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## **GUEST EDITORIAL**

## What should drive the idea of conservation: emotions or economics?

Towards the end of June 2015, along the borders of the Hwange National Park in Zimbabwe, a lion named Cecil was hit by an arrow shot by Dr Walter Palmer, a rich US dentist and a habitual wild-game hunter. Not satisfied merely by injuring the lion, the dentist tracked it incessantly for almost the next 40 h, and on 1 July 2015, he shot it down with his rifle. The news of this barbaric killing of 'Cecil the lion', triggered a great controversy all over the world regarding the philosophy and policies underlying the present-day conservation strategies (Nelson et al., Conserv. Lett., 2016, 9, 302-306). The event received prime coverage in the global media of all types (http://www.nytimes.com/2015/07/30/us/cecil-the-lionwalter-palmer.html). While the brutal murder of the lion received condemnation from several corners, surprisingly, the act was strongly supported by a large group of conservationists and academicians. The heated debates that followed stirred up a hornet's nest even in unrelated sections: several airlines brought restrictions on the transportation of hunted trophies; an US conservation organization added two species of lions to the endangered list; the US legal system revised laws on the import of game hunts and several questions were raised on the policies of conservation (Wikipedia: Killing of Cecil the lion).

The reason why this barbaric event kicked-off the controversy is not because a lion was killed. For a long time, lion hunting has been a regular feature in the park; about 40 lions are being hunted down every year since 2008. Rather, the sensation arose because 'Cecil the lion' (named after Cecil Rhodes, the Prime Minister of South Africa), was a celebrity in the Hwange Park among the tourists, park managers and even the ethologists who had radio-collared it for studying its behaviour. Cecil was well known for its majestic, 'real king of the forest' posture and its fearless walk across the safari roads even amidst safari vehicles. It had become a mascot for promoting tourism in the park. Tourists proudly carried back memories of Cecil's fiery postures and its sighting from close proximities. Obviously, the killing of Cecil, the hero, had left as great an impact as the murder of a famous Hollywood celebrity would have!

Also, the reason for the controversy was not because this lion was 'poached' by a rich foreigner from a capitalistic country. On the contrary, the controversy gathered steam precisely because the dentist had the official permission to hunt and collect his 'trophy'. He had bought his license to hunt by paying a large amount of money (about US\$ 50,000) to the contractor who in turn held the permit to promote such trophy hunting! In other words, the event attracted the attention of millions world over because a celebrity lion with a big fan following was killed by a 'James Bond' with a licence to kill!

Hwange National Park administration was generating funds for conservation by promoting 'trophy hunting' as an entertainment enterprise. A limited set of licenses was being sold at a very high price to those who could afford it and the funds thus raised were being utilized for conservation programmes in the park. With the killing of Cecil, debate emanated on the simple but obvious question: '*Can we kill animals for conservation*?'. This question has two angles – one economic and the other emotional. Obviously, both these lead to diabolically opposite views on the purpose, means and ends of killing for conservation.

First to the economic angle: The economic policy relies on the canon that the killing of few individuals could pave the way for conservation of the entire population of lions in the park. The policy is based on the assumption that the benefits accrued by conservation of the entire lion population would outweigh the cost of killing a few individuals. This canon is obviously based on the 'economic view' of life in general, and of biodiversity in particular a typically capitalistic western view that is most predominant in shaping the entire range of strategies and policies of conservation promoted by the present-day science. In fact, Cecil's episode clearly captures the essence of the economic dictum guiding conservation that promoted wildlife management as 'the art of making land produce sustained annual crops of wild game for recreational use' (Leopold, Game Management, Charles Scribner's Sons, New York, 1933) – a principle that treats animals as 'crops' to be cultivated and harvested for human use!

Now to the emotional and ethical angle: Following the death of Cecil, justification for hunting lions on the premise that the benefits of conservation outweigh the cost of killing has been questioned from an ethical angle related to animal welfare and from an emotional issue of our right to kill. Very specifically, we have no moral right to decide that some individuals can be sacrificed, based on an untested assumption that revenue earned from such a killing would bring good for the rest of the population. Of course in human societies, such sacrifice of a few for the sake of the rest is formalized in several situations; for example, building the army for protecting the country and its people. But in the highly democratic civilizations, every individual has the right to reject from being enlisted to the army. On the contrary, in the case of 'killing for conservation', all lions are potential targets and they do not have the luxury of opting out of the hunter's target. In other words, 'killing for conservation' is a cruel programme that smacks of organized slaughter crime designed and executed by humans for their selfish ends.

Not surprisingly, such objections are chided as 'emotionally driven, and irrational' by those favouring the conservation approach driven by economic arguments. They argue: 'while it is sad that we sometimes have to resort to killing animals for conservation, let's not allow emotions to overtake our arguments' (<u>http://www.</u> <u>theconservation.com/why-killing-lions-like-cecil-may-</u> actually-be-good-for-conservation-45400).

These two opposing views have brought to focus a tangential, but an important question: What should drive conservation – economics or emotions?

Conservation driven by economics has the tendency to prioritize the elements of biodiversity based on their worth to be conserved. It sets up a vertical hierarchy among organisms based on our perception of their economic importance, relevance to the ecosystem, conservation status, etc. The hierarchy thus created is highly tentative and liable to be altered with our perception of utility and the perspective of conservation. In other words, such conservation programmes run the risk of an Orwellian pseudo equality of 'some' being 'more equal than others'. In the process, a great proportion of living systems down the hierarchy may be denied of conservation. Nevertheless, this approach is more pragmatic and adaptive to the availability of resources.

The idea of conservation, promoted by the science of biodiversity is a recent phenomenon, shaped during the past few decades and, is deduced from the perceived perils that the humans may suffer from the loss of biological diversity. In its present form, it is fundamentally rooted in the idea of safeguarding the future of our own self than that of the other species. Our eagerness and commitment to conserve other species, such as pandas in China, or lions in Africa, and ecosystems such as swamps of the Western Ghats or global hotspots, are justified by their potential utility for the welfare of humans. According to this model, species not found useful for humans may not merit conservation. This is evident from the fact that we have successfully eliminated organisms causing plague, contained the spread of invasive species and have invested billions of dollars to eliminate pests and diseases.

On the other hand, the idea of conservation driven by emotions does not discriminate among the living systems based on their relevance or utility value; it treats all life equal to, and as important as, our own. Such a conservation process, though more inclusive and unbiased, is highly challenging, especially because the resources for conservation of all organisms and ecosystems are always limited. Therefore, this model is hardly favoured by practitioners and scientists of conservation. Though occasionally there are discussions on 'conservation for conservation sake' without any economic baggage, there are hardly any takers for it in practice. Surprisingly, support comes to this view from the religious ideology. In this sense, the two aspects of civilization – science and religion – exhibit contrasting views in their idea of conservation.

While the economics-driven models are promoted by the data generated by the sciences of biodiversity and ecology, emotion-driven conservation seems to have been nurtured, albeit cryptically, by the ideologies of at least a few religions. For instance, in Jainism even the less visible bugs are prevented to be inhaled such that they are seldom hurt or killed. There is a specific animal and a plant attached to each deity or Thirthankara which perhaps ensures respect, reverence, love and protection to them. The highly revered sacred groves all over India serve as the models of conserving an entire ecosystem with all its elements. Thus it appears that the emotiondriven idea of conservation is owned and promoted by religions, while economics-driven conservation is owned by science. It may indeed be good to incorporate the emotion and reverence to organisms favoured by religions, into economics-driven models of conservation favoured by science. With such an approach several Cecils are sure to be saved. There are emerging examples of such efforts. In Cambodia, Buddhist monks patrolling the forests have been more successful than official forest managers in converting the poachers into partners in conservation (http://www.arcworld.org/news.asp?pageID= 818). In Ladakh and Zhanskar, Jammu and Kashmir, Buddhist monks are being enlisted for the protection of snow leopards (http://www.arcworld.org/news.asp?page-ID=805). As Stephen Jay Gould remarked, 'we cannot win this battle to save species and environment without forging an emotional bond between ourselves and nature; for, we will not fight to save what we do not love'.

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