

Save the rhino by the horns

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The views expressed are those of the author.

Current status of African rhinos

African rhinos endure a huge problem of poaching. The rhinos are sought by poachers, traffickers, international criminal groups and even tourists.

On 15 July 2018, an internet search for “rhino poaching” showed over 48700 media references on the subject. People from Asia are the prime wildlife consumers. In China and Viet Nam mainly, the demand for rhino horn has gone beyond any level-headed imagination, fuelled by endless inspirations of local traditions and attitudes, a situation exacerbated by wrong and misinformed perceptions of wildlife products. In fact, the recent attempt of the Chinese government reversing of a 25-years ban (NatGeo 2018) that would allow the use of rhinoceros horns and tiger bones in traditional medicine, it is the evidence of ill-fated intentions.

Most Chinese consider obtaining parts of protected wild animal species is unpopular in their society. However, those who acquire the products view the possession of ivory and rhino horn as a status symbol or a panacea for all sorts of maladies. According to a recent study of consumer demand for elephant, pangolin, rhino and tiger parts by the United States Agency for International Development Wildlife Asia (USAID Wildlife Asia), Beijing Normal University and GlobeScan (2018), 20 percent of the 1800 Chinese citizens interviewed earlier this year in six major cities think that buying elephant, rhino, pangolin and tiger parts is “socially acceptable.” Let us hope that these figures do not apply, at the same ratio, to the whole Chinese population.

Organized rhino slaughter works at five levels. Col Johan Jooste, South African commander of the Hawks Endangered Species Section, gave a thorough account of the scenery and operation of poaching syndicates (Eloff 2018). In specific, Jooste stated: “*It could take months or years to establish an evidentiary link between the levels and the acts performed by other role players*”.

What to do?

Most wildlife experts and conservationists consider outlawing trade, suppressing poaching and trafficking, and providing educational campaigns to reduce demand represent the way to over-turn the current trend. Other experts promote discordantly the sheer legalization of trade in rhino horn as the only viable option that can guarantee rhino preservation. The fact remains the conflict between contra and pro trade will merely leave the poaching and illegal trade flourishing and at the end neither solution will save the rhinos.

A single solution no longer exists in conservation, but well-pondered, multiple actions are necessary to interact with each other for the ultimate objective to save a species from extinction.

A major census of all the remaining rhinos has so far been ignored (Nardelli 2017). Such a census would allow critical evaluation of the number of rhinos alive and ascertain the volume of stockpiled horns, if not for a severe evaluation of live rhinos present, for the numbers of stockpiled horns are unknown.

The recently proposed “silver bullet” would be to consent the international trade in rhino horn in a manner similar to commodities. The horns are eventually sawn off the rhinos, under risky general anaesthesia, and sold. Once they re-grow sufficiently—according to the rhinos or their owners?—they are sawn off and sold...Again and again. While the dispute goes on, rhinos are being killed by the thousand.

Despite rhino poaching being the topic of a myriad of papers, simple calculation supports 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, if not simply because there are clearly too few alive.

Since completing an extensive review of 25 years worth of literature relating to the wildlife trade, Nadal and Aguayo (2014) have turned into fervent critics of the economic arguments put forward by supporters of wildlife trade and came to the conclusion: “*Illegal rhino horn trade is an international problem that requires a well-coordinated global response comprising genuine commitment to strong legislation, uncompromising enforcement and creative demand-reduction initiatives*”.

The case or not for rhino horn trade

In standard trade, lowering a much sought after product's price increases its demand and the competition among suppliers. Considering that every talented attempt to end the rhino horn trafficking plague has so far been insufficient, the additional chance for all—to legally trade horns—will certainly anticipate the demise of the rhinos. In today's situation rhino horn must not be widely trafficked, as tangible yet tragic experiences in the form of pangolin scales, shark fins, ivory, whale's meat—the list could fill pages—has amply demonstrated (Mc Cann 2018).

Trade in wildlife favours current and potential dealers who exploit animals for their own livelihoods and lifestyles, and refuse to look at any alternative that may work for the rhinos. What's more, ubiquitous corruption (Save the Rhino 2018) complicates the protection efforts.

The pro open-trade argument goes thus: scarcity will be eliminated through the flow of legal supply. Legal owners in actual fact guess, offering such vast quantities of horn from captive breeding, natural mortality, culling (aka trophy hunting) and rhino horn stockpiles. In this manner, they presume they will satisfy demand and take control of the market supply and drive prices down, thus rendering poaching unprofitable. Obviously an intuitive failure.

One viable plan is necessary to obtain solid and mutually beneficial conclusions, in the first place for the sake of rhinos.

At first sight it would appear that by simply removing the horn the problem is solved: rhinos will be worthless to poachers. However, the issue is a lot more complicated than it first appears.

Dehorning to prevent rhinos from falling victim to poachers has in some cases proved inadequate. During any dehorning exercise a remnant of horn remains and although poaching is made less profitable, the sad reality is that poachers will still kill for a horn stub (Salem 2018) because even this one has high value, or merely to end their chase successfully.

Very relevant, though not taken into consideration, is the evidence that on a whim, rhinos will no longer rely on their multiple-use instrument that has been vital during their million-years-old ecology.

Evidently, open trade is a motivation more for business than for conservation.

What to say of horn poisoning or inserting micro cameras into the horns of live animals? Good intentions but ineffective? Selling synthetic horn to an Asian trader would be akin to selling synthetic gold to a Swiss banker. On a large scale, these procedures consume too much time and funds, and present at all times is the risk of general anaesthesia to the animal.

Some rhino host countries and consumer countries have signed good-intentioned agreements to suppress the trafficking of illegal horn. How and when these agreements are going

to be properly implemented is yet to be seen. National governments' directories of priorities are known and even the most developed countries have wildlife conservation at the bottom of that list.

A new approach to African rhino horn management

Nevertheless, if we look at the issue from another angle, large rhino horn stockpiles are sitting in bank vaults or similar custody, devoid of any contribution to conservation.

Considering that the unsustainable demand for rhino horn from China and Viet Nam continues unabated and *in situ* protection measures need more time and money to become significantly effective, it is in the interest of the South African and other local governments, as well as private owners, to sell their stockpiles to sustain and improve rhino conservation.

A feasible solution is to make proper use of the stockpiles to halt poaching. To achieve this, it is necessary to take advantage of the existing rhino horn stockpiles, although in a manner that will, in reality, grant control over the market.

Some countries and legal owners want to sell their stocked rhino horns? On condition that buyers stop rhino poaching.

To solve the rhino horn problem, China and Viet Nam governments must intervene to bring to an end the illegal trade. These governments can end the slaughter if they really want to, (english.gov.cn. 2018) (e.g. the Giant Panda *Ailuropoda melanoleuca*), but their actions related to “exotics” are presently guided by the convenience of not upsetting local consumers and for financial gain of their nationals.

A viable and mutually beneficial solution for all, rhinos *in primis*, would be to secure an agreement between rhino countries—South Africa *et al.*, legal private owners included—and rhino horn consumers—China, Viet Nam *et al.*—unified into two agencies (sellers = Agency I and buyers = Agency II) to trade their existing rhino horn stockpiles yearly, using quotas, via exclusive selling and buying procedures and strictly from Agency I to Agency II. All transactions will be submitted to extensive checks by CITES and controls by enforcement agencies to ensure that organized criminal elements and allied do not enter the trade.



Microtaggant

First, stockpiled horns must be permanently tagged using microtaggants. These tags are uniquely encoded materials or chemistries that are virtually impossible to duplicate. A microtaggant is like a fingerprint—a unique signature of identity to which users assign meaning. It can be overt or covert and can be used for a wide variety of applications. Microtaggant particles are microscopic, ranging in size from 20 microns to 1200 microns. Each particle is uniquely encoded exclusively for a requested application—acting as a virtual fingerprint—resulting in positive, error-free identification every time. This experienced technology enables investigators to test on-the-spot, providing positive, instant ID and verification of materials, with inexpensive readers and detectors.

The agreement must be signed between all the owners of rhino horn stockpiles and their consumers. (At the CITES meeting in Bangkok in 2013, it was rumoured that China would be South Africa's preferred trading partner were international trade to be allowed.) Such an agreement will be founded on precise clauses, stating in short that: *An exact quantity of rhino horns, of exclusive existing rhino horn stockpiles origin is sold, on a yearly basis quota fixed by global experts, to supply a strictly controlled market for the period of (at least) 10 years. Sales from Agency I to Agency II to be exclusively authorized under the strict condition that Agencies get to a close the illegal trade. The resuming of poaching events will be the basis to end the rhino horn stockpiles sales and the sanctions herein listed apply. The operation must be carried out under scrutiny and frequent inspections by selective international third Parties.*

The supply from rhino horn stockpiles is evidently limited thus poaching will resume as soon as deliver ends, unless, during the years of truce, a natural rhino horn will be created and produced as replacement.

The whole procedure is feasible.

In conclusion: it is a determining factor to negotiate as soon as possible a solid contract between rhino countries and main consumers: China and Viet Nam *in primis*. However, such a document cannot materialize, based on authentic rhino conservation, if the negotiations are left just to governments without an unbiased and strong mediator. The bureaucracy s management and control, in a skilful manner, are indispensable to achieve the long-term survival of the rhinos.



A trial product: stub of the first physically created rhino horn

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