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# Tackling supply and demand in the rhino horn trade

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## **Summary**

The majority of responses to the growing illegal trade in rhino horn aim to curb supply through frontline enforcement and security in parks and reserves in Southern Africa, particularly South Africa. They include recent advances in legalising the trade. Far less effort has been made to involve local communities in anti-poaching efforts or reduce the appetite for rhino horn in East Asia. This policy brief reviews available information on supply and demand in rhino horn markets, analysing the main responses and their impacts. It advocates greater policy coherence in supply-side measures and more regional and international cooperation in demand-side campaigns.

## Key points

- Responses to the illicit trade in rhino horn have mainly focused on the supply side. The burden of implementing security measures cannot only fall on the under-resourced departments responsible for maintaining national parks.
- Improving the protection of rhinos is necessary, but not sufficient.
   Community-led activities that are well coordinated and funded are needed to ensure local people become key stakeholders in rhino conservation.
- Policy focus on curbing the demand for rhino horn must be increased to balance supply-side policy interventions. This requires more support and resources for research and public awareness campaigns in demand countries.



According to research and advocacy organisation Global Financial Integrity, wildlife crime, defined as the acquisition and movement of illicit and protected species,<sup>1</sup> is the fourth-most lucrative form of organised crime globally and has evolved from a conservation issue into a national security priority in a number of African countries. Eastern and Southern Africa are among the leading suppliers of this market, which is estimated to generate between US\$5 billion and US\$23 billion in annual revenues globally.<sup>2</sup>

It is now widely accepted that highly organised transnational criminal syndicates coordinate the poaching and trafficking of rhino horn

Since 2010, there has been a marked increase in the scale and toll of wildlife crimes in Southern Africa. Despite the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which sets the terms of the international trade in an estimated 35 000 plant and animal species, a flourishing illegal trade exists in African parrots, pangolins, lion bones and abalone (a type of shellfish), as well as a host of other smaller species.<sup>3</sup> The insatiable appetite for rhino horn has seen poaching more than triple between the years 2010 and 2015.<sup>4</sup>

It is now widely accepted that highly organised transnational criminal syndicates coordinate the poaching and trafficking of rhino horn. Poachers, typically recruited along the borders of parks and reserves, can earn anything from US\$500 to US\$20 000, depending on their specific role.<sup>5</sup> On the black market, rhino horn sells for an estimated USD\$25 000 per kg.<sup>6</sup> An average-sized white rhino can carry between 3kg and 6kg of rhino horn, and a black rhino between 1.5kg and 3kg.<sup>7</sup> White and black rhinos typically have two horns.

A market-based approach to monitoring transnational organised crime (TOC) implies that the forces of supply and demand determine the scale and nature of the crime. The logic follows that it is necessary to address both, given that aiming to curb supply is an endless and costly endeavour in the face of growing demand. International and domestic governing bodies are

increasingly responding to the illegal rhino trade as a sophisticated criminal enterprise, but the majority of responses remain targeted at curbing supply.

This supply-side emphasis translates into security measures that overwhelmingly fall on the departments responsible for maintaining national parks and reserves, which are rarely appropriately resourced for the task. Further, the international and domestic legal frameworks that guide the prosecution and sentencing of perpetrators of rhino horn-related crimes remain inadequate in a number of supply- (African) and demand-side (Asian) countries. Compounding these challenges is the fact that demand-side campaigns, such as educational campaigns on the impact of rhino horn consumption, while largely effective, are underused.

Important too is the role facilitators or middlemen play in moving rhino horn from the points of supply to the demand markets. This space is typically the focus of special investigations carried out by domestic law enforcement bodies and through regional cooperation. While acknowledging that facilitation is a key part of the equation, this paper focuses on the two ends of the spectrum of supply and demand to make clear that there is much opportunity for increased impact on the demand side and much more coherence required on the supply side. South Africa is the primary focus.

### Rhino poaching: the supply

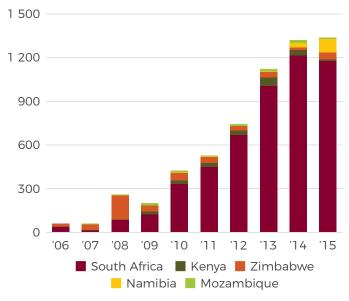
The remaining rhino populations in the world are concentrated in the Southern African countries of South Africa, Botswana, Namibia and Zimbabwe. The poaching crisis is therefore concentrated in these range countries.

What we know about the scale of the current supply market – or poaching of rhinos – is derived from official statistics on poaching and seizures of trafficked rhino horn, and specialist reports by conservation experts. A regional expert analysis carried out in 2016 showed a dramatic increase in rhino poaching between 2009 and 2015, especially in South Africa.<sup>8</sup> Despite a slight dip in 2016,<sup>9</sup> the number of rhinos killed in 2017 in South Africa alone is likely to have been around 1,000 in total, the average number of rhinos killed annually in the country since 2013.

A recent report by wildlife trade monitoring network TRAFFIC estimated that more than 2 149 rhino horns were seized globally between June 2010 and June 2017. This figure, however, does not represent the true scale of rhinos poached or traded, given the many limitations of using seizure data to gauge the scale of the challenge.<sup>10</sup>

Despite the limitations of seizure data, they provide a picture of the destinations of smuggled rhino horn. Emslie et al (2016) posit that most seizures of rhino horn between 2009 and 2015 occurred in or involved South Africa, Vietnam, China and Mozambique.<sup>11</sup>

Figure 1: Total rhinos poached by country 2006-2015



Source: IUCN<sup>12</sup>

Reports based on first-hand interviews with poachers and park rangers show that poachers are typically from poor communities that border national parks where rhinos live. When arrested, the poachers usually have hunting rifles equipped with silencers and are typically poorly resourced in terms of clothing, water and food. Most are motivated by the high incomes poaching syndicates pay, the appeal of which is accentuated by dismal employment opportunities in many remote parts of Southern African rhino range countries.

From these various sources the research and response community has been able to gain a sense of the scale of the supply problem, see changes in this supply over time and know roughly where and how rhino horn is being obtained at national and sub-national levels. Seizure data also help point to the key countries involved in rhino horn transit and tell us about the tactics traffickers use.

Supply-side responses include changes to domestic law, specifically in relation to outlawing possession of or trade in particular species; legal sentencing terms; and increasing security around and inside national parks, with high-tech surveillance equipment and highly trained rangers.

# Supply-side responses and results: the case of South Africa

In South Africa, where the majority of rhino poaching occurs, the multiple supply-side policy responses and actions are at best a mixed bag of successes, paradoxes and failures.

The government in South Africa in 2014 deemed rhino poaching a national priority. Therefore, rhino poaching receives the 'highest level of attention from the Department of Environmental Affairs (DEA), the country's law-enforcement authorities, and the prosecution service.' However, the DEA received only 1% of the government budget in the 2015/16 fiscal year. It must use this to support a range of biodiversity and conservation projects, including the maintenance of South African National Parks (SANParks) and its management of 21 national parks.<sup>15</sup>

Since the implementation of the 2011 Integrated Strategic Management of Rhinoceros approach, a unit of the South African National Defence Force has been deployed to protect rhinos in Kruger National Park (KNP), an estimated 20 000 sq. km of protected land where the majority of the country's remaining rhinos live. In 2015/16, SANParks employed roughly 450 rangers at an annual cost of around 200 million rand (roughly US\$ 17 million). This included costs associated with spatial mapping and reporting tools, drones and helicopters for surveillance.

Also since 2011, the South African Police Service (SAPS) has been mandated to focus on rhino-related crimes under the Directorate for Priority Crime Investigation, also known as the Hawks. Under the Threatened or Protected Species (TOPS) Regulation of 2013, poachers and traffickers can be fined a maximum of 10 million rand (roughly US\$ 800,000) or receive a sentence of five to 10 years in prison for repeat offences.<sup>18</sup>

In 2012 and 2013, the South African government signed memoranda of understanding (MoUs) with China and Vietnam to increase cooperation in the fight against poaching. Around the same time, the government stopped issuing hunting permits to Vietnamese nationals to stem the flow of rhino horn into these high-demand countries. Before the ban, between July 2009 and May 2012, more than 185 Vietnamese nationals visited South Africa with sport-hunting permits. Analysts maintain that because these individuals had little hunting experience, syndicates intentionally recruited them to serve as 'pseudo-hunters' to obtain trophy horns for the retail market in Vietnam and China.<sup>20</sup>

In 2017, in one of its most recent supply-side efforts, the government announced the adoption of the National Integrated Strategy Against Wildlife Trafficking. This emphasised the government's commitment to ensuring rhino trafficking would remain a national priority and set out a number of approaches intended to control the poaching crisis.<sup>21</sup>

#### Results

The results of South Africa's supply-side efforts are mixed. Increased surveillance and response capabilities in KNP led to a reduction in incidents of rhino poaching in 2016, but an increase in the number of attempts at entry with the intent to poach.<sup>22</sup> The banning of Vietnamese pseudo-hunters is reported to have led to a decline in number of pseudo-hunts from 173 in 2011 to 64 in 2015.<sup>23</sup>

Following initial implementation of the Integrated Strategic Management of Rhinoceros approach, arrest rates of poachers nearly doubled from more than 150 in 2010 to almost 250 in 2011.<sup>24</sup> <sup>25</sup> According to the 2015/16 SANParks annual report, 317 poachers were arrested in and in connection to poaching within KNP, compared to 258 in 2014. Arrests by KNP rangers increased by 13% between 2014/15 and 2015/16.<sup>26</sup> More recently, in February 2017 the DEA reported that a total of 680 poachers and traffickers were arrested on rhinorelated charges between January and December 2016.<sup>27</sup>

Yet, a negative impact of the increased surveillance and security at KNP is a steep increase in rhino poaching in other parts of the country. For example, KwaZulu-Natal province is said to have experienced a 50% increase in rhino poaching between November 2016 and November 2017.<sup>28</sup>

Thus, it appears that more attention is required from the Hawks. According to the unit's 2015/16 annual report, there were 217 cases of 'organised crime' filed in the country, just 13 of which related to wildlife crime. In those cases, 30 people were reportedly arrested for rhino poaching, and only six rhino horns and 5 million rand (roughly US\$375 000) were confiscated.<sup>29</sup> As indicated above, 1 200 rhinos were poached in South Africa in 2015 producing a potential 2 400 horns (given that they have two horns), with a street value that dwarfs the amount confiscated that year.

More attention is also required with regards to convicting those arrested. Most of those charged with poaching or other violations of the CITES treaty in South Africa are convicted: 89% of the cases that

made it to court between April 2015 and January 2016 resulted in convictions.<sup>30</sup> However, many cases never make it to court, having been thrown out due to a lack of evidence, resulting from incomplete dockets that are referred back to police for further investigation.<sup>31</sup> Minister of Environmental Affairs Edna Molewa in July 2017 confirmed that since January 2017, 359 poachers and traffickers had been arrested inside KNP and within the greater Mpumalanga province.<sup>32</sup> Only 15 cases were tried, which resulted in 22 perpetrators being sentenced for a combined total of 95 years.

The sentencing of these perpetrators – on average, for around just 4.3 years each<sup>33</sup> – points to a weakness in South Africa's approach: too few cases make it to court, and while those that do are most likely to result in convictions, the sentencing regime does not match the seriousness of the issue. Only half of those convicted receive custodial sentences, with the others given fines or suspended sentences.<sup>34</sup>

In addition to this, a WildAid report on South Africa argues that the middlemen or kingpins orchestrating the crimes have not experienced the same intensity of focus as poachers at the national parks.<sup>35</sup> The report lists a number of poaching kingpins who remain free or are out on bail, some for extended periods.<sup>36</sup>

South Africa's emphasis on strengthening law enforcement related to poaching has also meant that potentially effective community-based crime prevention efforts have not received the priority they may need. This has meant that while KNP have been able to stem the number of poaching incidents in 2016 and 2017, growing numbers of would-be poachers are entering the park.

Rhino horn trade expert Annette Hübschle argues that the historical and current socio-political contexts that maintain the continued marginalisation of the populations that border SANParks are important, ongoing and under-addressed drivers of poaching that need to be prioritised to strengthen developmental crime prevention.<sup>37</sup>

Although not without controversy, two community-based initiatives in particular have been effective. One is the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) programme in Zimbabwe. It works as a decentralised, community-led initiative, whereby rural district councils:

...on behalf of communities on communal land, are granted the authority to market access to wildlife in their district to safari operators. They in turn sell hunting and photographic safaris to mostly foreign sport hunters and eco-tourists. The District Councils pay the communities a dividend according to an agreed formula.<sup>38</sup>

Funds are derived through permits issued for private hunting, a process that a steering committee tightly regulates. Outright critics of sport hunting often oppose this approach, but proponents value the economic gains to communities as disincentives to engaging in poaching.

Another example comes from northern Kenya, where in 2013 a group of volunteer rangers, consisting of villagers from local communities, formed a group to protect wildlife through patrols and information sharing.<sup>39</sup> Most notably, the group managed to recruit a former poacher who now advocates protecting wildlife, working to achieve this and recruiting new rangers.<sup>40</sup>

It could prove useful to scale up and mainstream these efforts in South Africa and other countries that are shouldering the burden of the rhino-poaching crisis. Although the National Integrated Strategy Against Wildlife Trafficking commits South Africa to such community-led efforts, there is much to be done to act on its recommendations.

#### Rhino horn: the demand

In certain parts of China, Vietnam and Thailand, rhino horn is highly valued as a commodity for its many end uses – in jewellery, ornaments and traditional Chinese medicine (TCM).<sup>41</sup>

The medicinal use of rhino horn in many East Asian countries dates back 1 300 years. In China, it was legal until 1993.<sup>42</sup> Before the ban on the trade in rhino horn and associated products in 2011, rhino horn carvings dated before 1949 were legally traded and carvings acquired legally from auctions abroad could be imported into China.<sup>43</sup> A smaller but growing market for rhino horn exists in Vietnam and a number of South East Asian countries such as Thailand, Malaysia and Laos mainly serve as transit countries for the demand markets in China and Vietnam.

However, the scale of the demand for rhino horn is less well understood, simply because it is more difficult to determine demand for illegal products and because official statistics on poaching and seizures are often used as proxies for the scale of demand. Nonetheless, reports have shown increased demand for rhino horn in Vietnamese and Chinese markets since 2009, around the time the region experienced significant economic

growth and subsequent expansion in purchasing power, and with these an increased desire for luxury goods.<sup>44</sup> According to a WildAid study, increasing numbers of cancer diagnosis in East Asia – a disease traditionally treated with TCM – may also have influenced the rise in demand for rhino horn.<sup>45</sup>

Recent survey-based research by academics and civil society organisations on rhino horn consumer markets in demand countries provide useful insights into rhino horn demand drivers. For instance, *Rhino Rage: What is driving illegal consumer demand for rhino horn?* (2016), a study of the rhino market in China, surveyed 2 000 respondents over the age of 18 from five different cities. It showed that respondents from low-income groups were significantly less likely to buy rhino horn for TCM compared to those from middle- and high-income groups.<sup>46</sup> The study indicated that the majority of respondents bought rhino horn because of its rarity as a collector's item and prestige of ownership, followed by its use in TCM, and lastly for its value as a symbol of success.<sup>47</sup>

# Most respondents bought rhino horn because of its rarity as a collector's item

An academic study of the discussion of rhino horn products in Chinese media between 2000 and 2014 echoed these findings. Over 75% of articles surveyed referenced the economic value of rhino horn carvings as collectible and investable assets, 40% their artistic value and 29% their medical value.<sup>48</sup> A 2017 study into consumer preferences for rhino horn in Vietnam<sup>49</sup> provided similar evidence of the tendency among consumers to value rhino horn for the associated prestige.

A number of independent NGOs, such as the Wildlife Justice Commission (WJC) and the Environmental Investigations Agency (EIA), are increasingly turning their attention to demand-side research and investigations, with the aim of unlocking local syndicate operations. The WJC, established in March 2015, carried out its first investigation in Vietnam, which included gathering evidence against 51 people suspected of being involved in wildlife crime in and around the craft village of Nhi Khe, around 50 km from the capital Hanoi. The WJC report noted that Chinese interpreters in Nhi Khe played an important role in recruiting buyers, and regularly

used social media sites such as WeChat and Facebook to sell wildlife products.<sup>50</sup>

Such studies on demand have broadened our understanding of the distinction between rhino horn bought for use in TCM or as a collector's item or status symbol. Below, we discuss how this helps show the impact of different policy approaches on consumer patterns. However, an accurate measure of the scale of demand remains a challenge and this has important ramifications for the types and scale of demand-side responses.

# Demand-side responses: a focus on China and Vietnam

#### Responses

Policy interventions aimed at curtailing demand typically entail domestic law for the control of markets and educational or awareness-raising campaigns on the implications of consuming rhino horn. Several projects and campaigns – state-led, NGO-based or a combination of the two – have been initiated to influence the demand for rhino horn within China and Vietnam. The MoUs signed by South Africa with Vietnam and China in 2012 and 2013 had important demand-side aims: to increase cooperation in wildlife conservation, including collaboration on demand reduction campaigns.<sup>51</sup>

On World Rhino Day in September 2014, TRAFFIC, in collaboration with the Vietnamese government rolled out the Chi campaign. This focused on addressing misperceptions about rhino horn and its supposed cancer-curing properties by invoking the concept of chi, one's internal energy or power. The campaign's key message, which emphasises that 'success, masculinity and good luck, flow from an individual's internal strength of character and refutes the view that these traits come from a piece of horn',52 was displayed on outdoor billboards and at lifestyle events and forums in major cities and towns.53 In the same year, WildAid, African Wildlife Foundation and Vietnamese NGO CHANGE (Center of Hands-on Actions and Networking for Growth and Environment), launched the Stop Using Rhino Horn campaign in an attempt to reduce demand.54

In 2015, the United States and Vietnam cooperated on Operation Game Change, which aimed to raise public awareness about the importance of conserving wildlife. From this initiative came WildFest, a local filmmaking competition about rhino horn consumption and wildlife conservation.<sup>55</sup>

In 2016, WildAid launched the celebrity-endorsed Nail Biters campaign, with the key slogan 'Rhino horn has nothing your own nails don't have' to inform consumers that rhino horn is composed of the same substance found in hair and nails, keratin.<sup>56</sup>

With respect to demand-side national law, the Chinese government's 2011 ban on the domestic trade in rhino horn and rhino horn products, and its reiteration of this law in subsequent statements, are the some of the state's strongest national measures to date. Vietnam has also made similar public statements, suggesting that it could soon strengthen its laws on domestic trade.

#### Results

The impact of demand-side educational campaigns appears promising. Survey results from an evaluation by the Stop Using Rhino Horn campaign found that there was a 64% decline in the number of consumers who said they believed TCM had medicinal benefits.<sup>57</sup> Also, the survey results from the 2016 Nail Biters campaign suggested that awareness that keratin was rhino horn's key ingredient grew from 19% in 2014 to 68% in 2016.<sup>58</sup>

## The impact of demandside educational campaigns appears promising

However, there is a divergence of expert opinion on the true impact of such campaigns. Rubino and Pienaar (2017) hold that public awareness campaigns generally yield little success because demand is rooted in and maintained by pro-TCM circles, which have a great deal of influence over communities.<sup>59</sup> Further, some survey research points to the limitations of such campaigns. A study by MacMillan et al (2017) in Vietnam, which asked respondents whether government advertisements urging consumers to refrain from illegal rhino horn trade would make a difference to their likelihood of purchasing rhino horn, roughly 46% of respondents said that it would not, 40% said that they would buy less, 13% responded they did not know and 1% said they would buy more.<sup>60</sup>

However, the Rhino Rage study in China suggests that it is possible to influence preferences. The study asked respondents why they would buy an alternative luxury item other than rhino horn: almost half of respondents stated concern about wildlife conservation as their top reason and 40% said because it was too expensive.<sup>61</sup> Further, the study notes that the illegal status of the rhino horn trade successfully dampened demand in both the TCM and collector's item markets.<sup>62</sup> Similarly, MacMillan et al (2017) indicated that Vietnamese consumption of TCM declined slightly, in part due to stricter laws, the decrease in availability and increase in price.

Assessment of the Chinese government's 2011 ban on the domestic trade in rhino horn indicates that the ban was largely effective in reducing the number of auctions of products, but that an underground market remains and is growing.<sup>63</sup> Similarly, according to expert investigation, law enforcement agencies in China and Vietnam seldom prioritise wildlife crime, and sentencing and convictions do not match the value of the illicit markets.<sup>64</sup>

In summary, research suggests that demand-side campaigns can make a difference to consumer demand patterns and there is great potential to increase the scope and scale of such efforts to reduce the rhinopoaching crisis. However, much more demand-side research is necessary on what works and why, and how successful campaigns can be scaled up, adapted to changing market forces and better supported.

# Legal trade in rhino horn: a new approach to addressing demand?

The introduction of a legal supply of rhino horn, which private rhino breeders in South Africa are advocating, could have grave, negative implications for efforts to reduce demand.

After much lobbying by the rhino breeders, the ban on the domestic trade in rhino horn in South Africa was officially lifted in April 2017.<sup>65</sup> 'Trade, not aid, will help to save Africa's rhino' was the line that welcomed visitors to the website of South Africa's first legal online auction of rhino horn from 23 to 25 August 2017.<sup>66</sup>

Permits to enter the legal online auction sold for around 100 000 rand (USD\$7 000) each and a total of 264 horns were on sale. John Hume, the world's largest private rhino breeder, expressed his disappointment with DEA's management of the permits DEA.<sup>67</sup> According to Hume, the auction attracted far fewer bidders than expected.

Proponents of the legal domestic trade in rhino horn in South Africa, which includes Hume and a group of private rhino breeders, argue that supplying legal rhino horn would reduce demand and abate the poaching crisis. They claim the boom in rhino poaching coincided with the initial ban on the domestic trade in 2009.<sup>68</sup>. They argue that opening up a legal supply would stem poaching. Domestic demand, Hume suggests, could be linked to the 300 000 or more 'ethnic Chinese' in the country, but there is little evidence of a domestic consumption market in this community.<sup>69</sup>

# The introduction of a legal supply of rhino horn could have grave, negative implications for efforts to reduce demand

Because the domestic sale of rhino horn was only legal in South Africa, permits for participation in the auction were only issued to South African residents. It was notable, however, that the auction website was translated into Mandarin and Vietnamese. The languages of the site signal that Chinese and Vietnamese markets are a priority for private breeders and that the end of the moratorium on the domestic market in South Africa may well be just the first step in achieving legal international trading eventually.

However, there are many problems with legalising trading in rhino horn. There is the question of the scale of demand and then whether the supply can meet it. Hume alone reports he has safely cultivated an estimated six tonnes of horn from 1 500 captively bred rhinos on his farm in Klerksdorp, in South Africa's North-West province. He argues that the government and private owners could supply 6–8 tonnes of rhino horn to the global market annually, and says that a sustained supply would reduce demand and curb poaching.<sup>70</sup>

However, a close follower of the issue, economist Ross Harvey of the South African Institute of International Affairs, contends that until there is more evidence on the magnitude of demand in East Asian markets, the foundation of the argument that a legal supply would reduce demand is weak.<sup>71</sup> According to Harvey, another challenge this argument faces is how to determine the appropriate price point for legally traded rhino horn.

Private breeders face extremely high overhead costs in maintaining their farms, where nearly half of running costs are attributable to security to deter poachers. Thus, the incentive for them in legalising the trade is to keep the price point for rhino horn high. In other words, they have a direct incentive to not supply the product at levels that would drive the price down. Given this, many doubt whether meeting demand is really the intention of proponents of a legal trade, since the current market is ripe for profit.

On the question of how the legalisation of trade in rhino horn could affect demand in Vietnam and China, much is unknown. MacMillan et al (2017) found that 24% of Vietnamese respondents said legalisation of international trade in rhino horn would influence them to buy more, 11% said they did not know and 10% said they would buy less.<sup>72</sup> The same study suggested a preference for rhino horn sourced from the wild, which would mean that farmed rhino horn would not satisfy the current demand appetite and that poaching would still be required.

Crosta, Sutherland and Talerico (2017) warn that legalising the rhino horn trade could send a message to consumers that, despite various campaigns to the contrary, rhino horn may have medicinal properties and be a worthwhile investment.<sup>73</sup> Relatedly, legalising the trade could increase demand, as it reduces stigma and signals to the market that consumption is, once again, completely legitimate. Further, because of the price point issue mentioned above it is likely that private breeders would wish to maintain a high price point, thereby also increasing the incentive for would-be poachers.

In summary, without further evidence on the extent of the demand for the product, it is difficult to know if legalisation would in fact reduce demand, as many pro-legalisation bodies argue. Further, without more research into demand markets, myths or generalisations about the dominance of Chinese TCM will continue to be overplayed. They will colour understanding of what actually shapes the demand market and thus what demand-side campaigns should target to be most effective.

### **Conclusions**

Rhino poaching has increased year on year since 2008, even though the crime was deemed a national security threat to South Africa in 2014 and China and Vietnam have committed their support to prevent it. Goncalves, a local analyst, argues that a multi-stakeholder and human-centric approach is needed to supplement the narrow and short-term focus on security in wildlife crime policy that governments support.<sup>74</sup>

Enhancing reactive law enforcement with a sentencing regime that is more commensurate with the seriousness of the offence, and making sure investigations and prosecutions of middlemen and kingpins are as rigorous as those of poachers, are likely to have positive results. However, these interventions alone will not be sufficient to have a significant impact.

Interventions need to be balanced with communityoriented programming that ensures people who live on the borders of parks and reserves feel obliged to protect rhinos and, in return, benefit from their survival. Further, efforts need to go beyond KNP to halt rising poaching in new hotspots.

Attempts to legalise the trade in rhino horn may undermine supply-side efforts to reduce the amount of rhino horn available on the black market

Public support in supply- and demand-side countries is key to the success of any intervention. The response that followed the killing of Cecil the Lion in Zimbabwe in 2015 showed what a groundswell of public outrage can do to laws governing wildlife. Shortly after the incident, a number of Western countries banned the importation of hunting trophies, and several airlines would not carry big game trophies.<sup>75</sup>

Attempts to legalise the trade in rhino horn may undermine supply-side efforts to reduce the amount of rhino horn available on the black market. Research suggests that when consumers are price-insensitive, supply-side interventions are largely futile.<sup>76</sup> Therefore, better understanding of demand markets and their economics is vital.

More generally there is a need to move the issue of wildlife crime out of its current niche policy space, where it is often seen as a specialisation of conservationists. Such a view also creates an opportunity for transnational criminal organisations and corrupt officials to continue to exploit African resources. Rhino poaching can only be fully addressed when governments prioritise wildlife crime and implement integrated and innovative policy responses that include community-led initiatives.

#### Notes

- Illicit species as protected species corresponds with the levels of protection listed in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) appendices. In this paper, we focus on the trade in fauna (animals).
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