Andrew Taylor](#)

- How has the uncertainty of the “number of rhino horns in private stockpiles” been removed, and thereby mitigated the risk of “laundering of illegal horn into legal stockpiles as well as smuggling of horn out of the country?” This is despite “the RHODIS database to ensure traceability. The system is well managed and rhinoceros horn stock piles are regularly audited.”
- There is an obligation on Parties to “take appropriate measures to enforce the provisions of the present Convention and to prohibit trade in specimens in violation thereof” includes all Parties' (including South Africa's) adherence not to facilitate trade in contravention of the CITES 1977 ban on all international commercial trade in rhinoceros and their products - where under [Article I](#) definitions “Trade” means export, re-export, import...” and undermine the [February 1995 exemption South Africa’s white rhinoceros population to an Appendix II listing](#) and the caveat that this exemption did not include trade in rhinoceros horn.

In final summary, the Notice 1105, Table 1, NDF 25 “Effectiveness of strict protection measures” evidence in support of exploring a legal rhino trade is not impartial, exhaustive or complete. The body of impartial science does not categorically support any legal rhino horn trade as not detrimental to the survival of the species. Therefore, the CITES requirement for export (even for claimed “primarily non-commercial purposes”) are not met:

Appendix I and II Specimen – “An export permit or re-export certificate issued by the Management Authority of the State of export or re-export is required. An export permit may be issued only if the specimen was legally obtained **and if the export will not be detrimental to the survival of the species**. A re-export certificate may be issued only if the specimen was imported in accordance with the Convention.”