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**Rhino Capture in Kruger National Park**

**Case Study**

**Introduction**

In 1898, South Africa created and named Kruger National Park in an attempt to protect the nation's wildlife that was steadily decreasing. Kruger National park sheltered 7,722 square miles of living area for the animals. Several thought Kruger to be the best national park in Africa in all categories including management, infrastructure and biodiversity. The park was known for its’ stunning scenery, and was a tourist attraction for the many contributing twenty-one rest camps, seven private lodges, and eleven private safari lodges. People came from all over to view the wide range of wildlife. Kruger detained many different species other than rhinos, including 336 trees, 49 fish, 34 amphibians, 114 reptiles, 507 birds and 147 mammals. Kruger National Park was still the largest rhino population in the world in 2009, occupying 15,000 white rhinos and 500 black rhinos. With this being said, a group of specialists indicated that around 15,000 white rhinos and only 1,500 black rhinos still existed in other parts of South Africa. Kruger Park was a well-known holding place for rhinos.

An important and essential part of Kruger National Park and their conservation attempt was game capture. The game capture permitted the park to reintroduce some of the species in areas that were uninhabited. It also allowed the rhinos to be introduced to other parks in South Africa and also bordering countries. To control the supervising of the rare species, they were placed in breeding and secluded areas, which the game capture helped with. This process was used more and more steadily over time and also started gaining popularity amongst the neighboring countries. As the demand for rhinos increased, so did the capturing. Eventually, game capturing became part of an income generating procedure.

Over time, Kruger National Park combined with South African National Parks (or SANParks). Animals were being relocated. In 1961, the first movement of rhinos to this park took place with 345 white rhinos being relocated from Kwa Zulu Natal. But towards the end of the time period, the fixed assets became SANParks property. With the cost of each rhino being between $30,000 and $35,000, SANParks detained their 252nd rhino of the year. The national government of South Africa provided an annual grant for the funding of the SANParks operation.

**Exhibit 1 SANParks Budget Allocation (in U.S. dollars)**

**Kruger National Park Budget $4,951,900**

**Poaching $ 275,100**

**Infrastructure $ 275,100**

Below is a white rhino (on the left) and a black rhino (on the right) at the Kruger National Park in South Africa. An evident number of rhinos are being killed in South Africa for their horns. Poachers kill the rhinos, take their horns and then they are sent to Vietnam and China. Vietnam takes the horns, they are then grounded up and used supposedly as a cancer cure, even though some experts say the horns have little to no value to the medicinal fields. As stated above, South Africa has more rhinos that any other country and that’s why people say they have been targeted by poachers. The population of rhinos in South Africa is now 22,000, or about 90 percent of all rhinos in Africa. According to the chart below, poaching is exceptionally higher in Kruger National Park than any other area; almost triple the amount from the next highest region.

 



**Define**

Poaching is the illegal taking of wild plants or animals; the law is concerned with the conservation and wildlife management laws. Violations of hunting laws and regulations are usually liable to be punished by the law. People are killing off rhinos for their horns. It is becoming more and more common and the existence of each breed of rhino is becoming rare. Most commonly, white rhinos are sold more than black rhinos. Black rhinos are more aggressive and less abundant than white. Rhino hunting costs a hunter a little more than $82,000 dollars per rhino. Once they kill the rhino or detach the horns for the rhino, each inch of the horn can be sold for about $2,800. Rhino horns are made mainly of the protein keratin; this is the main element found in hair, fingernails, and animal hooves. The horns of most animals don’t contain full keratin, which is opposite of rhino horns. Other animals’ horns have a lanky center covered by a thin layer of keratin, while rhino horns are keratin completely through. The amount of keratin is based on the rhino’s diet and location. People in different countries all over use the horns for different purposes. In Asia and India, the rhino horns became so popular and in demand that people were making large profits. Asia uses the horns as their top form of traditional medicine, where it is worth about $66,000 per kilo, which is more than the current price of gold. Asian buyers also believe that the rhino horn is a very powerful and beneficial aphrodisiac. In Vietnam, the horn is made into a powder that is supposed to care for fevers and cure cancer. However, it has already been stated that there is no evidence that it does so. According to a corporation that monitors illicit wildlife trade, China is trying to take part in the ban on trade of rhino parts. China used to be one of the major buyers. Indians purchase rhino horns in order to fashion them into horn daggers, which are in high demand.

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**Establish**

The problem with rhino poaching and hunting is growing more and more every year. There is obviously no easy fix for this issue, because if there were, it would already be in use. While the capture of rhinos in Kruger National Park and translocation of the animals by SANParks has helped a great deal to eliminate some of the illegal hunting and poaching going on, it has not stopped the problem. We believe that the reason for this has a great deal with the large expense surrounding 24-hour surveillance and security to cover such an extensive area. Another reason is that while many of the activities surrounding rhino hunting and poaching are illegal, they are still helping to stimulate the South African economy and adding to its’ revenues. In 2009, there was an estimated $6.9 million generated from tourist attractions surrounding rhino hunting alone. $4.8 million is the estimated amount brought in from hunters. While the profits of illegal acts of hunting and poaching are not calculated, we can gather that there is a large amount of money circulating throughout the South African economy from these acts.

In order to make a proposal of a solution to the current issues with rhino capture, hunting and poaching, it is important to choose one that will be cost efficient for SANParks. The organization is already having trouble with funding, and any solution that could be put into action will be undoubtedly costly. It is important that there be fundraising, whether by SANParks or through government funding in order to make any possible solutions feasible.

A problem with trying to eliminate illegal poaching and hunting is that the individuals engaging in these activities view it as their livelihood and main source of income. We feel that it would be important for SANParks to create new jobs in the implementation of any possible solutions, to give legal job opportunities to some of the South African people.

 **Collect**

SANParks is the biggest area for poaching. The Budget allocated in U.S. dollars show that $4,951,900 went to Kruger National Park's budget. This is a park dedicated to going about the hunting of rhino the correct way. They understand there's a demand for it so they are trying to attend to the poaching populations need. They allocated $275,100 to poaching, and $275,100 on infrastructure so poachers can have a legitimate enjoyable experience while hunting rhino for sport and not driving them to extinction. The Rhinos population in South Africa was very large due to the parks. In 2007 there were 15,000 white rhinos and 1,500 black rhinos. Between 2007 and 2010 there was a dramatic growth with there being 17,500 white rhinos and 4,200 black rhinos due to the breeding process SANParks had put in place.

SANParks focused on selling high-value species, which maximized income from wildlife sales. The two species sold were white rhinos from Kruger National Park and disease-free buffalos from other parks. They felt these very large animals would become a huge tourist attraction and would drive poachers to want to come to these parks to handle their hunting needs. The only condition required to be met when an animal was sold was that its’ removal could not negatively impact the populations from which it came. In 2009 up to 500 rhinos were sold alone in South Africa. Kruger National Park was apart of 252 of those transactions. On average the selling price for a white rhino was $30,000. The revenue that was generated from rhino sales alone in 2009 totaled $7,033,400. This is a very big business that generates large quantities of money just by satisfying people’s needs to hunt. At this point of success a corporation would know they're on to something.

The buyers of the live rhinos were dealers who specialized in wild game or private owners who bought directly from the SANParks. Black rhinos were more rare and much more aggressive than so white rhinos were sold more often. The black rhinos had the tendency to fight more and became a riskier investment than white rhinos. The white rhinos bred and coexisted much better than black rhinos. Due to conservation efforts to reestablish the black rhinos, they were moved from Kruger where they had been donated. This effort was established because they were trying to repopulate them in other countries where they had gone extinct. The park feels they played a vital role in the ecosystem so their existence is crucial. Kruger Game Capture Unit provided a lot of different services. They had private game owners, ranchers/breeders, parks, and private game owners. The private game owners served places such as private parks, the parks served private safaris, and private game owners had places like hunting businesses.

Selected operating expenses like rhino capture had lots of different ways of catching the rhinos and made the park lots of money. They had things like helicopters, transportation of rhino expenses, trucks, booms, capture teams and RFID microchips. Helicopter cost about $800 per hour. The transportation of a rhino was $300 per rhino and around $11,000 per year. Trucks were $300 per day, as well as the boom service. The capture team ranged from around $200 per hour or cost about $1,400 per day. The RFID microchip was the cheapest of these expenses costing $50 per rhino and $17 in unit cost.

It cost $82,400 per hunter for a regular rhino hunt. In revenues from tourist attraction, South Africa made an estimated $6.9 billion in 2009. From that 6.9 in tourist attraction, hunting accumulated about $4.8 billion, exactly 70%. The Selected Company Safari Expenses and Trip Details offered hunters with a variety of different things. The services offered; first-class rifle and bow hunting, ethical professional hunters, personal attention to clients, family and photographic tours, specialized and maintained vehicles, luxury accommodations, excellent cuisine and a dedicated staff.

Their customers were provided with different firearms and calibers ranging from rhino legal minimum .375 calibers and 3-9 x 40 variable-power telescope, ammunition recommended minimum of 40 full metal jacket/solids in addition to soft point bullets. Africa Sport Hunting Safaris handled all documentations. There is three sets of hunting clothing that are required. Poachers and tourist must have long pants, long-sleeve shirts, socks and underwear. They need hunting boots/shoes that are comfortable, casual/running shoes, sweater/warm jacket, and flip flops or sweat suit. The travel information required valid passports of course, while traveling outside the contrary it is always standard to have a passport on you. Their trophy handling is very professional and detailed. They had very experienced skinners and they handled all the skinning of animals as well as salted marked, and dried prior to being sent to a taxidermist.

**Identify**

Through various resources and much collaboration, we pulled together and came up with several possibilities to combat the threat of poachers taking rhino’s horns. The list of our responses to the situation is as follows:

* Stronger laws against poaching.
* Raising the defense of rhinos.
* Integrating hunting rhinos and rhino horns.
* Legalizing the collection of rhino horns.
* Destroying the demand of rhino horns.
* A combination of several of these points.

**Defend**

Of the options mentioned above, each one of these could be viable to reacting to the threat of poachers. The first, being do nothing isn’t a recommended action but it is always possible. The poachers will most likely continue and the rhinos will become extinct with time.

Option two would be to build stronger laws against poaching. Since these people who come in and poach the rhinos are definitely not run of the mill poachers but organized crime members who even get funding from human trafficking, prostitution, arms smuggling, and drug trafficking, there must be far stricter laws that will put these people in their place.

Option three involves raising security of the rhinos. The rhino’s presence bring in a good economy for Africa, having millions of dollars circulating around them through hunting, auctioning, ranchers, breeders, parks, and so on. What if they use any possible funding from the profit they receive from the positive activities that the rhinos bring to raise their defense. While they currently have $5.2 million invested in training police to catch poachers, adding more money, men and women onto the case could significantly increase the chances of them catching and sentencing poachers before they even catch sight of a rhino in the wild.

Option four, while unethical, could be a possible solution to the problem. Hunters are legally allowed to kill rhinos, so why not give them the choice to take the horn off of the rhinos that they kill? Hopefully this incentive will turn poachers into hunters and allow them to collect horns this way without completely endangering the species as a whole.

Option five could possibly end the problem of poaching. It follows up on the idea of hunters legally able to kill rhinos. If legalized, not as much money would have to be spent on the protection of rhinos while former poachers wouldn’t have to go to such great lengths to kill a single rhino. Though that wouldn’t mean that there are absolutely no restrictions on the amount of rhinos that could be killed; there would still have to be laws set in place where only a limited amount of rhinos could be killed, and that killing any more than you are allowed or killing without a license would lead to serious repercussions for anyone involved with the crime.

Option six being destroying the demand for rhino horns; we believe is a very strong case that should stop poaching in its tracks. Since demand for these horns in China are reported to be about $7,200 per pound in 2010, one can see how lucrative it would be to get as many horns as possible. A simple solution would be to education the Chinese people of the dangers this demand is causing to wildlife in Africa. If African government officials work together with Chinese government officials on the issue, it is very much possible to drive down the demand for rhino horns, which would lower the price of which they are worth, which will discourage poachers from committing the crime in the first place. Though there may be the possibility of black market still existing for these things, we still believe that attacking the problem at its source could be one of the best solutions to this problem in the long run.

Overall, we would recommend that a mixture of these points be brought together into a plan to defeat the poachers and save the already critically endangered rhinos of South Africa. The overall plan would be to first, neutralize the demand of rhino horns in China. As mentioned above, this should drive poaching down if the business is not lucrative enough that poachers would waste time and resources to go through. Second, if the demand goes low but doesn’t completely disappear; enforce severe laws in both South Africa and China that will attack anyone who poaches rhinos or anyone who owns rhino horn in China. This should extremely discourage the behavior and there should be a reduction in the amount of rhinos that die. The third tier to this plan is to heighten the security of the rhinos. While the respective governments work together to formulate laws to punish these people, strong bodyguards such as the army soldiers and officials should be in charge of protecting the rhinos. Considering these criminals are equipped with more sophisticated arms than regular officials could combat, the army should be enough to stop poachers in their tracks.

 **Evaluate**

SANParks worked to handle the problem of illegal hunting and poaching by using translocation of animals to help control the amount of rhinos and other species being illegally killed. While this has helped, it has not completely solved the problem at hand and the people at SANParks are still working to instate new solutions. Wildlife activists have accused SANParks of misusing the park and have said that the park is being used as nothing more than a private game breeder. The activists are worried that the park is allowing all of the rhinos hunted to fall into the hands of private game hunters.

SANParks is defending themselves and their decision to move animals into their park by Clause 55(2)(b) of the Protected Areas Act No. 57 of 2003, which in summary, simply states that the park may sell, exchange and donate anything within their park (including animals, plants and any other organism). SANParks is aiming to educate the public and wildlife activists that selling rhinos is for the greater good and that what they are doing is not a negative act.  **Conclusion**

Rhino capture is still a major concern because rhino poaching is still at an all time high. Because of excessive poaching rhinos are still be driven to the break of extinction, that is why the cause that SANParks started is so important. They started a business that can be monitored and policed, and insure the safety to the overall race of rhinos. The also give poachers the necessary protect against rhinos. With the rhinos size and speed it very well maybe one of the top animals to hunt. Rhinos are being killed in South Africa alone at the rate exceeding one a day. One of the main reasons rhinos are facing extinction is because "poachers are trying to reach the demand from Asia where powder rhino horn is used as medicine, and in the middle east rhino horn is valued for decoration." CNN also reports that a park owner suggested, but did not ac on, is to insert a poisoned rhino horn into the illegal trade so that end consumers would fall ill. That is the magnitude of the situation and these are the extremes that people are actually thinking about doing. While SANParks is trying to provide legal ways of going about hunting rhinos, South Africa is still losing the fight due to people performing their own private businesses and are illegally killing rhinos.

"Exact prices are hard to gauge but some say a kilogram of rhino horn is more valuable than gold, though that is disputed by others looking into the murky black market." With a demand like this it's hard to stop a lot of outsiders from conducting their own business. That quote itself shows the magnitude of the situation. Back when there was the gold rush you couldn’t tell a person they couldn't go digging for gold because that person saw it as the only way to improve their life and create a better way of living for their families. If that same attitude is being applied to the situation going on with rhinos, you can understand how far a person may go in order to get these rhino even if it does drive them into extinction. South Africa can use a lot of help in this whole endeavor. Possibly the United States and other world powers should interfere and help with the cause. If this was to happen, be it they give South Africa money so that they can better police the situation themselves or we send troops to South Africa over a period of times to do the policing. It is an event that can change the face of the world so it should become everyone’s problem and not just South Africa’s.

There is a possibility that the tourist operations at Kruger National Park will decrease due to the extinction of the rhino. Some people who go on these tours want to see the great beast of the world. With the rhinos extinct, that desire to go to Kruger National Park may cease to exist. The whole tourist operation was bringing in a lot of money and with that aspect of the money on decline, they might risk having to close down the whole operation.