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Local communities as rhinoceros ranchers
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CHAPTER 10

Local communities as rhinoceros ranchers – J.G. du Toit

Case Study 1 – Khama Rhinoceros Sanctuary in Botswana.

The Khama Rhinoceros Sanctuary Trust (KRST) was established in 1992. This is a community-based organisation, whose main aim is to save rhinoceros and to bring about economic benefits for locals, through tourism and the sustainable use of the available natural resources. It covers an area of approximately 4300 ha.

The main objectives of the Trust are to:

- Establish, develop and manage the Khama Rhinoceros Sanctuary on behalf of the community.
- Protect the environment within the Sanctuary and to protect and nurture the endangered rhinoceros and all other fauna and flora.
- Establish, maintain and preserve the biodiversity within the Sanctuary.
- Generate revenue for the local community from tourism and other uses of the Sanctuary's Botswana and to the general public.

The sanctuary started with only four rhinoceroses, which were translocated from the northern parts of Botswana during 1993. In total, 14 rhinoceroses were translocated to the sanctuary between 1993 and 1999. Some of the rhinoceroses were donated by and translocated from Pilanesberg by the North West Parks Board (South Africa) in 1995 and during 1999. Currently there are 56 rhinoceroses in Botswana, with 27 of them being at KRST (Sebele, 2010).



Benefits for the Community (Sebele, 2010):

Employment for local communities

KRST employs 26 permanent staff members, of whom 23 come from the three member villages of Serowe, Paje and Mabeleapudi and the remaining three come from other parts of the country.

Contribution to conservation

Unlike other CBNRM (Community-Based Natural Resource Management) projects where natural resources are found within the locality, the rhinoceroses at KRST were not from the local area. Results from an interview held with the Chief Warden indicate that rhinoceroses are an endangered species in Botswana, with their numbers having been in decline for a long period of time in the country. The project has, therefore, been excellent in introducing the rhinoceros species in an area where they had not existed before. The CBNRM project is in this regard important for conserving the few remaining species in Botswana.

Contribution to tourism

Wildlife tourism is synonymous with the North West District of Botswana, especially the Okavango Delta. This form of tourism is still in its infancy in the Central District and KRST has exposed the district to tourism activities. Moreover, focus group discussions with elders in the village indicate that parents now spend less money on school trips, as children no longer have to travel longer distances to the popular Okavango Delta in the Ngamiland District.

Sourcing of local goods and services

These services include: welding, thatching grass, roofing poles, petrol and diesel from a local filling station and food. Furthermore, arts and crafts are obtained from a San project in a neighbouring village (although not part of KRST). The sourcing of locally available goods and services is very important for this community as opportunities are created for small-scale, informal sector operators, who otherwise would not have access to the mainstream tourism industry, which is mostly foreign dominated.

Problems experienced with the KRST project:

Lack of community involvement and participation

Interviews with role players stated that the community is not involved in the running of KRST. At the initial stages of the project, consultations through kgotla meetings were held to get the locals' permission to use their tribal/communal land for the conservation of the rhinoceros. Results indicate kgotla meetings are now held once a year to give a report back and every two years to elect new board members. A kgotla is a traditional meeting place for Tswana communities.

This is a place where communities discuss issues that are of concern to them. It may also be used as a place where disputes, differences and conflicts within the community are discussed and settled. The kgotla meeting is usually led by a Kgosi (chief) with the help of his advisors. This lack of interaction means the community's voice is seldom heard. The implication is that decisions made may not represent the wishes of the community. Therefore, although on

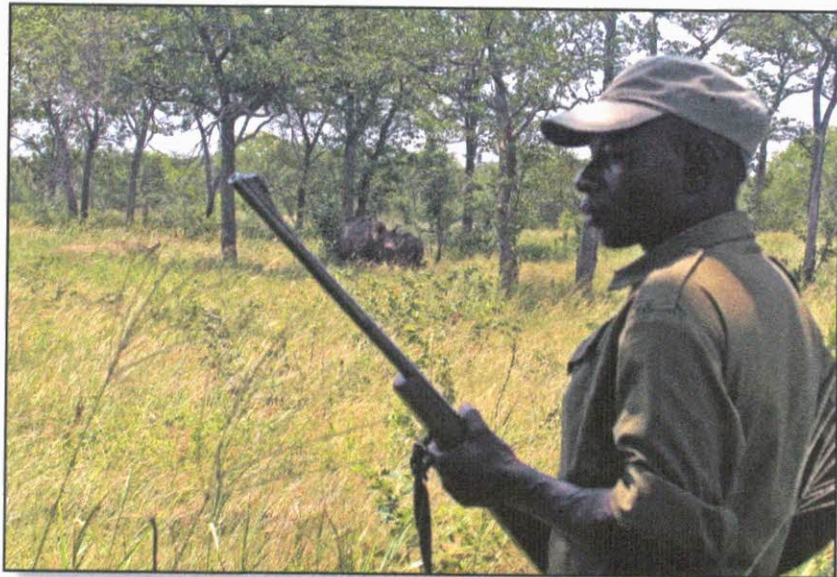
paper the community is said to own the project, their participation is minimal, hence it can be argued that the project is not theirs.

Case Study 2 – Mosi-oa-Tunya National Park in Zambia.

The history of the white rhinoceros introduction programme in the Mosi-oa-Tunya National Park dates back to 1964 when the first breeding herd of three animals was introduced from South Africa. The programme lasted for about 22 years until the last white rhinoceros was poached with the aid of a wildlife official during 1986. The Zambian Government initiated the second introduction programme during 1994 when six animals were translocated to Mosi-oa-Tunya National Park from South Africa. Only two animals from this herd are surviving. Again one of these animals was poached with only one animal surviving.

The major causes of the failure in both cases are poaching, nutritional stress and reproduction failure. The whole problem is compounded by the lack of *political will* and *funding inertia* within the national wildlife agency of the Zambian Wildlife Authority (ZAWA). Since its inception, the white rhinoceros introduction programme has continued without a Conservation Plan to guide the ZAWA on the critical areas of the management of the species – biological and security issues. Inadequate feed, demotivated staff, patrol personnel, communication equipment and transport, generally characterize the whole programme. In addition capacity building has generally been lacking (Siamudaala & Chansa, 2005).

However, recently four more animals were introduced from South African and protected by armed guards 24 hours a day. The animals have radio collars fitted to find them easily on a daily basis. Since the introduction, three heifer calves have been born and the population totals eight animals. This underlines the concept that if there is a political will the ranching and conservation of white rhinoceros can be done in Zambia.

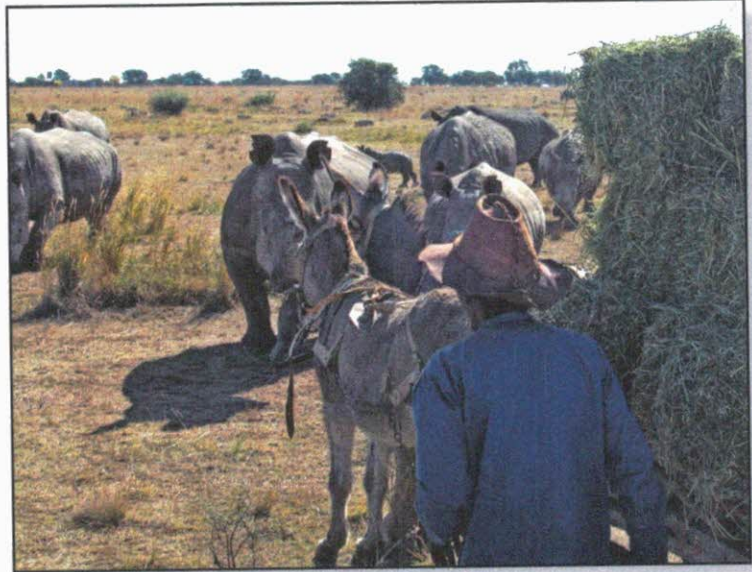


A game guard protecting white rhinoceroses in Mosi-oa-Tunya National Park, Zambia

Communities as rhinoceros ranchers

There are about 100 chiefs in Zambia and if each chief could ranch with 15 animals the total population in Zambia can be 1500 animals of which communities may benefit from. Theoretically 1% of the animals will be old and can be hunted on private game ranches in

Zambia bringing the annual income to *ZAR 4 million* ($1\% \times 1600 = 16 \times \text{ZAR } 250\,000$). If this quota can be linked to a Big Five hunt the communities can offer 16 of these hunts per annum. The live sale of animals can be calculated at the same value as the hunting value, *ZAR 4 million*. The sale of horn will become a reality in the near future. About a third of the population can be dehorned every year, producing an average of two kg of horn per animal at an average price of ZAR 100 000 per kg. This will result in ZAR 100 million ($500 \times 2 \times \text{ZAR } 100\,000$). The income for communities from rhinoceros ranching alone will be at least ZAR 108 million per annum. More than 95% of this income is without killing the animals. A member of a community will not cut down a mango or marula tree for firewood, why will he kill a rhinoceros illegally if he gets the benefit?



SWOT ANALYSIS FOR COMMUNITIES RANCHING WITH RHINOCEROSSES

Strengths

Work opportunities

The Khama Rhinoceros Sanctuary Trust employs 26 permanent staff members. These members must be trained for tourism as well as conservation. With the rhinoceros ranching system proposed the scouts must be trained to protect the animals on a 24-hour basis. The skills and infrastructure to cater for high-profile tourism is not necessary. The need is 18 scouts to give permanent protection to the animals.

Maintenance costs are low

There are no expensive costs for tourism like lodges, marketing, vehicles and labour. The main costs will be the patrolling of fences, scouts for anti-poaching and the water infrastructure.

Highly skilled staff not needed

The maintenance costs for fences and water does not need skilled staff as compared to running a lodge.

Income high for the area used

A high income per hectare will be generated from a ranching model for rhinoceroses, especially when the horn can be sold legally.

Income from rhinoceroses is sustainable

With the sale of live animals to repopulate new ranches and the sale of horn, the rhinoceros will be kept alive. This method of ranching can be sustainable with a positive growth in the rhinoceros populations for Africa.

Weaknesses*Start-up capital will be needed*

The stocking, fencing, capturing of animals and the establishing of reliable waterpoints can be expensive and start-up capital will be needed.

History of poor management of rhinoceros

As explained above, Zambia has a poor history of conserving white rhinoceroses. The white rhinoceros has twice become extinct in Botswana, Mozambique and Zambia in the past. However, the current situation illustrates that with the right political will, the animals can be ranched effectively.

Biodiversity

The white rhinoceros is not really indigenous to Zambia. However, it can be used as a ranch animal because from a puristic point of view, cattle can also be seen as an exotic species.

Opportunities*Show-case that it can work*

This ranching model can be a show case in Africa to prove that the Silingombe ranching model can be achieved to assist poor communities.

Other income out of antelope

The Silingombe ranching model also includes antelope that can generate an income.

Offering Big Five hunts

Zambia will be one of a few countries in Africa that can successfully offer “Big Five Hunts”.

Threats*Poaching*

Poaching is a problem, but Mosi-oa-Tunya National Park proved to be a success story.

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