An Interview with Dr. Chris Brown by Gail Potgieter.

Recently, the Chinese government attempted to partly lift the ban on rhino horn use in Traditional Chinese Medicine (see this New York Times article). The ban on endangered wildlife in Chinese medicines has never been enforced with any commitment or conviction by the Chinese authorities. The fact that these products, like pangolin scales and many others, have no proven medicinal properties does not seem to deter the growing number of users who presumably get some placebo effect enhanced by the conferred status of being able to afford elitist medication.

Chinese traditional medicine is said to be a US\$ 100 billion industry. The Chinese government has identified this as a growth industry, to compete worldwide with Western scientific approaches to medicine – particularly in Africa. If this is the case, we can expect the demand for such Chinese traditional medicines to grow, and pressures on wildlife to similarly grow.

Within this context, Namibia and other African countries must carefully consider their response to the Chinese stance. Some critical questions must be asked before it is too late for our rhino population. Dr. Chris Brown, CEO of the Namibian Chamber of the Environment, believes that legalising the trade in rhino horn could provide a way forward for Namibia and its neighbours to resolve the current poaching crisis and create real incentives for rhino conservation in future. However, such a proposal often provokes serious questions about if it could work, and what the future of rhinos would be under the legal trade scenario. In this interview, I put some of the critical questions to Dr. Brown about legalising the trade and how, in his view, it would contribute to rhino conservation.

Question: Why do you think that legalising the trade in rhino horn is a better option than continuing to improve rhino security in Africa and clamp down on the trade in Asia?

Answer: At the moment, demand for rhino horn is increasing, leading to higher prices, more professional and ruthless poaching gangs, and greater danger to our anti-poaching rangers. I do not believe that we will reverse this trend by simply gearing up and doing more of the same. For those who think this continuing arms race over illegal rhino horn will provide a solution after so many years of not succeeding, I refer them to a quote attributed to Albert Einstein: "Insanity is doing the same thing over and over again and expecting different results".

Question: How would Namibia supply enough horn for sustainable legal trade, and how do you envisage a transparent monitoring and auditing system would work?

Answer: A national dehorning of all rhinos would take place in national parks (with the exception of those in the immediate vicinity of tourism facilities such as Okaukuejo, Halali and Namutoni in Etosha National Park), and on communal and freehold land, on a two to three year cycle. Each removed horn, as well as all stock-piled horns, would be micro-chipped, a DNA sample taken and a passport issued. Horns would be strategically released for sale to pre-approved buyers under a de Beers type marketing system. The passport would accompany the horn throughout

its life. A small royalty would be taken on each sale to cover the cost of dehorning (done by nationally approved teams), DNA analysis, storage, management and sales. The bulk of the horn value would revert to the owner or custodian of the rhinos from whence the horn came, i.e. to the national parks, communal conservancies, private owners, or MET for custodian rhinos.

Question: At the moment, trade in rhino horn is banned by the Convention for International Trade in Endangered Species (CITES). How would Namibia start trading rhino horn with this ban in place?

Answer: Ideally Namibia's trade would be under CITES approval with international monitoring and audit procedures in place. Alternatively, if blocked by the CITES member states, it should trade despite CITES, and then transparent monitoring and auditing becomes even more imperative.

Question: At the moment, all black rhinos in Namibia belong to the state, whilst white rhinos can belong to private owners. How would those living with and/or owning rhinos (including private land owners and people in communal conservancies) see the benefit of the rhino horn trade?

Answer: Current approaches to black rhino ownership should be relaxed to allow private and communal ownership, as is the situation with white rhino. Freeing up legal wildlife markets inevitably delivers conservation dividends. Furthermore, custodians and owners of land should be encouraged to expand their wildlife operations to include both species of rhinos (where habitat is suitable), and land under livestock should be encouraged to expand to include wildlife with rhinos. In reality, no real encouragement would be needed, as market forces would provide all the necessary incentives. To facilitate the process, financial support should be offered, e.g. AgriBank could expand its loan facility to allow farmers to invest in rhinos and other wildlife under approved business and management plans that include adequate levels of wildlife expertise.

Question: If rhino horn sales were legalised, would the rhino owners/custodians be the only beneficiaries, or do you forsee a broader economic impact for Namibia?

Answer: Land under wildlife with rhinos and with an international trade in rhino horn in place would generate far greater returns per hectare than any other form of land use, short of finding a diamond-rich Kimberlite pipe on your land (the diamond resource would be depleted over time, but the rhino horn resource would grow). I have estimated that an international trade in rhino horn would contribute close to N\$2 billion per year to the Namibian economy, and this would grow as rhino populations expanded. Tax revenue to the state would be significant. A legal trade in rhino horn would help enable land reform, create jobs, address rural poverty, help adapt to and mitigate climate change, and mitigate many other challenges. In short, there is no other natural renewable resource that comes close to the value of rhino horn that would prosper in the semi-arid and dry sub-humid regions of Namibia and Africa.

Question: This all sounds very good from an economic point of view, but will it have a substantial benefit in terms of rhino conservation – particularly with regards to reducing poaching and illegal trade?

Answer: Dehorning of the national rhino herd would significantly reduce the incentive to poach – the risk-to-reward ratio would be heavily skewed towards high risk and low reward, and the markets would simultaneously be well supplied with legal horn. Some people have said that there may be an increase in rhino calf mortality in areas with lions and spotted hyaenas if rhino mothers don't have horns. The data is equivocal. Based on limited sample sizes it is not statistically confirmed that calf losses are higher to mothers that have been dehorned. And even if the losses were somewhat higher, this would be largely insignificant against poaching losses of adult animals.

Legalising the rhino horn trade would bring many buyers into the open, where their businesses would be legitimised. Businesses far prefer to be legal, where business terms are well understood, and rules are clear. They would be unlikely to jeopardise their legal standing by dealing in "blood rhino horn". And DNA sampling would quickly reveal illegal horn on the market. Legal dealers would be inclined to give information to law enforcement on illegal dealers to reduce competition.

Question: The idea of legalising the trade in animal parts inevitably brings up the question of trading in other endangered species – like tigers and lions for their bones, and elephants for their tusks. How do you feel about trading those animal parts?

Answer: The situation varies from species to species. Trade and market forces under specific circumstances can contribute significantly to the conservation status of many species and to achieving desired conservation outcomes. Trade and markets do not work for all and they do not work under all circumstances. Only in cases where markets can promote the conservation status of wildlife, are they worth pursuing. Species that are typically unsuited to market forces are slow-breeding, occur at low density and are difficult to monitor and manage. Examples would include pangolins, large birds of prey and some marine mammals. Circumstances that would be unsuitable for market forces to deliver good conservation outcomes are where rights, responsibility and accountability over wildlife have not been devolved to the appropriate level of management by means of policy and legislation, where institutional arrangements to administer and manage the resources are not adequate, and where there is a weak regulatory framework. It is important to note that these operational conditions do not need to be perfect – they need to be sufficient to deliver conservation benefits and have a positive trajectory over time.

We need to clearly differentiate between the tiger and lion bone industry and that of rhino horn. Rhino horn is a renewable resource. It can be harvested without harm to the rhino - the horn simply regrows. While this is happening, rhinos fulfil their ecological role in the environment, breed and, through their huge value, safeguard landscapes under natural vegetation and provide collateral protection to other indigenous biodiversity. And if this initiative is strategically linked to incentives for open landscapes, it could turn around the harmful game fencing mania we currently face, where the landscape is fragmented and wildlife populations become increasingly isolated. Indeed, the value of rhinos and their horn could be the

economic driver for rewilding much of Africa. Africa could then really build on its global comparative advantage – its wildlife – as a core plank for long-term development.

By contrast, there is no conservation value to be had from the tiger and lion bone industry. Lion farming, in small enclosures, adds no value to lion conservation. It is an unpleasant, corrupt industry with huge animal welfare issues. South Africa has done itself severe reputational damage by its engagement in the lion bone industry and its legalised sales quota of lion bones to Asia. Namibia should steer well clear of any such trade, with severe penalties for transgressors.

A trade in ivory, by contrast, would have conservation benefits. Ivory derived from natural mortalities and from the legal management of elephant populations would help offset the cost of living with elephants, on both communal and freehold land. However, exporting raw ivory would be to lose much of the potential value. A local ivory carving and manufacturing industry would add considerable value to this natural product. In addition, the production of elephant leather and use of elephant hair would increase the value of elephants on farmlands and open up areas to elephants where they are currently not wanted. This would reduce conflicts and lead to an increased population over a larger range – all desired conservation outcomes.

Question: You mention the benefits of farming rhinos in extensive ecosystems, which provides an economic incentive for conserving large landscapes; however, one could produce more horn per year if the rhinos are kept at high densities under intensive management conditions (i.e. in captivity). What incentives do you think are needed to ensure that rhinos are kept as part of large, natural ecosystems, rather than as captive farm animals?

Answer: I would make it a condition of black rhino ownership that they could only be acquired, held and sold on if they were kept in large open systems. This would apply to black rhino ownership into the future and would be a permit requirement. Second, large open systems offer both conservation and economic benefits to the owners and custodians. In addition to harvesting of rhino horn, such systems would support a full suite of wildlife species around which various tourism products could be developed. They also allow sustainable wildlife harvesting for meat and trophies, and live sale of surplus high value species. This provides a diversified set of economic activities.

Concluding remarks: I believe that the time is right for Namibia, preferably in partnership with neighbouring countries, to take some bold steps regarding rhino horn and rhino management, for the purpose of long-term rhino conservation. The demand for rhino horn will grow. We can grow the supply. I believe we can do it in a way that protects, conserves and grows our rhino populations while harnessing the economic opportunities thus created and realising a suite of other conservation and socio-economic benefits. Namibia would then be "optimising its global comparative competitive advantages" as we are challenged to do by Vision 2030. Not to do so would have us miss huge economic opportunities while we witnessed the inevitable decline of rhinos, accompanied by a "rhino war" of attrition where everyone would be the loser.

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