

## **REGULATING THE RHINO HORN TRADE: ECONOMIC CONSIDERATIONS AND IMPLICATIONS FOR POLICY**

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Rhino horn has a long historical precedent of use in various Asian cultures for both ornamental and medicinal purposes. A surge of demand in the early 1970's for the making of ornamental dagger handles was followed by the Convention on International Trade in Endangered Species (CITES) Appendix I listing of all rhino species in the mid-1970s, effectively banning all international trade in rhino horn. This was followed by a dramatic rise in the price of horn, which fuelled rampant poaching throughout most African range states until the early 1990s. At that time, the demand for rhino horn appeared to have abated somewhat and the ban was assumed to have finally worked. More recent experience demonstrates that was not the case.

Michael 'T Sas Rolfes started analysing the economic incentives for rhino conservation in 1989 by focussing on the role of the private sector. Evidence emerged that private owners would be motivated to act in the interests of conservation under conditions of legally defensible private property rights, market pricing and open markets. The key to conserving rhinos is to make them more valuable alive than dead to the people who actually control their destiny! His 1993 MSc thesis examined optimal harvesting of rhinos and rhino horn and concluded that under a legal trading regime, society as a whole would invest more in live rhinos than under a trade ban. In 1994, Michael led a detailed study for WWF / TRAFFIC on the world trade in rhino horn. The study, which was not published at the time, examined other illegal markets with similar characteristics and drew several conclusions:

By far the most effective deterrent for poaching is early detection of poaching intrusions before rhinos are actually killed. If the probability of detection is low, all subsequent measures (arrest, conviction, punishment) act as weak disincentives for criminals. The strong and persistent underlying demand for rhino horn also shows limited sensitivity to changes in price (the technical term for this is "price-inelastic demand"). This is a characteristic shared by products such as alcohol, tobacco and certain illegal drugs. Experience has shown that banning such products is ineffective, if not counterproductive, as it simply drives up prices and creates attractive profit opportunities for professional crime syndicates. Enforcement efforts typically fail as these syndicates co-opt corrupt members of government to work with them.

Intensifying enforcement, closing legal loopholes (such as the recent fake Vietnamese trophy hunts in South Africa) and destroying stockpiles of horn are all actions that simply restrict the supply of horn to the market and drive up the price, thereby providing increased incentives to poachers and illegal traders. The CITES ban on the rhino horn trade does not appear to be enforceable. Legal trade may be a better option, as the provision of a continuing sustainable supply to the market would eliminate speculative demand and prices would drop, while the proceeds from legal trade could be re-invested into conservation. However, legal trade would only reduce, not eliminate, incentives to poach, and continued rhino security will always be necessary.

The most effective way to conserve rhinos is most likely through a combination of three factors: providing an increased and sustainable supply of horn to the market, re-investing the proceeds of sales into field protection and other deterrent measures such as dehorning. If the underlying demand for rhino horn persists, as seems likely, the restrictive CITES approach to rhino conservation will probably drive the rhino ever closer to extinction in the wild.