
# THE SURVIVAL OF BLACK AND WHITE RHINOCEROS IN SOUTH AFRICA

## THE RESUMPTION OF TRADE IN RHINOCEROS HORN AND THE ASSOCIATED RISKS POSED BY LEGALISED TRADE AS A POTENTIAL CONTRIBUTOR TO THE EXTINCTION OF SOUTH AFRICA'S FREE-RANGING RHINO

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## A. EXECUTIVE SUMMARY

1. The economic models proposed in favour of legalizing trade in rhinoceros horn to eradicate poaching are based on economically flawed assumptions. On that basis alone, any formal consideration of legalizing trade is misguided, dangerous and could lead to increased demand and the ultimate extinction of the rhinoceros in the wild.

2. There is no evidence that legalizing trade will prevent poaching. On the contrary, legalizing trade has the potential of increasing poaching to devastating and unsustainable levels which will see a decline in real terms of rhino populations.

3. There are a multitude of factors that have influenced the rise and fall of global rhinoceros populations. As a consequence and in isolation, it is disingenuous to blame the CITES ban for the increase in poaching. It is undeniably the demand for rhinoceros horn that promotes poaching.

4. Effective enforcement by both local and international enforcement agencies is critically important in the global effort to eradicate / mitigate future poaching.

5. Wildlife farming / ranching has proven to be a low employment sector of the domestic economy. The implementation of the growth objectives proposed by the Honourable Minister, Mr Martinus van Schalkwyk, at the launch of the first ever National Tourism Sector Strategy and the associated increase in the tourism sector's contribution to national GDP, entrenches the sector's potential as an important contributor to South Africa's economic prospects and the well-being of her people as a whole.

6. Current domestic rhino reproduction rates in national and private parks are sufficient to increase population figures, subject to there not being a further increase in poaching.

7. Increased security to protect free-ranging rhino in all national, regional or private parks and reserves is critical..

8. In addition to the tourism objectives proposed and alluded to in 5. Above, it is essential to encourage and assist members of local communities, especially those in close proximity to parks, to operate and / or manage anti-poaching units or tourism-orientated businesses. This will address issues of poverty in the communities, increase the protection of wildlife, promote employment and boost the economy..

9. At face value legalizing trade could bring much needed funding to parks and reserves and most notably to SANParks. Notwithstanding, the real risks of unintended consequences (see 10. below) are such that it would be morally reprehensible, highly irregular and or irresponsible to promote legalized trade at any time into the foreseeable future and before other more sustainable sources of revenue are thoroughly investigated.

10. It is our recommendation that the ban on trade, both local and international, in rhinoceros horn remains in effect until such time that an approved, independent and representative panel of experts, appointed and commissioned by CITES, investigates, collates and presents accurate current and /or potential demand data. No bans should be lifted until such time as poaching rates fall below the "background" rate of 2007.

## B. INTRODUCTION

This document examines the relevant aspects proposed for a review of the current CITES-imposed ban on rhinoceros horn. There have been calls to "re-open" trade in rhinoceros horn and as a consequence we highlight the associated risks and in some cases dispel many of the economic myths argued in favour of legalised trade.

- Developing countries require unique solutions to deal with the environmental, social and economic challenges that they are facing in the new millennium. It is clear that large nature reserves or parks mitigate the risk of extinction of species, ensure biodiversity and nurture and protect populations of endangered fauna and flora. However, most developing countries do not have the resources to adequately secure large tracts of land and effectively protect valuable species from illegal/unsustainable exploitation.

- Conservation success ultimately depends on resources. History confirms a direct relationship between the rate of poaching and the number of anti-poaching patrols (APUs) in the field. In basic economic terms this relationship determines the risk or 'cost' poachers anticipate before harvest i.e. as the number of APUs rise the probability of getting caught rises and therefore the "cost" of poaching increases. Getting caught BEFORE harvesting the horn largely determines the "cost" of the supply.

- Other important social factors of which poverty and corruption are just two of many, are also linked to the rate of poaching. Recent global studies place South Africa as the 64th "least-corrupt" country behind countries like Rwanda and Namibia. Corruption has, undeniably, contributed to the significant rise poaching.

- There are other key contributors to the surge in poaching in South Africa which will be discussed elsewhere in this document.

- The South African government has identified the tourism industry as a key driver of future sustainable growth and as a consequence an aggressive growth strategy was developed to achieve these goals. International and domestic inbound tourist focal points are Cape Town's Table Mountain and the internationally accepted 'Big 5' [originally coined by early hunters to describe Africa's five (5) most dangerous animals. The 'Big 5' includes the elephant, buffalo, lion, leopard and rhinoceros]

South Africa's current poaching crisis is being driven by high market demand ('illegal') for rhinoceros horn in Asian countries like China and Vietnam for use in Traditional Chinese Medicine (TCM's).

- Rhinos are either locally extinct or rare elsewhere in Africa. The logistical "cost" for poachers of finding them outside of South Africa has escalated. In addition, where the rhinoceros is extant those few individuals are, invariably, under some form of close supervision. By way of example Kenya employs two (2) guards for every rhino. That makes the illegal harvest "cost" of these rhino prohibitively high. Finding rhinos in South Africa is significantly easier. The "cost" of harvesting is, therefore, much lower. Add corruption to that formula which reduces, tangibly, the risk of getting caught either before or after harvesting the horn and poachers enjoy 'the perfect storm' – i.e.: demand-push prices; scarcity value; low harvest risk or 'cost'; low export risk or 'cost' and negligible enforcement risks in the retail markets (Asia).

## C. DISCUSSION

In order to come to better understand the dynamics, certain aspects need to be investigated:

1. International law –CITES
2. Local law – NEMBA, TOPS
3. ECONOMICS
4. Factors that triggered the increase in poaching Pseudo hunting and the stockpile debate
5. Criminal syndicates and the so-called 'Black – market'
6. Legal trade and associated pitfalls

### 1. CITES

Regulation of International Trade in Wildlife (fauna & flora) and their products is managed through the Convention of International Trade in Endangered Species (**CITES**). **CITES** is mandated to regulate and monitor trade in endangered and threatened species. Species are listed (categorised) on various appendices that regulate the issuance of permits to reduce the threat of exploitation.

**CITES** is a self-regulating treaty. Member states are responsible for the protection of wildlife through national legislation. Strict regulations in international trade of endangered species are enforced by **CITES** which then needs to coincide with strict enforcement of local and regional regulations and laws. If strict regulations from local authorities are not applied and enforced then **CITES** regulations become irrelevant.

South Africa is a founding member of **CITES**. Locally the Department of Environmental Affairs is responsible for the co-ordination, policy determination, implementation and liaison with **CITES**.

It is a gross over-simplification to proclaim that the **CITES** ban has caused the significant increase in rhino poaching from 2008 to date. Demand for the product has caused the poaching. If the trade was legalized the demand for the product would generate supply but it won't be called poaching because poaching by definition pre-supposes illegal behaviour. Poaching or legal supply facilitate one and the same reality i.e. satisfying demand.

Despite the many deficiencies in regulation and enforcement in South Africa the trade ban can be directly linked to increased population numbers of both the black and white Rhino.

## 2. TOPS

**TOPS** (Threatened or Protected Species Regulations) – these regulations were promulgated in 2008 and regulate restricted and prohibited activities as well as permits for hunting, conveying, keeping, or selling of protected species. **TOPS** regulations have been amended on numerous occasions to eliminate loopholes that were being exploited by the hunting industry.

If these regulations are strictly followed and applied by competent and non- corrupt officials then **CITES** regulations could be effective. Currently the enforcement of **TOPS** is both ineffective and inefficient and the fact that the Department of Environmental Affairs (**DEA**) has a 51% vacancy rate makes enforcement practically impossible. In addition, the **DEA** is wholly reliant on the provincial agencies which are understaffed and under-skilled and lack the necessary discipline to enforce the extensive environmental regulations effectively.

Systemic corruption and the substantial financial returns derived from the illegal trade in rhinoceros horn lends itself to high levels of corruption by regulatory institutions and / or private individuals in the national and / or provincial regulatory environment.

3. **Rhino economics and the Demand-curve**

Price is derived by the interaction of supply and demand both of which are fundamental components of a market. An exchange of goods will occur whenever buyers and sellers agree on a price.

When demand is **NOT** known the effect on price by increasing supply cannot be *assumed*.

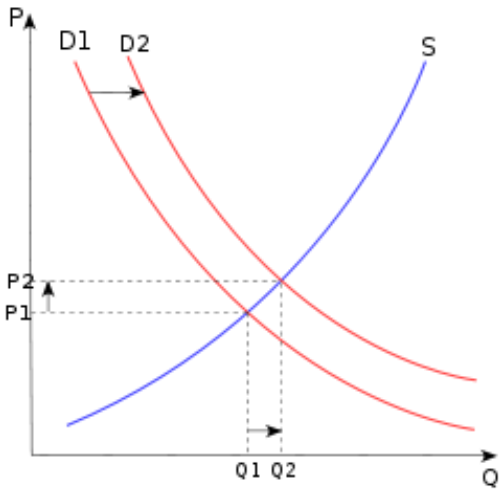


Figure 1.

The price (P) of a product is determined by a balance between production at each price (supply S) and the desires of those with purchasing power at each price (demand D). The diagram (above) shows a positive shift in demand from D1 to D2, resulting in an increase in price (P) and quantity sold (Q) of the product.

Advocates of legalised trade predict free-trade will increase supply to such an extent that consumers will be able to 'bargain' for lower prices. As prices fall the incentive to 'take-the-chance' and poach falls too i.e. the financial /economic incentive is not worth taking the chance of getting caught. The prediction relies on a dangerous assumption which is, alarmingly, subjectively self-serving. Proponents of trade assume NO or very little increase in demand from current levels; undeniably naïve.

When illegal markets are legalised very often NEW consumers, who were previously reluctant to try the product because of the legal implications, enter the market. The current illegal consumers will, more than likely, still be consumers.

As a consequence:

i) The potential for a significant increase in the number of consumers, post legalisation, is real.

ii) The suggestion that an increase in the supply of a commodity will decrease the price of a product for the retail consumer does not always hold true.

iii) Where demand is unknown it is erroneous to make assumptions by extrapolation only i.e. it is grossly inaccurate to predict current demand from aggregated supply data. This is especially true in an unregulated and/or illegal market.

iv) Specific to illegal markets it is irresponsible to discount the effects on demand as previously law-abiding consumers enter the market (reverse stigma)

v) In instances where the demand curve shifts outward (Figure 1.) i.e. new participants enter the market; an increase in supply does **not** always decrease price.

vi) The proposal that an increase in supply will result in lower prices when demand data is unknown is inaccurate and / or irrelevant.

**vii) It is inaccurate to infer that an increase in supply will result in lower prices. Paradoxically, demand from new participants could shift the demand curve significantly to the right resulting in higher prices. The incentive to cease illegal supply fails as prices rise.**

## 4. Factors that triggered the increase in poaching - Pseudo hunting and the stockpile debacle

The down-listing by **CITES** of White Rhino in 1997 from Appendix I to Appendix II signalled the possibility of a resumption in trade and until 2008 stockpiled horn was being traded on the 'local' market which was finding its way via international crime syndicates onto the Asian market. This, coupled with the increase in 'pseudo hunting' with the express purpose of exporting trophies to get the horn onto the black-market fuelled the increase in poaching. It is estimated that more than 69% of all hunting permits issued in 2011 were issued to Vietnamese 'hunters'. Vietnam is not known as a hunting nation and it can only be assumed that all the horns from these trophies were traded on the black market in Vietnam.

In 2008, following an increase in rhino poaching, South Africa implemented a local moratorium on trade in rhino horn. This, to a large extent, ended local trade with international organized crime syndicates and it appears that the high current poaching levels are indicative of high levels of local trade in horn to international syndicates prior to the moratorium.

Internal corruption and lax enforcement of TOPS and the reluctance of Private Rhino Owners to declare rhino horn stockpiles and comply with micro-chipping and DNA sampling regulations, has led to horn from stockpiles leaking onto the market. It is evident from recent arrests in South Africa that horn

destined for the illegal Asian markets is not always from recently poached animals and can therefore only be coming from either government-owned or private stockpiles.

**5. The CSO and black market crime:**

Advocates of trade suggest that legal rhino horn sold through a Centralized Selling Organization (CSO) will eradicate illegal trade on the black market. Such analysis seems attractive at first but a closer look at the facts will prove that it is both simplistic and inaccurate.

Implied restrictions on market participants and the quantities sold supports a black market to facilitate supply to the buyers 'excluded'. In addition it has been suggested that the CSO build-in a profit for 'conservation'. The black market will exploit the layered legal-supply pricing by excluding these taxes and /or levies.

It is accepted that the black market is made up of criminals. What are the chances that they will say "*Oh well, we cannot compete in this legal market, we may as well all go out and get real jobs*"? In short, the notion that legalizing trade will eliminate organized crime simply purports an ignorance of how organized crime actually works.

**6. Once-off sales and poaching statistics**

We need to learn from our mistakes and one only needs to look at the ivory trade to know that allowing trade in endangered species does not always decrease poaching. In fact, as is evidenced with regional one off sales of ivory, poaching of elephants in Africa has reached epidemic proportions with 2011 being the worst in decades. Experts have laid the blame for this explosion in poaching on the release of stockpiles onto the market.

It is abundantly clear that neither demand driven nations (China and Vietnam) nor supply nations (Africa) have the ability to monitor and control trade in wildlife – legal or illegal.

In many ways, the outright ban on the trade in ivory was incredibly successful because it not only brought illegal poaching to an end but also ended the demand for ivory in Europe and the USA. Throughout the world the price of ivory dropped dramatically. Global awareness campaigns in conjunction with the ban in trade accounted for the massive decrease in demand. As populations recovered African countries began elephant culls and stockpiles grew. In 1997, emphasizing their positive conservation records, Botswana, Namibia and Zimbabwe were permitted to transfer their elephant populations from Appendix I to Appendix II and sought permission for a once-off sale of ivory to Japan. South Africa argued that the revenue generated from the sales would generate much needed funds for conservation. It was argued that this would allow elephants to 'pay their way' which would ensure their long term survival.

After much debate, Botswana, Namibia and Zimbabwe were allowed a once off sale of 59 tons. All

proceeds from the sale of the ivory were to be used for elephant conservation. The sale was deemed a success by the exporting countries. Notwithstanding, it has subsequently been confirmed that the sale of these stockpiles presented an opportunity for organized crime syndicates to launder 'illegal' ivory onto the markets resulting in increased demand, higher prices and the mass slaughter of elephants throughout Africa culminating in 2011 being the worst elephant poaching year in decades.

It is believed that the rhino horn trade, if legalized, will be no different from the scenario that played out in the trade in ivory. Despite the fact that China has completely prohibited the use of illegal animal products in Traditional Chinese Medicines (**TCM**) they show little commitment to enforcing the prohibition in the markets. Little or no education informing Asian consumers in Asia of the harvesting atrocities are in evidence.

China and other Asian countries have shown little regard for enforcement and /or policing the trade of illegal products within the 'legal' wildlife trade market. To expect that it would be any different for the 'legal' trade in rhino horn would be irresponsible.

> '*Evidence suggests that the illegal trade in wild animal products is controlled by groups of criminal networks (syndicates) who specialize in trafficking illegal commodities. These traders have a substantial hold on the market and earn high profits by controlling over supply and pricing. The illegal trade in endangered species is characterized by imperfect competition and failure to acknowledge this fact could have detrimental consequences for wildlife. Using conventional models of imperfect competition may result in greater poaching pressure and accelerate the likelihood of extinction*' (Erwin H Bulte 2004 – An Economic Assessment of Wildlife Farming and Conservation)

## 7. Intrinsic value and the 'pay to stay' theory

As an integral member of the Big 5, the rhinoceros contributes between 75-80% of the tourism sector's contribution to national GDP which equates to a credible R172.8 billion. Growth in the tourism industry is expected to contribute R499 billion to gross GDP by 2020.

Hunting/ranching contributes insignificantly to national GDP by comparison. The IUCN (2011) report on the domestic hunting / ranching industry refers specifically to the land area occupied (13.1%) and the small contribution to the GDP (0.04%). The report also highlights a meagre 15 000 salaried jobs throughout the eight main hunting countries in Africa.

The tourism industry on the other hand contributes more than a million jobs. Tourism's contribution to South Africa's gross domestic product (GDP) rose from 2.7% to 7.9% in the 2009-2010 period. The South African government aims to increase the tourism sector's contribution to 12% of GDP, which has the potential to create a further 400 000 jobs.

**RHINO IS PAYING ITS WAY NOT ONLY IN ITS ENORMOUS CONTRIBUTION TO DOMESTIC GDP BUT ALSO BY CREATING JOBS AND REDUCING UNEMPLOYMENT.**

The Intangible intrinsic value ('Blue Sky' or brand-value) of the rhinoceros as in integral, iconic member of the Big 5 is, extremely high indeed.

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