



## MIDLIFE MORTI-I?

Can we really quantify the value of wildlife – and could doing so bring into focus the economic prudence of preserving Africa's natural wealth?

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## ow much is a lion worth? Or a gorilla, an elephant, a whale shark?

It might seem an odd question, especially to those of us who love Africa's wildlife for its own sake. A picture might be worth a thousand words, but a photo of a cheetah atop a termite mound, or a black rhino amid South African scrub, can't be priced in mere dollars and cents.

Yet the idea is particularly pertinent at the moment, as the financial impact of the Covid-19 crisis becomes more apparent. Alongside the wider costs of tackling the pandemic, resulting in budget deficits for governments worldwide, the loss of revenue from Africa's decimated tourism industry – much of which funds wildlife conservation, particularly in protected areas – is potentially devastating for the continent's nature.

Just as local communities are driven to rely more heavily on natural resources, funding for protecting wildlife and habitats is under pressure. So being able to demonstrate the economic importance of wildlife is crucial: it shows that protecting nature is an investment, not merely a cost.

Quantifying such things is a complex matter, of course. At one level, the answer clearly depends on who you ask: the owner of a safari camp reliant on a healthy game population to attract guests? A pastoralist whose livestock is predated by big cats? A national park warden dependent on visitor fees to pay rangers and fund conservation work? A scuba-dive operator taking tourists to swim with marine giants? A trophy-hunting concession owner, a wildlife-ranch manager, an ivory poacher, a bushmeat hunter, a Chinese traditional 'medicine' practitioner?

Attempts to measure the value of individual species are easier in protected areas managed largely for one creature. So, for example, it's been estimated that the annual tourism income generated by

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one wild tiger in an Indian reserve might reach US\$10 million – vastly more than the total its body parts would raise if killed and sold for 'medicine'.

In Africa, things may be a little woollier. Even so, a 2014 report by the David Sheldrick Wildlife Trust suggested that a single elephant would be worth US\$1.6 million in tourism income over its lifetime. And as long ago as 1981, the tourism value of a lion was estimated at US\$1.195 million over a 15-year period. That's not to ignore the costs associated with both

species – damage to crops, loss of livestock and risks to humans among them, as well as the expenses of protecting them and their habitats. And these aren't like-for-like comparisons, of course. But despite these provisos, the point is clear: the economic benefits of just a single species can be substantial.

Of course, a lion or an elephant is worth more in terms of tourism revenue if it's in a healthy habitat that also hosts rhinos, buffalo and leopard – the so-called 'Big Five' is a global blockbuster brand. Add the diverse mix of species found in Africa's 8,400 protected areas, and the appeal increases exponentially. According to a report in *Nature Ecology & Evolution* in July 2020, wildlife-based tourism in Africa generates over US\$29 billion annually (around 8.5 per cent of total GDP), employs 3.6 million people, and supports perhaps 24 million indirect jobs.

Wildlife tourism can be seen as part of a virtuous circle: the money we spend visiting Africa funds jobs and conservation efforts, which results in richer biodiversity, which encourages more visitors – creating more income for destinations and, ideally, communities.

Conserving biodiversity and habitats has wider impacts in terms of climate

resilience, water security, availability of food and other resources; even in reducing the likelihood or frequencies of future outbreaks of diseases such as ebola and, yes, the current coronavirus – a wide range of ecosystem services, as well as less tangible aspects such as heritage value of wildlife for the

people who live alongside it.

The idea of 'natural capital' – a way of quantifying the returns on investment in environmental protection – has gained traction in recent years among both conservationists and governments.

Hence the Global Biodiversity Framework adopted by Parties to the Convention on Biological Diversity, which proposes the protection of 30 per cent of the planet's land and oceans by 2030. An analysis of the impact of this target, produced in July by more than 100 leading economists

## CONSERVATION

## DISCUSSION POINT

and scientists, suggests that this level of global protection could drive an economic output of between \$64 billion and \$454 billion a year - no small beans.

So, nature is valuable, and tourism is just part of that overall 'value'. In June, the African Leadership University's School of Wildlife Conservation launched studies of wildlife economies in the continent's 54 countries, examining the benefits and impacts of ecotourism among other outputs.

Initial case studies on Ghana and Kenya identify ways in which wildlife generates income – including bushmeat and international wildlife trade as well as fisheries, and harvesting of medicinal and other plant products – and the potential for sustainable growth resulting from greater investment.

The contrasts are striking: whereas more than two million tourists visited wildlife areas in Kenya in 2019, contributing US\$1.03 billion, in Ghana tourism receipts from 243,000 visitors to protected areas in 2018 generated \$3.3 million - from a total of £2.5 billion tourism receipts overall. Clearly, these countries have different resources and infrastructure: the report identifies 485 protected areas in Kenya and 393 mammal species, compared with 16 wildlife-protected areas and 225 mammal species in Ghana. But there

are opportunities in both countries

wildlife-linked activities to the national

to increase the contributions of

economies.

Among the lessons brought home by the coronavirus pandemic is the vulnerability of ecotourism to such international crises. The latest studies emphasise that, while tourism contributes substantially to nature conservation, there's a need to diversify both how this conservation is funded and, linked, how local communities benefit. But they also show that wildlife gives us much more than it costs. Conservation isn't a zero-sum game – and renewing efforts to care for Africa's natural bounty could create a win-win situation for wildlife and people alike.

