

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA

Eighteenth meeting of the Conference of the Parties
Colombo (Sri Lanka), 23 May – 3 June 2019

Species specific matters

Rhinoceroses (Rhinocerotidae spp.)

REPORT OF THE STANDING COMMITTEE AND THE SECRETARIAT

1. This document is submitted by the Standing Committee and the Secretariat.
2. At its 17th meeting (CoP17, Johannesburg, 2016), the Conference of the Parties adopted Decisions 17.133 to 17.144 on *Rhinoceroses (Rhinocerotidae spp.)*, as presented in Annex 5 to the present document.
3. The reporting of the Standing Committee in accordance with the provisions of Decision 17.144 is presented in paragraphs 4 to 14 of the present document. The reporting of the Secretariat in accordance with the provisions of Resolution Conf. 9.14 (Rev. CoP17) on *Conservation of and trade in African and Asian rhinoceroses*, and additional reporting as appropriate, are presented in paragraphs 15 to 88 of the present document.

Decision 17.144: Reporting of the Standing Committee

4. The Standing Committee as required by Decision 17.140, at its 69th and 70th meetings (SC69, Geneva, November 2017; SC70, Sochi, October 2018), evaluated Parties' implementation of Resolution Conf. 9.14 (Rev. CoP17) and the measures implemented by Parties to prevent and combat rhinoceroses poaching and the associated trafficking in rhinoceros' horn. The Committee as required by the Decision took into consideration the recommendations in Annex 5 to document CoP17 Doc.68 and focused in particular on the Parties identified for priority attention as presented in that report. As required by Decisions 17.141 to 17.143, the Committee also assessed progress made by Mozambique and Viet Nam at SC69 and SC70.
5. For SC69, the Secretariat prepared document [SC69 Doc. 60](#) on *Rhinoceroses (Rhinocerotidae spp.)*. The Secretariat noted that Annex 5 to document CoP17 Doc.68 on *Rhinoceroses (Rhinocerotidae spp.)* identify Mozambique, South Africa, Viet Nam and Zimbabwe as Parties for priority attention, and therefore limited its reporting to these four Parties. The Secretariat also included reporting on the missions it conducted to Mozambique in July 2017 and Viet Nam in September 2017 in accordance with Decisions 17.135 and 17.137.
6. Decision 17.141 directed the Standing Committee to evaluate the reports from Mozambique and Viet Nam in accordance with recommendations b) and f) on *Conservation of and trade in African and Asian rhinoceroses (Rhinocerotidae spp.)*, agreed at the 67th meeting of the Committee (SC67, Johannesburg, October 2016), and to make additional recommendations as appropriate. Mozambique included its reporting in the report to SC69 on progress with the implementation of its National Ivory and Rhino Action Plan (NIRAP),¹ while the report from Viet Nam was made available to the Committee as Annex 1 to document SC69 Doc. 60.
7. The document prepared for SC69 by the Secretariat and the reports submitted demonstrated that a wide range of commendable measures and activities have been and continue to be implemented and mobilized

¹ See Annex 12 to document SC69 Doc. 29.3 on National ivory action plans process.

by the Parties concerned, in response to rhinoceros poaching and the trafficking of rhinoceros horn. However, it was also evident that sustained efforts by Parties to tackle these crimes are essential, as rhinoceros poaching and the trafficking of rhinoceros horn persist.

8. The Committee at SC69 agreed a number of Recommendations on rhinoceroses (*Rhinocerotidae* spp.) as presented in document [SC69 Sum. 4 \(Rev. 1\)](#). These included a comprehensive set of targeted Recommendations directed to Mozambique and Viet Nam, requesting further reporting from both these Parties to SC70, as well as additional reporting from Viet Nam to the 71st meeting of the Standing Committee (SC71, Colombo, May 2019).
9. At SC60, the Committee established an intersessional working group on rhinoceroses with membership as presented in document [SC69 Sum. 4 \(Rev. 1\)](#).² The Committee noted that some Parties and observer organizations at SC69 suggested that China and Namibia were mentioned in Annex 5 to document CoP17 Doc. 68 and should be included as Parties for priority attention. China, because information suggested a significant illegal market for rhinoceros horn in the country and Namibia, because of an escalation in rhinoceros poaching in the country. The Committee subsequently tasked the intersessional working group on rhinoceroses to:
 - a) *evaluate Parties' implementation of Resolution Conf. 9.14 (Rev. CoP17) and measures to prevent and combat rhinoceroses poaching and trafficking in rhinoceros horn, taking into consideration the recommendations in CoP17 Doc. 68 Annex 5 and, focusing particularly on the six countries identified for priority attention as presented in that report, make any recommendations as appropriate; and*
 - b) *review and evaluate reports submitted by Mozambique and Viet Nam, when available.*
10. To evaluate Parties' implementation of Resolution Conf. 9.14 (Rev. CoP17), the working group developed a questionnaire focusing on key components of the Resolution. These included legislation, investigations, prosecutions, forensic analyses and rhinoceros horn stock management. The questionnaire was made available to Parties as an Annex to [Notification to the Parties No. 2018/040](#) of 23 April 2018. In response to the Notification, the working group received 20 replies from the following Parties: Austria, China, the European Union, France, Germany, Hungary, Malta, Mozambique, Namibia, the Netherlands, New Zealand, the Philippines, Slovakia, South Africa, Sweden, Thailand, the United Kingdom of Great Britain and Northern Ireland, the United States of America, Viet Nam and Zimbabwe. Noting that the Standing Committee requested further reporting from Mozambique and Viet Nam to SC70, the working group agreed that it would conduct its work using the reports received from Mozambique and Viet Nam in response to the recommendations agreed by the Standing Committee at SC69, rather than the responses to the questionnaire from these two Parties.
11. The working group prepared document [SC70 Doc. 56](#) on *Rhinoceroses (Rhinocerotidae spp.)* for SC70. The document was prepared with a focus on Mozambique, South Africa, Viet Nam and Zimbabwe, as well as China and Namibia as the two Parties mentioned in the report and suggested for consideration as Parties for priority attention. The working group document noted that with regard to the six Parties mentioned, it is clear that there is much effort taking place to implement Resolution Conf. 9.14 (Rev. CoP17) and to put in place measures and mobilize activities to address rhinoceros poaching and the associated trafficking in rhinoceros horn. These measures and activities are elaborated upon in the document and the Annexes to it. The document also includes a summary proposing a number of areas requiring further attention, which the working group considered the six Parties should focus upon in their efforts to address rhinoceros poaching and illegal trade in rhinoceros horn.
12. After analysing the responses all Parties to the questionnaire, the working group identified some common themes, for example that all had legislation in place to protect endangered wildlife, including rhinoceroses, rather than legislation specific to the protection of rhinoceroses, and that many Parties have implemented stricter domestic measures concerning trade in rhinoceros specimens. The document also highlights a variety of good practices and activities conducted.
13. At SC70, the Committee established an in-session working group on rhinoceroses with membership and a mandate as presented in document [SC70 Sum. 6 \(Rev. 1\)](#). The Committee agreed a comprehensive set of

² Following SC69, the Chair of the working group on rhinoceroses received written requests from the Environmental Investigation Agency (EIA) and WildAid to be included as members of the Intersessional Working Group on Rhinoceroses. In accordance with the Rules of Procedure of the Standing Committee, the Chair of the Standing Committee agreed to the inclusion of these two non-governmental organizations as members of the working group.

recommendations on *Rhinoceroses (Rhinocerotidae spp.)*, as presented in document [SC70 Sum. 12 \(Rev. 1\)](#). In addition to the recommendations agreed, the Committee also agreed to propose two draft decisions to the Conference of the Parties for consideration, as presented in Annex 1 to the present document. The numbering of these two draft decisions have been changed from the numbering in document SC70 Sum. 12 (Rev. 1), as shown in strikethrough and underline in Annex 1 to the present document, where they are presented as draft decisions 18.DD and 18.FF.

14. The Standing Committee considers that Decisions 17.135 to 17.144 have been implemented and can be deleted.

Resolution Conf. 9.14 (Rev. CoP17): Reporting of the Secretariat

15. In paragraphs 7 to 11 of Resolution Conf. 9.14 (Rev. CoP17), as presented in in Annex 5 to the present document, the Conference of the Parties directs the Secretariat to commission the International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC), African and Asian Rhino Specialist Groups and TRAFFIC to submit a report to the Secretariat prior to each meeting of the Conference of the Parties.
16. As required by paragraph 8 of the Resolution, the IUCN/SSC African and Asian Rhino Specialist Groups and TRAFFIC, in the development of the report, engaged with range and implicated States as appropriate, as well as with the United Nations Environment Programme – World Conservation Monitoring Centre.
17. The Secretariat made an aggregated summary of the 2016 and 2017 rhinoceros horn stock declarations of Parties available to the IUCN/SSC African and Asian Rhino Specialist Groups and TRAFFIC for analysis and inclusion in their reporting.
18. The report prepared by the IUCN/SSC African and Asian Rhino Specialist Groups and TRAFFIC for the 18th meeting of the Conference of the Parties (CoP18, Colombo, 2019) in accordance with paragraph 9 b) of the Resolution is available as Annex 2 to the present document. The report is available in English only. The Secretariat take this opportunity to thank the government of Switzerland for responding positively to the provisions in paragraph 10 of the Resolution, providing generous funding which enabled the Secretariat to commission the report.
19. Information in the report shows that, with a few exceptions, almost all range States have adopted conservation and management plans for rhinoceroses as required by paragraph 4 of Resolution Conf. 9.14 (Rev. CoP17).
20. Also, worth noting is that since the first report of the IUCN/SSC African and Asian Rhino Specialist Groups and TRAFFIC was prepared for the 14th meeting (CoP14, The Hague, 2007) of the Conference of the Parties, the reported number of all rhinoceros species, except for Sumatran rhinoceros (*Dicerorhinus sumatrensis*), has increased. Notwithstanding the recent declines in the populations of some species due to, among others, the drought in southern Africa, the total number of rhinoceroses has increased by over 28%. The conservation efforts of Parties are commended and the Secretariat notes that the controls applied to trade in rhinoceros specimens by Parties under CITES have made an important contribution to this success. There is, however, no room for complacency over illegal killing and trade and the provisions of Resolution Conf. 9.14 (Rev. CoP17) require a regular review of the situation by the Conference of the Parties.
21. Some of the key matters concerning African and Asian rhinoceroses as outlined in the report prepared by the IUCN/SSC African and Asian Rhino Specialist Groups and TRAFFIC for CoP18 are briefly highlighted in paragraphs 22 to 34 below. It is beyond the scope of the present document to address all the matters outlined in the report, and Parties are invited to consult the full report for detailed information.

Africa

National and continental conservation status and trends for African rhinoceroses

22. The report elaborates on a number of conservation actions and management strategies deployed in Africa and highlights that the white rhinoceros (*Ceratotherium simum*) is categorised as Near Threatened on the IUCN Red List, while the black rhinoceros (*Diceros bicornis*) is categorised as Critically Endangered.
23. The report states that numbers of African rhinoceroses as of the end of 2017 are estimated at 17,212 to 18,915 white rhinoceroses and 5,366 to 5,627 black rhinoceroses. The vast majority of African rhinoceros

(97% of white and 94% of black rhinoceros) occur in four range States: South Africa, Namibia, Kenya and Zimbabwe.

24. The report states that while white rhinoceros numbers increased rapidly from 1992-2010, averaging population growth of +7.1% per year, the population growth started slowing down as poaching increased with numbers declining from 2012 onwards. The report further states that, after black rhinoceros numbers reached their lowest point in 1995, they have since steadily increased, with increased poaching slightly slowing population growth in recent years. The report notes that the different trends shown by the two species are in part due to white rhinoceroses being subjected to higher poaching levels than black rhinoceroses, likely because white rhinoceroses generally live in more open habitats where they are easier to target, live in larger groups and have greater average horn weights. It further stated that the difference in trend in numbers between white and black rhinoceroses in recent years may also be due to the differential responses of the two species to severe drought that affected parts of southern Africa in 2015-2016, since the food supply of white rhinoceroses (grass) is affected more by drought than that of black rhinoceroses (browse).

Poaching and trafficking affecting African rhinoceroses

25. The report highlights that the annual number of rhinoceroses poached in Africa has been declining since 2015, and that the decline appears to have continued into 2018. It is reported that poaching in the first eight to nine months of 2018 remained low or decreased in many range States, with the exception of Botswana and Namibia where slight increases that give cause for concern were observed. The report states that the number of rhinoceroses poached across Africa at the time of writing seemed likely to drop below 1,000 rhinoceroses in 2018, for the first time in six years. The IUCN African Rhino Specialist Group (AfRSG) will compile updated population estimates and poaching records for 2018 at its February 2019 meeting, and will prepare a short update on this to be made available at CoP18 as an information document.
26. The report estimates that approximately 4,757 horns from African rhinoceroses entered illegal trade in the period 2016-2017. Of these, 1,093 horns (23%) were reportedly seized, both within and outside Africa. This represents approximately 2,378 rhinoceros horns weighing an estimated 6.6 tonnes sourced each year for illegal markets. Using the seizures, it is estimated that approximately 1,832 horns or approximately 5.1 tonnes of rhinoceros horn enter illegal trade each year. The report notes that the rapid increase in the sourcing of rhinoceros horns destined for illegal markets as documented in the reports prepared for each meeting of the Conference of the Parties since CoP14 seem to have ceased, with a modest decline in the number of horns annually sourced for illegal markets in 2016 and 2017. Poaching remains the major source of these horns.
27. The report states that data from the TRAFFIC Rhino Horn Seizures Database for the period 2009 to September 2018³ shows that the total estimated weight and number of horns seized has increased steadily from 2009 to 2017. It is reported that, regarding the estimated total number of rhinoceros horns destined for illegal markets, the percentage of horns seized in Africa has almost doubled since CoP17, from 4.5% to 8.9%, while the percentage of horns seized outside of Africa has remained at similar levels (5.8% and 5.5%, respectively). The report notes that more seizures were made in Africa (relative to countries outside Africa) every year except 2013 and 2014, with numbers in 2017 being almost evenly split. It further states that from 2010 to 2014 the weight of horns seized per rhinoceros poached declined as poaching was steadily increasing, reaching close to peak levels in 2014. However, since 2014 there has been an annual increase in the weight of horn seized per rhino poached, which may be indicative of increased enforcement effort and effectiveness. The report further notes that this trend coincided with first the slowing rate of poaching and then a limited decline in poaching post-2015, with 2018 poaching estimates projected to return to levels last observed in 2013.
28. The report highlights that there is evidence of Chinese-run rhinoceros horn processing operations that emerged in South Africa since CoP17, producing worked goods for export to Asian markets, and that that this marks a new development in illegal trade. It further states that police investigations in 2017 uncovered small home workshops where rhinoceros horn beads and bracelets are manufactured for export along with horn offcuts and powder. The report also notes that bags of rhinoceros horn offcuts, beads and cylinders have been seized in Mozambique, but that it remains unknown whether processing operations have been established in the country or whether the seized goods originated from South Africa or elsewhere.

³ *Covering 737 rhinoceros horn seizure cases and involving an estimated 2,733 horns or horn pieces weighing a total of 6,349 kg.*

Asia

National and continental conservation status and trends for Asian rhinoceroses

29. The report highlights that the greater one-horned rhinoceros (*Rhinoceros unicornis*) is categorized as Vulnerable on the IUCN Red List, and that according to available data it is estimated that populations in India amount to approximately 2,939 animals, and in Nepal to approximately 649 animals. This suggests only a slight increase in the number of greater one-horned rhinoceroses in each of the two Parties in the period between CoP17 and CoP18.
30. Regarding the Javan rhinoceros (*Rhinoceros sondaicus*), categorised as Critically Endangered and found in only one population in Ujung Kulon National Park in west Java, Indonesia, the report states that monitoring is improving with camera traps now covering the entire park. It also notes that park authorities reported that between 2016 and 2018, three Javan rhinoceroses were found dead with the horn intact (presumed natural mortalities), and that at least four calves were born in 2017 and three in 2018, resulting in a current total estimate of 65-68 individuals. This represents a small increase from the 2015 estimate of 63 individuals indicated in the report to CoP17. The report notes that with all individuals in a single population the species is particularly vulnerable to poaching, disease carried by domestic cattle, and potential natural disaster such as volcanic activity or a major tsunami. It notes that longstanding plans to establish a second population in Indonesia continue to show little progress, and that strategically, a second population would not only reduce risk, but could promote breeding by freeing up food resources for remaining females, assuming enough area of suitable and well-protected habitat.
31. The report notes that the Sumatran rhinoceros (*Dicerorhinus sumatrensis*), also categorized as Critically Endangered, is now restricted to only four isolated sites in Indonesia in up to ten sub-populations. The report estimates the total population of Sumatran rhinoceros to be 40-78 individuals, compared to the estimation of 76 in the report to CoP17. It states that no existing sub-population is thought to be greater than 30 individuals, and it is reported that some sub-populations are estimated to number between only two and five animals that are not likely to be viable in the long term. It also highlights the launch of a Sumatran rhinoceros rescue project in September 2018, to establish two new intensive semi-captive breeding facilities that will aim to breed animals from currently small and isolated sub-populations in Kalimantan and Bukit Barisan Selatan National Parks in the hope of expanding these populations. The report further states that the seizure of three Sumatran rhinoceros horns has been reported since 2014 and, that in addition to poaching, habitat conversion, invasive species and possible vegetation succession remain important threats to the survival of the species.

Poaching and trafficking affecting Asian rhinoceroses

32. Available data indicates that poaching of the greater one-horned rhinoceros has declined each year since 2013, from a high of 41 animals poached per year in 2013, to 12 in 2017, and only seven up to September 2018. The report states that the continued decline in poaching of the greater one-horned rhinoceros reflects the success achieved by front-line enforcement agencies. Nepal maintains its record in preventing rhinoceros poaching with reports of only two rhinoceroses lost to poaching in Nepal between 2011 and September 2018.
33. The report highlights that, although African rhinoceros species account for the vast majority of rhinoceros horns in illegal trade, horns from Asian rhinoceros species are on occasion the subject of seizures. Data shows that 78 horns from Asian rhinoceroses (75 from greater one-horned rhinoceros and three from Sumatran rhinoceros) were seized in 66 seizure incidents in the period of 2014-2018. In comparison, 45 horns (42 from greater one-horned rhinoceros, two from Javan rhinoceros and one from Sumatran rhinoceros) were seized in 39 seizure incidents in the period 2009-2013.
34. The report notes that recorded poaching levels in Asia is not currently significant, but that numbers of Javan and Sumatran rhinoceroses are so low that sub-populations could be negatively impacted by even very low levels of poaching, and therefore it remains essential to be vigilant in law enforcement effort to protect these critically endangered species.

Parties most affected by rhinoceros poaching and rhinoceros horn trafficking

35. Paragraphs 76 to 91 of document SC70 Doc. 56 consist of a summary prepared by the working group on rhinoceroses, that propose areas they considered important for China, Mozambique, Namibia, South Africa,

Viet Nam and Zimbabwe authorities to focus upon to address rhinoceros poaching and rhinoceros horn trafficking.

36. The Standing Committee at SC70 requested the Secretariat to take the summary prepared by the working group into consideration when formulating draft decisions for the present meeting in accordance with paragraph 9 c) of Resolution Conf. 9.14 (Rev. CoP17). The Committee at SC70 also encouraged Parties concerned to submit any additional information on the matters outlined in the summary prepared by the working group on rhinoceroses to the Secretariat for such information to be included in the reporting of the Secretariat to the present meeting. The Secretariat received reports from China and Zimbabwe and these reports are available as Annexes 3 and 4 to the present document.
37. On the basis of the IUCN/SSC African and Asian Rhino Specialist Groups and TRAFFIC report and considering the summary prepared by the working group on rhinoceroses presented in document SC70 Doc. 56, the Secretariat in paragraphs 40 to 81 below elaborate on matters relevant to China, Mozambique, Namibia, South Africa, Viet Nam and Zimbabwe, as the Parties considered to be most affected by rhinoceros poaching and trafficking of rhinoceros horn. The Secretariat also includes Botswana as Party that is currently experiencing an increase in rhinoceros poaching.
38. The draft decisions formulated by the Secretariat in accordance with paragraph 9 c) of Resolution Conf. 9.14 (Rev. CoP17) for consideration by the Conference of the Parties, are presented in Annex 1 to the present document, as draft decisions 18.AA, 18.BB, 18.CC and 18.EE, and take into account the summary prepared by the working group on rhinoceroses as requested by the Committee.
39. The Secretariat proposes that Decisions 17.133 and 17.134 be deleted and be replaced with draft decision 18.AA.

Botswana

40. Table 2 in the report presented in Annex 2 to the present document shows a slight increase in rhinoceros poaching in Botswana. By August 2018, seven animals were illegally killed for the year, compared to two in 2012 and 2013 respectively, and either one or none per year in the other years since 2006. The Party is encouraged to keep this matter under review to ensure that measures implemented to prevent and combat rhinoceros poaching remain effective and are quickly adapted to respond to any new trends.

China

41. Table 5 in the report presented in Annex 2 to the present document shows that China, including Hong Kong Special Administrative Region (SAR) of China, are destinations for illegal rhinoceros horn consignments. Data used in the report shows that China has either made or was involved in 30% of all recorded seizures in the period 2014-2018, representing more than one-quarter of the estimated weight and number of seized rhinoceros horns. The estimated weight and number of rhinoceros horns seized by China is reported to have increased in the period 2014-2018, compared to the period 2009-2013, which may be indicative of improved enforcement effort. However, the report further states that the estimated weight and number of rhinoceros horns in seizures made elsewhere associated with China also increased during this same period. The report further notes that this could suggest that demand for rhinoceros horn is increasing in China, and that despite significant law enforcement effort and many prosecutions the Party remains a key destination for illegal trade.
42. The report highlights that in recent years the number of Chinese nationals arrested for crimes involving illegal rhinoceros horn escalated significantly. The report also highlights that an analysis conducted by authorities in South Africa regarding seizure cases at OR Tambo International Airport between August 2016 and October 2018 revealed that Hong Kong SAR was, in over half of the cases analysed, the destination for the seized horn.
43. The report highlights the range of educational efforts focused on Chinese nationals in Africa, which include SMS messages to every Chinese national arriving in a foreign country, warning them not to buy, carry or ship endangered wildlife and particularly rhinoceros horn and ivory. The report states that the effectiveness of these measures appears to be limited given the increasing numbers of Chinese nationals arrested abroad. In this regard, draft decision 18.AA seems relevant.
44. The report elaborates on a quantitative online survey assessing consumer demand for rhinoceros, elephant, pangolin and tiger products in China, conducted in February-March 2018 among 1,800 self-reported buyers in six urban centres: Shanghai, Beijing, Guangzhou, Kunming, Nanning and Harbin. The report states that

the survey suggests a shift towards viewing rhinoceroses horn as medicine as it 'brings good health', 'well-being' and 'cures from illness', surpassing more status-related motivations such as 'affirmation of wealth, success and high position' and 'a good investment'. Also in this regard, draft decision 18.AA seems relevant.

45. The report notes that a long-term programme maintained by TRAFFIC monitoring 31 website platforms known to offer endangered species products for sale, found that the number of new rhinoceros specimen advertisements in China halved from an average of 96 per month in 2016, to 42 per month in 2017, but that over the first six months of 2018 a significant resurgence was detected. It is reported that from the start of 2018 through June 2018, the monthly average of new rhinoceros specimen advertisements increased 6.7 times to 283 per month. It is, however, encouraging to note that the report also states that after interventions with the relevant website managers, the number of rhinoceros specimen solicitations has since declined to only 34 in October 2018, across the 31 websites monitored.
46. Regarding measures being implemented in China to address rhinoceros horn trafficking and illegal use and consumption, the report states that legislation in China is well developed and that penalties for minor offenses include up to five years' imprisonment and a fine, while serious offenses can result in a life sentence and property confiscation. The severity of the crime and corresponding sentences for those convicted are determined by the economic values of the specimens involved. China also elaborates in detail on this in the report available as Annex 3 to the present document.
47. The IUCN/SSC African and Asian Rhino Specialist Groups and TRAFFIC report further highlights that there have been a number of successful prosecutions in China for crimes involving rhinoceros specimens. According to a government website that lists court verdicts,⁴ 88 cases involving rhinoceros horn specimens were finalized between June 2013 and April 2017, with 131 offenders convicted and sentenced. It is reported that sentences were on average heavier for international cross-border smuggling than for internal trafficking and illegal trade, as generally these cases involved greater quantities of rhinoceros horn. It is also reported that the assets of 13 offenders convicted for cross-border rhinoceros horn smuggling were forfeited. The report also highlight a number of other activities and measures implemented in China to address rhinoceros horn trafficking, as also reported upon by the Party in [Annex 2 to document SC70 Doc. 56](#).
48. The Secretariat commends China for its efforts to address rhinoceros horn trafficking, which are reflected by the convictions and sentences mentioned in paragraph 47 above. It is, however, essential for China to build upon these successes and to further strengthen efforts to ensure that those who continue to manage and organize the illegal trade are arrested, prosecuted and convicted, to put an end to their illegal activities. Considering the increasingly important role that Hong Kong SAR seems to play in the illegal rhinoceros horn trade chain, scaled up efforts by authorities in Hong Kong SAR to pursue the arrest and prosecution of the individuals involved are particularly important.
49. Draft decision 18.AA seems in particular relevant for China, including Hong Kong SAR of China, and the Party may wish to, in the light of the escalating rhinoceros horn trafficking trends as it affects China, review the measures it has put in place to ensure that they remain effective and are adapted as may be needed to respond to and decrease the levels of rhinoceros horn trafficking.
50. It is essential for the Parties most affected by rhinoceros poaching and rhinoceros horn trafficking to make every effort to further strengthen their implementation of paragraphs 1 e) and 2 d) of Resolution Conf. 9.14 (Rev. CoP17), including by pursuing the initiation of joint investigations and operations aimed at addressing the members of organized crime networks across the entire illegal trade chain. In this regard, draft decision 18.BB is proposed.
51. As noted in paragraph 36 above, the Secretariat received a report from China available as Annex 3 to the present document, responding in detail to the matters raised in the summary prepared by the working group on rhinoceroses as presented in document SC70 Doc. 56.

Mozambique

52. Table 2 of the report in Annex 2 to the present document shows that annual rhinoceros poaching levels in Mozambique have decreased since 2014, when 19 animals were killed, to 13 in 2015, five in 2016, four in 2017, and only one up to July 2018.

⁴ <http://wenshu.court.gov.cn/>

53. The report highlights that Mozambique has reported several successful convictions following the entering into force of new amendments to its conservation law in 2017. It also states that Mozambique continues to cooperate closely with law enforcement authorities in the neighbouring Kruger National Park, South Africa, and that it has started resettling villages identified as places where poachers originate, from Limpopo National Park, Mozambique, to other areas outside the park.
54. Table 5 in the Annex 2 report shows, however, that Mozambique continues to be significantly affected by rhinoceros horn trafficking and that it is the second most prominent place of origin of rhinoceros horns entering illegal markets. The report states that the weight of seized rhinoceros horn from Mozambique is significantly greater than could be produced by the number of rhinoceroses that currently occur in Mozambique, indicating that the Party continues to be a major transit place for illegal rhinoceros horn. The report further states that many Mozambican nationals continue to be implicated in rhinoceros poaching in South Africa and that there is evidence that Vietnamese-led transnational criminal syndicates are heavily engaged in the trafficking of South African-sourced rhinoceros horn out of Mozambique.
55. The report highlights that the number of rhinoceros horn seizures made in Mozambique before leaving the country has risen significantly in the period 2014-2018, compared to the period 2009-2013. This is a positive development and could be indicative of improvement in law enforcement in Mozambique. However, at the same time greater quantities of rhinoceros horn were illegally exported compared to the period 2009-2013, reportedly involving during the period 2014-2018 at least an estimated 149 horns weighing 374 kg in 18 separate seizures indicating Mozambique as the source country.
56. The Secretariat notes that Mozambique is currently included in the CITES National Ivory Action Plan (NIAP) process, and is implementing a National Ivory and Rhino Action Plan (NIRAP).⁵ The Secretariat further notes that the Standing Committee at SC70 agreed recommendation p) on the NIAP process directed to Mozambique, as presented in [document SC70 Sum 2 \(Rev. 1\)](#). The Secretariat believe that this recommendation, against which Mozambique will report at the 73rd meeting of the Standing Committee, fully encompasses the matters outlined in the summary prepared by the working group on rhinoceroses as presented in document SC70 Doc. 56. The Secretariat therefore suggests that matters related to Mozambique can be addressed through the activities to be conducted by the Party in the implementation of its NIRAP, the associated reporting to the Standing Committee, as well as the activities to be conducted by the Committee in this regard.
57. Should the Conference of the Parties agree draft decision 18.BB, Mozambique is encouraged to pursue the implementation of this draft decision as part of the implementation of its NIRAP.

Namibia

58. For Namibia, Table 2 in the report in Annex 2 to the present document shows that poaching levels have been high since 2014 compared to previous years, reaching the highest number of rhinoceroses killed per year in Namibia (97) in 2015. Thereafter, the annual number of rhinoceroses poached in Namibia declined to 61 in 2016 and 44 in 2017, but again increased to 53 by November 2018.
59. The report notes that, like many other range States, Namibia has well-established informant networks and has set up a toll-free number the public can call to provide information on poaching and illegal wildlife trade. The report also highlights that training of wildlife investigators, prosecutors and magistrates were conducted in Namibia to be more conversant with wildlife crime and applicable legislation. It further states that Namibia is moving towards the use of a broad suite of relevant laws to prosecute offenders.
60. The report further highlights that Namibia's Controlled Wildlife Products and Trade Amendment Act of 2017 provides for fines of up to 25 million Namibian Dollars (approximately USD 1, 8 million) and/or imprisonment of up to 25 years, while repeat offenders could be liable for fines up to 50 million Namibian Dollars and/or imprisonment of up to 40 years. The Nature Conservation Amendment Act of 2017 also provides for similar penalties in cases relating to the poaching of rhinoceroses.
61. The report highlights discrepancies between export data for rhinoceros horn trophies reported by Namibia to certain Parties, in particular the Russian Federation and the United States of America. These discrepancies are demonstrated in Annex 1 to the report in Annex 2 to the present document. Namibia may wish to consider identifying if there are any trends that justify further scrutiny or the implementation of

⁵ <https://www.cites.org/eng/niaps>

additional measures. Draft decision 18.AA as presented in Annex 1 to the present document seems relevant in this regard.

62. Considering that poaching levels have since 2014 been high in Namibia compared to previous years, and in the light of the recent increase of rhinoceros poaching observed in Namibia, the Secretariat suggests that it would be appropriate to include Namibia as a Party that could benefit from pursuing the activities anticipated by draft decision 18.BB.

South Africa

63. The annual number of rhinoceroses poached in South Africa continues to decline since it peaked in 2014 with 1,215 rhinoceroses poached. In 2015, this number declined to 1,175, in 2016 to 1,054, in 2017 to 1,028, and up to August 2018, 508 rhinoceroses. These declines are encouraging to note and suggest that continued progress is made.
64. However, as the range State with the highest numbers of black and white rhinoceroses, South Africa also continues to be the Party most affected by rhinoceros poaching and the associated illegal trade in rhinoceros horn. Table 5 in Annex 2 to the present document show that South Africa accounts for the highest number of seizures, either making or being implicated in 33% of all seizures that have occurred since 2014 and accounting for 40% of the total weight of seized rhinoceros horn in this period. The report shows that the number of seizures made in South Africa, as well as the estimated weight of the horns seized, declined in the period 2014-2018 compared to the period 2009-2013. At the same time, seizures made by other Parties that implicate South Africa in the illegal trade chain increased notably. The report however also notes that this may in part be due to the increased availability of information about South Africa as the source of seized rhinoceros horns, determined through forensic analyses and information provided by arrested traffickers. The report further notes that a shift towards the smuggling of processed rhinoceros horn, as elaborated upon in paragraph 28 above, is making detection more difficult, a matter that seems relevant in the context of draft decision 18.AA presented in Annex 1 to the present document.
65. The report highlights that South Africa has an *Integrated Strategic Management Approach* to combating rhinoceros poaching and a *National Strategy of the Safety and Security of Rhinoceros Populations and Horn Stocks*. It further highlights that South African government departments responsible for law enforcement identified the need for an integrated approach across government, assisted by civil society, to address rhinoceros poaching, and that under an initiative led by the South African Police Service, the Party finalised its *National Integrated Strategy to Combat Wildlife Trafficking*. South Africa may wish to provide an update regarding the approval and adoption of its *National Integrated Strategy to Combat Wildlife Trafficking* at the present meeting.
66. The report highlights that a large number of rhinoceroses in South Africa are privately owned. It elaborates upon the significant decline in prices per live white rhino in the period 2007-2018, which shows a 58% decline in the South African Rand and 67% decline in the United States Dollar value. The report notes that combined with a number of other factors including the substantially increased cost of security to prevent poaching, incentives to conserve rhinoceroses continue to decline given the limited economic returns rhinoceroses are currently able to generate. Given the important role played by private owners in the conservation of rhinoceroses, this gives reason for concern.
67. Regarding trophy hunting, the report states that hunting continues to play an important role in the conservation of white rhinoceroses through the revenue it generates. It further highlights that the challenges experienced concerning pseudo-hunting in South Africa have been largely addressed by the control measures the Party implemented in 2012, and that this no longer seem to pose any significant threat. The report, however, highlights that there remain very large accumulated discrepancies regarding data on exports of rhinoceros horn trophies reported by South Africa to certain Parties, in particular the Russian Federation and the United States of America. The report further states that other such discrepancies continue to be noted for Canada, China, Denmark, Hungary and Spain. This is demonstrated in Annex 1 to the report in Annex 2 of the present document and could merit further scrutiny. Draft decision 18.AA in Annex 1 to the present document seems relevant in this regard.
68. Further, Annex 1 to the report in Annex 2 to the present document suggests that hunters from, for example, Kuwait, seem to have engaged in sport hunting in South Africa, but that the Party has not reported the export of these trophies.

69. The Secretariat believes that it is essential for South Africa as the Party most affected by rhinoceros poaching and rhinoceros horn trafficking to pursue the activities anticipated by draft decision 18.BB.

Viet Nam

70. Table 5 in the report presented in Annex 2 to the present document indicates that Viet Nam remains one of the Parties most affected by rhinoceros horn trafficking. The report states that available seizures data suggests that Viet Nam continues to be a leading destination for illegal rhinoceros horn consignments, accounting for approximately 15% of rhinoceros horn seizure cases and more than one-quarter of seized rhinoceros horns by estimated weight or number in the 2014-2018 period.
71. The report notes that the number of seizures made in Viet Nam increased by 35%, while seizures made by other Parties associated with Viet Nam decreased considerably in the period 2014-2018, compared to the period 2009-2013. This is encouraging to note and could be indicative of improvement in law enforcement in Viet Nam. The report however also notes that overall, the estimated numbers of illegal rhinoceros horns involved increased approximately by 24% in the latter period.
72. The report highlights that in recent years, the number of Vietnamese nationals arrested for crimes involving illegal rhinoceros horns escalated significantly.
73. The report highlights the revised Penal Code that took effect in Viet Nam on 1 January 2018. The Secretariat notes that as mentioned in paragraph 8 of the present document, the Standing Committee at SC69 requested further reporting from Viet Nam at SC71 on the application of the Penal Code and other relevant matters. The Committee will, at SC71, consider if the application of the Penal Code in Viet Nam, and other activities and measures implemented, sufficiently address illegal trade in wildlife, in particular illegal trade in rhinoceros horn as it affects the Party, or if any further measures are needed.
74. The Secretariat notes that Viet Nam is one of the Parties included in the NIAP process. The Standing Committee at SC69 requested Viet Nam to revise and update its NIAP and to develop a combined National Ivory and Rhinoceros Action Plan (NIRAP). The final revised and updated NIRAP developed by Viet Nam was received and assessed as 'adequate' by the Secretariat in July 2018. The Secretariat notes that the revised and updated NIRAP includes a significant component on addressing domestic demand for illegal rhinoceros horn and ivory, and that this component of the NIRAP fully addresses the matters outlined in the summary prepared by the working group on rhinoceroses as presented in document SC70 Doc. 56, as it relates to Viet Nam. Viet Nam will report on progress with the implementation of its NIRAP to the Standing Committee at its 73rd meeting.
75. The Secretariat suggests that matters related to Viet Nam can be addressed through the activities that will be undertaken by the Standing Committee at SC71, the activities to be conducted by the Party in the implementation of its NIRAP, the associated reporting to the Standing Committee, and the activities to be conducted by the Committee in this regard.
76. Should the Conference of the Parties agree draft decision 18.BB, Viet Nam is encouraged to pursue the implementation of this draft decision as part of the implementation of its NIRAP.

Zimbabwe

77. Table 2 in the report in Annex 2 to the present document shows that, as most other Parties in Africa, annual rhinoceros poaching levels in Zimbabwe declined, from 50 rhinoceroses poached in 2015, to 35 in 2016, 36 in 2017 and 15 up to September 2018.
78. The summary prepared by the working group on rhinoceroses as presented in document SC70 Doc. 56 contains suggestions for Zimbabwe. As noted in paragraph 36 above, the Standing Committee at SC70 encouraged Parties concerned to submit any additional information on the matters outlined in the summary to the Secretariat, for such information to be included in the report from the Secretariat to the present meeting. As also noted above, the Secretariat received a report from Zimbabwe in this regard, available as Annex 4 to the present document.
79. The Secretariat notes some discrepancies between the report received from Zimbabwe and the report available as Annex 2 to the present document, and the Party may wish to clarify some of these at the present meeting, for example the number of rhinoceroses poached.

80. The report available as Annex 4 provides information on a variety of matters, including on court cases involving the poaching of rhinoceros specimens, resource constraints, habitat loss and fragmentation, and others. It responds to some of the matters raised in the summary prepared by the working group on rhinoceroses. The report available as Annex 2 to the present document also responds to some of these matters, for example stating that the Parks and Wildlife General Laws Amendment of 2011 provides for imprisonment of up to nine years, and 11 to 20 years for repeat offenders.
81. The Secretariat notes that Annex 1 to the report received from Zimbabwe indicates that some sentences with significant penalties for crimes involving rhinoceros were secured in the country. However, from the 40 cases included in the report stretching over the period 2014 to 2018, only eight seem to have been finalized in court, and significant room for improvement seems to exist in this regard. This is also a matter addressed in document SC70 Doc. 56 prepared by the working group on rhinoceroses. Zimbabwe is encouraged to give further consideration to the suggestions made by the working group on rhinoceroses, and to implement measures that will facilitate the processing and finalization of these cases in court, as well as the swift handling of any future cases. The Secretariat in this regard proposes draft decision 18.CC.

Form for collection and sharing of data on rhinoceros horn seizures and on samples for forensic analysis

82. In paragraph 1 e) of Resolution Conf. 9.14 (Rev. CoP17), the Conference of the Parties urges Parties to share information on the seizure of illegal rhinoceros specimens made within their territories with countries of origin, transit and destination, as applicable, in support of the initiation of investigations in these countries to ensure that the entire illegal trade chain is addressed. The report prepared by the IUCN/SSC African and Asian Rhino Specialist Groups and TRAFFIC for the present meeting again highlights the importance of this in enabling effective responses to the transnational organized crime groups involved. As highlighted in the report, significant room for improvement continues to exist in this regard. Parties are therefore encouraged to, when appropriate and in a manner that would not jeopardize any ongoing investigations or expose covert investigative techniques, step up efforts to effectively implement paragraph 1 e) of the Resolution, by sharing information about rhinoceros horn seizures with countries of origin, transit and destination in accordance with the provisions of their relevant national legislation, and in support of joint investigations or investigations in the countries concerned.
83. The report prepared by the IUCN/SSC African and Asian Rhino Specialist Groups and TRAFFIC highlights the value of the RhODIS® Rhino DNA Indexing System⁶ which stores rhinoceros DNA profiles from multiple African countries in a single continental database. RhODIS enables the comparison of DNA samples collected from seized rhinoceros horns and crime scenes against the DNA profiles of thousands of rhinoceroses and rhinoceros horns. The report highlights that to date RhODIS DNA matches were made in more than 250 cases and have assisted in successful prosecutions in Eswatini, Kenya, Namibia and South Africa. The report provides examples of 10 such cases. The Secretariat highlighted the RhODIS system in document CoP16 Doc. 54.2 (Rev. 1), and notes that what distinguishes RhODIS from other databases that may be available is its exceptionally large rhinoceros DNA profile database which enables comparison of samples. This significantly increases the possibility of securing a positive result where efforts were made to collect samples from rhinoceros horn seizures and associated crime scenes.
84. It remains essential that Parties use all tools at their disposal to the fullest extent possible to address rhinoceros poaching and illegal trade in rhinoceros horn, including forensic applications. The value of drawing upon forensic applications in the investigation of these crimes is evident.⁷ The report prepared by the IUCN/SSC African and Asian Rhino Specialist Groups and TRAFFIC notes that due to the absence of forensic analysis in many rhinoceros horn seizure cases the origin of much of these horns remains unknown. In addition to supporting investigations, knowledge about illegal trade chains can be significantly enhanced through the increased use of forensic applications.
85. At SC70, the Standing Committee agreed a recommendation as presented in document [SC70 Sum. 12 \(Rev. 1\)](#) urging Parties to pursue strengthening their implementation of paragraph 1 e), f) and g) of Resolution Conf. 9.14 (Rev. CoP17), and to actively use the *Form for collection and sharing of data on rhinoceros horn seizures and on samples for forensic analysis*,⁸ provided in the Annex to Resolution Conf. 9.14 (Rev. CoP17). The Committee further urged Parties to bring any difficulties that may be experienced in sharing information

⁶ <http://rhodis.co.za/>

⁷ <https://www.the-scientist.com/the-scientist/rhino-forensics-used-to-track-down-poachers-and-traffickers-30439>

⁸ *This form can be used as a standard format to collect and share information about seizures of rhinoceros specimens, and for the collection of relevant data to accompany samples collected from seized rhinoceros specimens for forensic analyses, in support of the implementation of paragraphs 1 e) i) and ii), f) and g) of the Resolution.*

and samples or in the use of the form to the attention of the Secretariat, to facilitate consideration of any changes that could be made to the form, to further enhance the gathering and sharing of information and samples. The report received from China as presented in Annex 3 to the present document provides some related information. The Secretariat notes that, at the time of writing, no other information has been communicated to it and continues to welcome information from Parties.

86. Parties are encouraged to, where not yet done, draw to the attention of their national authorities the relevant provisions of Resolution Conf. 9.14 (Rev. CoP17) and the *Form for collection and sharing of data on rhinoceros horn seizures and on samples for forensic analysis*, and to encourage its use.

Final remarks

87. Available data shows that, since CoP14 in 2007, the total number of rhinoceroses has increased by over 28% and, in this regard, the conservation efforts of Parties should be commended. Further, rhinoceros poaching levels have been declining since 2015, with 2018 poaching estimates projected to return to levels last observed in 2013. This suggests that the significant and persistent efforts of Parties to address this poaching and illegal trade are now showing measurable positive effects. Available information also shows that since 2014 there has been an annual increase in the weight of rhinoceros horn seized per rhinoceros poached, which suggests increased enforcement effort and effectiveness.
88. However, with an estimated 4,757 horns from African rhinoceroses destined for illegal markets in the period 2016-2017, the continued scale of the problem is evident. Rhinoceros poaching and rhinoceros horn trafficking continues to undermine conservation efforts and poses a serious threat to rhinoceros populations. Efforts are delivering results, but it is essential that these efforts be sustained, and that Parties remain vigilant in the implementation of measures and activities to address rhinoceros poaching and rhinoceros horn trafficking.

Recommendations

89. The Conference of the Parties is invited to:
- a) adopt the draft decisions in Annex 1 to the present document;
 - b) delete Decisions 17.133 and 17.134, as they can be replaced by draft decision 18.AA in Annex 1 to the present document;
 - c) delete Decisions 17.135 to 17.144, as they have been implemented;

Draft decisions on Rhinoceroses (Rhinocerotidae spp.)

Directed to all Parties

- 18.AA Parties should continuously review trends associated with the illegal killing of rhinoceroses and illegal trade in rhinoceros specimens, and the measures and activities they are implementing to address these crimes, to ensure that these measures and activities remain effective and are quickly adapted to respond to any newly identified trends.

Directed to China, Mozambique, Namibia, South Africa and Viet Nam

- 18.BB China, Mozambique, Namibia, South Africa and Viet Nam are encouraged to make every effort to further strengthen their implementation of paragraphs 1 e) and 2 d) of Resolution Conf. 9.14 (Rev. CoP17) on *Conservation of and trade in African and Asian rhinoceroses*, including by pursuing the initiation of joint investigations and operations aimed at addressing members of organized crime networks across the entire illegal trade chain, and to report to the Secretariat on any activities conducted in this regard.

Directed to Zimbabwe

- 18.CC Zimbabwe is encouraged to pursue the expeditious finalization of outstanding cases related to rhinoceros poaching and rhinoceros horn smuggling in court, to consider measures that could be implemented to facilitate the swift processing of such cases in future, and to report to the Secretariat on any activities conducted in this regard.

Directed to the Standing Committee

- 18.BBDD The Standing Committee shall review the recommendations of the Secretariat reported under Decision 18.AAFE, and prepare proposals for consideration of the 19th meeting of the Conference of the Parties.

Directed to the Secretariat

- 18.EE The Secretariat shall review the reports received under Decisions 18.BB and 18.CC, and bring any issues of concern that may arise to the attention of the Standing Committee.
- 18.AAFF The Secretariat shall, in consultation with interested Parties and the IUCN/SSC African and Asian Rhino Specialist Groups and TRAFFIC, explore options to reflect on challenges and best practices to assist in addressing rhinoceros poaching and rhinoceros horn trafficking in the report prepared for the Conference of the Parties in accordance with paragraph 7 of Resolution Conf. 9.14 (Rev. CoP17) and prepare recommendations for consideration by the Standing Committee.



African and Asian Rhinoceroses – Status, Conservation and Trade

A 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. CoP17)

Richard H Emslie^{1,2}, Tom Milliken^{3,1}, Bibhab Talukdar^{2,1}, Gayle Burgess³, Keryn Adcock¹, David Balfour^{1,4} and Michael H Knight^{1,4} (compilers)

¹ IUCN SSC African Rhino Specialist Group (AfRSG), ² IUCN SSC Asian Rhino Specialist Group (AsRSG),
³ TRAFFIC, ⁴ Nelson Mandela University, South Africa

1. Introduction

The present report was commissioned by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Secretariat, and prepared by the IUCN SSC's African Rhino Specialist Group (AfRSG), Asian Rhino Specialist Group (AsRSG) and TRAFFIC, in accordance with the provisions of paragraphs 7 and 8 of CITES Resolution Conf. 9.14 (Rev. CoP17) on *Conservation of and trade in African and Asian rhinoceroses*, for the 18th meeting of the Conference of the Parties to CITES (CoP18, Colombo, 2019).

In accordance with the Resolution, the report addresses the conservation status of African and Asian rhinoceros species, trade in specimens, stocks and stock management, illegal killing¹, enforcement issues, conservation actions and management strategies, and measures by implicated States to end illegal use and consumption of rhino parts and derivatives, and primarily deals with developments since the 17th meeting of the Conference of the Parties to CITES (CoP17, Johannesburg, 2016). At the recommendation of the CITES Standing Committee Working Group on Rhinoceroses (SC-RWG), the Standing Committee at its 70th meeting (SC70, Sochi, 2018) agreed to submit a draft decision to CoP18 for consideration, directing the Secretariat to, in consultation with interested Parties and the IUCN SSC AfRSG and AsRSG and TRAFFIC, explore options to reflect on challenges and best practices for addressing rhinoceros poaching and rhinoceros horn trafficking in the report prepared for CoP meetings in accordance with the provisions of paragraphs 7 and 8 in Resolution Conf. 9.14 (Rev. CoP17). This report therefore also highlights some identified challenges and best practices.

2. African rhinoceroses

2.1 National and continental conservation status and trends

White rhinoceros (*Ceratotherium simum*) are categorised as Near Threatened on the IUCN Red List (Emslie, 2012a), while black rhinoceros (*Diceros bicornis*) are categorised as Critically Endangered (Emslie, 2012b). Estimated numbers of African rhino by subspecies and country as of the end of 2017 are given in Table 1, together with revised 2012 and 2015 totals for comparison. 90% confidence levels around 2017 estimates (derived by bootstrapping using calculated or likely estimate precision) are estimated at 17,212 to 18,915 white rhino and 5,366 to 5,627 black rhino.

The vast majority of African rhino (97% of white and 94% of black rhino) occur in four range States: South Africa, Namibia, Kenya and Zimbabwe (in order of rhino numbers; Table 1). Botswana's rhino numbers now exceed 500 following the reintroduction of 215 white rhino since 2015 and population growth, and the country currently has the fourth largest white rhino population on the continent. Since CoP17, black rhino have been reintroduced to both Chad (2018) and Rwanda (2017). While the Rwandan population is starting to grow, some of the Chad founder animals have died and experts are

¹ Throughout the report the term "poaching" is also used to refer to illegal killing.

currently trying to determine the possible causes. In 2018 a population of southern white rhino (*C. s. simum*) was established in Democratic Republic of Congo with animals from Namibia and Zimbabwe². A total of four white rhino have also been confirmed in reserves in Côte d'Ivoire and Senegal, outside the species' native range.

Table 1: Estimated numbers of white and black rhino by species and subspecies/genetic management cluster and by country as of the end of 2017, with continental totals for end of 2012 and 2015*. (Based on AfRSG data in collaboration with range States. Country trends are over the five-year period 2012-2017.)

Species Subspecies/ Management Cluster	White rhino (WR) <i>Ceratotherium simum</i>				Black rhino (BR) <i>Diceros bicornis</i>					Total Both species
	<i>C.s.cottoni</i> (Northern)	<i>C.s.simum</i> (Southern)	TotalWR	Trend	<i>D.b.bicornis</i> (South-western)	<i>D.b.michaeli</i> (Eastern)	<i>D.b.minor</i> (South-eastern)	TotalBR	Trend	
Botswana		452	452	Up			50	50	Up	502
(Côte d'Ivoire)**		1	1							1
Kenya	3	510	513	Up		745		745	Up	1,258
Malawi							28	28	Up	28
Mozambique		29	29				1	1		30
Namibia		975	975	Up	1,857			1,857	Up	2,832
Rwanda (Senegal)**		3	3			19		19	Up (New)	19
South Africa		15,625	15,625	Down	331	83	1,632	2,046	Up	17,671
eSwatini		66	66	Down			21	21	Up	87
Tanzania						155	5	160	Up	160
Uganda		22	22	Up						22
Zambia		14	14	Up			48	48	Up	62
Zimbabwe		367	367	Up			520	520	Up	887
End 2017 total	3	18,064	18,067	Down	2,188	1,002	2,305	5,495	Up	23,562
End 2015 total*	3	20,053	20,056	Down	2,212	887	2,115	5,214	Up	25,270
End 2012 total*	4	21,316	21,320	20,165 in 2010	1,968	799	2,078	4,845	4,880 in 2010	26,165

* In light of information obtained since CoP17, 2015 totals have been revised slightly down (white rhino -1.6%, black rhino -0.7%), while 2012 totals have been revised slightly up (white rhino +3.5%, black rhino +0.5%). 2010 estimates remain as reported in CoP16 (Doc 16.54.2A2). **Countries out of native range.

South Africa³ has reported the export of 538 live rhino since 2014 (the majority of which were white rhino), with 67% (361) exported to current and former range States (South African Department of Environmental Affairs, 2018). The remaining 177 rhino were exported outside Africa to institutions that are either members of the World Association of Zoos and Aquaria (WAZA) or accredited members of regional zoo associations recognised as reputable institutions by the importing country's CITES Management Authority.

While white rhino numbers increased rapidly from 1992-2010, averaging +7.1%/year, population growth then slowed as poaching increased, with numbers declining from 2012 onwards (Figure 1, left). After black rhino numbers reached their lowest point in 1995, they have since steadily increased, with increased poaching slightly slowing population growth in recent years (Figure 1, right). The different trends shown by the two species are in part due to white rhino being subjected to higher poaching levels than black rhino. This is likely to be due to the fact that white rhino generally live in more open habitats where they are easier to target, live in larger groups and have greater average horn weights. The difference in trend in numbers between white and black rhino in recent years may also be due to the differential responses of the two species to the severe drought that affected parts of southern Africa in 2015-2016 (Ferreira *et al.*, 2018a; Mick Reilly – eSwatini Big Game Parks, personal communication), since the food supply of white rhinos (grass) is affected more by drought than that of black rhinos (browse). The impact of the drought on rhino numbers is discussed further below.

² While stakeholders in the Zimbabwe donor population were not consulted prior to this move, and the translocation didn't form part of the country's agreed annual management plan, the recipient site was visited and approved by Zimbabwe Parks and Wildlife Management Authority staff (Roseline Mandisodza-Chikerem - ZPWMA Chief Ecologist, personal communication).

³ South Africa was the only range State to report significant exports of live rhino from 2014 onwards, according to data recorded in the CITES Trade Database.

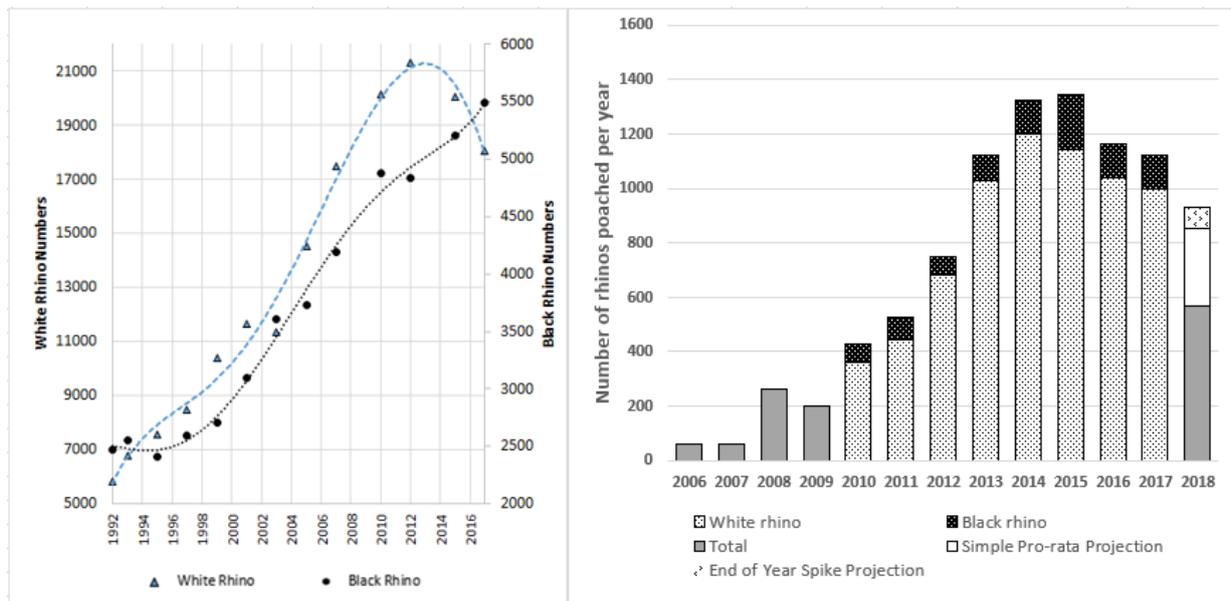


Figure 1: Estimated numbers of white and black rhino 1992-2017 based on AfRSG data in collaboration with range States (left) and reported numbers of rhino poached 2006-2018* (right). (Based primarily on AfRSG data, as well as TRAFFIC and CITES Standing Committee Rhinoceros Working Group [SC-RWG] data, in collaboration with range States. *The 2018 estimate includes reported poaching data available at the time of writing [see Table 2; darker shading] as well as a simple pro-rata projection for the rest of the year assuming poaching continues in each country at the same rates [no shading], and an additional estimate for an end-of-year spike in poaching which historically has often occurred [chevron shading], estimated using a correction factor derived from five years of available data for South Africa⁴. Actual 2018 poaching totals may differ from those projected here, and an update with actual 2018 totals will be provided to Parties at CoP18 by the AfRSG.

The decline in estimated continental white rhino numbers from 2012-2017 can largely be accounted for by a drop in estimated numbers in the largest population, in South Africa’s Kruger National Park (KNP), which has been severely affected by poaching since 2007 (Figure 2). After allowing for the translocation of just over 300 white rhino out of KNP from 2015-2017, there was a net drop in estimated white rhino numbers of ~3,400 rhino in the park. This decline occurred despite a 40% recorded reduction in the number of white rhino poached in KNP over the same period (853 rhino were poached in KNP in 2015, 632 in 2016 and 513 in 2017; Ferreira *et al.*, 2018a; Figure 2). Given the declining population size, the decrease in the proportion of the KNP population poached annually has been much less marked (a ~14% decrease from 2015-2017). From 2014-2017, reported minimum poaching levels in KNP have remained high with a geometric mean of 8.1% per year. The 4,210 white rhino “removed” from the KNP population by reported poaching and management over this period account for only around four-fifths of the estimated decline in numbers over this period. While drought will have impacted numbers (as discussed below), some of the discrepancy can be explained if some poached carcasses were undetected, which is likely given KNP’s large size and resultant low field ranger densities⁵. Analysis of field carcass detection data indicates that around 20% of carcasses may go undetected in KNP (Ferreira *et al.*, 2018b)⁶. If this is the case, actual white rhino poaching levels in KNP from 2014-2017 may have averaged in the region of 10%-12% of the population per annum⁷. This poaching level is above the longer-term estimated maximum population growth rate for white rhino of around 9%, and thus poaching is likely to have accounted for some of the recorded decline in KNP white rhino numbers.

⁴ The 2018 total may well exceed the simple pro-rata projection estimate of 863 rhino, as in previous years there has often been a spike in poaching in the last quarter of the year. A comparison of simple projected year-end totals based on mid- to end-August data with actual year-end totals over five years of available data for South Africa indicated that actual year-end numbers poached were 8.56% higher than projected using a simple pro-rata model. Applying this correction factor would estimate an additional 74 rhino poached in 2018, giving a revised projection of 937 rhino. The AfRSG will be compiling updated population estimates and poaching records for 2018 at its February 2019 meeting, and will prepare a short update to be made available to CoP18 as an Information Document.

⁵ Some of the difference could also be a result of sampling variability in block count estimation.

⁶ Average persistence of carcasses in KNP was found to be 89.8% (0.769-1.000) and the probability of a carcass being observed given persistence was 89.7% (0.883- 911), with an estimated under-detection of total rhino poaching of 19.8% (white rhino 19.4%, black rhino 27.6%). This translates to an estimated 5,271 (4,750-6,165) white and 246 (224-287) black rhino poaching mortalities in KNP since 2016 (Ferreira *et al.*, 2018b). Given that carcasses of young calves are less likely to persist and be detectable, these estimates may under-estimate actual losses due to poaching.

⁷ Including an estimate for additional carcasses of young calves less likely to have been detected.

Figure 2 shows trends in estimated numbers of white rhino in KNP (with confidence levels) and modelled trends in numbers under two scenarios – if there had been no poaching, and no poaching and no management removals⁸. In contrast to the decline in actual estimated numbers, white rhino numbers would have stabilised from 2008-2015 under the two modelled scenarios, only declining over the last two years (2015-2017) when actual estimated numbers showed the most significant decline.

This marked recent decline coincides with the severe drought that affected southern Africa in 2015-2016, when KNP rainfall was 49% below the long-term average following a 26% below long-term average rainfall the year before, which negatively impacted both mortality and calving rates (Ferreira *et al.*, 2018a)⁹. The drought affected other parts of South Africa and eSwatini (previously Swaziland), and was the most severe drought to hit this region since the early 1980s. As early as January 2016, experienced South African conservationists were predicting that this drought might kill more rhinos than poaching (Groenewald, 2016). Other large grazers also suffered during the drought. Despite losing only one white rhino to poaching in the period 2012-2017, eSwatini’s white rhino numbers declined by 21% over the same period. White rhino losses would have been higher had it not been for many private owners in South Africa and eSwatini supplementary feeding their rhino during the drought.

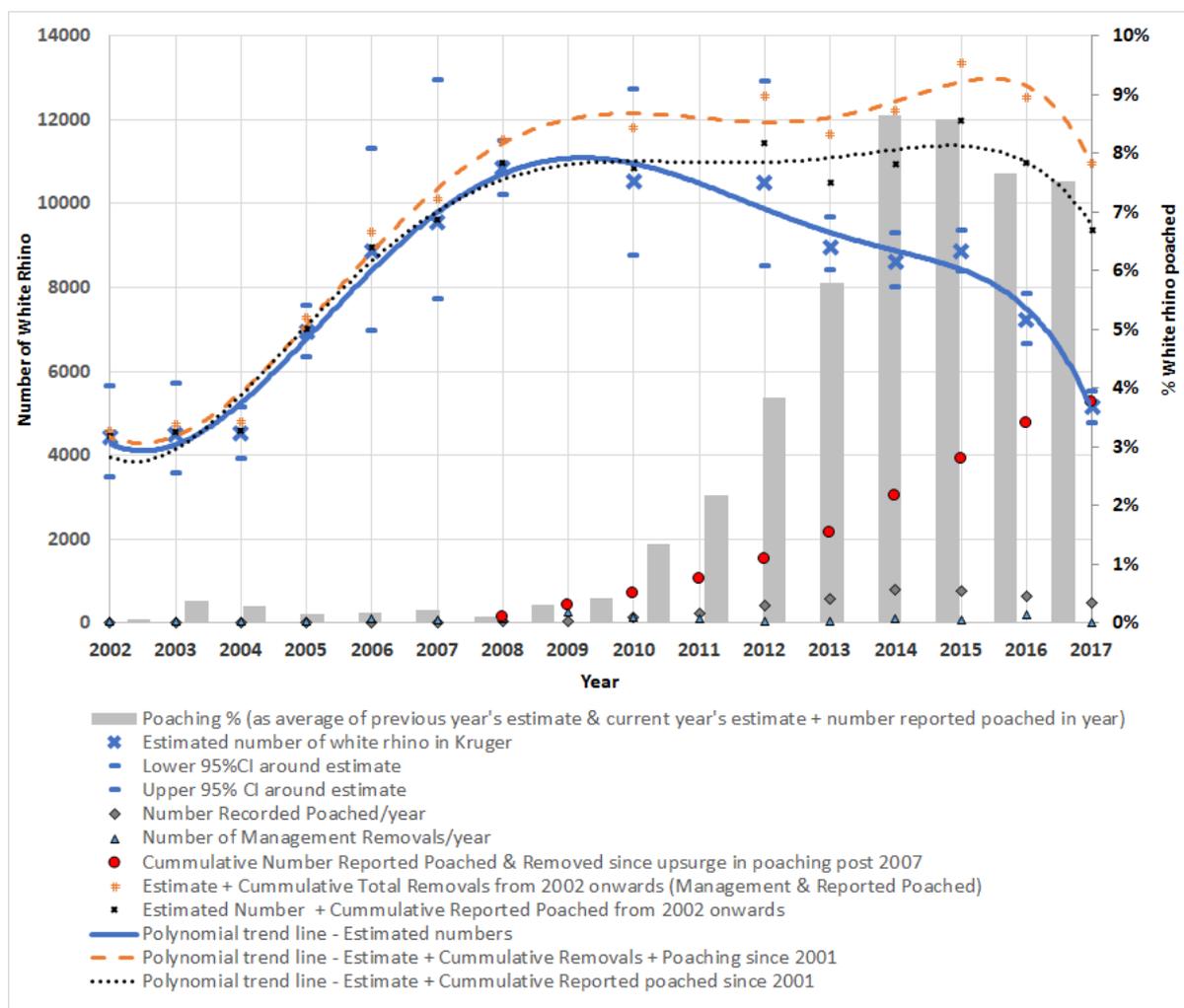


Figure 2: White rhino population history in Kruger National Park, 2002-2017. (Based on SANParks data provided to AfRSG, Southern African Development Community Rhino Management Group [SADC RMG] data and Ferreira *et al.*, 2018a). Removals from 2001-2003 were estimated as the average of removals in 2004 and 2005. For years where no species breakdowns were available (primarily early years), the numbers of white rhino poached were estimated based on the average proportion of white rhino poached over 10 years with available data [95.9%].)

⁸ The modelled numbers reflect a simple “adding back” of poached and management removals to estimated numbers; for simplicity no growth has been modelled for these added animals.

⁹ Ferreira *et al.*, (2018a) determined that the drought impacted on the KNP white rhino population in two main ways – by increasing natural mortalities in the two survey intervals 2015-16 and 2016-17 (by around 0.5% per year) and by reducing calving rates in 2016-17 (by around 4%), with the lag in the latter effect due to the white rhino’s 16-month gestation period. These two factors alone would account for a loss of almost 400 white rhino.

From 2012-2017 white rhino numbers declined by an estimated 51% in KNP and 26% in other State-run parks and game reserves in South Africa. In 2017 there were 10 fewer State-run white rhino populations in South Africa than there were in 2012 (a 21% decline); these populations were either lost due to poaching or their last remaining animals were translocated out to prevent them being poached. There were also three fewer State-run black rhino populations in South Africa in 2017 compared to five years previously.

Updated white rhino number estimates are available for the majority of the larger known private populations in South Africa as well as for many other smaller populations. However, precise estimates for many other populations under private ownership in South Africa are not available due to non-reporting by certain owners (with predominantly smaller¹⁰ populations) during a recent survey¹¹. Conservative estimates¹² have been made to account for likely additional populations for which data were not available, and as such the total may be an underestimate. Despite this, these data indicate that numbers of white rhino on private land in South Africa have continued to increase (Figure 3). While some generally smaller private owners have sold some or all of their rhino in recent years, others have bought more animals thus leading to a sector-wide consolidation of populations. In contrast to most State parks and game reserves, many private owners supplementary fed their white rhino during the recent drought, often at great cost, thereby reducing mortalities and improving birth rates.

The largest semi-wild population of over 1,600 white rhino has achieved an average net growth rate of 8.7%/year since 2008 (Adcock *et al.*, 2018) and poaching levels approximately a tenth of the national South African average. No rhino have been poached at this site since January 2017. This success has come at significant cost of around USD357,000/month, of which security accounts for around 60%. Given the limited economic returns rhino are currently able to generate (discussed further below), such high levels of expenditure on intensive management and protection are not sustainable without additional support.

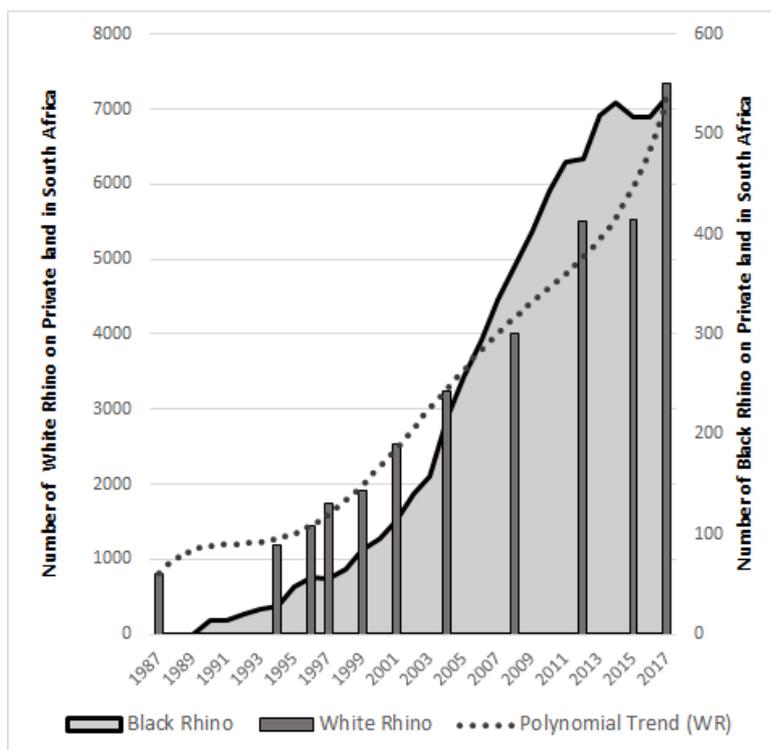


Figure 3: Estimated numbers of white and black rhino conserved on private land in South Africa, 1987-2017. (Black rhino estimates based on Southern African Development Community Rhino Management Group (SADC RMG) data, AfRSG data and 11 surveys of white rhino on private land by Buijs (1988), Emslie (1994a), Buijs & Papenfus (1996), Buijs (1998) Buijs (2000), Hall-Martin & Castley (2001), Castley & Hall-Martin (2004), Hall-Martin *et al.*, (2009), Balfour *et al.*, (2015), Balfour *et al.*, (2018) and Shaw *et al.*, (in prep).)

¹⁰ Non-reporting properties are likely to hold an average ~8 rhino.

¹¹ Due to the continuing difficulty of obtaining reliable estimates of white rhino numbers on some private and State properties in some South African provinces, the SADC Rhino Management Group has initiated a process with the South African Department of Environmental Affairs with the intention of developing a formally gazetted annual reporting requirement in the country. It is planned for this process to be in place by October 2019 in order to test it at the end of 2019.

¹² With wider confidence intervals applied to this estimate.

White rhino numbers outside South Africa increased by ~64% over the five-year period 2012-2017. Some of this growth was due to continued translocations of white rhino (mainly from South Africa). At a continental level there has also been a significant shift in the proportions of white rhino conserved under different management models over the last five years, with private owners/landowners for the first time now conserving almost as many white rhino as the State (Figure 4). The estimated proportion of white rhino conserved on private land in 2017 was 49.3% (bootstrapped 90% confidence levels of 46.9% to 51.6%). In contrast, the proportions of black rhino under different management models in Africa have remained very similar over the five years 2012-17.

By 2016-2017, the southern African drought ended in most areas. If normal rains continue, and the reduction in poaching can be maintained, a slight increase in white rhino numbers as a result of increased birth and survival rates can be expected. At the time of writing, however, the start of the summer rains in KNP has been delayed and the park is very dry (Kobus De Wet – KNP, personal communication).

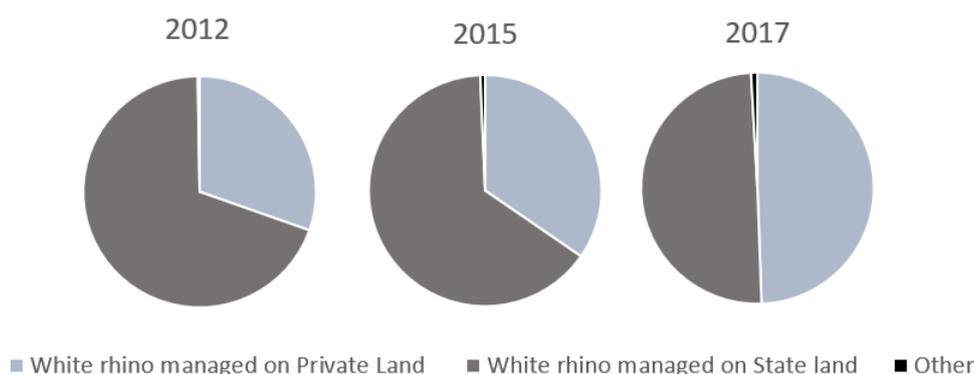


Figure 4: Proportions of continental white rhino numbers by management model for 2012, 2015 and 2017. (Based on AfRSG data. “Other” includes community land.)

2.2 Illegal killing

Table 2 gives numbers of rhino reported poached per year by country since 2006. It is important to note that these figures are likely to be under-estimates of actual poaching levels given potential under-detection of poaching, particularly in larger areas with lower field ranger densities.

Poaching of rhinos in Africa increased for six consecutive years from 2009-2015 to peak at almost 3.7 rhino/day in 2015, albeit at a slowing rate of increase from 2013-2015 (Table 2, Figure 2 and Emslie *et al.*, 2016). While recorded poaching levels have declined since 2015, poaching still remains at high levels with around 3.1 rhino/day poached in 2017 (Table 2). As noted above, reported poaching levels presented in Table 2 are likely to be slight underestimates of actual numbers, since ~20% of poached carcasses may be undetected in some very large areas with lower field ranger densities such as KNP (Ferreira *et al.*, 2018b).

The decline in poaching from 2015 appears to have continued into 2018, with reported poaching in the first eight to nine months of the year remaining low or falling in many range States (Figure 2, Table 2). Although recent slight increases in reported poaching in Botswana and Namibia in 2018 are cause for concern¹³, numbers poached across Africa in 2018 are likely to drop below 1,000 rhinos for the first time in six years (Table 2), unless there is an end-of-year spike in poaching that is larger than predicted.

¹³ The projected 2018 poaching levels for Botswana and Namibia presented in Table 2 (11 and 61 rhino, respectively) would represent 2.2% of the rhino population in each country.

Table 2: Reported African rhino poaching mortalities by country, 2006-2018*. (Based primarily on AfRSG data in collaboration with range States, and TRAFFIC and CITES Standing Committee Rhinoceros Working Group [SC-RWG] data). Some totals from previous years have been revised slightly compared to the previous [CoP17] report in light of additional information. Zimbabwe estimates for 2016 and 2017 include some animals missing and assumed poached; corresponding minimum recorded poaching figures for these two years were 28 and 27. Shaded cells in year columns indicate the country had no rhino in that year.)

Country	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 to date	Date 2018 data up to	Total (not including 2018 projection)	Simple Projection for 2018	2017 Poaching as a % of population	
Botswana	0	0	0	0	0	0	2	2	1	0	1	0	7	26-Aug	13	11	0.0%	
Chad													0	25-Sep	0	0		
DR Congo	0	0	2	2									0	25-Sep	4	0		
Kenya	3	1	6	21	22	27	29	59	35	11	10	9	4	30-Sep	237	5	0.7%	
Malawi	0	0	0	0	0	0	2	1	1	1	1	1	0	21-Nov	7	0	0.0%	
Mozambique	0	9	5	15	16	10	16	15	19	13	5	4	1	31-Jul	128	2	11.8%	
Namibia	0	0	0	2	2	1	1	4	30	97	61	44	53	21-Nov	295	61	1.5%	
Rwanda													0	0	0	0	0.0%	
South Africa	36	13	83	122	333	448	668	1004	1215	1175	1054	1028	508	31-Aug	7687	763	5.5%	
eSwatini	0	0	0	0	0	2	0	0	1	0	0	0	0	25-Sep	3	0	0.0%	
Tanzania	0	0	2	0	1	2	2	0	2	2	0	2	0	07-Nov	13	0	1.2%	
Uganda	0	0	0	0	0	0	0	0	0	0	0	0	0	25-Sep	0	0	0.0%	
Zambia	0	1	0	0	0	0	0	0	0	0	0	0	1	25-Sep	2	1	0.0%	
Zimbabwe	21	38	164	39	52	42	31	38	20	50	35	36	15	30-Sep	581	20	3.9%	
Additional projection for usual end of year spike in poaching >																74		
Total	60	62	262	201	426	532	751	1123	1324	1349	1167	1124	589		8944	937	4.6%	
Poached/day	0.2	0.2	0.7	0.6	1.2	1.5	2.1	3.1	3.6	3.7	3.2	3.1				2.6		

* The column "Simple projection for 2018" provides a projected total poaching estimate for 2018 assuming that poaching continues in each country at the same rates to the end of the year. An "additional projection for usual end of year spike in poaching" is also included as an end of year spike has historically often occurred. This additional projection was estimated using a correction factor derived from five years of available data for South Africa¹⁴. Actual 2018 poaching totals may differ from those projected here, and an update with actual 2018 totals will be provided to Parties at CoP18 by the AfRSG.

2.3 Trade

2.3.1 Horn sourced for illegal markets

A total of 4,757 African rhino horns are estimated to have entered illegal trade in the period 2016-2017, of which 1,093 horns were reportedly recovered by enforcement agencies within and outside Africa (Table 3). This represents approximately 2,378 rhino horns each year being sourced for illegal markets, weighing some ~6.6 tonnes, with an estimated 1,832 horns or ~5.1 tonnes per year entering illegal trade. It appears that the rapid increase in illegal acquisition of horn documented in the CoP14 to CoP17 reports has now ceased, with a modest decline in the number of horns annually sourced for illegal markets in 2016 and 2017 (Table 4). Poaching remains the major source of these horns. Of the total number of horns intended for illegal markets, the percentage of horns seized in Africa has almost doubled since CoP17, from 4.5% to 8.9%, while the percentage of horns seized outside of Africa has remained at a similar level (5.8% and 5.5%, respectively).

¹⁴ The 2018 total may well exceed the simple pro-rata projection estimate of 863 rhino, as in previous years there has often been a spike in poaching in the last quarter of the year. A comparison of simple projected year-end totals based on mid- to end-August data with actual year-end totals over five years of available data for South Africa indicated that actual year-end numbers poached were 8.56% higher than projected using a simple pro-rata model. Applying this correction factor to 863 would estimate an additional 74 rhino poached continentally in 2018, giving a revised continental projection of 937 rhino. The AfRSG will be compiling updated population estimates and poaching records for 2018 at its February 2019 meeting, and will prepare a short update to be made available to CoP18 as an Information Document.

Table 3: Estimated number of African rhino horns by source entering illegal trade, January 2016 – December 2017. (Based on TRAFFIC and AfRSG data.)

Description of source or recovery of horns	Number of horns	% of total*
Source of African rhino horns intended for illegal markets		
Horns on all recorded poached rhinos ¹⁵	4,531	95.2%
Horns stolen from natural mortalities (estimate) ¹⁶	85	1.8%
Thefts from government stockpiles ¹⁷	12	0.2%
Other thefts in Africa (private stocks, museums etc.) ¹⁸	40	0.9%
Horns illegally sold from private stocks (estimate) ¹⁹	57	1.2%
White rhino horns obtained from legal trophy hunts (estimate) ²⁰	32	0.7%
Source Total	4,757	100.0%
Recovery of illegally obtained African rhino horns by enforcement agencies		
Recoveries of illegally obtained horns <i>in situ</i> (estimate) ²¹	408	8.6%
Confiscations/seizures in Africa ²²	425	8.9%
Confiscations/seizures outside of Africa ²³	260	5.5%**
Recovery Total	1,093	23.0%
***Total African rhino horns entering illegal trade	3,664	77.0%

*Percentage of total horns intended for illegal markets.

**Percentage of horns seized outside of Africa, out of total horns intended for illegal markets that leave Africa, is 6.6%.

***Estimated number of horns intended for illegal markets minus estimated number seized.

Table 4: Estimated average number of African rhino horns sourced for illegal markets per year, 2000-2017. (Based on Milledge, 2007; Milliken *et al.*, 2009; Emslie *et al.*, 2012, Emslie *et al.*, 2016.)

Jan'00-Dec'05 (Pre-CoP 14)	Jan'06-Sept'09 (Pre-CoP15)	Jan'09-Sept'12 (Pre-CoP16)	Oct'12-Dec'15 (Pre-CoP17)	Jan'16-Dec'17 (Pre-CoP18)
106	408	1,140	2,674	2,378

2.3.2 Major illegal trade flows and countries most affected

Figure 5 and Table 5 present data from the TRAFFIC Rhino Horn Seizures Database from 2009 to September 2018, covering 737 rhino horn seizure cases and involving an estimated 2,733 horns or horn pieces weighing a total of 6,349 kg²⁴. Without a formal reporting mechanism for historic seizures, many of these data were obtained through opportunistic collection of open-source records. Many of the records originated from official government sources²⁵. Although these data only reflect what has been detected and reported, this dataset remains the most comprehensive set of rhino horn seizure data presently available and analysis yields valuable insights into trade routes and other dynamics. There is now a formal process for CITES Parties to submit annual illegal trade reports in accordance with Resolution Conf. 11.17 (Rev. CoP17); rhino seizure data included in these reports could inform future reporting pursuant to Resolution Conf. 9.14 (Rev. CoP17) if made available.

Based on these data, the total estimated weight and number of horns seized has increased steadily from 2009-2017 (Figure 5, Table 5). More seizures were made in Africa (relative to countries outside Africa) in every year except 2013 and 2014, with numbers in 2017 being almost evenly split. From 2010-2014 the weight of horns seized per rhino poached declined as poaching was steadily increasing, reaching close to peak levels in 2014. However, since 2014 there has been an annual increase in the weight of horn seized per rhino poached, which may be indicative of increased enforcement effectiveness/effort. This trend has coincided with first a slowing rate of increase in poaching and then a

¹⁵ Based on recorded number of poached rhinos in Table 2 multiplied by 1.98 horns per rhino.

¹⁶ Assuming a 3% theft rate and a 3% annual natural mortality rate.

¹⁷ Based on data obtained by TRAFFIC in collaboration with governments.

¹⁸ Based on data obtained by D. Balfour, increased by 10% to account for estimated unreported data.

¹⁹ Assuming a 3% annual natural mortality rate of privately-owned rhinos and an estimate of 14.5% entering illegal trade based on expert knowledge from law enforcement professionals and individuals monitoring the status of rhinos in South Africa.

²⁰ Based on assessment of trophy hunting data for South Africa and known and estimated patterns of pseudo-hunting.

²¹ Assuming 9% of poached rhino based on discussions with wildlife authorities.

²² Based on seizures data in the TRAFFIC Rhino Horn Seizures Database.

²³ Based on seizures data in the TRAFFIC Rhino Horn Seizures Database.

²⁴ 2,765 kg in the period 2009-2013; 3,584 kg in the period 2004-2018.

²⁵ Often pursuant to reporting to the CITES SC-RWG, through the National Ivory and Rhino Action Plan (NIRAP) process, or reporting to the Elephant Trade Information System (ETIS) where rhino horns are seized together with ivory; other official data comes through AfRSG country representatives in African range States, as well as South African government statistics on rhino crime). TRAFFIC has put significant effort into vetting these data and is willing to share data with Parties on request.

limited decline in poaching post-2015, with 2018 poaching estimates projected to return to levels last observed in 2013.

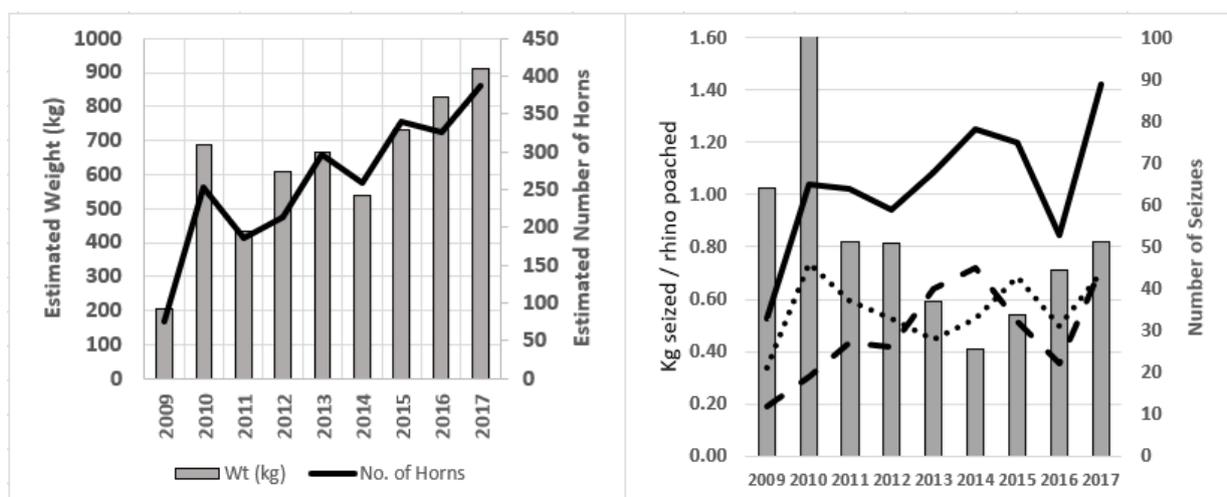


Figure 5: Estimated weight and number of African rhino horns seized globally (left), and number and location of seizures of African horns (in Africa [dotted line], in Asia and other countries [dashed line] and total [solid line]) and the ratio of seized horn weight to rhino poached (grey bars) (right), 2009–2017. (Based on TRAFFIC Rhino Horn Seizures Database. Where data on weights or numbers of horns were not available for a particular seizure, these have been calculated using species-specific average horn weights found in Pienaar *et al.*, 1991 and Leader-Williams, 1992.)

In Table 5, data for seizures made by a particular country (“*Made by*”) have been combined with data on seizures that took place elsewhere but implicated that country as the origin, exporter, transit link or final destination (“*Implicated in*”)²⁶. Therefore, total consolidated numbers of seizures, weights and numbers of horns in Table 5 include some double-counting as data from a single seizure can be captured at more than one point in the trade chain. In the absence of DNA analysis of all seizure samples, the origin of much of the horn leaving Africa remains unknown. Knowledge of trade chains would be enhanced by increased forensic testing and more timely submission of seizure information and samples for DNA analysis (discussed later). Given the caveats associated with interpretation of the data in Table 5, these data cannot be used to indicate law enforcement effectiveness/effort, unless perhaps comparing similar types of countries (e.g. destination countries) or within a country over time. Nevertheless, the trade flows shown by these data provide an indication of the countries most affected by the illegal rhino horn trade.

²⁶ If a seizure was made in Country A and horns were destined to have been transported by air via Country B to Country C, the seizure would be recorded as “*Made by*” A and also listed under “*Implicated in*” for Countries B and C. In this case, law enforcement authorities in Countries B and C would have had no chance to make a seizure and thus “*Implicated in*” does not necessarily reflect law enforcement effectiveness. If a seizure is made in Country C and DNA shows the horn came from Country A, then it would be recorded as “*Made by*” Country C and listed under “*Implicated in*” for Country A.

Table 5: Global rhino horn seizure data, 2009–September 2018. (Based on TRAFFIC Rhino Horn Seizures Database. Where data on either weight or number of horns were not available for a particular seizure, these have been calculated using species-specific average horn weights found in Pienaar *et al.*, 1991 and Leader-Williams, 1992. Shading in the columns for the most recent period is proportional to the values in each column.)

Country/Territory	2009-2013				2014-Sept2018				Entire Period 2009-Sept2018			
	Seizure Number Made by	Seizure Number Implicated in	Estimated Weight (kg) of Seizures	Estimated Number of Horns & Pieces	Seizure Number Made by	Seizure Number Implicated in	Estimated Weight (kg) of Seizures	Estimated Number of Horns & Pieces	Seizure Number Made by	Seizure Number Implicated in	Estimated Weight (kg) of Seizures	Estimated Number of Horns & Pieces
South Africa	138	13	1,560	503	102	33	1,434	552	240	46	2,994	1,055
China (+Hong Kong SAR)	75	35	733	314	85	38	982	425	160	73	1,715	739
Viet Nam	26	35	847	339	35	25	910	422	61	60	1,757	761
Mozambique	7	12	241	89	25	18	790	341	32	30	1,031	430
Malaysia	0	4	63	25	3	3	367	140	3	7	430	165
Kenya	9	3	122	44	9	7	347	150	18	10	469	194
Qatar	0	11	102	62	1	13	201	86	1	24	303	148
Thailand	6	7	135	57	8	5	193	92	14	12	328	149
Malawi	0	0	-	0	3	2	138	61	3	2	138	61
Singapore	3	1	-	0	4	3	116	61	7	4	116	61
Namibia	0	0	-	0	10	5	114	55	10	5	114	55
Cambodia	0	0	40	19	2	4	96	42	2	4	136	61
Uganda	1	2	62	27	4	1	87	53	5	3	149	80
Zambia	1	0	14	5	4	3	73	33	5	3	87	38
Ethiopia	0	5	43	20	0	7	68	32	0	12	111	52
Nigeria	0	4	81	32	0	3	64	24	0	7	145	56
Lao PDR	0	1	6	2	2	6	63	48	2	7	69	50
Turkey	0	0	-	0	2	1	61	23	2	1	61	23
United Arab Emirates	1	6	35	18	0	6	50	41	1	12	84	59
United Kingdom	5	1	37	29	4	0	41	16	9	1	78	45
India	18	0	19	20	51	0	39	52	69	0	58	72
France	2	6	52	35	1	1	14	13	3	7	67	48
Czech Republic	4	0	118	40	2	0	7	3	6	0	125	43
U.S.A.	1	2	108	40	3	0	4	4	4	2	112	44
Zimbabwe	7	2	69	36	1	1	3	4	8	3	71	40
∑ Other Countries *	29	25	277	147	43	21	257	182	72	46	534	329
TOTAL	333	174	4,763	1,903	404	206	6,517	2,955	737	380	11,281	4,858

*Includes 35 other countries: Angola, Belgium, Bhutan, Botswana, Canada, Central African Republic, Côte d'Ivoire, Democratic Republic of the Congo, Denmark, Egypt, Germany, Greece, Guinea, Hungary, Indonesia, Ireland, Italy, Japan, Korea, Myanmar, Nepal, Netherlands, Philippines, Portugal, Rwanda, Slovakia, South Sudan, Spain, Sudan, eSwatini, Sweden, Switzerland, Taiwan (province of China), Tanzania, Togo.

As in reports to previous CoPs, Table 5 indicates that South Africa, China (including Hong Kong SAR), Viet Nam and Mozambique remain the countries most affected by illegal trade, and nationals of all of these countries continue to be arrested for rhino crimes.

Among source countries, **South Africa** accounts for the highest number of seizures in Table 5, with the country either making or being implicated in 33% of all seizures that have occurred since 2014 and accounting for 40% of the total weight of seized rhino horn in this period. This is not unexpected since South Africa has the greatest number of rhino and experienced the heaviest poaching, and therefore remains the biggest source of horn for illegal markets. Whilst the number of seizures made in South Africa, the estimated weight of seized horns and the estimated number of seized horns have all declined in the period 2014-2018 compared to the earlier period, these variables have all increased considerably in seizures made by other countries that implicate South Africa in the trade chain. This may be due in part to increased availability of information regarding the source of illegally traded horn, through DNA analysis and information obtained from traffickers that have been detained. The shift towards smuggling processed horn (discussed below) is, however, making detection more difficult. While South Africa remains one of the countries most affected by illegal trade, poaching levels in South Africa have been declining since 2014 (Table 2).

Mozambique is the second most prominent source country in Table 5; the country made, or was otherwise implicated in, approximately one in 10 of the total number of seizures made in the period 2014-2018. The weight of horn seized is significantly greater than could be produced by the small number of rhino that currently occur in Mozambique, indicating that the country is acting as a major transit country for horn. Many Mozambique nationals continue to be implicated in rhino poaching in

South Africa (Kobus De Wet, KNP - personal communication) and there is evidence that Vietnamese-led transnational criminal syndicates are heavily engaged in trafficking ivory and South African-sourced rhino horn out of Mozambique (EIA, 2017, 2018). While the number of rhino horn seizures made by Mozambique has risen 3.6 times compared to an approximate two-fold increase in poaching over the period 2014-2018 (Tables 2 and 5), which could be indicative of an improvement in law enforcement in the country, a greater quantity of rhino horn illegally left the country compared to the period 2009-2013 (involving at least an estimated 149 horns, weighing 374 kg, in 18 separate seizures that Mozambique was reportedly “implicated in” since 2014). Rhino horn trade dynamics in Mozambique are intrinsically linked with neighbouring South Africa which is the major source of rhino horn and is believed to share highly adaptive transnational criminal networks involved in the trade on both sides of the border.

China²⁷ again ranks as another important end-use destination in Asia based on available seizures data. China either made, or was implicated in, 30% of all recorded seizures in the period 2014-2018, representing more than one-quarter of the estimated weight and number of seized rhino horns (Table 5). The estimated weight and number of rhino horns seized by China grew by one-third and one-quarter, respectively, in the most recent period relative to the earlier period. The estimated weight and number of rhino horns in seizures made elsewhere that implicated China in the trade chain increased by 36% and 55%, respectively, during this same period. While these data may be indicative of improved enforcement effort, they could equally suggest that demand for rhino horn could be intensifying in the country, and that despite significant law enforcement effort and many prosecutions the country remains a key destination for illegal trade.

Among destination countries, available seizures data suggest that **Viet Nam** continues to be a leading destination for rhino horn overall, accounting for around 15% of the rhino horn seizure cases and more than one-quarter of the seized rhino horns by estimated weight or number in the more recent (2014-2018) period (Table 5). The number of seizures made in the country increased by 35% in the 2014-2018 period relative to the earlier period, with the estimated total weight and number of horns in those seizures more than doubling. In the same period, seizures made by other countries implicating Viet Nam decreased considerably. This could be indicative of an improvement in law enforcement in Viet Nam over the two periods. Overall, however, Viet Nam’s rhino horn trade flow increased by about 24% between the two periods in terms of the estimated numbers of horns involved. As has been the case since CoP15, demand in Viet Nam remains a key driver of the illegal rhino horn trade.

The predominance of China and Viet Nam in the illegal rhino horn trade is not only reflected in the available seizure records, but also in law enforcement data available for source countries. These data indicate that within Africa, Chinese and Vietnamese nationals are heavily engaged in rhino horn trafficking and play major roles in the acquisition and transport of rhino horn out of Africa to Asian destinations. The results of 141 cases in which 219 nationals of Asian countries were arrested in conjunction with a rhino horn seizure in Africa, or were arrested in Asia coming directly from Africa with rhino horn, are presented in Figure 6. Comparing the periods 2009-2013 and 2014-2018, four times more Chinese nationals were arrested in the more recent period (25 versus 101 arrests), while there was a much smaller increase in the number of Vietnamese nationals arrested between the two periods (34 versus 53 arrests). From 2009 to date, Chinese nationals made up 57% of Asian individuals arrested while Vietnamese nationals comprised 40%.

A recent analysis of 21 court cases pertaining to rhino horn seizures made at OR Tambo international airport from August 2016 to October 2018 by South Africa’s Department of Environmental Affairs in collaboration with South African Police Service, the Hawks and the South African Revenue Service (Melanzi, 2018) reveals a similar pattern of involvement of these two countries. Hong Kong SAR was the reported end destination for 13 of these shipments, with another two scheduled to pass through Hong Kong SAR to Nanjing in China, and the remaining six cases involving horns destined for Viet Nam via either Dubai or Doha.

²⁷ Data for China includes data for Hong Kong SAR, as there is no evidence that this region constitutes a separate market.

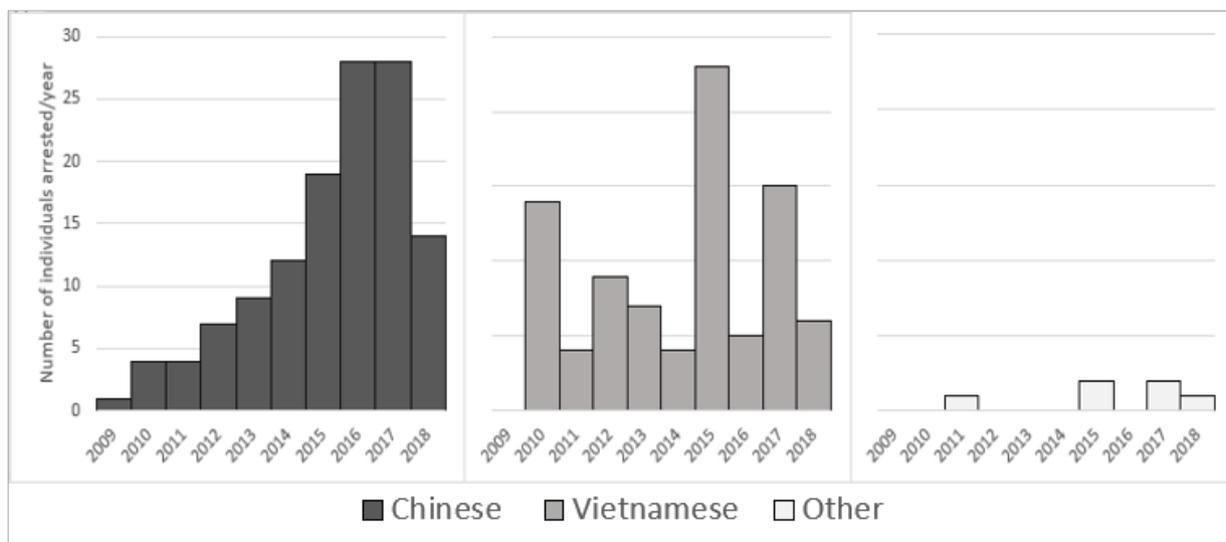


Figure 6: Numbers of individuals from Asian countries arrested in conjunction with African rhino horn seizure cases. (Based on TRAFFIC Rhino Horn Seizures Database. “Other” nationalities include 1 Malaysian, 2 North Korean, 2 Taiwanese and 1 unspecified “South East Asian”.)

Evidence of Chinese-run rhino horn processing operations in South Africa for export to Asian markets has emerged since CoP17 and marks an entirely new development in the trade. Police investigations in 2017 uncovered small home workshops where rhino horn beads and bracelets are manufactured for export along with horn offcuts and powder, and two Chinese nationals and a Thai national were arrested as a result (Moneron *et al.*, 2017). Bags of rhino horn offcuts, beads and cylinders have also been seized in Mozambique but it remains unknown whether processing operations have been established in the country or whether the seized goods originated in South Africa or elsewhere (T. Milliken, personal observation, July 2018). The advent of manufacturing of rhino products in Africa coincides with a similar development in the illegal ivory trade (CITES, 2017).

As previously reported, in 1993 the Chinese government banned all trade and exploitation of rhino horns and tiger bones with the issuance of a *Circular on Banning the Trade of Rhino Horns and Tiger Bones*. This legal instrument strictly prohibited the import and export, sale, purchase and transport (including carrying or sending by post) of these wildlife products, and was further buttressed by the official removal of these substances as approved ingredients in the official *Chinese Pharmacopoeia* governing traditional Chinese medicine (TCM). However, on 29 October 2018, a *Notice by the General Office of the State Council on Strict Rules of Activities of Operation and Utilization of Rhinoceros and Tiger and their Products* repealed the 1993 *Circular* and effectively opens up two new channels of rhino horn and tiger bone usage and trade: the sale of antique or collectable specimens which hold cultural value, and licensed trade as a medicinal product through approved TCM doctors in accredited hospitals. The first trade option essentially mimics an exemption made for ivory antiques at the time of the market closure of legal ivory trade on 31 December 2017, but the allowance of rhino horn as a TCM ingredient overturns a longstanding prohibition on domestic use of rhino horn spanning two and half decades. The *Notice* restricts rhino horn usage to captive bred animals (as distinct from zoo specimens), but key implementation details concerning the eligibility of individual live rhino presently in China as a future source of horn, the conditions of rhino horn stock procurement and management, the design of chain of custody controls from producers to consumers, and other related issues are yet to be developed. However, on 12 November 2018, the official Xinhua news agency reported that the “detailed regulations for implementation” of the October *Notice* had been “postponed after study”, and the “three strict bans” will continue to be enforced meaning that the import and export; the sale, purchase, transport, carrying and mailing; and the use of rhino horns and tiger bones in medicine all remain strictly banned. State Council Executive Deputy Secretary-General Ding Xuedong also announced that the government would soon be organising special crackdown campaigns focused on addressing the illegal trade in tigers and rhinos and their by-products, and that illegal activity would be dealt with severely.

In the meantime, trade in rhino horn products continues to be observed in China. A study of art and antiquities auctions in China from 2000-2014 documented 7,189 rhino products in domestic trade with a rapid escalation in sales from 202 items in 2005 to 2,698 items in 2011, followed by a virtual collapse in the period 2012-2014 following the issuance of a special notice by China’s State Forestry Administration on 15 December 2011 reaffirming prohibitions on rhino horn trading in the country (Gao

et al., 2016). Investment and appreciation of artistic value were the two common reasons given for purchase and the government's subsequent intervention was cited by the China Association of Auctioneers as a major factor in "a sharp decrease in turnover in China's booming art auction market" (Gao *et al.*, 2016). Another more recent review of auctions in China found rhino TCM products being sold²⁸. Although the auction houses engaged in this trade were in apparent violation of the 1993 ban on rhino horn, the items found on display had all ostensibly been approved by officials from the State Administration of Cultural Heritage, indicating a major gap in awareness of wildlife trade regulation in the country amongst key government officials.

Countries with a higher proportion of "Implicated in" seizures in Table 5 include some countries with airports that are major transport hubs. With the recent expansion of Ethiopian Airlines to become the biggest airline in Africa, Ethiopia has emerged as an important regional transport hub, along with South Africa and Kenya where carriers offer direct flights to Asian destinations. The national carriers of Qatar, United Arab Emirates and Turkey also offer similar connections via Doha, Dubai/Abu Dhabi and Istanbul, and available evidence suggests that these routes have all been used by couriers to illegally move horn between Africa and Asia.

In addition to available data on seizures, market surveys can also provide valuable information regarding trade routes. An undercover investigation in the Golden Triangle (the border region between Thailand, Myanmar and Lao PDR) in April 2018 revealed a market where large quantities of illegal wildlife products were openly displayed for sale, including whole African rhino horns as well as pieces, shavings and worked beads of rhino horn²⁹.

2.3.3 DNA analysis and use of the CITES rhinoceros horn seizures form

The RhODIS® Rhino DNA Indexing System (Harper *et al.*, 2013, 2018), established in 2010, is proving to be increasingly useful in investigations where DNA profiles from blood samples, seized horns and even horn dust in a bag used to transport horns can be compared and matched to DNA forensic sample profiles taken from poached animals at specific crime scenes, or by searching for matches against the DNA profiles of thousands of live animals and horn stocks on the RhODIS database. The storage of all these profiles from multiple African countries in a single continental database facilitates such matching (Harper *et al.*, 2018). With collection of samples from hunts, dehorning and any rhino immobilizations being legally mandatory in South Africa, and other range States such as Kenya and Namibia continuing to supply samples, the number of DNA profiles on the continental database continues to grow, and the chances of getting matches to international seizures increases. The system provides a tool to police and control domestic horn sales and the export of hunting trophies by allowing for the identification of illegal laundering of horn from either source onto illegal markets.

South Africa's report to SC70 (SC70 Doc. 56 Annex 14) summarizes international seizure samples sent to South Africa from international sources over the three-year period 2015-2017. Links were made to specific Kenyan, Namibian and South African rhino in seizure samples received from 11 countries during this period. Additional matches not listed in SC70 Doc. 56 Annex 14 have also been made from international seizure samples submitted in 2012-2014 and 2018, with a positive match to at least one animal for every international seizure sample submitted since 2016. If individual countries instead opted to implement their own incompatible DNA profiling systems, it would not be possible to efficiently look for matches across Africa as has been possible using the continental RhODIS database.

Nevertheless, some countries have indicated a preference to use their own in country DNA labs, while others have questioned the need to allocate resources to sending samples to the South African Police Service Forensic Science Lab (SAPS FSL) and subsequent RhODIS analysis³⁰, when for them, a simple species DNA test may be all that is needed to successfully secure a prosecution in a seizure case in their own country. One option used very successfully by Malaysia was to use its national DNA

²⁸ "For these items, the date of manufacturing was mostly claimed to be in the 1980s or before 1993 when the trade ban on rhino horn and tiger bone was imposed. A total of 112 lots of TCM were recorded. There were 66 auction lots of Peaceful Palace Bovine Bezoar Pill (containing rhino horn), with an estimated auction market value of ... USD1,160-4,639 per lot" (Chou, 2018).

²⁹ Based on photographs taken by an undercover investigator in April 2018, that were shown at the 30th meeting of the Rhino and Elephant Security Group (Mwanza, Tanzania, November 2018).

³⁰ While DNA species identification tests can be undertaken in a range of countries, RhODIS profiles are currently only being produced in a single lab in South Africa, but in time the hope remains that RhODIS-compatible profiles can be generated in multiple labs around the world. This would allow countries to analyse samples in-house and then share RhODIS-compatible DNA profiles without the need to send horn or extracted DNA samples to South Africa. Kenya's lab is apparently close to being able to derive RhODIS-compatible profiles. If a country is not able or seeking to adopt International Society of Animal Genetics standardization methods, another way to facilitate roll out of RhODIS compatible testing to other countries may be through the development of a commercial RhODIS kit.

forensic lab to extract DNA and conduct a species test needed for a local prosecution, and then to send samples of the extracted DNA to South Africa (obviating the need to send horn samples) that allowed many matches to be made.

Many range State investigators, conservationists and the major rhino coordination groups in Africa see it as vital for law enforcement efforts against transnational organized crime to share as much seizure information as possible (perhaps excluding confidential nominal data that can't be shared due to ongoing investigations or pending cases) along with DNA samples for analysis, and support the use of RhODIS as the only standardized DNA system and database to identify the source of samples in Africa. The system allows investigators to identify which different reserves and countries specific organized crime syndicates have been and are operating in, and provides greater understanding of their supply routes. Using DNA evidence to show the whole chain of supply in court allows couriers to be convicted for trafficking, rather than just illegal possession, and therefore receive higher penalties (for example in a recent case in eSwatini discussed later). INTERPOL in southern Africa has also shown support for the system and a film presentation to the 87th INTERPOL General Assembly by South Africa's Directorate for Priority Crime Investigations Unit stressed the value of using the RhODIS system to link seizures back to specific rhino in Africa.

From reports to the SC-RWG, it is also clear there have been many instances where transit or end user countries have not used the recommended CITES *Form for collection and sharing of data on rhinoceros horn seizures and on samples for forensic analysis* referenced in Resolution Conf. 9.14 (Rev. CoP17) and/or timeously submitted details of seizures. South Africa reported it had only received the collection form from three countries. Countries in general seem reluctant to complete the CITES collection form because investigations or court cases are still ongoing or pending.

2.3.4 Trophy hunting

In South Africa and Namibia, the two countries with the largest rhino populations in Africa, numbers of both species of rhino have increased considerably since sport hunting of white and black rhino resumed in 1968 and 2005 respectively (Emslie *et al.*, 2016; Cooney *et al.*, 2017). In 2004, CITES Parties approved annual hunting quotas of five black rhino males for both South Africa and Namibia. Between 2005-2017, 45 black rhinos were hunted in South Africa (an average 3.5/year and 69% of the quota), and a total of 10 black rhinos were hunted over the same period in Namibia (15% of the quota; Figure 7). Over the last six years, an average of 4.8 black rhinos/year have been hunted in the two countries. For white rhino, where hunting is not subject to CITES quotas, an average 83 white rhino/year have been hunted across both countries in the six years 2012-2017. These average hunting rates are equivalent to hunting a very low and sustainable 0.50% and 0.13% per year of the current total number of white and black rhino, respectively, in the two countries.

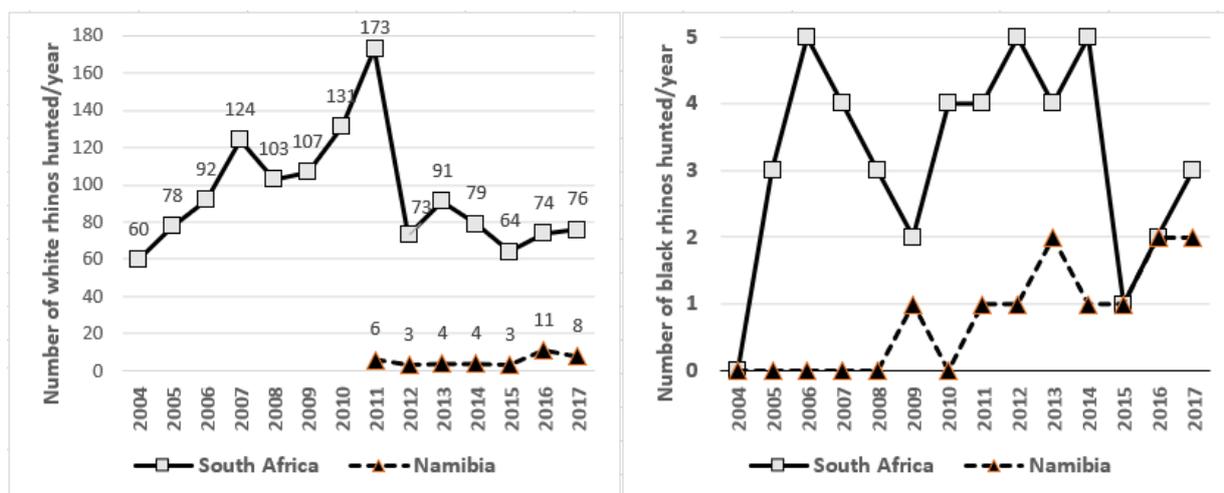


Figure 7. Number of white rhino hunted in South Africa 2004-2017 and Namibia 2011-2017 (left); and number of black rhino hunted in South Africa and Namibia since approval of annual quotas of five black rhino for each country in 2004 (right). (Data from Hall-Martin *et al.*, 2009, Milliken & Shaw 2012, South African Department of Environmental Affairs and Namibian Ministry of Environment and Tourism).

Pseudo-hunting (hunting to acquire horns for illegal markets) emerged as a serious issue in South Africa in 2006, rising steadily to peak in 2011 (Milliken and Shaw 2012, described in the CoP17 report).

This resulted in a doubling of the number of white rhino hunted in South Africa from 2005 to 2011 (Figure 7) coinciding with a marked increase in the number of hunters from “non-traditional” countries (Figure 8). South Africa’s regulatory clampdown on pseudo-hunting in 2012 was followed by a decrease in the number of white rhino hunted annually between 2012-2015 to levels previously seen in 2004-2006 (Emslie *et al.*, 2016), a trend which has continued through 2016 and 2017. It is suspected that some pseudo-hunting has continued since 2012, although at a much lower level as a result of improved regulation, fewer white rhino hunts taking place annually, and some hunting applications being rejected in South Africa (a total of eight in 2016-2017, usually where the applicant had no prior hunting experience). Since the clampdown, the number of white rhino hunting applications from “non-traditional” countries including Czech Republic, Poland, Thailand and Viet Nam has declined considerably, while the number and proportion of white rhino hunting applications from “traditional” countries (those that hunted white rhino in 1977-1986 and/or 1991-1993) has increased (Figure 8). The proportion of white rhino hunting applications from the principal “traditional” countries, Spain and the United States, has increased from 1.2% and 5.4% respectively at the time of peak pseudo-hunting (2009-2011) to 5.8% and 47.4% respectively in 2016-2017. Historically over the period 1977-1986 and 1991-1993, hunters from Spain the United States accounted for 6.9% and 71.6% of white rhino hunted in South Africa respectively (Emslie 1994b).

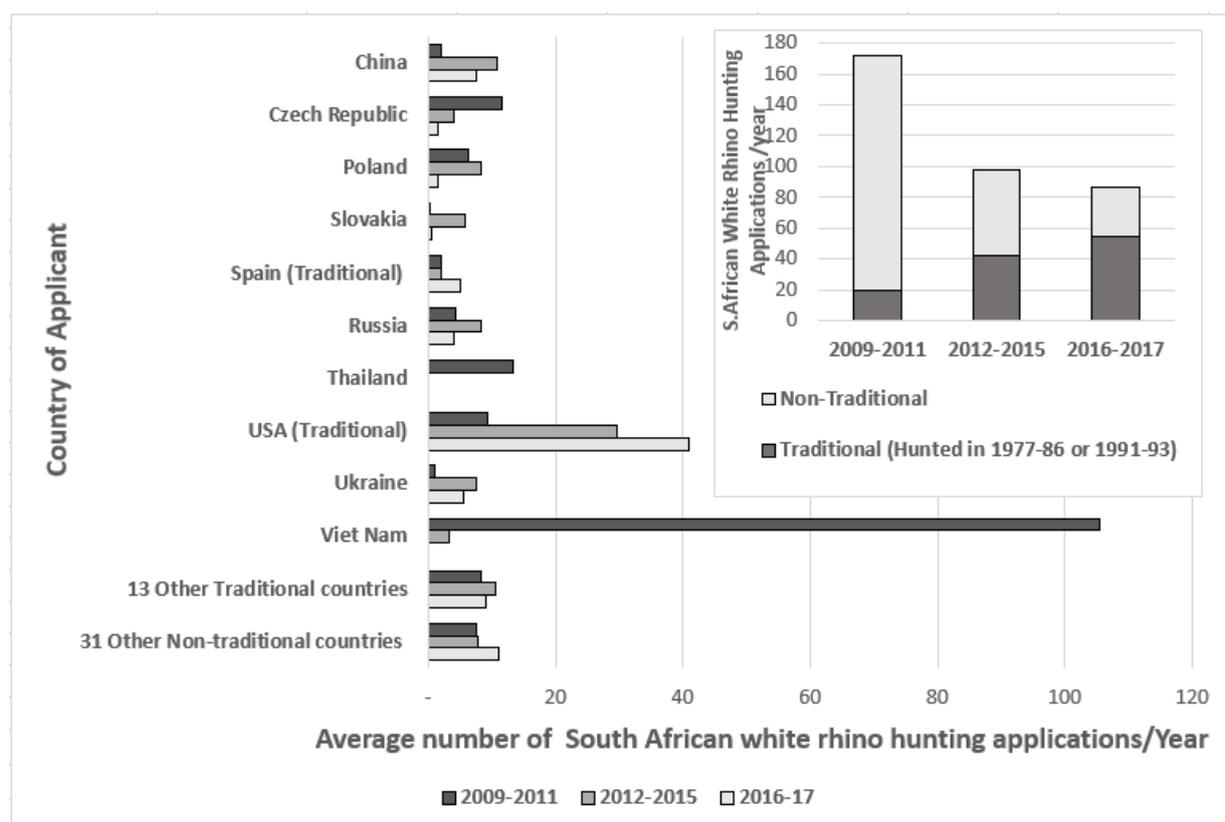


Figure 8: Average number of hunting applications for South African white rhino per year by hunter country of residence, for 2009-2011 (prior to pseudo-hunting clamp down by South Africa in early 2012), 2012-2015 and 2016-17. (Based on South African Department of Environmental Affairs rhino hunt data. “Traditional” countries are defined as those from which hunters came from to hunt white rhino in 1977-86 and/or 1991-93 (based on Emslie’s (1994b) analysis of data from the CITES Trade Database for 1977-86 and South African CITES permits from 1991-93). Summary totals are provided for countries from which less than 5 permit applications/year were submitted in any of the three periods. The smaller insert bar graph compares the average number of applications per year over the three periods from “traditional” and “non-traditional” countries. Note that not all applications were approved or resulted in hunts.)

In reports to CITES and the SC-RWG, the EU reported that it has recommended that, where possible under national laws, Member States carry out risk-based checks on persons who imported trophies since 2009 to ensure they still remained in their possession. Austria, Germany and Hungary indicated they had checked hunting trophy imports to ensure they remained in possession of hunters, while the UK was also considering measures to ensure trophies remained in the possession of hunters. Hungary also reported steps to join a joint investigative team targeting illegal rhino horn trade in Czech Republic, Hungary and Slovakia, while Slovakia has suspended the import of hunting trophies since 2016. In the EU, the import of rhino trophies is conditional upon the issuing of an import permit by Member States.

The EU and South Africa have been closely considering the hunting experience of those applying to hunt or to import hunting trophies (SC70 Doc. 56 Annexes 1,3,5,6,13 and 17 and Mpho Tjiane – South African Department of Environmental Affairs, personal communication).

Whilst prior to CITES CoP16 it was estimated that as much as 18% of the rhino horn sourced in Africa for illegal markets may have originated from pseudo-hunting (Emslie *et al.*, 2012), following the implementation of control measures from 2012 this source had declined to an estimated 2% prior to CoP17 (Emslie *et al.*, 2016). It is now estimated that only around 0.7% of horns destined for illegal markets may be sourced from pseudo-hunting (Table 3). Although hunters from Poland and Slovakia continued to be engaged in sport hunting of white rhino in South Africa in the period 2015-2016, this was at a reduced level compared to 2013 and Slovakia suspended the import of trophies in 2016 (SC70 Doc. 56 Annex 13). However, it is worth noting that there remain very large accumulated discrepancies between exports of rhino horn trophies reported by South Africa to certain countries, in particular Russia and the United States, and imports reported by these countries, which merit further investigation (see Annexure 1). Other such discrepancies continue to be noted for Canada, China, Denmark, Hungary and Spain. Further, hunters from Malaysia and Kuwait have apparently engaged in seven and ten sport hunts, respectively, while South Africa has not reported the export of the majority of these trophies (Annexure 1). In order to assist CITES Management Authorities in importing countries and facilitate their efforts to ensure trophies remain in the lawful possession of hunters, South Africa is encouraged to consider taking stricter domestic measures, as the EU has done, and require the prior issuance of an import permit before issuing an export permit for rhino horn trophies.

Hunting continues to play an important role in white rhino conservation through the revenue it generates, as recognised by the 2012 IUCN World Conservation Congress³¹ and national rhino management plans in South Africa and Namibia, the two range States with the highest numbers of black and white rhino which together conserve 87% of Africa's rhino. Measures that have been introduced to restrict trophy hunting, such as hunting trophy import bans by some countries and refusal of certain airlines to transport trophies, has the potential to negatively impact on African rhino conservation by reducing revenue generated through this source.

2.3.5 Domestic horn sales

International rhino horn sales remain banned under CITES while the commercial sale of hunting trophies is also not permitted. Following successful legal challenges to the procedures followed by South Africa in instituting a moratorium on domestic rhino horn trade in 2008, the country's Constitutional Court ruled in 2017 that a tightly controlled legal domestic trade in rhino horn could re-open in South Africa³². As of September 2018, South Africa has reported issuing 12 permits for the potential sale of up to 1,219 rhino horns and 16 permits have been granted to potential buyers. To ensure traceability and assist law enforcement, all horns being sold were required to have RhODIS DNA profiles. While the numbers of horns actually sold or prices achieved have not been publicly released, a brief statement issued after the first rhino horn auction stated "the auction yielded fewer bidders and fewer sales than expected". This is likely to be at least partly due to the fact that the main market for horn is international rather than domestic.

2.3.6 Live sales

Regular removals of live animals from State and private populations to maintain productive densities continues to form a key part of the biological management of populations in most national rhino management plans. Historically, the sale of such surplus animals in some countries has also generated significant additional revenue to help fund and incentivise conservation efforts. Following the upsurge in poaching it has become more difficult to assess overall revenue from live sales, since for security reasons more private owners are buying rhinos by individual arrangement, rather than on public auctions from which sales data can be more easily obtained. However, trends in average prices can still be obtained from data provided by major auctioneers, major selling conservation agencies, and the owner of the largest privately-owned white rhino population (Figure 9).

³¹ IUCN World Conservation Congress 2012 Recommendation 138: <https://portals.iucn.org/library/node/44105>.

³² https://cites.org/eng/news/Background_issuance_CITES_permits_export_of_rhinoceros_horn_15032017.

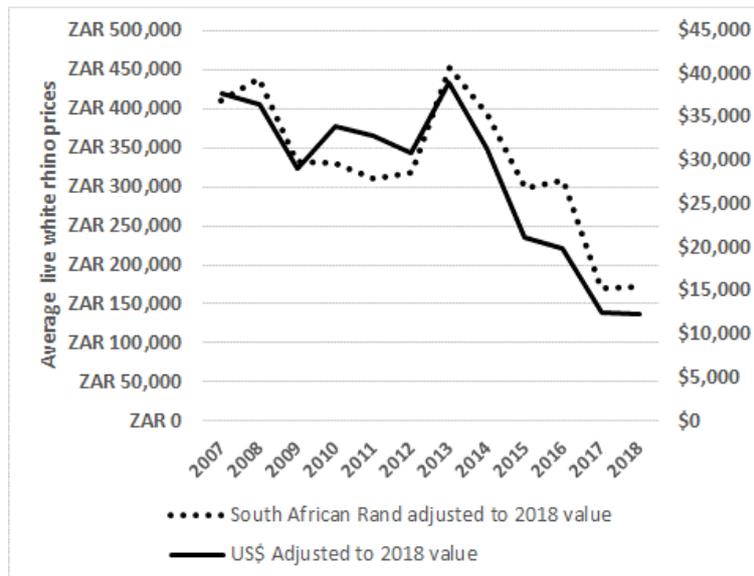


Figure 9: Inflation-adjusted average prices per live white rhino in South African Rand (ZAR) and United States Dollar (US\$) from 2007-2018. (Based on data supplied by Ezemvelo KZN Wildlife, South African National Parks, Vleissentraal Bosveld Auctioneers, Mpatamacha Wild Auctioneers, John Hume and Michael t' Sas-Rolfes).

From 2007-2018, prices per live white rhino (adjusted to account for inflation) showed a 58% drop in South African Rand (ZAR) and 67% drop in United States Dollar (US\$) value (Figure 9). Since the poaching upsurge began post-2007, this has reduced the total asset value of white rhino in South Africa alone in 2017 by an estimated US\$396.8m. The loss of an estimated 6,753 white rhino to poaching in South Africa from 2008-2017 represents a further loss of US\$254.3m (based on 2007 pre-poaching upsurge prices adjusted for inflation). There is also the significant opportunity cost of poached rhinos not breeding, representing an estimated further loss of ~US\$60.2m over ten years assuming an average net growth rate of +7.1% per year (which was the net growth rate achieved continentally prior to the poaching increase). The combined loss of revenue from these three sources totals ~US\$711.3m, equivalent to ~US\$105,330 or well over ZAR1m per white rhino poached in South Africa since the upsurge in poaching started. If estimates for the potential declining value of animals on State land and in other range States, the value of the lost horn, and the substantially increased cost of security and law enforcement for all parties since poaching escalated were also taken into account, the real economic cost of the upsurge in poaching would be substantially higher. Seen in this context, a fine of around ZAR1m for a trafficking seizure involving poaching of multiple animals is well below the economic cost of the crime. The combination of much lower prices and fewer surplus animals to sell due to poaching, and in some cases what appear to be overzealous veterinary restrictions preventing some translocations, significantly threaten both State and private sector revenues from this source.

A number of possible reasons have been suggested for the decline in average live sale value. A 2018 survey of white rhino on South African private land (Balfour *et al.*, 2018) indicated that security costs per white rhino on private land had increased an estimated 348% since 2014, with total 2017 costs estimated at ZAR181.8m (~US\$13m). Supplementary feeding during the recent drought has further added to costs. The number of white rhino hunts remains limited (Figure 7), and owners are unable to generate a significant return from their legal horn stocks. The recent launch of the “Rhino Coin” cryptocurrency³³ also occurred at a particularly difficult time when values of major cryptocurrencies have crashed and most new initial crypto-coin offerings have failed. It is therefore becoming increasingly difficult for owners to sustainably fund their rhino management, while incentives to conserve rhino continue to decline. To date, most of the rhino owners that have sold all their rhino have been relatively small-scale and therefore of less conservation significance. However, the owner of the largest semi-wild population of over 1,600 rhino has indicated that additional funding is urgently needed to maintain current efforts, while in 2018 the owner of another semi-intensive operation that once had 250 white rhino and had been spending ~US\$ 20,840/month on management and protection has now sold most of his rhino and some of his land (Balfour *et al.*, 2018; Coetzee, 2018). While 62% of respondents to a recent survey of private owners in South Africa indicated that they didn’t intend to sell any of their white

³³ Built on the Ethereum blockchain, with each coin issued against 1g of legal rhino horn and a percentage of each coin sold going to fund rhino conservation: <https://www.rhinocoin.com/>.

rhino, 18% indicated they were considering selling up to a third of their white rhino, 7% between a third and two thirds of their rhino, and 13% more than two thirds of their rhino (Balfour *et al.*, 2018). Certain Namibian rhino custodians are also starting to question their part in the custodianship programme given the increased security costs and limited financial benefit.

2.4 Horn stocks and stock management

The CITES Secretariat provided the AfRSG with data on rhino horn stocks received from a number of Parties for 2016, 2017 and 2018 pursuant to Resolution Conf. 9.14 (Rev. CoP17), together with data on horns obtained prior to 2016 provided by some Parties. While these data are incomplete, data were received from the four African range States that currently conserve the most rhino (Kenya, Namibia, South Africa and Zimbabwe), together with Malawi and Uganda. However, Kenya and Uganda did not separate their totals into legal and illegal stocks, while South Africa only reported on additions in 2017. South Africa reported accumulating 7.40 tonnes of horn in 2017, with the majority of this (5.65 tonnes) privately held. The AfRSG has been provided with end-2015 data that improves upon Taylor *et al.*'s (2017) South African stockpile estimate for 2016³⁴, as well as end-2015 eSwatini stockpile data. Adding a conservative projection for 2016 accumulation in South Africa (calculated as 75% of the reported 2017 accumulation) gives a conservative total African stockpile estimate of 52.16 tonnes, with the majority of this being legal stocks. With increasing numbers of white rhino on private land, some private owners undertaking regular dehorning³⁵ and some State-run parks also dehorning for security reasons, it is expected that horn stocks will increase more rapidly in future. These stockpile levels can be contrasted with the estimated average ~5.1 tonnes of African rhino horn entering illegal trade per year over the period 2016-2017. Taylor *et al.*, (2017) estimated that South Africa alone could sustainably produce from ~5.3 to ~13.4 tonnes of horn legally a year.

2.5 Conservation actions and management strategies

2.5.1 Management plans and strategies

Globally, resolutions, decisions and recommendations adopted under CITES and the IUCN World Conservation Congress³⁶ continue to provide direction with regard to rhino conservation and management. At the **continental** level, the African Rhino Conservation Plan that was developed with input from all African rhino range States was launched at a CoP17 side event. Almost all range States have **national** rhino conservation plans that have been formally accepted, with most being 5-10 year plans that undergo regular review and revision upon expiry. Since CoP17, national plans have been revised by Kenya, Namibia (separate black and white rhino plans), Tanzania (undergoing final revision and approval process) and Zimbabwe (awaiting Ministerial sign off). Uganda has now formally approved its first plan, and Rwanda and Chad also developed plans as precursors for the reintroduction of black rhino. Approved national plans have also been developed in Botswana, Malawi, South Africa (separate black and white rhino plans) and eSwatini. Zambia has also revised its plan but at the time of writing it is not known if this has been formally approved. Almost all of these national plans have measurable targets, and Key Performance Indicators for key components are being increasingly included.

2.5.2 Coordination and implementation mechanisms

Rhino range States continue to promote continental and regional coordination through membership in various groups and through the African Rhino Range States' plan³⁷. Since CoP17, the Southern African Development Community (SADC) Rhino Management Group and East African Community Rhino Management Group have both held meetings in South Africa and Rwanda, respectively, and the IUCN/SSC AfRSG is scheduled to meet in Namibia in February 2019. A number of countries have formally identified rhino coordinators, and range States have nominated Official Country Representatives within the AfRSG. While the various continental and regional groupings have all created and maintain valuable networks, and continue to successfully share information, experiences and best practices, the degree and effectiveness of national rhino coordination remains limited in some range States.

³⁴ These data do not include any figure for private land in the province where the largest private white rhino population is found, therefore an additional estimate has been included based on figure provided by the owner of this population.

³⁵ Dehorning every 18 months generates approximately 0.75kg and 1.5kg per adult female and male white rhino, respectively, per year (John Hume, personal communication).

³⁶ In particular, CITES Resolution Conf. 9.14 (Rev. CoP17) and Decisions 17.133 to 17.144, and IUCN World Conservation Congress 2012 Recommendation 138.

³⁷ https://www.environment.gov.za/sites/default/files/strategic_plans/africanrhino_conservationplan.pdf.

2.5.3 Major conservation actions and field activities

As a report to CITES which primarily focuses on trade issues, conservation activities being undertaken by range States are only briefly outlined in this report; more detail can be found in range State reports to SC70 (Annexes to SC70 Doc. 56). Monitoring and continued biological management remain key areas for most countries but an increased focus and deployment of staff on rhino security has reduced the quality of monitoring in some areas.

South Africa undertook a thorough process to develop plans for the five key areas identified in its 2016 Committee of Enquiry report as requiring interventions, namely: security; community empowerment; biological management; responsive legislative provisions that are effectively implemented and enforced; and demand management. The WWF Black Rhino Range Expansion Project continues to contribute to expansion of black rhino range and numbers in the country. There is increasing recognition of the need for greater involvement of communities in rhino conservation in South Africa, and a number of pilot projects have been set up or are being planned³⁸. A small number of more intensive semi-wild populations in South Africa have also very successfully bred and protected white rhino, but the financial sustainability of such operations in the current environment is increasingly challenging. Namibia has responded to increased poaching with some dehorning, and increased collaboration among government agencies and more coordinated involvement of NGOs. Botswana has significantly boosted its rhino numbers through some significant translocations into the country. In Kenya an “eyes in the court” programme that monitors case progress is proving useful. In Malawi, over 31,000 snares were removed from one rhino park, and the potential for boosting Malawi’s black rhino numbers as part of the WWF Black Rhino Range Expansion Project is currently being considered. eSwatini continues to keep poaching at very low levels through intensive field patrolling and intelligence. Drought losses in the country were reduced through measures such as supplementary feeding, translocating animals, temporarily holding animals in bomas, hand raising calves, and removing other competing grazers. Tanzania is investigating options to bring in additional founder rhino and survey work is once again planned in areas of the Selous Game Reserve. Zimbabwe also held a one-day rhino metapopulation management workshop and developed detailed translocation recommendations to genetically revitalize some of its smaller white rhino populations.

Technology is playing an increasingly important role in law enforcement efforts, particularly in larger parks where field ranger densities are low. Technologies that have proved useful include innovative “Meercat” mobile radar systems that can distinguish humans from other animals, use of software such as CMORE in 24-hour manned command centres, thermal imaging, intrusion detection systems, and enhanced detection scanners. Detection, tracking or attack dogs continue to be very valuable in the field, at park entry points and at ports of exit. Increased aerial support and surveillance is assisting and as ever intelligence remains critical in the fight against poaching. However, finding ways to secure sufficient and sustainable funding for field protection, monitoring and management remains a major challenge and threat to rhino conservation. In an attempt to address this issue, a Rhino Impact Investment Project³⁹ has been initiated with the intention of developing a sustainable funding mechanism for rhino conservation in some key populations.

2.6 Enforcement issues

2.6.2 Security and law enforcement strategies

In recent years there has been greater recognition that poaching presents an organised crime problem impacting the socio-economics of range States, rather than being simply a conservation issue. To successfully combat organised crime requires a holistic government approach that is ideally police-led. Since CoP17, several range States have been working to enhance cooperation between different government agencies.

A number of countries have developed specific security-related strategies. Mozambique has developed a *National Ivory and Rhino Action Plan*, which outlines and periodically assesses measures to deal with rhino crimes. The country continues to co-operate closely with law enforcement authorities in neighbouring Kruger National Park in South Africa, and has started resettling villages in Limpopo National Park which have been known sources of poachers to areas outside the park. South Africa has an *Integrated Strategic Management Approach* to combat rhino poaching and a *National Strategy of the*

³⁸ In South Africa this is being included as part of the country’s programme to develop a Wildlife Economy as part of its Biodiversity Economy. The aim is to fast track community programmes in which biodiversity and wildlife are seen as valid land uses and economic activities for communities to engage in.

³⁹ <https://www.zsl.org/conservation-initiatives/animals-on-the-edge/rhino-impact-investment-project>.

Safety and Security of Rhinoceros Populations and Horn Stocks. South African Government departments responsible for law enforcement also identified the need for an integrated approach across government, assisted by civil society, and under the leadership of the South African Police Service finalised a *National Integrated Strategy to Combat Wildlife Trafficking*. Namibia has developed a *National Strategy on Wildlife Protection and Law Enforcement*. Like many range States, Namibia has well-established informant networks and has set up a toll-free number the public can use to provide information. It has also undertaken training of wildlife investigators, prosecutors and magistrates so they can be more conversant with wildlife crime and applicable legislation, and is moving towards the use of a broad suite of Acts to prosecute offenders. With the recent signing of an MoU between the country's Big Game Parks, police and Directorate of Public Prosecutions, eSwatini has also recently formalised its National Wildlife Law Enforcement and Anti-Poaching Task Team. In Tanzania the introduction of a 24-hour operations control room is assisting its law enforcement efforts. Malawi has established a Wildlife Crime Investigations Unit and an Anti-Trafficking Unit.

In recent years a number of range, transit and end-user States have collaborated and developed bilateral MoUs. Mutual Legal Assistance agreements are also being sought. In addition, the SADC Law Enforcement and Anti-Poaching Strategy (LEAP) programme has been accepted by the SADC countries⁴⁰. SADC is also pursuing the AFRICA-TWIX (Trade in Wildlife Information eXchange) tool developed to facilitate cooperation and the exchange of information between enforcement and custom officers to assist in combatting wildlife trafficking⁴¹. Since CoP17 the Rhino and Elephant Security Group in Southern Africa has also held meetings in South Africa and Tanzania. The Asset Recovery Inter-Agency Network of Southern Africa (ARINSA) promotes and facilitates use of asset forfeiture in member States to “follow the money” and to try to “take the proceeds from crime”.

At a global level, the International Consortium on Wildlife Crime (ICWCC) is working to bring coordinated support to national wildlife law enforcement agencies. With respect to rhino, the World Customs Organisation (WCO) at CITES SC70 noted that it is seeking to encourage law enforcement efforts not to see international seizures as an end point, but rather the beginning of further action to investigate and prosecute wildlife traffickers (Roux Raath - WCO, personal communication).

2.6.2 Legislation and prosecutions

South Africa uses asset forfeiture, and Section 252A of the Criminal Procedure Act 51 of 1977 also allows for the use of traps and undercover operations where evidence obtained is admissible in court. In addition to prosecuting under its National Environmental Management and Biodiversity Act, South Africa lists 12 additional charges that can be instituted against rhino crime-related offenders and 11 associated legal Acts (Doc. SC70 56 Annex 16). By pursuing multiple charges, significant sentences have been handed down such as an effective sentence of 35 years 3 months in a November 2018 rhino case conviction on 11 counts under eight different charges. However, while there have been several convictions with significant deterrent sentences, there have been other cases where those convicted have received very light sentences.

Mozambique has reported several successful convictions following the coming into force of new amendments to its conservation law in 2017.

In Kenya the Wildlife Conservation Act of 2013 has penalties of up to a life sentence or a fine of up to KES20m.

Malawi's amended National Parks and Wildlife Act contains stiffened penalties. Following collaboration between African Parks, Malawi's Department of National Parks and Wildlife and its Police Service, a black rhino poacher in Malawi was convicted (horns recovered) and sentenced to 18 years' imprisonment, with two accomplices also sentenced to 8 and 10 years each. This has set a new precedent for punishment of wildlife crimes in the country.

Namibia's Controlled Wildlife Products and Trade Amendment Act of 2017 provides for the implementation of CITES with fines of up to N\$15-25m and/or imprisonment of up to 25 years. Repeat offenders are liable for fines up to N\$50m and/or imprisonment up to 40 years. The Nature Conservation Amendment Act of 2017 also provides for similar increases in penalties relating to poaching of rhino. In 2016, four Chinese nationals were sentenced to 14 years for attempting to smuggle 14 rhino horns. However, case backlogs due to trial postponements while awaiting forensic reports appears to be an issue.

⁴⁰ https://tfcaportal.org/system/files/resources/SADC_LEAP_FINAL%20DRAFT_Revised%2031%20MARCH%2015%20Eng.pdf.

⁴¹ <https://www.traffic.org/news/africa-twix-enhancing-collaboration-in-the-fight-against-illegal-wildlife-trade-in-central-africa/>.

Tanzania amended its Economic and Organised Crime Control Act in 2016 to increase penalties to between 20-30 years' imprisonment, and defined certain trafficking offenses to be economic offenses of the first schedule under the Wildlife Conservation Act Number 5 of 2009.

Zimbabwe has reported two convictions for poaching with sentences of 36 and 10 years. The Parks and Wildlife General Laws Amendment of 2011 provides for significant jail terms of nine years and from 11-20 years for repeat offenders.

The granting of bail to serious or repeat offenders remains a problem identified by some range States. Botswana issued an INTERPOL Red Notice for known rhino trafficker Dumisane Moyo so he could be brought back to the country to face charges; but after having been arrested and extradited by Zimbabwe on the strength of this Red Notice, he was again released on bail in Botswana. At the time of writing his current status is unclear. The granting of bail in Zimbabwean cases has for some time also been identified as a problem. This problem was also apparent in a South African analysis of 21 court cases pertaining to trials of 22 couriers caught smuggling rhino horn at OR Tambo International Airport from August 2016 to October 2018 (Melanzi, 2018). While nine of the cases had been finalized and five cases had been postponed for various reasons, warrants of arrest have had to be issued for the remaining eight accused (36% of those charged). All eight were Chinese nationals and all had been granted bail of from R70,000 to R150,000 (Melanzi, 2018).

To date there have been more than 250 rhino poaching and seizure case reports where RhODIS DNA matches were found and have assisted in successful prosecutions, not only in South Africa, but also in Kenya, Namibia and eSwatini. DNA evidence can help ensure convictions and longer sentencing. Table 6 gives examples of 10 successful court cases from four African countries where RhODIS DNA evidence was used. A recent case in eSwatini is a good example, where RhODIS DNA analysis was able to link a seizure in eSwatini to specific poached rhinos in three different reserves in neighbouring South Africa. In addition to being sentenced to 29 years each, the convicted traffickers were (for the first time) also ordered by the court to pay compensation for the poached animals to the three identified owners in South Africa, with a failure to do so adding another four years to their sentences. DNA evidence was key in this case as it allowed the prosecution to identify the full criminal supply chain from source, so that the accused could be convicted of wildlife trafficking and not just illegal possession of rhino horns and receive longer sentences as a result.

Table 6: Summary of ten prosecuted case of rhino crimes. (Based on Harper *et al.*, (2018); Mick Reilly – eSwatini Big Game Parks, personal communication).

Year	Species	Subspecies/ Genetic Management Cluster	Match result	Country Case in	Country horns linked to	Poaching Site linked by DNA	Sentences	Nationality
2012	White rhino	<i>C.s.simum</i> Southern	2 horns matched carcass 1 and 1 horn matched carcass 2	South Africa	South Africa	Kruger National Park	29 years 3 months	Mozambican
2012	White rhino	<i>C.s.simum</i> Southern	2 horns matched carcass 1 and 1 horn matched carcass 2	South Africa	South Africa	Waterberg (SA)	10 years	Zimbabwean
2013	White rhino	<i>C.s.simum</i> Southern	Horn matched carcass	South Africa	South Africa	Hoedspruit	15 years each	Mozambican & S.African
2013	Black rhino	<i>D.b.michaeli</i> Southeastern	2 horns matched carcass 1 and 1 horn matched carcass 2	South Africa	South Africa	Kruger National Park	14 years	Mozambican
2014	White rhino	<i>C.s.simum</i> Southern	6 horns with 2 horns matched to a carcass	South Africa	South Africa	Kruger National Park	15 months	Vietnamese
2015	White rhino	<i>C.s.simum</i> Southern	The profile from clothing matched carcass	South Africa	South Africa	Limpopo	8 years each	Zimbabwean and Mozambican
2016	Black rhino	<i>D.b.bicornis</i> Southwestern	14 horns with 2 horns matched to a carcass	Namibia	Namibia	Etosha National Park	14 years	Chinese
2016	White rhino	<i>C.s.simum</i> Southern	3 horns matched to 3 carcasses	South Africa	South Africa	OR Tambo International Airport and Hluhluwe-Imfolozi Park	R800,000 fine or 6 years	Chinese
2017	Black rhino	<i>D.b.michaeli</i> Eastern	Horn matched blood on carpet	Kenya	Kenya	Oi Pejeta Conservancy	11 years	Kenyan
2017	White rhino	<i>C.s.simum</i> Southern	Out of horns there were matches to carcasses in three different reserves in three different SA provinces. In one case horn in eSwatini a week since animal poached	eSwatini	South Africa	King Msawati III International Airport (eSwatini) and Balule (SA), Hluhluwe-Imfolozi (SA) and Madikwe GR (SA)	29 years each plus order to pay compensation for value of rhinos to identified owners in S.Africa or an additional 4 years	2 Taiwanese

3. Asian rhinoceroses

3.1 National and continental conservation status and trends

Population estimates of Asian rhino species are summarized in Table 7 based on AsRSG and WWF data.

Table 7: Estimates of Asian rhino numbers by country, species and subspecies with trends since CoP17 report*. (Based on AsRSG and WWF data.)

Species Subspecies	Greater One-horned (GOH)	Lesser One-horned or Javan	Sumatran			Trend
	Country	<i>R.unicornis</i>	<i>R.s.ondaicus</i>	<i>D.s.sumatrensis</i>	<i>D.s.harrisoni</i>	
India	2,939					Up slightly in Assam and Uttar Pradesh but trend since 2015 in West Bengal unknown
Nepal	649					Up in two smaller populations since 2015 (due to growth and translocations) but trend in main population since 2015 unknown
Indonesia		65-68				Up since 2015
			37-75	3	40-78	Unknown for <i>D.s.sumatrensis</i> but assumed stable for <i>D.s.harrisoni</i>
Total	3,588	65-68	37-75	3	40-78	

*Given their uncertainty, *D. s. sumatrensis* rhino estimates have been provided as a range, from minimum estimates based on footprints, camera traps and range occupancy information to maximum estimates of possible numbers (Source: AsRSG). Nepal's figure is based on the 2015 estimate for its largest population less translocations, assuming zero natural population growth given high recent natural mortalities, plus updated estimates for the other three populations. India's figure reflects recent slight increases in Assam and Uttar Pradesh but numbers in West Bengal have not been updated since CoP17.

The greater one-horned rhino (*Rhinoceros unicornis*) is categorized as Vulnerable on the IUCN Red List (Talukdar *et al.*, 2008). Surveys in 2018 confirm numbers in Assam are relatively stable at an estimated ~2,650 rhino in four populations in April 2018 (an increase of only 25 rhino from February 2015). Kaziranga National Park in Assam conserves the majority (~82%) of India's population, with numbers continuing to increase, albeit at a very slow rate of <1% per year which suggests that density dependence is an increasingly important factor. Since re-establishment of the population in Manas National Park, births there have cancelled out earlier poaching losses. Following four more introductions from Kaziranga's Centre for Wildlife Rehabilitation and Conservation (CWRC) from 2016-2018 and the birth of a calf in September 2018, the population has increased from 32 to 37 and here are plans to move at least another two founder rhinos to the park during 2018-19. Since 2015, numbers in Uttar Pradesh have increased by two to 34. There have been no new counts in West Bengal since the 2015 estimate of ~255 rhinos. Despite low growth rates in existing populations, no wild rhino have been translocated in Assam since 2016 as the identified new recipient reserve site needs more time to prepare logistics and put protection and monitoring regimes in place prior to reintroduction.

In Nepal, heavy poaching in a period of socio-political unrest caused numbers to fall to a low of 410 in 2005 before recovering to 645 by 2015. This follows a political settlement and the re-engagement of the army to assist with rhino protection in 2010. Only two rhino have been reported poached in the entire country from 2011 to September 2018. Like India the majority (~94%) of Nepal's rhinos occur in one population, in Chitwan National Park. There have been no rhino counts in Chitwan since 2015 and while deaths are recorded there is no standardised recording of births, so it is not possible to model a revised updated estimate. While numbers in Chitwan increased by ~4.7% per year from 2011-2015, natural mortalities have increased recently in this population with a minimum of 34 mortalities recorded in 2017 alone (a likely underestimate of true numbers). Thus, as in India, it appears that density dependence may be starting to impact on growth. Thirteen rhino have also been translocated out of this population. A conservative revised Chitwan estimate of 592 rhino (605 minus 13 translocations) assuming zero net population growth was used in compiling the revised national total in Table 7. Updated estimates are, however, available for other populations in Nepal: Bardia National Park has 37 rhino (up from 29 in 2015 following translocation of eight rhino); Suklaphanta National Park has 17 rhino (up from 8 in 2015 following translocation of five rhino); and Parsa National Park has three rhino. This gives a revised total estimate of 649 rhino in the country (five more than reported to CoP17).

The Javan rhino (*Rhinoceros sondaicus*), categorised as Critically Endangered (van Strien *et al.*, 2008a), only exists in a single population in Ujung Kulon National Park in west Java, Indonesia. As reported to CoP17, monitoring is improving with camera traps now covering the entire park. Park

authorities report that between 2016 and 2018, three Javan rhino were found dead with horn intact (presumed natural mortalities) but at least four calves were born in 2017 and three additional calves have been reported so far in 2018, giving a current total estimate of 65-68 individuals. This represents a small increase on the 2015 estimate of 63 individuals included in the CoP17 report. With all individuals in a single population, the species is particularly vulnerable to outbreaks of poaching, disease carried by domestic cattle, and potential natural disaster through volcanic activity (“Anak Krakatau” volcano is active immediately north of the park) or a major tsunami. Decades-old plans to establish a second population in Indonesia continue to show little progress. Strategically, a second population would not only reduce risk, but should promote breeding in the current population by freeing up food resources for remaining females, assuming a sufficient area of suitable and well-protected habitat.

The Sumatran rhino (*Dicerorhinus sumatrensis*), also categorized as Critically Endangered (van Strien *et al.*, 2008b), is now restricted to only four isolated sites in Indonesia in up to ten sub-populations. Some sub-populations are estimated to number between only two and five animals that are not likely to be viable in the long term. In addition to known populations in three National Parks in Sumatra, three rhinos survive in Kalimantan (Indonesian Borneo). No existing sub-population is thought to be greater than 30 individuals. In 2015, the minimum total number of Sumatran rhino was estimated at 73 individuals (Miller *et al.*, 2015), far fewer than previously thought. Monitoring effort has not been sufficient to obtain precise estimates of any of the populations on Sumatra. Recent ground information suggests the population in Bukit Barisan Selatan National Park could number between 4-15 individuals and in Way Kambas National Park between 15-30 individuals. Much uncertainty also exists around numbers in Gunung Leuser National Park due to its large area, undulating forested terrain, and patchy photo-trapping effort. Limited photo-trapping over the last seven years has recorded at least 18 different individuals, but it is thought there may be as many as 30 in this population. Despite a successful trial of intensive camera trapping in a study area in Gunung Leuser National Park a few years ago, which yielded high average sighting frequencies of individual rhino, this methodology has not been rolled out across all Sumatran rhino range areas at the scale needed to reliably assess numbers, distribution and population structure. Such monitoring data would not only help guide security needs assessments and patrol deployment, but would also enable more informed biological management decision-making and, over time, perhaps also help identify missing individuals. Improved monitoring data could help guide decision-making regarding the possible need to consolidate some very small outlier populations that may be non-viable if left alone (as Kenya successfully did in the 1980s). Field ranger densities also remain lower than minimum recommended levels in Africa and there are also significant infrastructure and equipment needs if protection is to be brought up to the necessary level. In addition to poaching, habitat conversion, invasive species and possible vegetation succession remain important threats to the survival of the Sumatran rhino. The seizure of three Sumatran rhino horns has been reported since 2014 (Table 8) and this only represents what has been detected. The need to significantly increase efforts to better monitor, secure and manage remaining wild populations is becoming ever more urgent if this species is to be saved from extinction.

3.2 Illegal killing

Available data indicate that poaching of the greater one-horned rhino has declined each year since 2013 (Figure 10). Only two out of 120 recorded deaths in Nepal from January 2011 to September 2018 were due to poaching⁴². Recorded poaching is not currently significant for this species and well below levels in Africa. Numbers of Javan and Sumatran rhino are, however, so low that sub-populations could be negatively impacted by even very low levels of poaching, so there remains a need to enhance law enforcement effort for these critically endangered and highly conservation-dependent species.

⁴² Correction from CoP17 report – the one rhino reported poached in Nepal in 2014 was in fact poached in 2012.

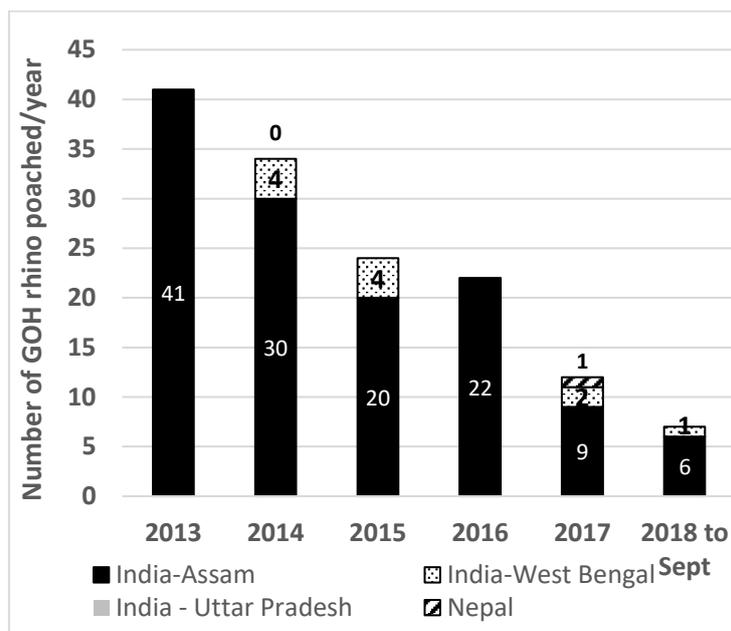


Figure 10: Poaching of greater one-horned rhino, 2013 – September 2018. (Based on AsRSG data.)

3.3 Trade

The continued decline in poaching of the greater one-horned rhino documented in Figure 10 reflects the success of enforcement agencies working on the ground. Although the two African rhino species account for the vast majority of the horns in current trade, horns from Asian rhino species are specifically identified in seizures on occasion. Table 8 presents available seizures data between 2009-2018, comprising a total of 117 greater one-horned rhino horns (although some of the horns in data reported by the Indian government are described as “suspected horns”⁴³), four Sumatran rhino horns and two Javan rhino horns seized in seven Asian countries.

While 86% of greater one-horned rhino horns were seized in the two main range States of this species, India and Nepal, 16 horns from this species were seized in transit or end-use market countries. While 75 horns were recovered from 2014-2018, only 99 greater one-horned rhino were reported poached during this period. Seizures of Sumatran rhino horns from 2009-2018 occurred in Indonesia (three horns) and China (one horn). Two Javan rhino horns were reportedly seized in China in 2009⁴⁴.

Table 8: Seizures of Asian rhino horns, 2009-2013 and 2014-2018. (Based on the TRAFFIC Rhino Horn Seizures Database.)

Country	2009 - 2013					2014 - 2018				
	No. of Seizures	Weight (kg)	Number of GOH Horns	Number of Javan Horns	Number of Sumatran Horns	No. of Seizures	Weight (kg)	Number of GOH Horns	Number of Javan Horns	Number of Sumatran Horns
China	5	3.70	3	2	1					
India	18	18.76	20			51	39.32	52		
Indonesia						3	0.81			3
Myanmar						1	3.05	4		
Nepal	15	15.49	18			10	9.16	11		
Taiwan (Province of China)	1	1.00	1							
Viet Nam						1	3	8		
TOTAL	39	38.95	42	2	1	66	55.34	75	0	3

Investigations being conducted by members of the AsRSG and NGOs working in South and Southeast Asia have increasingly indicated that Myanmar is a key transit country for horns of poached greater one horned rhino. Field investigations and intelligence from arrested poachers have revealed that rhino horn

⁴³ Many of the horns reported seized by police in Indian newspapers have turned out to be fake. The TRAFFIC Rhino Horn Seizures Database did not include newspaper reports of seizures in India.

⁴⁴ The species was reportedly identified by the Kunming Institute of Zoology, Chinese Academy of Sciences.

traders are using the Moreh-Tamu border to transport rhino horns from West Bengal and Assam via Mandalay in Myanmar (a known transit point of illegal wildlife products) before being moved on to China and other end-user countries. There is a need to improve monitoring and build capacity among the relevant authorities in India and Myanmar to address the illegal movement of rhino horns and other wildlife products between the two countries.

3.4 Horn stocks and stock management

Pursuant to CITES Resolution Conf. 9.14 (Rev. CoP17), Asian countries (Japan, Lao PDR, Malaysia, Thailand and Viet Nam) reported horn stockpiles totaling 1.04 tonnes of horn to the CITES Secretariat (some of which will comprise African horns), with Indonesia reporting two horns. In Viet Nam, Customs officers were prosecuted for stealing 6.1 kg of rhino horn, together with elephant ivory, from a government stockpile in 2017 (Anon., 2017). Once again neither Nepal nor India reported horn stockpiles to CITES. In Assam, which is estimated to manage about 90% of India's rhino horn stockpiles, a verification audit of rhino horn stockpiles was however initiated in 2016. The committee responsible verified around 2,020 rhino horns within Assam government treasuries, cross-referencing horns against data recorded by various Forest Divisions in the field at the time of acquiring the horn. However, it is estimated that there may be another 150-200 rhino horns in Assam which are being kept in different forest divisions and have not yet been deposited in government treasuries due to lack of space. West Bengal and Uttar Pradesh have not reported on their rhino horn stocks to CITES through the Indian Government. As in Africa, a lack of regular auditing and reporting of all stockpiles opens up opportunities for theft and possible leakage of horn onto international markets. Nepal and India are therefore encouraged to report their stocks to CITES.

3.5 Conservation actions and management strategies

As in Africa, the greatest rhino conservation successes in Asia continue to occur where there has been significant political will backed by active resourcing of sites, combined with dedicated staff commitment to effective action in the field.

In 2017, Nepal revised and updated its national Conservation Action Plan for the period 2017-2021. India still lacks a national rhino strategy, with conservation currently coordinated at the state level in Assam, West Bengal and Uttar Pradesh. Indonesia developed action plans for both Javan and Sumatran rhinos covering a 10-year period from 2007, which have now expired. Population Viability Assessments (PVAs) were also conducted for Sumatran and Javan rhino in 2015 (Miller *et al.*, 2015; Haryono *et al.*, 2016).

In contrast to India, Nepal and some African range States, where staffing densities, expenditure and political will are comparatively high, in Indonesia there remains limited government support and funding for protection, monitoring and biological management of free-ranging wild rhino populations. Indonesia is preparing an Emergency Action Plan for the next three years, and the PVA represents an important step. However, Sumatran rhino conservation continues to face great challenges from the low densities of anti-poaching field rangers (well below recommended minimum densities in Africa) to insufficient budgets allocated for protection and monitoring. Improving knowledge of the current status of this species in the wild remains a priority to determine security needs and better inform biological management decision-making. On World Rhino Day on 22nd September 2018, IUCN/SSC announced the launch of a Sumatran rhino rescue project in partnership with the International Rhino Foundation, WWF, Global Wildlife Conservation, National Geographic and the Indonesian Government. The project will establish two new intensive semi-captive breeding facilities that will aim to breed animals from currently small and isolated sub-populations in Kalimantan and Bukit Barisan Selatan National Parks in the hope of expanding these populations. The existing breeding facility in Way Kambas National Park was also recently expanded.

For Javan rhino, the immediate priority is to increase numbers in the wild through improved biological management and the creation of a second population in suitable habitat; goals identified through the PVA workshop included securing three well-managed sites for *in situ* populations to ensure an increase to at least 150 animals by 2040.

3.6 Enforcement issues

3.6.1 Security and law enforcement strategies

India and Nepal's anti-poaching efforts in the field and intelligence-based investigations continue to be critical in combatting poaching of greater one-horned rhino. In July 2018, the Chief Minister of Assam province in India appointed 90 youths from local communities surrounding Kaziranga National Park as constables to form a Special Rhino Protection Force that will help to protect rhinos in Kaziranga, Orang and Manas National Parks.

3.6.2 Legislation and prosecutions

In India and Nepal, jail terms under national wildlife legislation are generally severe. Although fines in both countries remain extremely low compared to the value of horns in illegal trade, in most cases fines continue to be given in addition to a jail term and not as an alternative. In Assam, the 12 district courts established in November 2016 by the Gauhati High Court are now fast-tracking judicial proceedings for all wildlife-related cases, with several cases already in the courts. Penalties for killing a rhino in Assam include a minimum seven years' imprisonment with Rs75,000 fine (~US\$1,062). If an offender is convicted of rhino poaching on more than two occasions, the offender can receive a sentence from 14 years to life imprisonment. For example, in January 2017, the Golaghat Court in Assam sentenced a poacher for killing a rhino in Kaziranga to seven years' imprisonment and a fine of Rs50,000 (~US\$708). In Nepal, the minimum sentence is five years' imprisonment and the maximum up to 15 years with a minimum fine of around US\$50.

4. Measures implemented by implicated States to end illegal use and consumption

Legislation in **China** is well developed and penalties for minor offenses include up to five years' imprisonment, criminal detention and a fine, whilst major offenses can result in a life sentence, property confiscation and suspension of political rights. The severity of the crime and corresponding sentences for those convicted are determined by the economic values of the products or animals being illegally traded. A distinction is also made between cross-border smuggling and internal illegal sale, purchase and transport of horn. In determining the value of each crime, a flat price of RMB250,000 (~US\$39,396) is used for each horn, with a fixed value of RMB1m (~US\$145,583) for each white rhino involved and RMB2m (~US\$291,168) for each animal of any other rhino species⁴⁵.

There have been a number of successful prosecutions for rhino crimes in China. According to a Government website that lists court verdicts⁴⁶, 88 cases involving rhino horn or horn products were finalized between June 2013 and April 2017, with 131 offenders convicted and sentenced over a 46-month period (Wang 2018). Sentences on average were heavier for international cross-border smuggling than for internal trafficking and illegal trade, as generally these cases involved greater quantities of horn (Wang 2018). All 131 offenders convicted received either fixed-term imprisonment or criminal detention totaling 689 years (average 5 years 4 months). However, 43 of the offenders were put on probation, with sentences postponed subject to a judge's assessment after probation (where those convicted are institutionalized in a correctional programme and required to undertake community service for a stipulated time). Assets were also forfeited by 13 of those convicted of cross-border horn smuggling. One had all assets seized, while the remainder had property totaling RMB3.41m (~US\$496,400) confiscated. Ninety per cent of those convicted also received fines, totaling RMB5.502m (~USD801,001, range RMB2,000 to 500,000 or ~US\$291 to 72,792). Eight of those convicted were also deprived of political rights for one to three years. In one case, the seller of only a single 4g bead made of rhino horn was sentenced to four months' imprisonment with probation of six months and a fine of RMB3,000 (~US\$437), while the purchaser was sentenced to four months in criminal detention and a fine of RMB5,000 (~US\$728).

China also reported to SC70 (SC70 Doc. 56 Annex 2) on several measures it was taking to address rhino horn trafficking. The country has participated in a number of international operations targeting illegal wildlife trade, including most recently the INTERPOL operations Thunderbird (2017) and Spring Thunder (2018). The country has also undertaken internal operations to combat wildlife trafficking which have resulted in rhino horn seizures. China also reported that it cooperates closely on efforts to combat rhino trafficking via MOU's with several countries, and has improved international exchange of

⁴⁵ With the proviso that the accumulated values of parts from one rhino will not exceed the economic value of the whole animal.

⁴⁶ <http://wenshu.court.gov.cn>.

information and intelligence. China's industry and commerce departments have regularly policed tourist souvenir and antique sales and online auctions, with information being passed onto law enforcement authorities for further action as required. Customs authorities have also prioritized the detection of rhino products, using X-ray and CT scanners and sniffer dogs to check containers, vehicles and luggage. Chinese criminal law allows for this use of specialized investigation techniques such as controlled deliveries and covert investigations to detect wildlife trafficking.

China has also conducted public education efforts to raise awareness of illegal trade in rhino horn, with public service advertisements on mass media and social media, sign boards, posters and brochures, as well as displays at airports and important land and sea border points. However, while knowledge and awareness are prerequisites to change behaviour, they are not necessarily sufficient on their own. Experience suggests that behaviour change rarely occurs as a result of public service ads alone, and that campaigns often need to be implemented in conjunction with other influencing strategies to effect behaviour change (Bada and Sasse, 2014). News of seizures and subsequent prosecutions and sentences are being reported in the mass media in the hope that these will act as a deterrent. China also reported a range of educational efforts focused on Chinese nationals in Africa, including SMS messages sent by the three main Chinese communication service providers to every Chinese national arriving in a foreign country warning not to buy, carry or ship endangered wildlife and particularly rhino horn and ivory. The effectiveness of these measures appears to be limited given the increasing numbers of Chinese nationals being arrested abroad (Figure 6), and a recent study by GlobeScan for USAID which found that the typical rhino/ivory buyer in China is someone who has travelled abroad, purchased the product and brought it home⁴⁷ (Figure 11; USAID Wildlife Asia 2018).

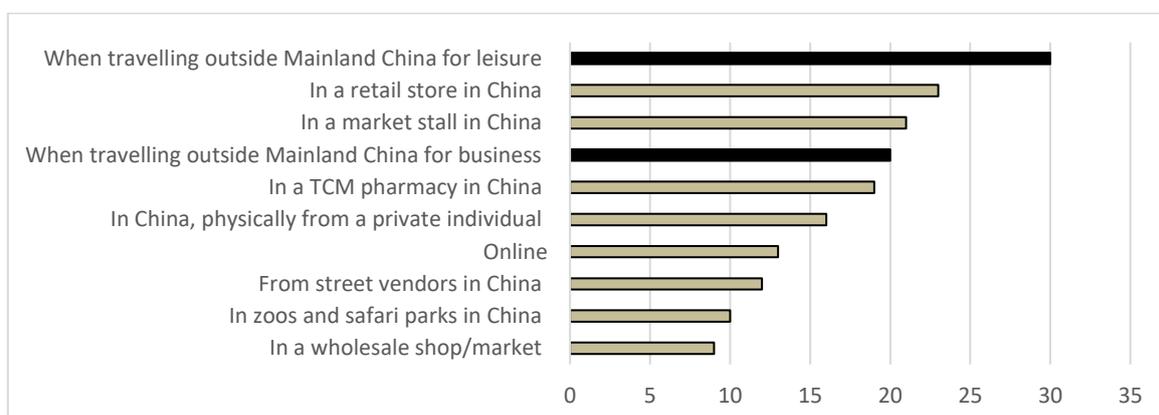
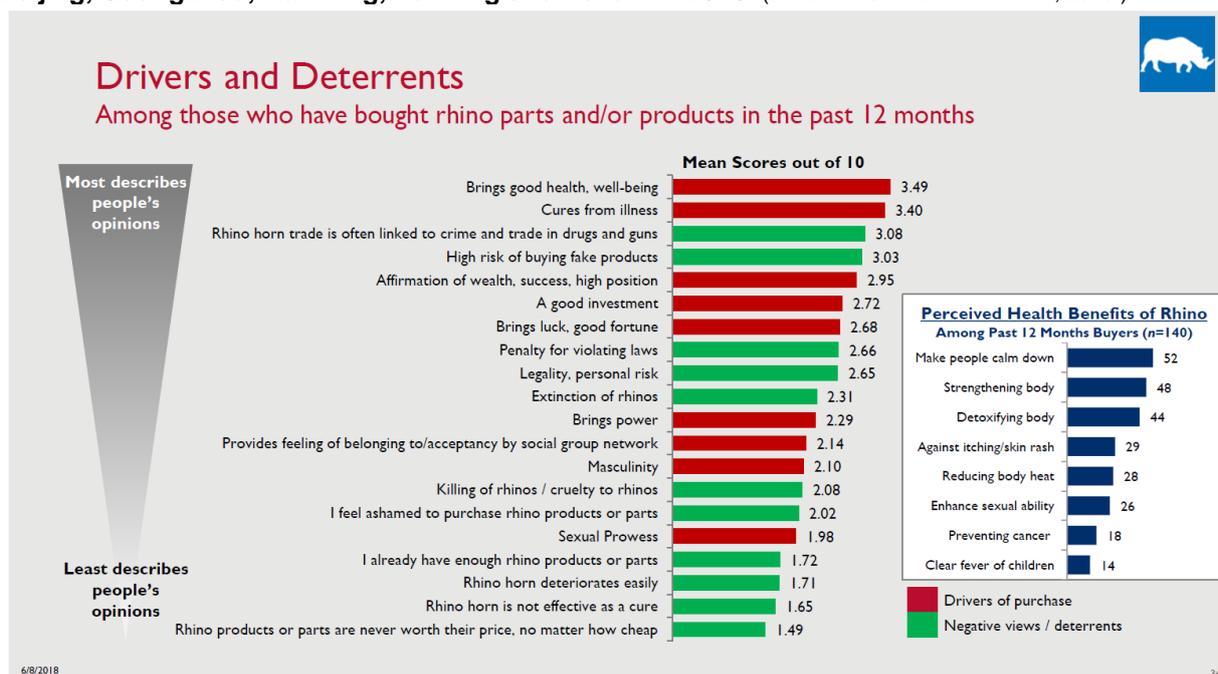


Figure 11: Main purchase channels of rhino horn for Chinese nationals based on a survey of 173 buyers. (Based on USAID Wildlife Asia 2018.)

A quantitative online survey assessing consumer demand for elephant, pangolin, rhino and tiger products in China was conducted in February-March 2018 among 1,800 self-reported buyers in six urban centres: Shanghai, Beijing, Guangzhou, Kunming, Nanning and Harbin (USAID Wildlife Asia, 2018). The timing of the surveys coincided with China's Lunar New Year gifting season when the purchase of high-value gifts such as rhino horn is likely to occur. The study revealed that 16% of the survey sample reported purchasing rhino horn, with 8% claiming to have done so within the previous 12 months. More than one-fifth of those reporting past purchase claimed to have done so as a gift. More than three-quarters (77%) of rhino horn buyers in the past 12 months indicated they were likely to purchase again in the future. Across the survey sample, around one-third believed cow/ox and buffalo horn were acceptable alternatives to rhino horn, while 31% indicated synthetic alternatives, which resembled rhino horn aesthetically, might replace it for the purpose of decoration. Comparing the drivers and deterrents reported in this study (Figure 12) with those presented in Kennaugh (2016), the survey found some shift towards viewing rhino horn as medicine as it 'brings good health, well-being' and 'cures from illness', surpassing more status-related motivations such as 'affirmation of wealth, success and high position' and 'a good investment' (USAID Wildlife Asia, 2018).

⁴⁷ A 2018 USAID study found that 50 out of 173 respondents from China who indicated they had bought rhino horn obtained it when travelling outside China for leisure (30 respondents) or business (20 respondents).

Figure 12: Drivers and deterrents behind Chinese consumer demand for rhino horn in Shanghai, Beijing, Guangzhou, Kunming, Nanning and Harbin in 2018. (Based on USAID Wildlife Asia, 2018.)



All online trade in rhino products is currently illegal in China, even items that would otherwise qualify for specific exemptions under Chinese law. TRAFFIC’s long-term monitoring programme of 31 website platforms that frequently offer endangered species products for sale has allowed monthly tracking of the number of new advertisements for a range of endangered species, including rhino. Whilst the annual number of new rhino product advertisements per month more than halved from an average of 96 per month in 2016 to 42 per month in 2017, a major resurgent trade has since been noted over the first six months of 2018: through June 2018, the monthly average of new rhino product advertisements increased 6.7 times to 283 per month (TRAFFIC unpublished data). This dramatic increase has occurred in conjunction with China’s full closure of its legal ivory market, which has resulted in the offering of ivory products through these website platforms to plummet to record lows. Since then, following interventions with the offending website managers, the number of rhino product solicitations has dropped to only 34 across the 31 websites monitored in October 2018 (TRAFFIC unpublished data).

An Internet Enterprise Coalition against Cyberspace Illegal Wildlife Trade, involving the three biggest internet service providers in China, was launched in November 2017. In March 2018, Chinese coalition members joined forces with Google, Facebook and six other international companies to form an international coalition aiming to reduce illegal wildlife trade on internet platforms by 80% by 2020. However, criminals may simply migrate to the Dark Web or other encrypted member-only sites.

Viet Nam also reported to SC70 on the implementation of its NIRAP (SC70 Doc. 56 Annex 19). The country’s CITES Management Authority cooperated with United Nations Office on Drugs and Crime (UNODC) to organise three training courses for 190 law enforcement personnel including police and customs officials. The course included the application of the penal code in relation to wildlife trade, identification of rhino horn and undertaking investigations. Viet Nam’s environmental police department conducted two operations that resulted in the seizure of 20.5kg of rhino horn and arrest of two traffickers in Lao Cai in transit to the Chinese border.

A revised Penal Code governing trade in rhino horn and elephant ivory in Viet Nam took effect on 1 January 2018 with the objective of treating trafficking crimes as serious offences. Now the maximum penalty is up to 15 years imprisonment or a fine of VND2 billion (~US\$86,500) for individuals who are convicted of rhino horn trafficking, whilst corporate entities face fines of up to VND15 billion (~US\$651,000) or the suspension of operations for up to three years. Whilst this is clearly a step forward, exemptions still remain if the amount of rhino horn is less than 50 grams. This loophole is an issue of contention as most consumers of rhino horn products such as beads, bracelets, pendants or medicinal powders would qualify for this exemption. Further, under current Vietnamese law, illegal

advertisements offering rhino horn for sale through online channels are only regarded as administrative violations subject to fines of up to VND100 million (~US\$4,300). A criminal prosecution of an offer for sale can also only take place if a suspect is caught in possession of a rhino horn. This allowance constitutes another serious loophole as the rhino horn trade progressively retreats from physical markets into the safer confines of internet and social media advertising. Indeed, there have been very few convictions for serious wildlife crime in Viet Nam and the sentences handed out to date have primarily been limited to fines and not imprisonment. Closely monitoring the situation in Viet Nam, as one of the two most important markets for rhino horn, is of critical importance to ensure that the full extent of the revised Penal Code is effectively used to deter rhino horn trafficking and retail sales in the country. Viet Nam is due to submit a full progress report to the Secretariat by 31 January 2019 on the implementation of the Penal Code.

In a quantitative study of 1,400 Vietnamese nationals in 2018, 11% of respondents indicated they had 'ever' consumed rhino horn, with 6% indicating this was within the past 12 months (GlobeScan, 2018). 23% of recent buyers bought at least once a month, suggesting that rhino horn consumption is a more habitual behaviour and consequently more difficult to change. The main deterrents to consumption among recent buyers were the endangered status of rhinos (76%), heavy penalties for buyers (73%) and animal cruelty (71%). However, a disconnect was evident with focus group respondents reporting awareness of animal cruelty images and messaging around extinction threats, but that it did not affect their future purchase intentions. They reasoned that they were not the ones killing the animals and justified their purchase by perceiving it to be a by-product. Legal deterrents were not considered to be effective due to a perception of poor implementation combined with minor penalties. Only 41% of recent rhino horn buyers were aware of the revised Penal Code, which was lower than those consuming elephant or pangolin products. Drivers for purchase included to give a gift, in particular in formal and important (business) relationships. The use of powdered horn continued to be in order to cure a hangover and improve sexual performance. The most important attributes driving purchase by recent buyers were that rhino horn was '*worth the price however expensive*' and to demonstrate wealth, power and social status.

Using choice modelling, Hanley *et al.*, (2017) explored willingness to pay for rhino horn among existing and potential future consumers in Viet Nam and found that wild-sourced horn, harvested humanely from the least rare species, is the most highly valued product. Furthermore, they report that consumers were willing to pay less for rhino horn products under a scenario where international trade was legalized compared to the current situation of illegal trade, although they caution their sample may not have been representative of the potential wider population of buyers. However, a much broader study of 310 rhino horn buyers, users or 'intenders' to buy or use in five Vietnamese cities, found that 46% of the respondents expected to pay more for rhino horn emanating from legal trade and only 17% suggested it would be cheaper. Conversely, 50% expected to pay less for rhino horn from illegal trade, whilst only 12% thought it would be more expensive (GlobeScan, 2018).

5: Challenges and suggested best practices for reducing poaching and trafficking

With reference to the recommendation from SC70 to explore options to reflect on challenges and best practices for addressing rhinoceros poaching and rhinoceros horn trafficking, we have briefly listed here some key challenges and suggested best practices. We suggest a focus on best practices in the widest sense of reducing impact of poaching and trafficking on rhino numbers, and this includes facilitating the growing of rhino numbers as fast as possible to offset these impacts.

- A major challenge identified by a number of range States, as previously discussed, is the granting of bail to repeat offenders and flight risks. Another major challenge is continued low and slow conversion rate of arrests to successful convictions with deterrent sentencing. More formal monitoring of court cases may help quantify and draw attention to this issue, with civil society also playing an important role. Greater use of INTERPOL Red Notices may assist in international efforts to bring offenders to trial.
- In some countries, backlogs and delays in obtaining forensic reports remains an issue, as well as the slow speed of DNA analysis and reporting of results. Again, a more formal process for tracking the progress of arrests through to court and reasons for case postponements may assist.
- Most arrests are of lower level poachers and couriers, and the challenge is how to successfully investigate and prosecute those higher in the criminal pyramid, especially when they may live in different countries. Whenever possible cases should be recognised as serious organised

crimes and coordination between different government agencies improved, with police departments playing a key role. Intelligence-sharing both nationally and internationally is key but presents another significant challenge. Greater sharing of intelligence and samples through use of the CITES rhino seizure form referenced in Resolution Conf. 9.14 (Rev. CoP17), as well as increased use of platforms such as TWIX, could assist.

- Another identified problem is that rhino horn seizures are often treated as the end of an investigation, with disregard for possible beneficial intelligence flow. Again, greater use of the CITES seizure form and submission of horn samples or extracted DNA to SAPS-FSL for RhODIS analysis could help range States with their investigations and efforts to combat organised crime, noting that funding is likely to be required to assist efforts to facilitate roll-out of RhODIS-compatible DNA analyses to other labs around the world. Seized horn may also provide investigators with opportunities to gain further intelligence by following what happens to horns if released (controlled deliveries).
- There have been calls by ICCWC partners and the Asset Recovery Institute of Southern Africa to “follow the money” and use asset forfeiture approaches to recover criminal revenues. The challenge is to develop financial investigation skills and an enabling legislation to catalyse expansion of such approaches.
- Internal corruption and staff involvement in poaching, or provision of information to poachers, continues to be a challenge. Attempts to corrupt court processes can also occur. A more formalised court system where all cases and outcomes are closely monitored, as previously mentioned, would help to address this issue.
- There is a danger of paralysis of decision makers following rhino losses in a small number of recent high-profile translocation exercises. It is critically important to keep translocating surplus rhinos to maintain productivity of established populations (and hence maximise offset against any poaching). There is strong evidence that without translocations, certain populations (such as the largest populations of greater one-horned rhino) would eventually cease to grow due to density dependence. Translocation has been central to growing rhino numbers and range rapidly. Overzealous veterinary restrictions on translocations also pose an important threat to effective biological management of some key populations. Solutions include the development of improved Standard Operating Procedures for translocations and expert evaluation of and learning from any losses that occur.
- The main approach advocated by the international community in recent years has been to increase law enforcement effort and to support demand reduction efforts that seek to change behaviour of consumers in end-user countries. The recent surveys referenced in the previous section in both Viet Nam and China indicate a willingness of many existing buyers to continue to buy horn, suggesting new behaviour change interventions will need to focus carefully on these particular buyers.
- The difficulty of sustainably funding the very high costs of rhino conservation in some areas is a major and increasing problem. Increasing costs and risks and declining incentives pose a threat to the continued successful conservation effort being made by many private owners and custodians.
- Another challenge identified in Africa is the need to create alternative livelihood opportunities for communities, which are often the source of poachers. This is difficult in the current environment where financial returns and incentives are limited and costs and risks are high. In the absence of such progress, the potential negative impacts of paramilitary law enforcement on attitudes of neighbouring communities to conservation efforts poses another important challenge and longer-term threat to conservation.
- The issue of inadequate securing, monitoring and reporting of rhino horn stocks by certain countries has also been identified as a challenge, as this may create opportunities for corrupt officials to launder horn. Transparent, long-term rhino horn stock management systems spanning rhino horn trade chains from producers to end-use destinations would assist in preventing leakage of horn onto illegal markets.
- Field ranger densities, monitoring effort and expenditure in the remaining Sumatran rhino range remains relatively low compared with what would be considered appropriate minimums for informing management decision-making and successfully protecting and growing rhino populations. In Africa, co-management or contractual management has boosted rhino

conservation in some State reserves and may be an option to consider, although this may require legislative changes in certain range States. The proposed increase in more intensive semi-captive efforts to breed Sumatran rhinos also needs to be done in such a way as to not detract from wild conservation efforts or negatively affect population viability. It is important that habitat in Kalimantan and Bukit Barisan Selatan is protected and conserved so that animals can be released back into these areas if successfully bred in the new semi-captive facilities.

- While currently well protected and monitored, the persistence of Javan rhino in only one population remains a significant risk to the survival of this species, and steps to establish new populations are encouraged.

6. Conclusions

Average rhino poaching in Africa has remained at high levels, with an average of just over three rhino poached per day in 2017. Nevertheless, the latest information available indicates some limited progress in reducing poaching in both Africa and Asia. The use of innovative technology as a “force multiplier” appears to be assisting law enforcement efforts, and the estimated quantity of horn reaching end-user markets in Southeast Asia has declined slightly for the first time since CoP14.

White rhino have, however, been badly affected by a recent severe drought in parts of southern Africa, especially in the largest white rhino population in Kruger National Park. In response to both poaching and drought, white rhino numbers have been in decline since 2012. At the time of writing, another possible drought threatens any recovery in this population. Private owners are playing an increasingly important role in conserving this species, but limited and reducing incentives and increasing costs and risks pose a threat to the continued growth of rhino numbers on private land. By contrast, black rhino numbers have continued to increase, although poaching has slowed growth rates.

In India and Nepal, poaching rates of greater one-horned rhino have declined markedly and seizure rates appear high. The greatest constraint to growing numbers of greater one-horned rhino is density dependence, coupled with a lack of additional secure areas in which to establish new populations. The continued lack of regular reporting of horn stocks to CITES by range States remains a concern, although a thorough audit of stocks has recently been undertaken in Assam. Javan rhino numbers are likely to have increased slightly but remain at very low numbers. It is still a strategic concern that the establishment of a second wild population of this species within Indonesia has not been progressed as hoped. The Sumatran rhino continues to be the most threatened rhino species. There remains an urgent need to more accurately determine numbers and distribution of Sumatran rhino in the three main populations to inform management and protection, as well as boost law enforcement effort at least to levels considered the minimum desirable in Africa. Additional planned efforts to expand intensive breeding efforts should also be done in such a way as not to detrimentally affect or draw attention away from efforts needed to boost wild rhino monitoring, protection, and biological management.

As in reports presented to previous CoPs, and despite progress on a number of fronts since CoP17, China (including Hong Kong SAR), Mozambique, South Africa, and Viet Nam continue to be the most affected source, transit and destination countries for African rhino horn, recorded in over two-thirds of reported seizures. These four countries remain priorities for actions to successfully curb the illegal rhino horn trade. Enforcement action in Viet Nam appears more limited thus far and reporting by the country on implementation of its new Penal Code in January 2019 is awaited with interest. The role of Myanmar as a potentially key transit country for Asian rhino horn may also merit further investigation.

There have been a number of successful prosecutions with deterrent sentences in many countries. Use of asset forfeiture, charging accused under multiple acts, and where possible treating offences as organised crime have assisted in increasing penalties. However, the granting of bail to serious offenders and flight risks, as well as low and slow conversion rates of arrests to prosecutions, remain important challenges. DNA forensic evidence is playing an increasingly valuable role and it is important that enforcement authorities do not see seizures simply as an end, but use all opportunities to further knowledge of the entire criminal supply chain and assist law enforcement efforts in range States by providing samples and intelligence information on seizures, and where possible releasing and following seized horns in a controlled manner. Taking action to address corruption and internal involvement in rhino crimes also remains essential to the success of law enforcement efforts.

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Annexure 1. Trade in African rhino horn trophies recorded in the CITES Trade Database.

Table A1: Direct exports of white rhino horn trophies* from South Africa reported by South Africa and by importing countries, 2013-2016 (based on data included in the CITES Trade Database***).**

Importer#	2013		2014		2015		2016		Total		Balance between reported exports and imports
	Reported by South Africa	Reported by importer	Reported by South Africa	Reported by importer	Reported by South Africa	Reported by importer	Reported by South Africa	Reported by importer	Reported by South Africa	Reported by importer	
Russia	56		46		22		20	X	144		144
United States	54	40	170	64	131	134	88	68	443	306	137
China			14	12	43	6	58	24	115	42	73
Canada	11		2		16		18		47		47
Poland▲	32	22	35	24	12	4	6	4	85	54	31
Denmark	4	2	12		10	4	2		28	6	22
Slovakia▲	26	20	18	6	4	6	8	4	56	36	20
Spain	10	6	16	10	7		4	2	37	18	19
Kuwait							2	20	2	20	(-18)
Hungary	4		10		4		2	4	20	4	16
Ukraine	10	2	28	21	14	8	12	18	64	49	15
Germany	18	8	4		6	4	2	4	30	16	14
Sweden	8	20							8	20	(-12)
Viet Nam▲		12								12	(-12)
Italy	6		4						10		10
Lebanon	4	N/A	6						10		10
Czech Republic▲	14	6	2	2					16	8	8
France	2		6	18	2				10	18	(-8)
Australia					2		2		4		4
Kazakhstan			6	X	2			4	8	4	4
Mexico			4		4	4	2	2	10	6	4
Switzerland					2		2		4		4
United Kingdom			2		2		2	2	6	2	4
Hong Kong SAR		4								4	(-4)
Estonia							4	2	4	2	2
Gambia	2	X						X	2		2
Luxembourg	2								2		2
Panama					4	2			4	2	2
Zimbabwe			2						2		2
Belgium	2	2	4		2	10	7	5	15	17	(-2)
Philippines					2	4			2	4	(-2)

Romania						2		2		(-2)	
Austria	2	2	10	2	2	6	2	6	16	16	0
Singapore					4			4	4	4	0
Total	267	146	401	159	297	192	243	175	1208	672	536

*Includes trade reported as "horns" or "trophies" ("trophies" were converted to horns using a conversion factor of 2 horns per trophy), with purpose code "H" (hunting trophy), "P" (personal) or "T" (commercial). Trade reported with source code "I" (seized/confiscated) or "O" (pre-Convention) was excluded.

**In the columns "Reported by importer", X = annual report not received from the country, N/A = First year in which CITES came into force in the country so annual report not required.

***CITES Trade Database (trade.cites.org) managed by the UN Environment World Conservation Monitoring Centre (UNEP-WCMC) on behalf of the CITES Secretariat. Data obtained on 22 November 2018 in consultation with UNEP-WCMC.

#For the importing country concerned, ▲ = incidences of pseudo-hunting have been confirmed (investigations have concluded that imported sport hunted trophies have gone into illegal trade).

Table A2: Direct exports of white rhino horn trophies* from Namibia reported by Namibia and by importing countries, 2013-2016 (based on data included in the CITES Trade Database***).**

Importer	2013		2014		2015		2016		Total		Balance between reported exports and imports
	Reported by Namibia	Reported by importer									
United States	8	4			4	2	2	4	14	10	4
Russia					4	6	4	X	8	6	2
Austria			2	1	4	4			6	5	1
Germany					2			2	2	2	0
Denmark	2	2							2	2	0
Hungary			2	2					2	2	0
South Africa					2	2			2	2	0
Total	10	6	4	3	16	14	6	6	36	29	7

*Includes trade reported as "horns" or "trophies" ("trophies" were converted to horns using a conversion factor of 2 horns per trophy), with purpose code "H" (hunting trophy), "P" (personal) or "T" (commercial). Trade reported with source code "I" (seized/confiscated) or "O" (pre-Convention) was excluded.

**In the columns "Reported by importer", X = annual report not received from the country.

***CITES Trade Database (trade.cites.org) managed by the UN Environment World Conservation Monitoring Centre (UNEP-WCMC) on behalf of the CITES Secretariat. Data obtained on 22 November 2018 in consultation with UNEP-WCMC.

Table A3: Direct exports of black rhino horn trophies* from South Africa reported by South Africa and by importing countries, 2013-2016 (based on data included in the CITES Trade Database***).**

Importer	2013		2014		2015		2016		Total		Balance between reported exports and imports
	Reported by South Africa	Reported by importer	Reported by South Africa	Reported by importer	Reported by South Africa	Reported by importer	Reported by South Africa	Reported by importer	Reported by South Africa	Reported by importer	
Malaysia	1		2		3	20	4		10	20	-10
France			4		4	2			8	2	6
Mexico		6								6	-6
China							4		4		4
Germany	2	2			1	2	4		7	4	3
Poland		2								2	-2
Total	3	10	6		8	24	12		29	34	-5

*Includes trade reported as "horns" or "trophies" ("trophies" were converted to horns using a conversion factor of 2 horns per trophy), with purpose code "H" (hunting trophy), "P" (personal) or "T" (commercial). Trade reported with source code "I" (seized/confiscated) or "O" (pre-Convention) was excluded.

**Annual reports have been received from all importing countries for the period 2013-2016.

***CITES Trade Database (trade.cites.org) managed by the UN Environment World Conservation Monitoring Centre (UNEP-WCMC) on behalf of the CITES Secretariat. Data obtained on 22 November 2018 in consultation with UNEP-WCMC.

Table A4: Direct exports of black rhino horn trophies* from Namibia reported by Namibia and by importing countries, 2013-2015 (based on data included in the CITES Trade Database***). No trade was reported in 2016.**

Importer	2013		2014		2015		Total		Balance between reported exports and imports
	Reported by Namibia	Reported by importer							
South Africa		2						2	-2
Spain			2			2	2	2	0
United States	2	2			6	6	8	8	0
Total	2	4	2		6	8	10	12	-2

*Includes trade reported as "horns" or "trophies" ("trophies" were converted to horns using a conversion factor of 2 horns per trophy), with purpose code "H" (hunting trophy), "P" (personal) or "T" (commercial). Trade reported with source code "I" (seized/confiscated) or "O" (pre-Convention) was excluded.

**Annual reports have been received from all importing countries for the period 2013-2016.

***CITES Trade Database (trade.cites.org) managed by the UN Environment World Conservation Monitoring Centre (UNEP-WCMC) on behalf of the CITES Secretariat. Data obtained on 22 November 2018 in consultation with UNEP-WCMC.

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The following information is provided in pursuant to the recommendations listed in paragraph 90 in SC70 Doc.56. The texts in black bold come from the documents.

91. The Working Group considers that China and Namibia identified as countries for consideration of Priority concern, should continue to be identified in that way as the information they have supplied indicates that some work is required in the following areas:

China:

– China is encouraged to develop bilateral relationships with Mozambique and Zimbabwe so that they can work collaboratively with all Parties identified as priority countries in CoP17 Doc. 68 Annex 5.

China is actively forging bilateral relationships with Mozambique and Zimbabwe to promote cooperation on public education, wildlife conservation and fighting against illegal wildlife trade in rhino horns.

In 2014, China began to conduct a series of outreach campaigns in African countries where illegal wildlife trade is identified as a problem of concern. The purpose of this program is to combat illegal wildlife trade by enhanced communication and exchange with local wildlife and CITES authorities, and equally important to raise awareness of the detrimental impacts of illegal wildlife trade among Chinese companies and Chinese overseas in African country and to solicit their support and participation in fighting against illegal wildlife trade.

An out-reach campaign was organized in Maputo, Mozambique on April 12, 2016. Lecturers from State Forestry Administration, General Administration of Customs, and Forests Police of China introduced the status of illegal wildlife trade in Africa, the enforcement measures taken by Chinese government in fighting against illegal wildlife trade, and called upon the Chinese companies and overseas Chinese communities to participate in the efforts to curb wildlife crimes.

Two day later, the Chinese officials met officials from Mozambique National Parks CITES management authority, customs, Ministry of Justice, and Environmental Police Department to step up cooperation on fighting transnational wildlife crime. Both sides agreed to strike further cooperation in three major areas: multilateral and bilateral exchange of information, capacity building and public awareness. The governments of China and Mozambique pledged to work together to reduce to the maximal extent illegal wildlife trade and promote environmental production and sustainable development by increased communications and the establishment of long-term mechanism.

A Chinese team led by Mr. Yongli Zhang, the Deputy Minister of State Forestry

Administration of China organized a high-level outreach campaign on conservation of endangered species and CITES implementation in Harare, Zimbabwe on June 11, 2017. Officials from China CITES Management Authority introduced amendment to relevant legislation and regulations within CITES framework, implementation and enforcement of CITES in China, and in specific, administration of ban on domestic trade in ivory and its repercussions. It was attended by nearly 100 participants from Chinese companies, chamber of commerce, representative of overseas Chinese, representative of Zimbabwe Ministry of Environment, Water and Climate, and Chinese and local media reporters. At the event a letter of appeal calling for Zero Tolerance to illegal ivory trade was adopted.

In the following day, Mr. Zhang and his Zimbabwe counterpart from Ministry of Environment, Water and Climate met to discuss bilateral cooperation and reached an agreement, among other things, to work together on wildlife conservation and CITES implementation.

Back In December 2015, China donated an array of equipment and facilities to support wildlife conservation and anti-poaching efforts in Zimbabwe. The list included vehicles (4WD, pickups, truckers, road grader, tractors), walkie-talkies, mobile solar batteries, backpacks, sleeping bags, outwears, tents, binoculars, portable GPS, diesel engines, and water pumps, with a total worth of \$2.3 million.

Non-governmental cooperation is also actively encouraged. In September 2015, China-Zimbabwe Wildlife Foundation was established to support wildlife conservation and anti-poaching in Zimbabwe, which received donations of nearly \$500,000 from Chinese companies operating in that country. In addition, Chinese volunteers are playing an increasing role in anti-poaching activities in Zimbabwe since 2015.

– China is encouraged to report details of any prosecutions initiated since October 2016.

There is no official statistics on the number of on-going prosecutions of wildlife trafficking cases. Furthermore such information is sensitive and its premature disclosure might jeopardize the on-going legal process. As a rule, information can be solicited from two sources: seizures records from customs and court rulings.

According to the statistics of the customs, Chinese made 3 seizures of rhino horn products, resulting in 2 whole rhino horns and 39 pieces of rhino horn. All the rhino horns came from Africa and were intercepted in passenger luggages at airport.

There have been a number of successful prosecutions for rhino crimes in China. A summary of a Government website that lists court verdicts (<http://wenshu.court.gov.cn>) indicates that over a 46 month period (June 15 2013 – April 12 2017) 88 cases involving rhino horn or products were finalized with 131

convicted and sentenced. Sentences on average were heavier for international cross-border smuggling than for internal trafficking and illegal trade, as generally these cases involve greater quantities of horn (Wang 2018). All 131 convicted during the period received either fixed term imprisonment or criminal detention totaling 689 years and 1 month (average of 5 years 4 months). 43 were however put on probation with sentences postponed subject to a judge’s assessment after stipulated periods of probation (where those convicted they have to do community service or be institutionalized in a correctional program for a stipulated time). Assets were also forfeited by 13 of those convicted of cross-border smuggling of horn. One had all assets seized, while another 12 had property worth a total of RMB 3.41m (\$496,400) confiscated. 90% of those convicted also received fines totaling RMB5.502m (\$801,001) ranging from RMB 2,000 to 500,000 (\$291 to \$72,792). Eight of those convicted were also deprived of political rights for one to three years.

– China is encouraged to fully report incidents of illegal trade in rhinoceros horn as part of their annual illegal wildlife trade report.

The report has been submitted.

– China is requested to clarify information about tourists who smuggle endangered wildlife products into China. In its voluntary report China stated that it does not bring criminal charges against tourists who import souvenirs of endangered wildlife products into the country worth less than RMB100,000, yet later in the document says it brings criminal charges against tourists who carry any rhinoceros horn products as personal effects regardless of the size of the products.

According to China’s Criminal Law, wildlife trafficking cases are punished by the level of its seriousness, which is gauged by the economic value of the contraband involved.

	Minor circumstances	Serious circumstances	Extremely serious circumstances
smuggling	<5 year imprisonment, with a concomitant fine	5-10 years imprisonment, with a concomitant fine	>10-year imprisonment up to life sentence in prison and concomitant forfeiture of property
Illegal sell, purchase and transport of endangered wild animals	<5 year in imprisonment, criminal detention, and a concomitant fine	5-10 years imprisonment, with a concomitant fine	>10 year imprisonment, with concomitant fine or forfeiture of property.

To provide quantitative criteria, a regulation in 2001 formulated cut-off standards in terms of economic values to determine the level of seriousness of a criminal case (Unit: RMB1,000).

		Minor	Serious	Extremely
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		circumstances	circumstances	serious circumstance
Illegal purchase, sell and transport	Economic value	0	>100	>200
	Profit	0	>50	>100
smuggling	Economic value	0	>100	>200

As more and more Chinese tourists take home with them small items made from rhino horn as personal effects, the Chinese legal system is overburdened with cases of wildlife trafficking of minor circumstances. To expedite prosecution process, an Interpretation of the Supreme People's Court and the Supreme People's Procuratorate on Several Issues in the Application of Law When Handling Criminal Cases of smuggling was issued in September 2014. The Article 9 of the regulation states that no criminal charge will be filed against someone who carried endangered wildlife and their products into China as souvenir if it is not for profitability and the economic value of the contraband is below RMB100,000. Furthermore, it will not even constitute a criminal crime if the case is of less seriousness.

The wildlife trafficking cases below the new cut-off line will be subject to administrative punishment delineated in the Rules of Administrative Penalties for the Implementation of the Customs Law of the People's Republic of China, promulgated by the Customs General Administration on July 1, 1987, which states that anyone who smuggles goods prohibited by the State are subject to confiscation of contraband, illegal gains, and a concomitant fine no more than RMB1 million; anyone who smuggles articles prohibited by the State are subject to confiscation of contraband, illegal gains, and a concomitant fine no more than RMB100,000.

– China is encouraged to utilize the Form for collection and sharing of data on rhinoceros horn seizures and on samples for forensic analysis provided in the Annex to Resolution Conf. 9.14 (Rev. CoP17).

China does not use the Form for collection and sharing of data on rhinoceros horn seizures and on samples for forensic analysis. Instead it uses its own system of registration of wildlife trafficking cases. China has not taken samples from seizures of rhino horns and products for DNA analysis, because exportation of rhino horn specimens for any purpose is strictly prohibited by the current policy.

– China is urged to report stocks of rhinoceros horn to the Secretariat in accordance with the provisions of Resolution Conf. 9.14 (Rev. CoP17).

China is now in the process of verifying information on stocks of rhino horns. The information on the stocks of rhino horns is not yet available.

NB. As the information based for answering the above questions is mainly in Chinese and is from different government bodies or other data sources, the current version of this document may or may not have accurately reflected the original intent or content of the source material.

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STATUS OF RHINOS IN ZIMBABWE

2018

Conservation status of Rhinos Globally and in Zimbabwe

Zimbabwe has two species of rhinos, the black and white rhinos. The conservation status of the two species is as follows:

a) Black rhino (*Diceros bicornis*)

Conservation Status of Black Rhinos

- Conservation Status under International Union for the Conservation of Nature (IUCN)

Black rhinos are listed as critically endangered under the IUCN. The IUCN is a body of international experts in management of different wildlife species and their expert opinion is regarded as credible worldwide. The categorization as critically endangered means that black rhino population levels are critical and are at the brink of extinction. Management actions should therefore aim or be targeted at increasing populations of the rhinos.

- Conservation Status under the Convention on International Trade in Endangered Flora and Fauna (CITES)

The Black rhino population of Zimbabwe is listed in Appendix I under CITES. The CITES is an international body that regulate trade of endangered wildlife species. The categorization of Black rhinos under Appendix 1 means trade in any black rhino product is prohibited.

b). White Rhino (*Ceratotherium simum ssp. simum*)

- Conservation Status under IUCN

White rhinos are listed as near threatened critically endangered in Zimbabwe. This means that white rhino population levels are critical and are at the brink of extinction. Management actions should therefore aim or be targeted at increasing populations of the rhinos.

- Conservation Status under CITES

The white rhino population of Zimbabwe is listed in Appendix I under CITES.

1. Range Areas

Rhinos (both black and white) occur on three main ranges in Zimbabwe; Buby Conservancy, Malilangwe and Save Valley Conservancy. There are other important but smaller populations in areas such as Matopos, Kyle and Chivero and Kavango. (See figure 1 for rhino ranges in Zimbabwe).

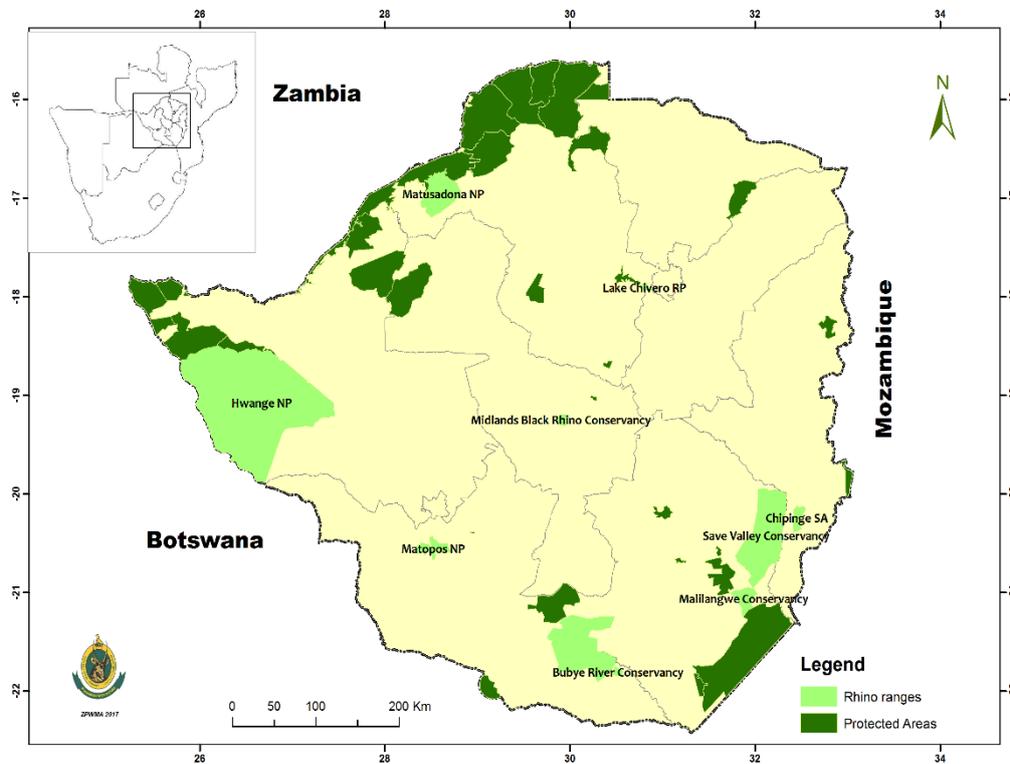


Figure 1. Rhino range areas in Zimbabwe

2. Overall Country Population

Currently the country has a total estimate of 857 rhinos. Of these 499 are black (58%) and 358 (42%) are white.

3. Black Rhino Population Status over the Past 20 years

Over the past 20 years, the country have lost some rhino range areas and also created new ones. Range areas such as Gourlays Ranch and Chiredzi Conservancy which were important for black rhinos were disintegrated largely due to lack of security and encroachment. New areas such as Kavango were created and are thriving and are a potential source of animals for other areas.

There has been an increase in black rhino population over the past 20 years from 350 to 520. The population increased by 170 individuals over 20 years which translate to an average of 9 animals per year.

4. Black Rhino Population Performance in the Past Six (6) Years.

Population Trends

Population increased from 423 in 2010 to 520 as at 31 December 2017. Seventy-one (71) individuals were thus added over the five year period. A total of 180 black rhinos were poached over the same review period (See Table 1).

Table 1. Zimbabwe Black Rhino Population Trend for 2010 to 2018

Year end	Bubye	Save	Malilangwe	Matopos	Chiredzi	Chipinge	Nakavango	Midlands	Imire	Sinamatella	Matusadona	TOTAL
2010	157	106	77	15	4	16	5	5	5	18	15	423
2011	163	108	82	13	0	14	5	5	4	5	6	405
2012	182	103	89	18	0	16	7	5	4	4	6	434
2013	188	106	100	13	0	15	7	4	4	8	4	449
2014	216	116	107	14	0	14	8	5	5	6	4	495
2015	205	113	109	13	0	12	9	4	5	4	4	478
2016	208	118	113	14	0	12	11	6	5	4	1	492
2017	212	128	120	16	0	13	12	6	5	7	1	520
2018	191	128	120	16	0	13	12	6	5	7	1	499
Rhinos added in 5 years	51	12	36	-1	-2	-4	6	1	0	-14	-14	71
Reported poached	98	60	0	4	2	8	0	2	0	5	6	201

5. Contribution of Range Areas to National Population Numbers

A total of 441 rhinos out of 499 of the national population of black rhinos occur on private land. This translates to 88% of all rhinos occurring on private estate. Three main properties are contributing highly to national population. These are:

- Bubyane Conservancy 191;
- Malilangwe 128 and;
- Save Valley Conservancy 120.

This indicates that private properties were contributing immensely to the national population of rhinos.

6. White Rhino Population Performance in the Past Five (5) Years.

Population Trends

Population increased from 299 in 2010 to 370 as at 31 December 2017. A total of seventy-one (71) individuals were thus added over the five year period. A total of 70 white rhinos were poached over the same review period (See Table 2).

Table 2. White rhino population performance 2010 to 2018

Year end	Bubye	Save	Malilangwe	Matopos	Mtirikwe	Chivero	Thetford	Imire	Hwange	Eldorado	TOTAL
2010	60	38	90	26	13	14	10	2	40	6	299
2011	64	34	103	28	16	15	10	2	15	4	291
2012	70	35	109	23	17	12	7	2	3	4	282
2013	78	38	118	21	17	13	8	2	3	3	301
2014	80	43	125	29	18	13	8	2	3	3	324
2015	81	41	137	29	18	13	9	2	0	3	333
2016	75	42	156	29	22	14	8	2	0	3	351
2017	72	44	168	35	23	13	9	3	0	3	370
2018	71	44	168	30	20	10	9	3	0	3	358
Rhinos added in 5 years	15	4	66	3	9	0	-2	0	-40	-3	52
Translocation Out				5	3	2					
Reported Poached	39	13	0	7	0	0	5	0	6	1	71

7. Translocations

A total of 10 white rhinos (5 from Matopos, 3 from Kyle and 2 from Chivero) were translocated to RDC in 2018.

8. Contribution of Range Areas to National Population Numbers

76% of the national population of white rhinos occur on private land with the remainder occurring on state land. This indicate that private properties were contributing immensely to the national population of rhinos. Matopos and Kyle and Chivero hold important small populations with a potential for growth on state land.

9. Poaching Statistics

Rhino poaching trend is showing a sustained increase in poaching since 2015. The country lost 47 rhinos in 2015; 25 in 2016; 27 in 2017 and has lost 21 so far in 2018 as shown in figure 2.

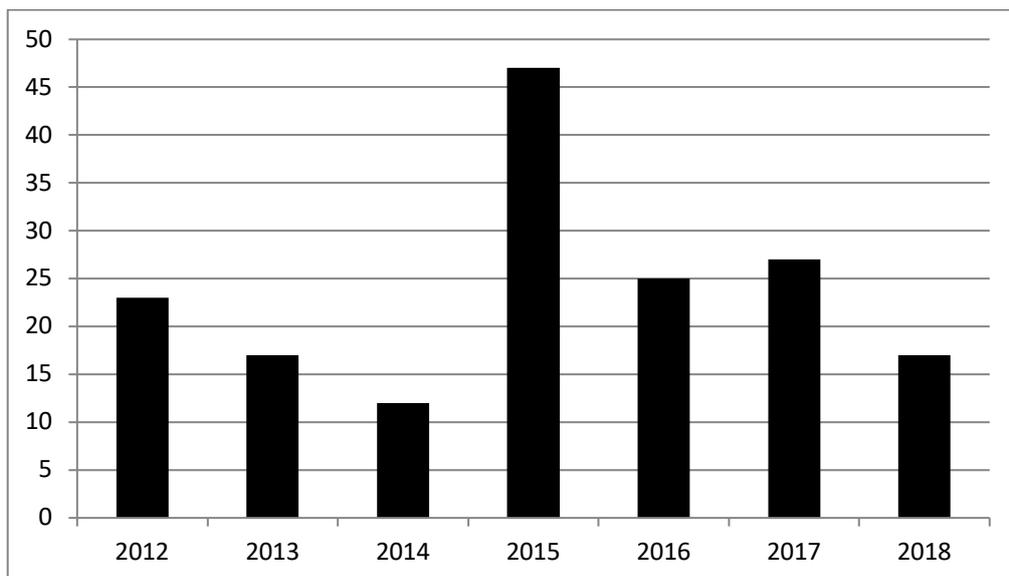
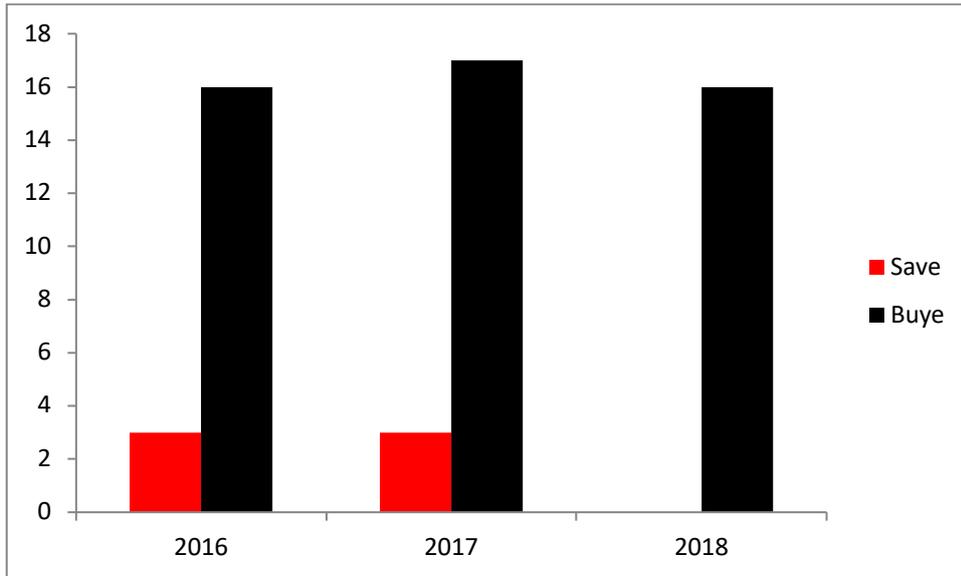


Figure 2. Rhino poaching trends 2012 to 2018.

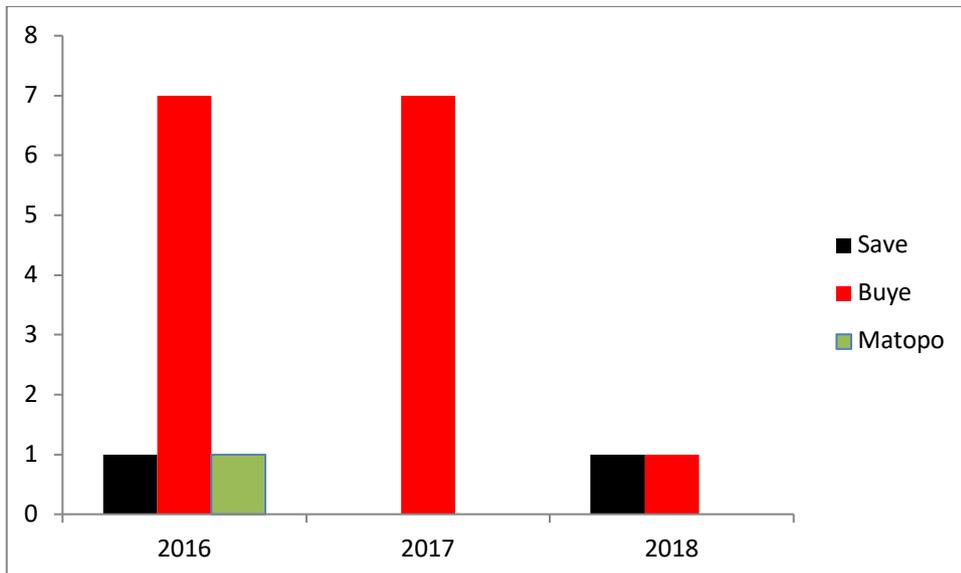
10. Poaching Hot-Spot Black Rhinos

Poaching of black rhinos remained high on private properties and particularly at Bubyee Conservancy. This is largely because of the high number of rhinos on the property (high chance of the poachers encountering a rhino with relatively low risk of an incursion). The conservancy has been losing an average of 16 black rhinos each year since 2016 (see figure 3).



11. Poaching Hot Spot for White Rhinos

Poaching of white rhinos is relatively low as compared to poaching of black rhinos. Bubyee Conservancy continue to record high poaching levels of white rhinos as well. Poaching of white rhinos is low largely because of the congregation nature of the species which make them easy to monitor.



As such Bubyee and Save Valley Conservancies are the main poaching hot-spots in the country due to high populations occurring on these properties.

12. Court Cases on Rhinos 2014 to 2018

A total of 40 rhino related cases were brought to the courts for the year 2014 to 2018. A schedule of the cases is given in annexure 1.

13. Challenges other than Poaching

- **Climate Change**

Climate change impacts are also taking a toll on conservation efforts. There is a growing increase in competition for resources especially water between people and animals. This is seeing more and more records of human and wildlife conflicts as animals move out or go for longer distances in search of water or people encroaching into protected areas for land and water.

The country is experiencing more spells of reduction in annual average rainfall. This has resulted in an increase in the budget for game water supply as the government has to pump more water for the animals.

- **Resource Constrains**

a) Shortage of manpower, shortage of transport, shortage of fuel and financial resources for effective field operations. The standard ranger density for effective patrol coverage is 1 ranger covering 20km². However due to manpower shortages 1 ranger is covering an average of more than 80km² and in extreme cases in areas such as Hwange National Park 1 ranger is covering more than 150km². The ideal ranger staff complement is 3218 against the current establishment of 2048. There is therefore a deficit of 1170 Rangers. This means the Authority is operating at 63% of the required staffing.

b) Transport for law enforcement is critical standing at 264 vehicles of which 189 are runners and 75 are non-runners. There are a total of 41 boats of which 22 are runners and 19 are non-runners. In the past two years we received 2 Landcruiser pick up vehicles from Great plain which were deployed at Kapirinhengu and Sapi in Zambezi Valley and one Landcruiser pick up vehicle from the World Wide Fund for Nature WWF for Chizarira. Six new Landcruisers were also procured in 2018. With the current fleet the Authority is operating at 51% of the required law enforcement vehicles. Restrictions in Trade of Wildlife and Wildlife Products

There are reductions in revenue inflows for conservation due to trade bans and restrictions for hunted wildlife trophies and raw ivory. There are over 106 tonnes of ivory in stock worth over \$10 million.

c) Slump in Tourism

There is a general decrease in tourism both consumptive and non- consumptive. Since the Authority is not getting any funding from the fiscus and that donor support is dry, the Authority relies heavily from tourism for its revenue to fund conservation. However, tourism is low and there is little funding available for conservation.

d) Habitat Fragmentation, Modification and Loss

Habitat fragmentation, modification and loss from factors such as human settlement pressures in protected areas, changes in vegetation communities due to veldt fires and impacts of climate change has affected wildlife habitation and exposed wildlife to poaching. Investment towards protection has therefore increased.

14. Conservation Actions by the Authority and Stakeholders

The management of rhinos in Zimbabwe is done through strategic planning and action predicated in a participatory approach and drawn into a management policy which is reviewed after a five year period. The policy has long, medium and short term action plans meant to enhance both on security and biological performance.

- The long term objectives are to increases in Zimbabwe's black and white rhino populations achieved, to levels of at least 2,000 individuals of each species through meta-population management in suitable habitats throughout the country. The targets are:
 - To achieve metapopulations of 660 black rhinos and 470 white rhinos in Zimbabwe by end of 2022 (based on net growth of 5% per annum)
 - To increase the numbers of black and white rhinos, under sustainable conservation initiatives, to a combined total of 1,000 rhinos within 2.5 years.

Current Security and Law Enforcement

a. Protocol on Wildlife Conservation and Law Enforcement

Zimbabwe ratified to the protocol on Wildlife Conservation and Law enforcement and is implementing the protocols in its management of wildlife resources. Some of the prominent actions taken include ratifying and implementing TFCA programs, domestication of the LEAP Strategy, conducting research and monitoring.

b. SADC Law Enforcement Strategy (Domestication of the Strategy in Zimbabwe)

The SADC Law Enforcement and Anti-Poaching (LEAP) Strategy 2016-2021 was adopted for implementation by Member States at the meeting of the Ministers of Environment and Natural Resources held in November 2015 in Gaborone, Botswana. The Strategy is now awaiting approval by SADC Summit.

Zimbabwe has crafted and domesticated a National Law Enforcement Anti- Poaching Strategy which was adopted by the Sub National JOC and presented the document to the National JOC for approval.

However, Zimbabwe has several strategies in place that are being implemented:

- Strategies to control poaching and smuggling of wildlife
- Strategies to curb poisoning of wildlife
- Species-specific protection strategies and management plans (elephants, rhinos, lions and leopards). Zimbabwe has reviewed the rhino policy and now have a document outlining management policies for the period 2018 to 2022.
- Guide to investigation and prosecution of rhino crimes in Zimbabwe
- Handbook for prosecution for wildlife crimes in Zimbabwe

Details of the strategies are:

• Implementation of Park and Species Management Plans and Policies

These management plans have components (such as protection and law enforcement, biological monitoring and management, and capacity building) and community benefit and support that have specific management actions to enhance protection and growth of populations. The management plans are operational for a five year period after which they are reviewed in tandem with the national plans.

• Advocating for and Implementation of Legislative Changes

- ✓ Zimbabwe has adopted a zero tolerance initiative to poaching, illegal ivory and rhino horn trade and trafficking. The Parks and Wild Life General Laws Amendment number 5 of 2011 provides for a 9 years jail term for anyone found in possession of elephant ivory or for the killing of an elephant through whatever

means. On a second and subsequent conviction the law provides for an eleven years jail term up to a maximum of 20 years in prison to the offender.

- ✓ Statutory Instrument 56 of 2012 Parks and Wildlife (Payment for hunting of animals) Notice, 2012, place the value of an elephant at US\$50 000 which forms the value of compensation which will be paid out by the accused to the complainant in the event of a successful trial and subsequent conviction.
- ✓ The Criminal Law Codification and Reform Act Chapter provides for the charge of criminal abuse of office by law enforcement or public officials involved in corrupt practices related to poaching and trafficking.
- ✓ The Firearms Act criminalizes the use of automatic weapons such as AK47 assault rifles that are currently utilized by poachers to further their illegal activities. The same Act further criminalizes a person for mere possession of ammunition and arms of war which effectively attracts a jail term of up to 5 years in prison for such related offences.

- **Combating use of Poisons**

- ✓ The Zimbabwe Environmental Management Act criminalizes the administration of poison such as cyanide which is used by poachers to kill wildlife. The Act was implemented during trial of accused persons involved in elephant poisoning leading to the conviction of poachers who poisoned elephants in Hwange National Park in 2013. Most of the offenders were given sentences of up to 18 years in prison.
- ✓ Currently the Authority is crafting a new statutory instrument to deal with gaps that have been identified in the use of poisonous chemicals by poachers.
- ✓ Lobbying for licencing of access and use of poisonous chemicals so that it is easy to track source and illegal use.

- **Awareness Campaigns**

- ✓ The Authority is continuously conducting awareness workshops that target the judiciary, the prosecutors, law-enforcement agencies and other stakeholders involved in the fight against poaching. This has resulted in significant improvements in the expeditious preparation of dockets and finalization of cases with a marked improved in convictions in the various courts around the country.
- ✓ Continuously carrying awareness campaigns with the local communities for them to appreciate the value of wildlife and solicit for conservation support.

- **Stakeholder Collaboration**

Stakeholders in the private sector are assisting with the provision of scarce resources that are needed to combat poaching and ivory and rhino horn trafficking. Properties with rhinos continue to offer livelihood support and opportunity initiatives at various levels. The

support is largely centred on health, education and livelihood support. Notable activities done include;

- Construction of the Imire Community Education Centre located at the Imire Anti-Poaching Headquarters. The Centre is an educational space fitted with 10 state of the art computers each linked to a local server and network, wi- internet access, a library and a complete solar powered lighting and electricity system.
- Support of educational programs at Imire, and the South Eastern Lowveldt (Save Valley and Bubi Valley Conservancies). The support include payment for school fees, purchase of books and reading materials.
- Livelihoods enhancement projects such as bee keeping, irrigation and employment have also been active in some areas.
- In Matopos, the Park constructed 4 thatch huts for the disadvantaged and vulnerable.
- **Aerial Support and New Technology**
 - ✓ The use of helicopters and aircrafts in the fight against poaching has also increased and this has assisted with deployments and detection of poachers in the field.
 - ✓ The country is experimenting with using sniffer dogs in deployments and detection of poachers in the field.
- **Cross Border Collaboration**
 - ✓ Cross border collaboration with law-enforcement agencies with neighbouring countries such as Botswana, South Africa, Zambia and Mozambique in information sharing on poacher movements and dealing with immediate incursions has tremendously helped in detection of cross-border poaching and trafficking incidents.
- **Collaboration with other Uniformed Forces.**
 - ✓ The Zimbabwe Republic Police Support Unit in collaboration with the ZPWMA carries out anti-poaching activities at all levels. The Minerals and Border Control Unit of Zimbabwe Republic Police Criminal Investigations Department is a specialized unit that investigates and prepares wildlife cases for courts.
 - ✓ Within the Zimbabwe's National Joint Operations Command (JOC) structure, elephant and rhino poaching have been elevated to a higher level of National Security Threat thereby making it a priority area of focus.
 - ✓ The same structures of the JOC committees have been activated both at national, provincial and district levels for effective monitoring of poaching situation on the ground.
- **Intelligence gathering and information sharing**

- ✓ Using secure networks;
- ✓ among national security agency;
- ✓ Between Zimbabwe and its neighbouring countries and;
- ✓ through Interpol

- **Improving Community Benefits from Wildlife Utilisation**

- ✓ In general rural communities are not happy with the level of benefits it is getting from wildlife. The government is therefore in the process of reviewing the CAMPFIRE concept so that it produces tangible benefits to local communities living with wildlife, especially elephants and large carnivores. This should make locals more cooperative in fostering the country's conservation goals.

- **Increased men on the ground**

- ✓ Zimbabwe is struggling to have enough patrol rangers on the ground because of resource constraints. In key elephant and rhino areas, this challenge has been addressed through a number of strategies:
 - Ranger call up system: The poaching pressure is not the same in all areas under the management of Parks. There is now a working system where rangers from low threat areas are temporarily deployed to high threat areas like the Zambezi valley and Hwange.
 - Joint anti-poaching patrols: The ranger complement in high threat areas has been augmented by enlisting the services of other law enforcing arms of the state, the Zimbabwe Republic police and the Zimbabwe National Army. The police now have almost permanent presence in some Parks Estates in Matabeleland whilst the army is called in when needed.

ANNEXURE 1: RHINO CASES FROM 2014 TO 2018 IN ZIMBABWE

<i>Case No.</i>	<i>Nature of offence</i>	<i>Date/Time/Place of occurrence.</i>	<i>ZRP,CID,DR.CRB.</i>	<i>Recoveries</i>	<i>Outcome</i>
1.	arrested at the after shooting and killing two white rhinos in the park	On 10 th April 2014 Crocodile Bridge Section of Kruger National Park in South Africa		H&K G3 full automatic assault rifle, with two magazines and twenty two (22) 7.62x51 mm calibre cartridges as well as a 9 mm Norinco semi automatic pistol with seven (7) 9 mm cartridges in the magazine. two sets of rhino horns from bags	Pending
2.	Rhino poaching	27/12/14 Bubye Valley Conservacy		375 fitted with a telescopic site 1 home made silencer Hunting touch 1 knife 8 (375) rounds 1 axe Toyota Corolla silver sedan	Pending
3.	poaching rhinos in Matendere Ranch	18/11/14 Matendere Ranch	CR78/11/12 DR10/11/12 Masvingo cid minerals		3years in jail.
4.	Rhino Poaching	18/10/14 mapari ranch of save valley conservancy		7 AK 47 spent cartridges	

<i>Case No.</i>	<i>Nature of offence</i>	<i>Date/Time/Place of occurrence.</i>	<i>ZRP,CID,DR.CRB.</i>	<i>Recoveries</i>	<i>Outcome</i>
		paddock e4			
5.	Rhino poaching	23/12/2014 save valley conservancy	CR 97/12/14 Bikita Police MSV DR 6/12/14	-1x ak47 rifle -57xak 47 rounds	Pending
6.	Rhino poaching	27/12/14 B VC	CR 31/12/14 Beitbridge Police CRB 48/15-1X375	1x375 licensed rifle -8x375 live rounds	Pending
7.	Rhino poaching	01/05/15 Chipinge		2 rhino horns removed from the carcass	
8.	Rhino poaching	22/02/15 Chishakwe Ranch of Save Valley	CR 57/02/15 Bikita Police DR 06/02/15 Masvingo MBCU.	3 black rhinos carcasses 2 horns were recovered Seven spent cartridges of AK 47 rifle.	
9.	Rhino kills using poison	25/02 15 Chipinge Safari Area	RRB 2307469 CR03/03/15 Middle Sabi Police	4 horns were recovered	
10.	Rhino poaching	3/05/15		1 small rhino horn	

<i>Case No.</i>	<i>Nature of offence</i>	<i>Date/Time/Place of occurrence.</i>	<i>ZRP,CID,DR.CRB.</i>	<i>Recoveries</i>	<i>Outcome</i>
		Matopos			
11.	Rhino poaching	19/04/15 Save Valley Conservancy (Msaize/Sango Boundary)	CR 68/04/15 Bikita Police	- 4 empty AK 47 cartridges - 1 live round AK 47.	
12.	Rhino poaching	Sango Ranch 05/06/15		Two rhino carcasses 14 spent AK 47 cartridges	
13.	Illegal hunting of rhinos thus c/s 45(1) of PWA (CAP 20;14)	03/08/15 Chipinge Safari@Chidimai Pan	CR 14/08/15 Middle Sabi Police RRB 2301924 DR 04/08/15 Mutare MBCU.		3 months wholly suspended for 5 years.
14.	Rhino poaching	15/08/15 Mapiri Area Bubye Valley Conservancy	Parks	Rhino carcass 1 x 303 bullet head	
15.	Rhino poaching	25/08/15 No.62 Area Bubye Valley Conservancy	Parks	Rhino carcass	
16.	Rhino poaching	26/08/15	Parks	Rhino carcass	

<i>Case No.</i>	<i>Nature of offence</i>	<i>Date/Time/Place of occurrence.</i>	<i>ZRP,CID,DR.CRB.</i>	<i>Recoveries</i>	<i>Outcome</i>
		Dindingwe Area Bubye Valley Conservancy			
17.	One male rhino named Luveve I.D.no. 1312 poached with two bullets wounds rhino recovered at senukwe homestead with all horns intact	16/10/15 Senuko ranch	RRB no 2561339 Mkwasi police	2 rhino horns recovered 2 A.K. 47 bullets heads found in the carcass	
18.	Rhino poaching	23/10/15 Senuko Ranch	Cr 17/10/15 Mkwasi Police.DR 02/10/15	8 AK 47 Cartridge and one live one male young adult name; Mobile I.D. 1358	
19.	Two rhinos shot by poachers dead	05/12/15 Senukwe ranch		2 rhino horns recovered.	
20.	Found in possession of a .303. rifle suspected to be poaching rhinos in the save valley conservancy	07/12/15 Senukwe	CR21/12/15mkwasi police	.303 Rifle recovered and 12 rounds of ammunition	Pending
21.	Two rhinos shot and killed in the bubye valley conservancy	10/12/15 Buby valley conservancy	CR.41/12/15 mwenezi Z.R.P. DR. 02/12/15 Masvingo minerals CRB MSV. 2370/15	Found in possession of one .375 rifle C2 550 telescopic and silencer fitted.	Pending

<i>Case No.</i>	<i>Nature of offence</i>	<i>Date/Time/Place of occurrence.</i>	<i>ZRP,CID,DR.CRB.</i>	<i>Recoveries</i>	<i>Outcome</i>
22.	Rhino poaching	14/12/15 Sango ranch		Magnum telescopic rifle and silencer U.S.A. made. Plus one AK47 and ammunitions	Pending
23.	Hunting of rhinos in Save valley conservancy C/S 45 (1) (a) as read with section 128 of the parks and wildlife act chapter 20;14	29/12/15 chegutu	CR112/12/15 Bikita police DR 05/12/15 Masvingo Minerals 2462/15 Masvingo magistrate	AK 47 rifle magnum rifle	Accused convicted and sentenced to 35 yrs imprisonment 15yrs were suspended for 5 years of good behaviour. To pay \$480 000.00 to save valley conservancy compensation
24.	Rhino poaching in SVC	26/03/16 Save valley conservancy	C.R. 78/03/16 Gutu Police CRB Msv 742-745/16	AK. 47 folding butt 41 rounds ammunition Nissan Terrano ACH 2957	Pending
25.	one adult rhino found dead with all horns missing	25/05/16 sango ranch		.303 cartridge found on the scene	
26.	Illegal possession of rifle 303 with intention to poach rhinos	17/07/16 Ngundu	CR-17/07/16 Ngundu Police CRB-Msv 1508/16 Mavingo court	rifle 303	Fined \$150.00
27.	Possession of hunting rhinos thus C/S 45 of PWA CAP 20:14	23/07/16 Chishakwe Ranch in Save Valley Conservancy	CR-91/07/16 Bikita Police Station DR-09/07/16 Masvingo MBCU CRB- 1535-38/16 Masvingo Court	458 rifle with silencer 303 rifle with a silencer Ford Ranger Twin Cab ADA 3054	Pending

<i>Case No.</i>	<i>Nature of offence</i>	<i>Date/Time/Place of occurrence.</i>	<i>ZRP,CID,DR.CRB.</i>	<i>Recoveries</i>	<i>Outcome</i>
				Mazda Cronos ADN 6879	
28.	Hunting rhino at Chishakwe Ranch in Save Valley C/S 45 of PWA CAP 20:14 found in possession of hunting rhinos with Cyanide		CR-50/12/16 Bikita Police CRB-2256/16 Masvingo Court.	Cyanide	Pending
29.	Rhino poaching	02/11/16 Beitbridge	ZRP Makhado CR15/02/16 Dr15/02/16	Rhino carcass Map of security area	Pending
30.	Rhino poaching	6/11/16 Save Valley Conservancy	Masvingo MBCU DR04/11/16	.337 revolver S/N R228179, two live rounds, Altezza vehicle metallic white reg. number ADK91565, 5 ketamine drug, one complete ZNA camouflage uniform and a black bag.	Pending
31.	poaching two (2) Black Rhinos	31/12/16 Bubye Valley Conservancy	ZRP Makado (Beitbridge) CR 28/12/16. Beit Bridge Court reference CRB 08/17.	three rifles, a GPS and 7 live rounds of 303	Sentenced to 10 yrs in prison.
32.	Rhino poaching	01/01/17 Bubye Valley Conservancy	Beitbridge Rural RRB 3040291	303 rifle; 5 Cell phones; A Silencer 1 x magazine 14 rounds	pending

<i>Case No.</i>	<i>Nature of offence</i>	<i>Date/Time/Place of occurrence.</i>	<i>ZRP,CID,DR.CRB.</i>	<i>Recoveries</i>	<i>Outcome</i>
				Honda CVR Reg.ACW7882	
33.	Rhino poaching	27/4/17 Savuli Ranch, Save Valley Conservancy	Parks, ZRP	Rhino carcass	
34.	Rhino poaching in Buby Valley Conservancy	01/06/17 Bulawayo			pending
35.	Arrested for rhino poaching.	20/12/17 Masvingo			they were sentenced to a combined total of thirty six (36) years imprisonment for illegal hunting of a specially protected animal and illegal possession of a firearm without a firearm certificate
36.	C/S 45(1) of PWA CAP 20:14 illegal rhino hunt in Chishakwe Ranch	Chishakwe Ranch	CR- 10/17 Bikita Police	375 rifle No 94373 with silencer, 22 rounds and 2 knives	
37.	c/s 45 of the P.W.Act, Chapter 20:14	24/03/18 Vic Falls	BB CRB 1020/18	Cell phone	Found not guilty and acquitted
38.	Illegal hunting of Rhinos in Buby Valley Conservancy	28/08/18 BVC	Beit-Bridge CR54/8/18 CRB	Illegal hunting	Both were convicted awaiting judgement

<i>Case No.</i>	<i>Nature of offence</i>	<i>Date/Time/Place of occurrence.</i>	<i>ZRP,CID,DR.CRB.</i>	<i>Recoveries</i>	<i>Outcome</i>
			BT1606-7/18		
39.	Illegal hunting of rhino in SVC	28/10/18	ZRP Mkwanaise RRB 3549335 Chiredzi MFFU DR 01/11/18	13 spent cartridges of ak47	
40.	Illegal hunting of Rhinos in Buby Valley Conservancy	11/11/18 BVC		375 hunting rifle fitted with a silencer device, a cell-phone and line, plus 11 rounds of live ammunition	Pending

RHINOCEROSSES (RHINOCEROTIDAE SPP.)

At its 17th meeting (CoP17, Johannesburg, 2016), the Conference of the Parties adopted Decisions 17.133 to 17.144 on *Rhinoceroses (Rhinocerotidae spp.)*, as follows:

Directed to Parties

17.133 *All Parties should review their implementation of Resolution Conf. 9.14 (Rev. CoP17) on Conservation of and trade in African and Asian rhinoceroses, and the strategies and proposed actions developed by the CITES Rhinoceros Enforcement Task Force contained in the Annex to Notification to the Parties No. 2014/006 of 23 January 2014, to achieve good implementation of the Resolution and the strategies and proposed actions, and to increase the effectiveness of the law-enforcement response to rhinoceros poaching and rhinoceros horn trafficking.*

Directed to all range States for rhinoceroses

17.134 *All rhinoceros range States should continuously review poaching and trafficking trends, to ensure that the measures they implement to prevent and combat rhinoceros poaching and rhinoceros horn trafficking remain effective and are quickly adapted to respond to any newly identified trends.*

Directed to the Secretariat

17.135 *The Secretariat shall conduct a mission to Viet Nam to meet with enforcement and justice sector agencies to review arrests, seizures, prosecutions, convictions, and penalties for illegal possession and trade of rhinoceros horn, including offences detected at border points and domestic markets in Viet Nam.*

17.136 *The Secretariat shall report to the 69th meeting of the Standing Committee on its mission to Viet Nam, particularly regarding the rate of successful and unsuccessful prosecutions, convictions and penalties, the reasons for those successes and failures, and any priority actions needed.*

17.137 *The Secretariat shall conduct a mission to meet with the Mozambique Ministry of Land, Environment and Rural Development, including the CITES Management Authority, as well as law enforcement and justice sector agencies that are mandated to enforce illegal wildlife trade and the implementation of CITES and related national legislation. This mission shall focus on implementation of Mozambique's National Ivory and Rhino Action Plan, in particular to assist Mozambique with the priority actions identified in the recommendations agreed at the 67th meeting of Standing Committee.*

17.138 *The Secretariat shall report to the 69th meeting of the Standing Committee on its mission to Mozambique, paying particular attention to both the rate of successful or unsuccessful prosecutions, convictions and penalties, the reasons for these successes and failures and priority actions needed to address these, and to the status and security of Mozambique's stockpiles and the strength of its stockpile management system; that report should include any recommendations for the consideration of the Standing Committee.*

Directed to Mozambique and Viet Nam

17.139 *Mozambique and Viet Nam should implement the recommendations agreed by the Standing Committee at its 67th meeting and welcome the Secretariat missions called for in Decision 17.135 and Decision 17.137.*

Directed to the Standing Committee

17.140 *The Standing Committee shall evaluate, at its 69th and 70th meetings, Parties' implementation of Resolution Conf. 9.14 (Rev. CoP17) and measures to prevent and combat rhinoceroses poaching and trafficking in rhinoceros horn, taking into consideration the recommendations in CoP17 Doc.68*

Annex 5 and, focusing particularly on countries identified for priority attention as presented in that report, make any recommendations as appropriate.

- 17.141 *The Standing Committee shall evaluate the reports submitted by Mozambique and Viet Nam, as called for in the recommendations agreed at its 67th meeting, and shall make additional recommendations as appropriate.*
- 17.142 *The Standing Committee shall evaluate the report of the Secretariat on its missions to Mozambique and Viet Nam, and shall make any additional recommendations for further action and request additional reporting to its 70th meeting, as necessary.*
- 17.143 *Based on its assessment of progress by Mozambique and Viet Nam, both at its 69th and 70th meetings, the Standing Committee shall determine if Mozambique and Viet Nam have satisfactorily addressed all recommendations, or if further actions, up to and including compliance measures, are warranted.*
- 17.144 *The Standing Committee shall report its findings and recommendations to the 18th Conference of Parties.*

The Conference of the Parties in paragraphs 7 to 11 of Resolution Conf. 9.14 (Rev. CoP17) on *Conservation of and trade in African and Asian rhinoceroses*:

7. *DIRECTS the Secretariat, prior to each meeting of the Conference of the Parties, and pending external funding, to commission the IUCN/SSC African and Asian Rhino Specialist Groups and TRAFFIC to submit a report to the Secretariat on:*
- a) *the national and continental conservation status of African and Asian rhinoceros species,*
 - b) *trade in specimens of rhinoceros,*
 - c) *stocks of specimens of rhinoceros and stock management,*
 - d) *incidents of illegal killing of rhinoceroses,*
 - e) *enforcement issues,*
 - f) *conservation actions and management strategies with an evaluation of their effectiveness; and*
 - g) *measures implemented by implicated States to end the illegal use and consumption of rhinoceros parts and derivatives;*
8. *REQUESTS the IUCN/SSC African and Asian Rhino Specialist Groups and TRAFFIC to engage with range and implicated States as appropriate, as well as with the UNEP World Conservation Monitoring Centre, when producing the report, and to reflect the outcomes of these consultations in their reporting pursuant to this Resolution;*
9. *DIRECTS the Secretariat to:*
- a) *make an aggregated summary of the rhinoceros horn stock declarations of Parties available to the IUCN/SSC African and Asian Rhino Specialist Groups and TRAFFIC for analysis and inclusion in their reporting to the Secretariat pursuant to the Resolution;*
 - b) *make the report of the IUCN/SSC African and Asian Rhino Specialist Groups and TRAFFIC available at each meeting of the Conference of the Parties; and*
 - c) *on the basis of the report, formulate draft decisions for consideration by the Conference of the Parties as appropriate;*
10. *ENCOURAGES the Parties to support the Secretariat financially, to enable it to commission a report from the IUCN African and Asian Rhino Specialist Groups and TRAFFIC for each meeting of the Conference of the Parties;*

11. *URGES range States of African and Asian rhinoceroses, implicated States, other Parties and other stakeholders to cooperate with the IUCN/SSC African and Asian Rhino Specialist Groups and TRAFFIC in collecting information and producing the report called for in this Resolution;*

TENTATIVE BUDGET AND SOURCE OF FUNDING
FOR THE IMPLEMENTATION OF DRAFT RESOLUTIONS OR DECISIONS

According to Resolution Conf. 4.6 (Rev. CoP16) on *Submission of draft resolutions, draft decisions and other documents for meetings of the Conference of the Parties*, the Conference of the Parties decided that any draft resolutions or decisions submitted for consideration at a meeting of the Conference of the Parties that have budgetary and workload implications for the Secretariat or permanent committees must contain or be accompanied by a budget for the work involved and an indication of the source of funding. The Secretariat proposes the following tentative budget and source of funding.

Draft decision 18.AA

Draft decision 18.AA does not have any budgetary and workload implications for the Secretariat or permanent committees.

Draft decisions 18.BB, 18.CC and 18.EE

Draft decisions 18.BB, 18.CC and 18.EE would require some time from the Secretariat, but could be accommodated within its regular work programme.

Draft decision 18.DD

Draft decision 18.DD does not have any budgetary implications and the activities can be accommodated within the regular work programme of the Standing Committee.

Draft decision 18.FF

Limited funding of approximately USD 20,000 may be required to secure a consultancy, if needed, to conduct research or undertake studies, but such work will be subject to the availability of external funding and would therefore not require the use of core funds. Implementation would require some time from the Secretariat, but could be accommodated within its regular work programme.