

Nepal's rhino success story - lessons for Africa?

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MOST PEOPLE'S IMAGE of Nepal is of high rugged mountains, and only a few realize that there is a lowland area in southern Nepal bordering India which is home to nearly 500 greater one-horned rhinos (commonly known as Indian rhinos). His Majesty, the King of Nepal has taken a great interest in conserving his country's rhinos, and since the late 1960s their numbers have more than quadrupled. Despite being one of the poorest countries in the world, the Nepalese have managed the rhinos almost entirely by themselves with very little foreign expertise or external funding assistance, a lesson to be learned, perhaps, in Africa.

From a population of about 800 animals in 1950, after the overthrow of the feudal Rana regime in 1951, their numbers were whittled down by poaching, land clearance and human settlement to perhaps a mere 100 rhinos by 1966. His Majesty's Government then gained control of the country and by 1973 had gazetted Chitwan National Park to safeguard the remaining rhinos. A special rhino patrol unit was established under the Forest Department that year to protect rhinos wandering outside the Park; and in 1976 the Nepali Royal Army was sent to patrol inside the Park. Nepal is the only country in the world to have some of its army permanently stationed within most of its parks, and this is surely one of the reasons for the country's conservation success. Poaching thus declined dramatically and not a single rhino was illegally killed until 1984. As poaching pressure once more resumed, his Majesty's Government established a whole battalion of 800 men to guard Royal Chitwan National Park. These soldiers, plus a few patrolling Park staff, have enabled there

to be almost one man per square kilometre on duty inside the Park - a significant manpower which has proved effective.

A poaching gang is usually organized by a local leader who provides the guns and ammunition, and since 1992, automatic rifles have been most commonly used. Other rhino poaching techniques in Nepal include deep rectangular

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pits on regular rhino pathways in which the animal falls, as well as wire nooses and heavy spears attached in trees again over a rhino path, and also poisoning, whereby pumpkins and maize growing on the edge of the Park are laced with poison in an area visited by rhinos.

Despite the high concentration of rhinos and the many poaching attempts, from 1984 to the end of 1993, only 4.7 rhinos have been poached per year in and around the Park. This is a great achievement considering the very high price offered to a gang of local, poverty stricken poachers: from around \$1,000 to \$2,000 for an average 700 gramme horn in 1993. This is about ten times more than a poaching gang is offered in Kenya.

The most cost-effective anti-poaching strategy the Parks and Forest Departments have co-ordinated over recent years has been an intelligence system whereby informers in villages around the Park are paid for information leading to the arrest

of poachers. Tika Ram Adhikari, Assistant Warden, stated in an interview in January 1994, 'If I were given \$4,000 each year, I could catch almost all the poachers'. The UK-based International Trust for Nature Conservation (ITNC) has given about \$550 cash a year since 1991 to pay for information, a vital assistance since the Parks Department would have great difficulty accounting for this money. Due entirely to ITNC support, eight rhino poachers and eight tiger poachers were caught in 1991, three tiger poachers in 1992, and in 1993, with additional funding of nearly \$3,000, a record 37 rhino poachers and three tiger poachers were apprehended and await trial. The effectiveness of information-gathering cannot be under-estimated. This confirms Richard Bell's work in southern Africa which has shown that one day of investigations produces as many arrests as 28 days of patrolling in the field. Some countries with rhinos in southern Africa are now involved in this form of anti-poaching, which has been especially effective in Namibia; Kenya has also had success with intelligence. More countries should follow their example.

Another major way the Nepalese have protected their rhinos has been by showing sympathy and support to the villagers around Royal Chitwan National Park. The understanding of the locals is becoming increasingly important as human (and rhino) numbers expand around the Park; 7% of the rhino population, at any one time, is outside the Park creating serious damage to crops, and occasionally rhinos take human lives. Since 1976, an innovative system to gain local support has been adopted by the Park officials: that of permitting villagers to enter

the Park for two weeks every January to collect grass and reeds, essential building materials. This benefit is worth \$500,000 a year to the villagers and is highly popular; 65,254 individuals received a permit in 1993 to enter the Park. Such legal benefits are rare in Africa. In Malawi, however, local people are allowed to tend and harvest beehives inside conservation areas. Should more park wardens in Africa think of allowing neighbouring farmers into the parks in a controlled manner to harvest certain resources for local consumption?

Royal Chitwan National Park provides another significant benefit. After officials have removed the horn, hooves and skin from a dead rhino to be kept in stores, they turn a blind eye to locals helping themselves to the blood, urine, meat and other products of the rhino carcasses found outside the Park. These products are prized in Nepal for medicinal purposes, and would be impossible for the villagers to obtain normally, except by stealing.

Tourism is another benefit, directly employing 650 people in lodges and camps, and indirectly employing thousands of others. In 1992, 55,335 foreign visitors came to Royal Chitwan National Park. Like Kenya, Nepal greatly encourages foreign tourism.

There are further plans to increase benefits to villagers around Royal Chitwan National Park through public education and by giving a sizeable amount of the Park's revenue to the local community for development projects, instead of to the Central Treasury. Park staff and villagers are planning to establish an 'impact zone' around the Park. Presently illegal livestock grazing, firewood collection and fodder cutting are prevalent within Royal Chitwan National Park, despite the large number of armed guards and the substantial fines given. Other resources obtained illegally from the Park include edible wild plants, medicinal herbs, stems for brooms, canes for baskets, fish and birds eggs. An impact zone, where trees could be planted for firewood and other resources made available, would greatly reduce the need for trespassing within the Park. About 66% of the Park's neighbours are landless, yet on average a household owns 5.5 domestic mammals. Such assistance is thus vital. Further plans are to educate the villagers to shift from

free-grazing of livestock to stall feeding, and to use nutritious rice straw as cattle feed as opposed to it being an agricultural waste. Also, improved energy-saving stoves and bio-gas technology based on cattle dung have great potential for success in the Chitwan area. Since 1977, Park staff have organized an annual gathering of local leaders for a two-day 'co-ordination meeting' where participants are encouraged to discuss development issues as well as their grievances and problems. Thanks to the forward-thinking Park staff, who intend to organize the above improvements for the villagers, it is hoped that the local people will increasingly support the Park and its rhinos, rather than feel negative towards them and harbour poachers.

For such a poor country Royal Chitwan National Park has an extremely large budget. The Park's expenditure and its earnings, however, have been very similar during the last few years. In 1993/4 the total budget for Royal Chitwan National Park (an area of 932 square kilometres) worked out at \$867 per square kilometre. This is far higher than for any park in East Africa. The Park's revenue, however, mainly from tourism, in 1992/3 was \$959 per square kilometre, mostly due to the high entrance fees charged to foreigners. Royal Chitwan National Park probably produces more income than any other park in Asia with rhinos which helps to justify its large and effective expenditure. Several countries in southern Africa could follow Nepal's example and charge higher fees to foreigners, as is the case now in East Africa.

The year 1992, however, proved an exception concerning the control of rhino poaching in Nepal when 18 rhinos were illegally killed in and around Royal Chitwan National Park, the only year since 1973 that fewer rhinos died of natural causes than from illegal killing. The main reason for this was poor leadership at the time causing a drop in morale and a decrease in motivation of the patrollers in and around the Park. This provides a useful lesson for the future in Nepal: the realization of the importance of strong and effective leadership as to whether rhino numbers actually increase or decrease. This strategy is also applicable to rhino conservation in East Africa. Strong leadership in Kenya has resulted in not a single black or white rhino poached, as

far as is known, since September 1991.

Nepal's successful rhino conservation efforts in Royal Chitwan National Park enabled his Majesty's Government to establish a second rhino population in Royal Bardia National Park in south-west Nepal. From 1986 to 1991, 38 rhinos were brought to this Park, an area of similar size and habitat to Chitwan. By 1994, the net increase in rhino numbers, however, was only one, with eight rhinos having been poached. The intelligence system needs to be stepped up around the Park to prevent further poaching losses from this small, but dispersed, population. In addition, the Nepalese are the first to agree that a positive attitude of the nearby villagers, by providing them with greater benefits, will ultimately determine the future of the rhinos.

Several significant lessons can be learned from Nepal's successful rhino conservation strategies by Africa's park managers. These include the importance of commitment and good leadership, adequate numbers of well-equipped field staff, an effective intelligence system, and considerable benefits for the people around parks. Nepal is a country which deserves significant praise for its efforts and whose successful rhino conservation techniques should be examined, and where appropriate, emulated by conservationists in Africa. ●

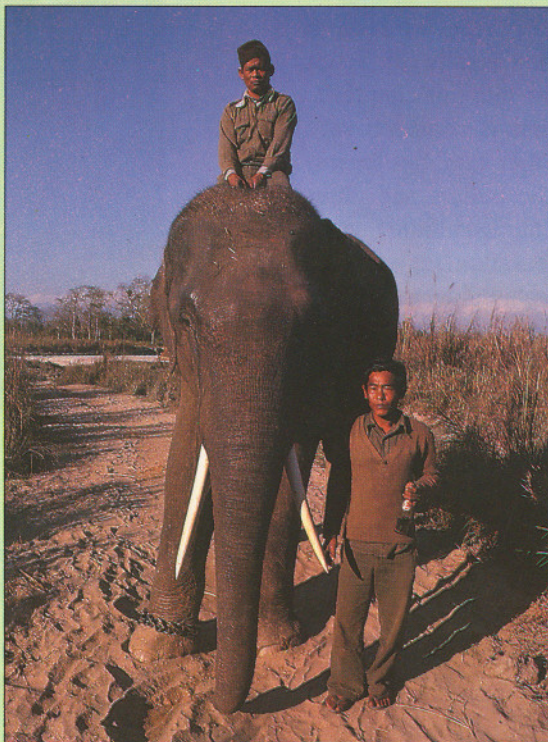
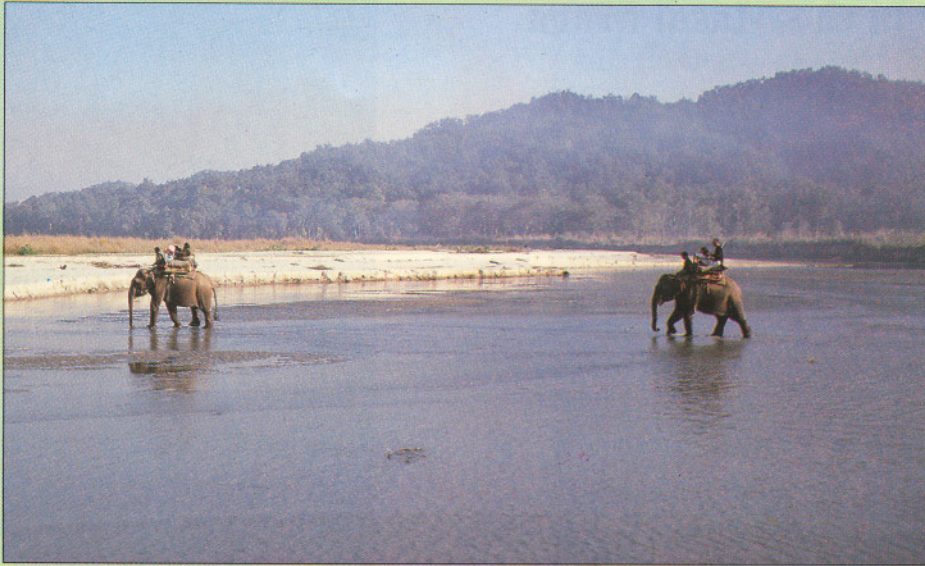
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Opposite page.

Top; There are few roads in Royal Chitwan National Park because they flood during the monsoon, so tourists are usually transported around the Park on domesticated elephants. In 1994 foreign tourists paid about \$13 each per hour for an elephant ride on a government-owned elephant in Royal Chitwan National Park.

Centre; Rhino urine is collected from the ground by elephant keepers in Royal Chitwan National Park to consume for chest congestion.

Bottom; Rhinos prefer the long grass of Chitwan to the forested areas.



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