Strategies to Decrease Rhino Poaching in Africa: Our Personal View

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Lessons to Learn from Rhino Protection in West Bengal, India

Te are now facing a conservation crisis concerning African rhinos. From 2007 to the end of 2011 rhino poaching in Africa escalated sharply, especially in southern Africa, but also in East Africa. From 2007 to the end of 2011 at least 1,370 rhinos have been illegally killed on the continent. In contrast, rhino poaching in Nepal and



Kruger National Park is home to the largest population of white rhinos in the world.

India has been negligible over this period, despite the horns from Asian rhinos being double the price of horns from African rhinos. In 2011 not one rhino was known to have been poached in Nepal (out of about 535 rhinos that nearly all inhabit two medium-sized parks of about 1,000 km² each) and only 18 in India (from about 2,500 that are mostly in one area of 859 km² in Assam).

In February 2012 we visited two relatively small protected areas of Gorumara National Park and Jaldapara Wildlife Sanctuary in West Bengal, India. Since 1992, no rhinos have been poached in Gorumara National Park (80 km²) with the population now standing at 43 rhinos. Since 1992, less than one rhino per year has been poached in Jaldapara Wildlife Sanctuary (216.5

km²) with a population today of about 150 rhinos. Their conservation success has been little recognized beyond India. We wanted to learn why so few rhinos have been poached there recently and to assess which policies that are working in West Bengal (and similarly in Assam and Nepal) could work more widely in Africa.

There are several reasons for West Bengal's conservation success. For over two decades the West Bengal Forest Department has been spending some of the largest amounts of money for any government-managed rhino area in the world. In 2011 the amount was USD 5,000-6,500/km². These funds come mostly from the State government but also the Central government supports rhino conservation. These high budgets allow nearly two field staff

JTO BY: ESMONI



Esmond Martin examines a rhino horn in 1990 in the KWS strong room that has been storing rhino horns for many years.

per km² in Gorumara and in Jaldapara. Furthermore, the Forest Department generously assists in eco-development projects for the large population of poor people living in the 'fringe' villages that surround these two wildlife areas. For example, the Department supports alternative farming practices, such as growing mushrooms, mustard, ginger, and other non palatable crops to wild animals, and has assisted with piggeries, poultry, irrigation schemes, and handicrafts etc. This helps to reduce the pressure of human encroachment for resources on the protected areas.

The Department also employs the villagers in habitat clearance, planting and road maintenance within the wildlife areas, as well as developing tourist eco-lodges for the villagers to run. To improve relations further the Department gives generous compensation for human wildlife conflict, even for crop and hut damage from large animals, especially elephants. The field staff spends much time with the villagers improving conservation awareness that has hugely improved cooperation and trust.

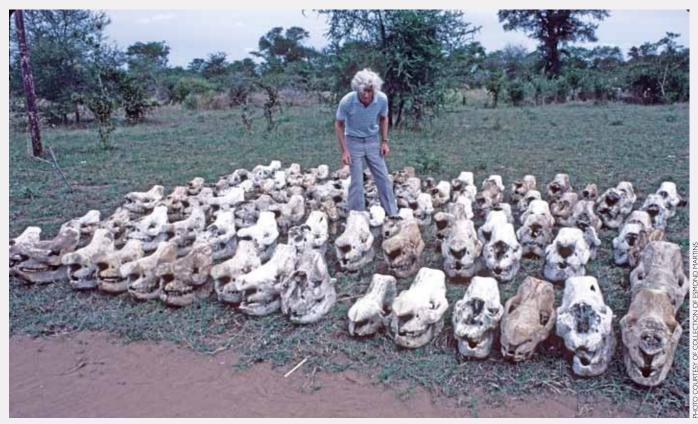
In return for so much support, the local communities provide extra help to the Forest Department putting out forest fires, patrolling the boundaries of Gorumara and Jaldapara, and providing vital information on possible rhino poachers. In other words, the fringe villagers have become the main eyes and ears for rhino protection.

The Forest Department maintains some excellent leaders in their Wildlife Division, and thus the staff are well managed, disciplined, motivated and hard working. Transparency amongst the staff is encouraged, with low ranking officials able to reach high ranking officials directly by mobile phone, which allows corruption to be kept in check. In addition, when poachers are arrested and tried, the judiciary usually gives sentences of several years in prison that

act as an adequate deterrent. These factors combined have worked to cut back rhino poaching in West Bengal.

Present-day Rhino Protection in Africa

Some of the successful strategies illustrated above can be expanded in Africa in accordance with the political, economic, social and geographic conditions of each country and their rhino areas. For the early 1980s, conservationists determined that an annual minimum of USD 200/km² and one person per 20 km² were required to protect elephants in Africa successfully. Now taking into account inflation over the last 30 years and that rhino horns are much more valuable than elephant tusks, we estimate that today a minimum of USD 1,000/km² annually, plus at least one man per 5 km² for small areas and one man per 10 km² for medium and large areas probably are needed to look after rhinos in Africa



Esmond Martin looks at 88 black rhino skulls from South Luangwa National Park in 1983, Zambia, 60 of which were poached.

effectively. We will look at general conditions and strategies in the main African rhino range States, from those with the best recent rhino protection, to those suffering rhino losses the most since 2007.

Namibia has had very successful rhino protection. In 2003 Namibia's rhino population was 1,424 (1,238 blacks and 186 whites). By the end of 2010 there were 2,219 (1,750 blacks and 469 whites). Over those eight years, only five rhinos have been known poached.

Most of Namibia's rhinos are within fenced national parks. Thanks to Namibia's small human population, the parks do not have many poor people along their boundaries putting pressure on the parks. Some black rhinos are free ranging on government land where the local communities have been sensitized to rhino conservation over many years, benefiting from wildlife tourism, and although poor, they work together with the government and NGOs in protecting the rhinos. There are also some black

and white rhinos on private land that are equally well protected. These rhino areas are arid or semi-arid making it easier to see poachers (as well as rhinos). Furthermore, with low human densities an outsider is quickly noticed.

Sentences for those involved in the rhino horn trade are severe: about 10 years in prison. The Ministry of Environment and Tourism (MET) which manages the parks, aware of the heavy poaching in neighbouring South Africa, is taking appropriate steps to improve security of their own rhinos. For instance, MET has been carrying out training courses with public prosecutors, police, customs, and immigration officers on improved rhino protection measures. MET has increased park budgets, deployed additional staff, purchased more antipoaching equipment, established more anti-poaching units and improved intelligence gathering. The government has also expanded its community projects including education on the importance of rhinos. Namibians have

not yet succumbed to dealing with illegal rhino horn traders from China and Vietnam.

The Kingdom of Swaziland has a relatively small population of white and black rhinos and numbers are stable. Actual rhino numbers are not available for security reasons. There was no poaching from 1993 for 18 years. However, two were poached in 2011; the first had a calf that died and the second was pregnant - hidden losses of offspring are not always recorded in other countries. The Swazi police found the poachers of the second rhino through a tip-off; the poachers opened fire and the police in self defence shot dead three of them, who were South Africans.

Several factors are responsible for so little poaching. There is one Swazi family which is committed to rhino conservation and has been managing all the rhinos in two well-protected areas with the King's full support. The areas with rhinos are relatively small making them easier to manage, and are partly

or fully fenced. The rhino areas have a manpower of 1 person per 5 km2 and with good leadership the patrol staff are dedicated and effective. Penalties for a rhino poacher or trader are severe. A person is subject to a mandatory five to 15 years in prison without the option of a fine. This is a major deterrent to criminal activity.

Kenya has the largest population of rhinos in eastern Africa: 597 black rhinos and 385 white rhinos at the end of 2010, according to the Kenya Wildlife Service (KWS). Rhino numbers have been increasing in Kenya on both State and private land since 1993. In 2007 only one animal was known to be have been illegally killed, but poaching has been increasing and 25 were poached in 2011 according to KWS.

Of the total rhino population, 46% of the blacks and 71% of the whites inhabit privately owned ranch land. Although white rhinos can be privately owned, black rhinos are owned solely by the State, but can be managed privately. For more than 20 years, most rhinos on private land have been increasing in numbers because the owners have allocated sufficient funds for scouts on the ground, have intelligence networks, and have well-trained, hard-working, motivated staff with little corruption.

In addition the private sanctuaries have had increasing support from KWS and the police; the police have given the scouts the status of Kenya Police Reservists which gives them more power. Those private sanctuaries that have been successful are fenced and are in more secure areas of the country. They are mostly located in the plains west of Mount Kenya. The owners spend on average USD 1,000-2,000/ km² annually and have a manpower ratio of at least one person per 2-5 km2. Ranchers give financial benefits (such as health and education) to the people living around them, some of whom supply intelligence data on poachers and traders for which they are rewarded. Two community land areas have a few rhinos to encourage tourists also. Although nearly all rhino areas encourage tourists for revenue, the number of private sites with rhinos is not increasing due to the growing cost of protecting them.

From around 1990, rhino numbers have also increased on most areas of State land, especially those of small and medium size. KWS has had an enormous task protecting rhinos in the huge unfenced 13,000 km² area of Tsavo East National Park. There is inadequate manpower to patrol this vast

No. of rhinos in Kenya at the end of 2010

area, compounded by the proximity of traditional rhino hunters and nomadic pastoralists among whom it is more difficult to have informers. Poachers from Somalia bringing more modern guns into the country are attracted to the less well protected areas.

Penalties against poachers and traders are still weak and thus ineffective in Kenya. Convicted poachers receive small fines or short jail sentences (generally a few days to a few months) that do not deter them.

Zimbabwe had 532 black and 297 white rhinos in 2007. By 2011 there were only 437 black and 285 white



Rhino horns and skins were piled up by KWS in Nairobi National Park in January 1990 and burned.



These well-made fake rhino horns in their velvet-lined box were for sale in Guangzhou, China, in 2011.

rhinos. This is the only country in Africa with a large rhino population that has declined since 2007. This is almost entirely due to heavy poaching. There are several sets of poaching figures for those four years, but about 225 to possibly 290 rhinos were poached. The worst year was 2008 with 120 illegally killed.

This decline in rhino numbers occurred on government land because of corruption in the country, insufficient anti-poaching training, inadequate resources allocated by the government, and generally poor leadership, along with low Park staff morale in the Department of National Parks and Wildlife Conservation (DNPWC). The relationships between DNPWC field staff and those people living around the rhino protected areas have been poor. Rhinos of both species have also been poached on private land, mainly due to several unplanned land invasions and planned land takeovers. Zimbabwean poachers were receiving much needed money for killing rhinos at a time when the country's economy was in a crisis. Around 2007 poachers received USD 2,500-3,000/kg for horn, and prices continued to increase in the following years. Compounding these problems until recently, there have been few court convictions and very low sentences of poachers and traders.

Fortunately in 2010 and 2011 rhino poaching declined significantly. Most rhinos on State land that were easy to poach had already been so, and those remaining became better guarded. Privately managed rhino areas had already been taken over by new settlers, leaving those remaining generally intact. Lowveld rhino numbers grew and the translocation of rhinos from vulnerable to more secure areas helped to mitigate the poaching. Information gathering during this period improved, showing that Zambian poachers are still moving rhino horn north across the Zambezi River, but the great majority of horns from poaching (done by Zimbabwean gangs of three to five men) are taken from Beit Bridge across the border to traders in South Africa. Court sentences are now much more severe in Zimbabwe and are starting to help as a deterrent. In March 2012, for example, an arrested Zimbabwean rhino poacher was sentenced to 14 years in prison.

South Africa has had the greatest success story for rhino conservation with the number of white rhinos increasing from about 2,500 in 1980 to 18,796 by the end of 2010, while black rhinos increased from about 625 to 1,915. There were about 400 private owners with over 4,500 rhinos in late 2010, largely due to the incentives of tourism and sport hunting. Today the country conserves three out of four wild rhinos on the planet! There were



These horns were being sold in pharmaceutical shops in Vietnam where most customers are conned into thinking they are buying rhino horn in their medicinal preparations, when usually it is water buffalo horn or another substitute.

SOUTH AFRICA HAS HAD THE GREATEST SUCCESS STORY FOR RHINO CONSERVATION WITH THE NUMBER OF WHITE RHINOS INCREASING FROM ABOUT 2,500 IN 1980 TO 18,796 BY THE END OF 2010, WHILE BLACK RHINOS INCREASED FROM ABOUT 625 TO 1,915.

a negligible 13 rhinos poached in 2007, but then poaching rose substantially: 83 in 2008, 122 in 2009, 333 in 2010 and 448 in 2011. The country lost more rhinos on public and private land from 2007 to 2011 than the rest of Africa and Asia combined.

Nearly half the rhinos were killed in Kruger National Park, a vast area of 20,000 km². This is not surprising as over half the country's rhinos are in Kruger and it has a long international eastern border with Mozambique. Many Mozambicans can easily get through both the unfenced and fenced eastern sections of the Park to shoot rhinos. Most are not sympathetic to

wildlife conservation as there has been little rhino awareness or benefits given. There have been a number of arrests of poachers, but overall intelligence and cooperation with officials across the border has been inadequate, and Mozambique's penalties for wildlife crimes are ineffectual. Four Kruger personnel were arrested in early 2012 for alleged involvement in rhino horn trafficking. In 2012 the number of Park field staff was increased from 500 to 650, which works out at 1 person per 33 km². To improve security, the army has just been deployed in Kruger, and further protection measures are planned.

Some veterinarians using helicopters and dart guns have been disgracing their profession by poaching rhinos, sometimes by dreadfully cruel means, using tranquilizers that are quieter than bullets, and leaving the rhinos bleeding and hornless to die an agonizingly slow death. Many private rhino areas have insufficient budgets to fight this new wave of poaching, and inadequate or no intelligence networks.

There has been insufficient political will from some provincial governments to fight this illegal trade. Vietnamese started coming to South Africa around 2005 to sport hunt white rhinos on licence. It is legal to export rhino horn trophies with permits and keep ownership of them. But the Vietnamese were bringing their trophy horns home to sell illegally. In 2009 and 2010 Vietnamese so-called sport hunters made up 90% of the legal hunts, shooting about 100 white rhinos a year. They forced up the price of hunts so high that few other nationalities could afford them.

Rhino horns became more fashionable in Vietnam after 2007 due to the economic boom in the country and the elite becoming much richer. They wanted more and more rhino horns as prestige items and for medicinal use. This huge increase in demand forced the price up in both Vietnam and South Africa for horns. It encouraged thefts from rhino horn stocks and from museums in South Africa (and elsewhere), and of course poaching escalated. Corruption increased considerably with Vietnamese diplomats in Pretoria buying illegal rhino horn and their embassy cars transporting horns. Sophisticated South African, Vietnamese and Chinese trading networks established themselves within South Africa. The huge problem of Asian syndicates in South Africa smuggling rhino horn to East Asia is not matched anywhere else on the continent. East Asians with new-found wealth have concentrated on getting horns from South Africa largely because the country has 83% of Africa's



rhino population. South Africa also has long-standing connections with East Asia, and has had the largest resident Chinese population in Africa in recent years.

But now there has been an increase in arrests in South Africa, notably of senior rhino horn traders. Top international software, rhino horn DNA analysis and specialist prosecutors are being used. Sentences also became more severe in 2012. One man who tried to sell dehorned horns (no rhino was even killed) got, as well as a 10 year sentence and large fine, a new punishment of 'asset forfeiture' whereby his assets have been seized, including his game farm. With the involvement of criminal syndicates, South Africa has been forced to apply increasingly strict measures to fight the poaching.

Finally in February 2012 the government introduced stricter measures to stop pseudo-hunters, requiring Vietnam to verify that trophies acquired since 2010 were still in the hunters' possession before issuing any new hunting licences to them. From April 2012 it was required for an official to be present on a hunt

and a CV supplied showing the hunter's credentials. Sport hunting fell by 60% in the first half of 2012. Some people fear that declining financial incentives for owners to keep rhinos, with increasing anti-poaching costs, could reduce rhino range and rhino numbers.

What Needs to be Done to Improve Protection of Rhinos in Africa?

Strategies that work in protecting rhinos that are similar in West Bengal and certain areas of Africa include: large budgets that enable a high density of people to patrol, efficient information gathering with appropriate financial rewards, an effective judiciary, and good relations with the people adjacent to the rhino areas for their support. These have proved to be crucial for successful rhino protection.

Some factors that have been negatively affecting rhinos in Africa that do not occur in India are the following. India has had no pseudosport hunting , no helicopters spotting rhinos, no sophisticated weapons, no Chinese or Vietnamese wildlife trading syndicates, and few new Chinese



BOTH PHOTOS: A shop in Guangzhou in China had hundreds of fake rhino horns for sale in 2011.

immigrants coming to the country to work. These factors have made rhino protection that much harder in several parts of Africa.

As well as in situ rhino protection (in rhino range States), ex situ effort (within the main consuming countries) needs greater attention. It is vital to understand today's demand for rhino horn in Asia; we know almost nothing about the demand in China, and little in Vietnam as few people have been collecting information there. We have a far greater understanding due to recent field research about the ivory trade. This must be rectified urgently so that we can implement a policy to cut demand and therefore the price and the poaching.

In the past we got the illegal rhino horn trade reduced. In the 1970s and 1980s rhinos were being poached in Africa in very large numbers. Black rhinos declined from around 65,000 in 1970 to an estimated 2,550 in 1993. This was due to an economic boom in Yemen, Hong Kong, Japan, Taiwan, South Korea, Singapore and latterly China, where rhino horn demand soared. Prices for rhino horn in Yemen rose from USD 30-600/kg wholesale from 1970 to 1979: a 20-fold increase.

In the 1980s and early 1990s conservationists created large media

campaigns that embarrassed countries about their blatant consumption of illegal rhino horn, while at the same time alternative materials to rhino horn were encouraged for use in medicines in East Asia and dagger handles in Yemen. Trade sanctions were threatened on certain Asian countries if they continued to turn a blind eye to illegal imports of rhino horn. Countries also brought in internal trade bans. These actions worked. In Yemen the wholesale price for horn remained stable at USD 1,200/kg from 1991 to 2003, despite a sharp decline in the supply. East Asian demand also fell. Such strategies need to be repeated urgently once again to cut down on demand and therefore poaching.

Today on the Asian market is a lot of fake rhino horn - perhaps 90% for retail sale in Vietnam was fake in 2011! In Guangzhou, China, in 2011 we saw a shop selling hundreds of artificial rhino horns priced wholesale at USD 9,500/ kg! A major public relations campaign by the Chinese and Vietnamese (with the benefits of modern technology) announcing this scam could also be highly effective in reducing consumer demand for illegal rhino horn as nobody wants to be swindled.

Thus, as well as anti-poaching improvements, along with continued support given for rhinos to earn more revenue (as one of the famous "Big Five") for communities, owners and governments, we must urgently reduce the upsurge in demand for rhino horn in Asia again in order to cut back on poaching. We need a UN Special Envoy for rhino conservation, as in the early 1990s, to visit top level officials and to suggest trade sanctions once more against countries that are not effectively combating the illegal rhino horn trade.

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Some Thoughts on the Recent Meeting of the CITES Standing Committee

By Esmond Martin

In late July I attended for the EAWLS the meeting of the 62nd Standing Committee of CITES held in Geneva. Several important issues concerning African rhinos and elephants were debated, but unfortunately no sanctions or punitive actions were taken against those countries which are not implementing measures to significantly reduce the illegal trade in rhino horn and elephant ivory. Those countries not taking sufficient actions, such as China and Thailand, were allowed extra time to produce reports on what progress they were making on this issue. For example, the Government of Thailand has been stating for years that the loophole in their law allowing legal sales of tusks from Thai domestic elephants will be eliminated, but no such change has yet taken place. Of course, reports are important, but they do not necessarily corroborate what is really going on. That is where NGOs become important because they can monitor the situation on the ground.

For instance, WWF produced at the Standing Committee its report, "Wildlife Crime Scorecard" assessing those countries having rhinos, elephants and tigers, and those that act as entrepots or consuming countries, for compliance and enforcement from June 2010 to June 2012. The worst offenders in order of severity were Vietnam, China and Laos. Serious offenders in Africa were Zimbabwe, South Africa, Mozambique, DRC, Nigeria and Tanzania.

Parties at this Geneva meeting also discussed a controversial proposal for an ivory decision-making mechanism for the sale of ivory, if a legal trade in ivory were to commence. The gist of it is that a cartel would be established called the Central Ivory Selling Organization similar to the De Beers cartel on diamonds whereby tusks would be sold, after CITES had approved the Appendix II listing of the country's elephants. Further discussions on this proposal are again taking place and the proposal will be submitted to the next Conference of the Parties in Bangkok in March 2013.

According to the Secretary General of CITES, John Scanlon, a critical factor limiting the effectiveness of CITES is the lack of adequate funds for the Convention. He pleaded for more financial contributions from the Parties and if funds were not forthcoming, he warned that he would have to make redundant several members of the Secretariat staff.

Besides the formal sessions, there were side events held mostly during the lunch breaks discussing provocative issues such as the illegal trade in chimpanzees and ivory in Egypt, the snake skin trade of South East Asia, and the most recent efforts carried out by the South African authorities to reduce the serious rhino poaching in the country. Often these side events were more stimulating to conservationists than the formal sessions and discussed in more detail what was really happening on the ground concerning the illegal trade in wildlife products.