Research Paper

Christopher Vandome and Alex Vines Africa Programme | October 2018

Tackling Illegal Wildlife Trade in Africa Economic Incentives and Approaches



Summary

- The illegal wildlife trade (IWT) significantly impacts African economies by destroying and
 corroding natural, human and social capital stocks. This hinders the achievement of the
 Sustainable Development Goals (SDGs) and has an impact on national budgets. Illicit financial
 flows from IWT deny revenue to governments where legal wildlife product trade exists and
 perpetuate cash externalization. IWT diverts national budgets away from social or development
 programmes, increases insecurity and threatens vulnerable populations.
- In expanding wildlife economies and pursuing conservation-driven development models, governments can protect their citizens, derive revenue from wildlife products, and establish world class tourism offerings. The illegal exploitation of wildlife is often due to a failure to enforce rights over those resources, where rights are unclearly defined or not fully exercised. Southern African countries have defined these rights in various ways, contributing to regional differences in conservation practices and the socio-economic benefits derived from wildlife resources. Combating IWT is an important step towards allowing legitimate business and communities to develop livelihoods that incentivize stewardship and connect people to conservation.
- The Southern African Development Community (SADC) has several framework policies for the
 establishment of transfrontier conservation areas (TFCAs). These promote local stewardship
 across multiple land-use areas to conserve biodiversity and increase the welfare and socioeconomic development of rural communities. Private-sector partnerships also increase skills
 transfer, improve access to investment finance, and expand economic opportunities, including
 through the promotion of local procurement. The economic benefits of TFCAs extend beyond
 tourism.
- The economic value of African ecosystems is often under-recognized because they remain
 unquantified, partly due to the lack of available data on the broader economic costs of IWT.
 Improved monitoring and evaluation with key performance indicators would help governments
 and citizens to appreciate the economic value of combating IWT.

Introduction

The threat of the illegal wildlife trade (IWT) to the African continent has grown in recent years with the rise in demand for IWT products. To tackle this threat, it is crucial to increase awareness of the economic incentives for Africa in countries that are most susceptible to IWT. This paper examines those economic incentives and the further gains of pursuing conservation-based economic development in Africa. Given the leading role of the Southern African Development Community (SADC) in promoting transfrontier conservation areas (TFCAs), this paper looks in detail at examples in Angola, Botswana, Mozambique, Namibia, South Africa, Zambia and Zimbabwe. It considers the different relationships between people, wildlife and the economy in the region that influence development models and outcomes. The cases presented demonstrate how various African models of conservation can provide distinct incentive mechanisms to tackle IWT.

The paper does not attempt to draw lessons from wider cases in Africa, such as the impressive range of co-management models and experience in East Africa. Nor does the paper look in-depth at economic potential beyond tourism and the potential to reshape African agriculture without harming wildlife habitats. The methodology is only now developing to measure the full economic benefits of wildlife to African economies, but considerable data gaps remain. These are important themes for African regional bodies and governments to pursue.

African economies benefit from significant natural capital stocks. Wildlife and ecosystems provide substantial gains but face myriad threats, such as IWT, in addition to encroaching agriculture, transhumance and industrialization. Locally-established interventions are having a positive impact in developing wildlife economies, which protect wildlife and contribute to local communities. But, many of these remain constrained by lack of resources, capacity, and ill-defined or unexercised ownership rights.

The SADC and the formation of TFCAs, such as the particularly ambitious Kavango-Zambezi (KAZA) TFCA, demonstrate practicable models of cooperation despite complex and often competing national priorities. This paper highlights seven Southern African countries where combating IWT provides significant direct and indirect economic benefits:

- In Angola, combating IWT is contributing to the nation's ambition to develop a tourism industry and is a critical part of restoring human security in the wake of conflict.
- In Botswana, despite the growing pressure on the carrying capacity of ecosystems from
 increasing elephant populations, anti-poaching efforts have supported one of the most
 successful conservation models and enabled the creation of an ecotourism industry that is vital
 for economic diversification.
- In Mozambique, tackling IWT and promoting the inclusive and sustainable use of wildlife resources is critical for the security of vulnerable populations inside parks.
- In Namibia, community-run conservation programmes have facilitated grassroot socioeconomic development and incentivized conservation.

- In South Africa, the security cluster is at the forefront of the fight against the rhino horn trade, and the nation's wildlife economy is seen as an important vehicle for broad-based empowerment and socio-economic transformation.
- In Zambia, anti-poaching is vital for promoting security and combating organized crime. The
 protection of wildlife has allowed the development of wildlife products and alternative
 livelihoods that have gone some way to disincentivize poaching and incentivize conservation,
 including through improved agricultural practices.
- In Zimbabwe, the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE), which devolved ownership of protected areas, was a pioneer for promoting community inclusion in conservation. Combating poaching and its related ills, such as corruption, is critical to regenerating the country's tourism industry and achieving its middleincome ambitions.

This paper is based on a rapid desk-based literature review; a research roundtable held at Chatham House on 14 August 2018; and over 20 interviews with researchers, practitioners, park managers, and both international and local NGOs. Capturing the voices of those working on these issues in Southern Africa, and moving beyond international narratives, was key to the research methodology. This paper also draws on the research of the 2014 Chatham House report, *Global Impacts of the Illegal Wildlife Trade: The Costs of Crime, Insecurity and Institutional Erosion*.

Comprehensive data on the full economic costs of IWT – including losses to natural, human and social capital – is not available in a form where comparisons can be made between countries. However, the existing body of literature does provide evidence of where these economic losses occur and illustrates the incentives for tackling IWT.

Countering IWT and promoting conservation are inextricably linked to the state of politics, economics and security of countries. This paper tries to illustrate these values in economic terms. While African institutions and governments have supported several efforts to combat IWT, action has been slow. The considerable impact of IWT (such as the theft of valuable African natural assets, which implies serious consequences for the rule of law, corruption, development livelihoods and biodiversity) is an issue requiring urgent policy attention from not only ministers of armed forces, tourism and the environment but also heads of state and their ministers of finance.

Political context

African governments are keen to accelerate economic advancement in the context of demographic, technological and environmental changes. The continent's population is forecast to more than double by 2050 to 2.5 billion people, which will account for a quarter of the world's population at that time.¹ Governments are under pressure to ensure that economic growth keeps pace with population growth to deliver on the expectations of citizens. But there are diverging patterns of growth and income between neighbouring countries. In sub-Saharan Africa, 27 of the 48 countries

¹ UN (2017), 'World Population Prospects: 2017 Revision', https://www.un.org/development/desa/publications/world-population-prospects-the-2017-revision.html (accessed 2 Oct. 2018).

are classified by the World Bank as low-income countries, with a gross national income (GNI) per capita under \$995, and 15 are lower-middle income countries, with a GNI per capita between \$996 and \$3,895.2 Furthermore, in many places widening inequality is causing social and political tension. In 2015, the Gini coefficient ratings for Namibia and Zambia were 59 and 57, respectively, and in 2014 South Africa's was 63 - making it one of the most unequal societies in the world.3 Governments are under pressure to create jobs, including through industrialization and manufacturing industries, which can have negative effects on valuable ecosystems if not governed properly. The food demands of a growing population are also having an adverse effect on ecosystems as agricultural areas expand, and in some cases bushmeat markets thrive.

To achieve its objective of transforming Africa's socio-economic landscape, the African Union's (AU) Agenda 2063 calls for the protection of natural ecosystems and the environment. The AU views the creation of climate resilient economies and communities as crucial to building a prosperous continent, based on inclusive growth and sustainable development. However, as has been acknowledged by government ministers, the illegal killing and trafficking of wildlife from Africa undermines this goal.⁴ In addition, African nations have proved slow in translating political rhetoric into cohesive policy strategies to protect these assets and there is sometimes a perception that wildlife conservation in Africa is driven by Western partners. The Big Conservation Lie, written by two Kenyan conservationists, highlights the dominance of Western conservation practices and target setting over local knowledge.⁵ That perception may derive partly from some Western partners in the past inadequately understanding that solutions need to fit a local agenda, that communities need to share tangible benefits, and that local voices are needed in the formation and management of these solutions. There is still a strong feeling on the ground from practitioners that community voices are not being heard.

There is also an increasing awareness that IWT needs to be given high-level attention by those African governments most impacted. However, strategic vision is often formed unilaterally within an environment or tourism ministry that does not have the political weight of other government departments. The environment or tourism ministry in question must compete for resources, and even where there are relevant skills and capabilities in place there is often limited funding to get teams into the field for critical monitoring and evaluation work. To tackle IWT and engender conservation development requires cross-government systemic action.

The illegality of the trade in iconic species, such as rhino horn and elephant tusk, has drawn international attention to specific elements of IWT, but the overall cost of environmental crime is significantly higher. The United Nations Environment Programme (UNEP) and INTERPOL estimate that the illegal wildlife trade is valued between \$7 billion and \$23 billion per year.6 The

² World Bank (2018), 'World Bank Country and Lending Groups, 2017', https://datahelpdesk.worldbank.org/knowledgebase/articles/906519world-bank-country-and-lending-groups (accessed 2 Oct. 2018).

³ World Bank (2018), 'World Bank Data: Gini Coefficient', https://data.worldbank.org/ (accessed 2 Oct. 2018). 4 APA News (2017), 'Conservation crucial to SADC's economy – Minister', 24 November 2017,

http://apanews.net/index.php/en/news/safrica-conservation-crucial-to-sadcs-economy-minister (accessed 20 Sep. 2018); South African Government (2016), 'Natural Assets Vital to SA Economy', South African Government News Agency, Tshwane/Pretoria: South African Government, 28 February 2017

⁵ Mbaria, J. and Ogada, M. (2016), *The Big Conservation Lie*, Washington: Lens and Pens Publishing.

⁶ Nellemann, C. (ed) (2016), The Rise of Environmental Crime – A Growing Threat To Natural Resources Peace, Development And Security, A UNEP-INTERPOL Rapid Response Assessment, United Nations Environment Programme and RHIPTO Rapid Response-Norwegian Center for Global Analyses, https://wedocs.unep.org/bitstream/handle/20.500.11822/7662/-

value of environmental crimes including illegal, unreported and unregulated (IUU) fishing, IWT, illegal logging, illegal mining and waste dumping could be worth as much as \$91 billion to \$258 billion annually. Around 60 per cent of this total is from illegal logging alone, although some experts have called into question this calculation and suggested it may be an overestimate. These activities deprive countries of future revenues and development opportunities.

IWT has a direct bearing on efforts of African governments to achieve their Sustainable Development Goals (SDGs) – including SDGs 1, 8, 15, 16, 17 – and thus also has direct relevance to the work of many other government ministries. It is now commonly understood that tackling IWT is as much a development challenge as a conservation one. It is also widely understood that this IWT challenge has a bearing on economic growth, land-use and management practices, local partnerships and strong institutions.

'Stronger internal accountability mechanisms... [and] more external accountability mechanisms [are needed so that the structure of funding matches the priorities of the rhetoric. If the priority is tourism - how are you investing in infrastructure? If the priority is IWT - how are you investing in antipoaching? If the priority is biodiversity - how are you investing in conservation?'

Patricia Mupeta Muyamwa, Indigenous Peoples & Local Community (IPLC) Strategy Lead, The Nature Conservancy⁷

The economic cost of IWT

Natural capital stocks, such as ecosystems and biodiversity, produce benefits that support societal and individual well-being and economic prosperity, such as clean air, fresh water, regulation of water flows and pollination of crops.8 Therefore environmental crime can have a significant impact on the wider economy. A World Bank study on Tanzania concluded that the country's GDP would decline by 7 per cent if the carrying capacity of the Serengeti ecosystem fell by 20 per cent as a result of combined pressures of poaching, demands for grazing land, aggressive expansion of tourism, and plans for potentially intrusive infrastructure development.9 The consequences of such a decline would be felt across the economy. At the global level, the International Union for Conservation of Nature (IUCN) estimates that the monetary value of natural capital benefits is \$33 trillion per year, almost twice the value of annual global production from human activities.10 Extraction of value from these assets is dependent upon clearly defined rights, good governance and management. For example, access to clean water is dependent upon good management of forest and watershed areas. Such benefits are often taken for granted and would incur significant costs if they disappeared due to bad land management.

The_rise_of_environmental_crime_A_growing_threat_to_natural_resources_peace,_development_and_security-2016environmental_crimes.pdf.pdf?sequence=3&isAllowed=y (accessed 2 Oct. 2018).

⁷ Skype interview, London, August 2018.

⁸ TEEB (2009), The Economics of Ecosystems and Biodiversity: TEEB for National and International Policy Makers, https://www.cbd.int/financial/values/g-accounting-teeb.pdf (accessed 11 Sep. 2018).

⁹ World Bank Group (2015), Tanzania's Tourism Futures: Harnessing Natural Assets, World Bank Group Report Number 96150-TZ, http://documents.worldbank.org/curated/en/204341467992501917/pdf/96150-REVISED-PN-P150523-PUBLIC-Box393206B.pdf (accessed 1 Oct. 2018).

¹⁰ Bos, G. (2017), 'Tomorrow's production systems will be closer to nature', IUCN Blog, 9 January 2017, https://www.iucn.org/news/businessand-biodiversity/201701/tomorrows-production-systems-will-be-closer-nature (accessed 31 Aug. 2018)

IWT has significant human and social capital costs. Between 2009 and 2017, at least 264 rangers were killed in Africa.¹¹ Some communities are exposed to violence by criminal networks attempting to coerce them into carrying out poaching. 12 Pervasive corruption and potential for rent-seeking undermine the state institutions that should protect these vulnerable populations. In one example, two journalists from Sweden and Germany, who were kidnapped in the town of Massingir on the edge of Limpopo National Park, Mozambique, described the town as being a lost society where mafia leaders had taken over.13 Poachers operated with immunity in the town, and the police were complicit in this activity. Young men from the community would go into the park and cross into neighbouring South Africa to poach. Many were killed by South African security services. While police may sometimes be complicit, research by the ENACT project found that police and customs and government officials were perpetrating actors in under 5 per cent of cases.¹⁴ They also found that, in Southern Africa, white middle-class South Africans were far more often involved in poaching incidents than violent criminal groups, but this has not been reported in the media.15

The militarization of counter-poaching can lead to communities feeling threatened by the presence of enforcement personnel. The visible expense of these initiatives also fuels a sense of resentment that lives of the community matter less to the state and to conservation groups than the wildlife. 16 This undermines positive relationships between authorities and communities and can fuel conflicts that stem from historical land injustices or colonial legislation criminalizing hunting practices. 17

Several headline studies have attempted to quantify the economic costs of IWT. The economic benefits of biodiversity as a natural capital stock is under-recognized and under-researched within IWT debates. Current estimates of the value of these stocks are based on the quantifiable economic flows that they provide, such as from tourism or hunting. However, these estimates are likely dwarfed by other missing or hidden values of biodiversity'.18

In 2016, a study by Naidoo et al. measured changes in tourism numbers and spend across 216 protected areas and correlated them with changes in elephant populations and incidents of poaching. The study estimated that elephant poaching costs the continent \$25 million in tourism revenue annually.¹⁹ However, IWT has an uneven impact across the continent. As elephant conservation in East, West and Southern Africa generates the majority of tourism revenue there, it is those regions that are more susceptible to the consequences of poaching. In 2014, the David

¹¹ International Ranger Federation (2017), Ranger roll of honour, https://www.internationalrangers.org/wp-content/uploads/2017/07/2.-2009-2017-Honour-Roll.pdf (accessed 18 Aug. 2018).

¹² Challender, D. W. and MacMillan, D. C. (2014), 'Poaching is more than an enforcement problem', Conservation Letters, 7(5), pp. 484–494, https://doi.org/10.1111/conl.12082 (accessed 04 Oct. 2018).

¹³ Limpopo Rhino Security Group (2015), Newsletter May 2015, http://www.lrsg.co.za/wp-content/uploads/2015/07/Limpopo-Rhino-Security-Group-Newsletter-May.pdf (accessed 2 Oct. 2018).

¹⁴ Aucoin, C. and Donnenfeld, Z. (2017), Guns, Poison, and Horns: Organised Wildlife Crime in Southern Africa, Research Paper, Enhancing Africa's Response to Transnational Organised Crime (ENACT), https://enact-africa.s3.amazonaws.com/site/uploads/enact-paper1.pdf (accessed 2 Oct. 2018). 15 Ibid.

¹⁶ Hübschle, A. M. (2017), 'The social economy of rhino poaching: of economic freedom fighters, professional hunters and marginalized local people', Current Sociology, 65(3), pp. 427-447; Benjaminsen, T.A., Goldman, M.J., Minwary, M. Y. and Maganga, F. P. (2013), Wildlife management in Tanzania: state control, rent seeking and community resistance', Development and Change, 44(5), pp. 1087-1109. https://doi.org/10.1111/dech.12055 (accessed 4 Oct. 2018).

¹⁷ Duffy, R., St John, F. A., Büscher, B. and Brockington, D. (2016), 'Toward a new understanding of the links between poverty and illegal wildlife hunting', Conservation Biology, 30(1), pp. 14-22, https://www.ncbi.nlm.nih.gov/pubmed/26332105 (accessed 4 Oct. 2018). 18 Bolt, K., et al. (2016). Biodiversity at the heart of accounting for natural capital: the key to credibility. Cambridge Conservation Initiative. https://naturalcapitalcoalition.org/wp-content/uploads/2016/07/CCI-Natural-Capital-Paper-July-2016-low-res.pdf (accessed 20 Sep. 2018). Naidoo, R., Fisher, B., Manica, A. and Balmford, A. (2016), 'Estimating economic losses to tourism in Africa from the illegal killing of elephants', Nature Communications, 7, Article Number: 13379, https://doi.org/10.1038/ncomms13379 (accessed 11 Sep. 2018).

Sheldrick Wildlife Trust reported that poaching 'has lost Africa's tourism industry, local communities and economies a total of \$44,554,844.47 alone this year'. ²⁰ The trust calculates that an elephant is worth more than \$1.6 million over the course of a lifetime. ²¹ Tourism development and the lost revenues resulting from IWT in the sector are the basis for many calculations of the cost of IWT in the literature. This is due to the availability of tourism data, but also the high value of the industry compared to other wildlife product sectors.

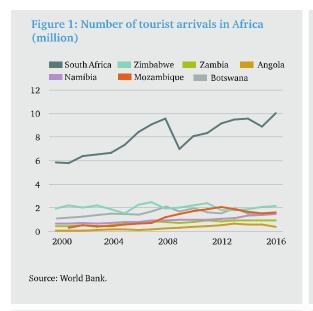
In a report for the Ecologic Institute, Smith and Porsch estimate that in 2006–14 rhino poaching caused total annual losses to tourism revenue in South Africa, Namibia, Kenya and Zimbabwe of between €205.76 million and €230.76 million. In addition, by their calculations, the extinction of one of the 'big five' species would result in wildlife tourism falling by 20 per cent.²² Furthermore, they estimate that the total loss of natural capital from elephant poaching in 2010–12 was between €12 billion and €18 billion, and the natural capital loss due to rhino poaching from 2006–12 was around €360–544 million.²³

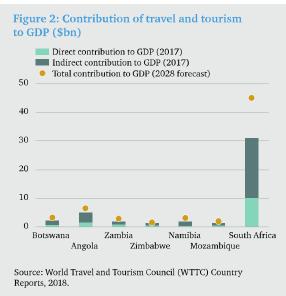
²⁰ Branford, R. (2014), *Dead or Alive? Valuing an Elephant*, Leatherhead: David Sheldrick Wildlife Trust, http://iworry.org/wp-content/uploads/2013/09/Dead-or-Alive-Final-LR.pdf (accessed 28 Sep. 2018).

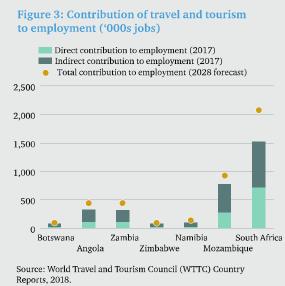
²¹ The figure of \$1.6 million was reached by making an inflation adjustment of a contested \$1 million figure given in Currey, D. and Moore, H. (1994), Living Proof: African Elephants; the Success of the CITES Appendix I Ban, Environmental Investigation.

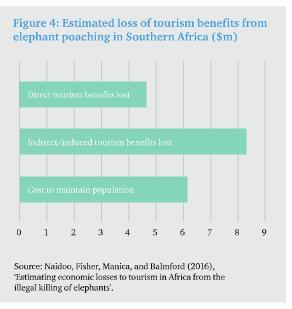
²² Smith, L. O. and Porsch, L. (2015), *The Costs of Illegal Wildlife Trade: Elephant and Rhino*, EFFACE Quantitative Analysis, Berlin: Ecologic Institute, https://efface.eu/sites/default/files/EFFACE%20D3.2c%20-

^{%20}Quantitative%20and%20monetary%20analysis%20of%20Elephant%20and%20Rhino%20hunting.pdf (accessed 20 Sep. 2018). 23 Ibid.









The burgeoning tourism market on the African continent presents a considerable opportunity for accelerating economic growth and job creation. International tourist arrivals in Africa increased from 35 million in 2005 to 56 million in 2013, which represents only 5 per cent of the global industry. This figure is expected to more than double within the next decade. The World Tourism Organization (UNWTO) has found that international tourism to Africa brings in \$36 billion a year and contributes over 8 per cent of total employment. One study estimates that the tourism sector is the principal foreign exchange earner for about 83 per cent of developing countries. Wildlife is the cornerstone of this industry and is the main draw for 80 per cent of visitors to the continent. There is considerable potential for ecotourism industry growth in the countries included in this study (see figures 1-4). Ecotourism is broadly defined as nature-based tourism that promotes socio-economic well-being and is managed on a sustainable basis.24

'There is a misconception within government circles and driven by the private sector. Policymakers think about things being done by operators and hotels. They take it for granted that we have the natural resources, and so what is needed is the infrastructure to exploit that by bringing people in to see them. What is missing is the connection to conservation and the need to protect these environments on which they depend.'

Edwin Muchapondwa, Professor of Economics, University of Cape Town²⁵

The transformative economic potential of ecotourism and other wildlife-dependent revenue streams are not equally dispersed across the continent. In sub-Saharan Africa only Botswana, Kenya, Mozambique, Nigeria, South Africa and Zimbabwe each receive over 1 million visitors a year.26

The successful commercialization of natural heritage through ecotourism is dependent on having a viable product and attracting the investment required to develop it and compete internationally.²⁷ The ability to see wildlife is just one of many criteria for consumers in the tourism sector when choosing a destination. Infrastructure for ease of access, electricity and communication are important considerations, which are often inconsistent or unavailable in African countries.²⁸

The prevalence of IWT is a disincentive for investment in tourism, alongside uncertainty of land tenure and asset security, opaque tax regimes, limited and expensive air travel and poor perception issues.29

'The success of the wildlife economy rests on property rights... Making government a strategic partner helps unlock some of these challenges.'

Moscow Marumo, Community Development, Peace Parks Foundation30

The impact of IWT on national government revenues and on GDP extends beyond the undermining of the tourism industry. The link between corruption and IWT is under-researched. There is little evidence that fully documents the relationships between different actors and the actions of those involved in IWT, however, it is thought to include abuse of position, illicit enrichment, bribery, money laundering and obstruction of justice. Corruption not only undermines IWT law enforcement success, but it also has a direct budget impact on law enforcement resources, which tend to come from national income. The value of illicit financial flows generated from the illegal

²⁴ Mbaiwa, J. (2008), 'The realities of Ecotourism Development in Botswana', in Spenceley, A. (ed), Responsible Tourism: Critical Issues for Conservation and Development, Abingdon: Earthscan.

²⁵ Skype interview, Hampshire, August 2018.

²⁶ Muchapondwa, E. and Stage, J. (2013), 'The economic impacts of tourism in Botswana, Namibia, and South Africa: Is poverty Subsiding', Natural Resources Forum, 37(2), pp. 80–89, https://doi.org/10.1111/1477-8947.12007 (accessed 2 Oct. 2018).

²⁷ Oliver Poole, executive director, interview, London, August 2018. 28 World Tourism Organization (2015), Affiliate Members Regional Reports, Volume four -

 $Tourism\ in\ Africa: A\ Tool\ for\ Development.$

²⁹ McNamee, T. and Sachs, D. (2015), *Africans Investing in Africa: Understanding Business and Trade, Sector by Sector*, Basingstoke: Palgrave Macmillan.

Speaking via Skype at the Chatham House roundtable: 'Conservation-based Economic Development and the Cost of the Illegal Wildlife Trade', 14 August 2018, London: Royal Institute of International Affairs.

trade of seven species across eight Southern African countries from 2006-14 is estimated to be \$1.6 billion.31

Natural capital, including wildlife, generates economic benefits in the form of direct public goods, but also the ability for communities and investors to derive revenue streams from their utilization. IWT is a threat to these ecosystems, and the livelihoods they support. Unlike other threats they face, such as expanding agriculture, industrialization or transhumance, IWT also induces specific costs to human and social capital. However, many of the incentives and processes for tackling IWT go hand in hand with broader conservation initiatives. The illegal use of wildlife resources is often characterized as a 'tragedy of the commons', where a shared resource system is over exploited by individuals each acting in self-interest rather than towards the benefit of the collective. The illegal exploitation of wildlife is often a result of a lack of enforcement of rights over those resources, where rights are unclearly defined or not fully exercised. Tackling IWT and protecting wildlife resources is an important part of exercising rights over these resources. Across Southern Africa, utilization rights are defined in various ways, which have contributed to regional differences in conservation practices and the socio-economic benefits provided by wildlife resources.

Conservation, countering IWT and economic development in Southern Africa

In Southern Africa conservation takes place across multiple land uses including conservancies, protected areas, national parks and private game reserves. Each country faces comparable challenges and many of them have developed similar responses. As such, the case studies below are not designed as a holistic review of each national approach, but rather draw on certain specific characteristics to demonstrate the costs of IWT, the incentives for tackling it, and examples of policies and interventions that have led to successful outcomes.

Botswana: Biodiversity management

In Botswana, conservation of the nation's biodiversity is a government priority and is an important part of diversifying the economy, which remains dependent on diamonds. Botswana has a reputation for high-cost, low-volume ecotourism, although there are a growing number of product options at different price points. Conservation and tourism are aligned at a government level in the Ministry of Environment, Natural Resources Conservation and Tourism, and are priorities of the government.

Ecotourism contributes greatly to Botswana's economy through employment, infrastructure investment and linkages to retail and service industries.32 For example, in 2012, 14 ecotourism organizations employed 610 people and generated revenue of over \$600,000 in Botswana's Okavango Delta.³³ The sector contributes to expanding economic opportunities through local

³¹ Martin, R. and Stiles, D. (2017), 'Assessing the Extent and Impact of Illicit Financial Flows in the Wildlife and Tourism Economic Sectors in

Southern Africa', Resource Africa, http://dx.doi.org/10.2139/ssrn.2996874 (accessed 1 Oct. 2018).

Stone, L. S., Stone, M. T., and Mbaiwa, J. E. (2017), 'Tourism in Botswana in the Last 50 Years: A Review', Botswana Notes and Records, 49, pp. 57–72, http://journals.ub.bw/index.php/bnr/article/view/976 (accessed 20 Sep. 2018).

33 Mbaiwa, J. E. (2015), 'Ecotourism in Botswana: 30 years later', *Journal of Ecotourism*, 14(2–3), pp. 204–222,

https://www.tandfonline.com/doi/full/10.1080/14724049.2015.1071378?scroll=top&needAccess=true (accessed 20 Sep. 2018).

procurement of goods and ancillary services. Partnership schemes allow local people to benefit from this industry. For example, in Ngoma, on the banks of the Chobe River in northern Botswana, the African Wildlife Foundation (AWF) facilitated a partnership between the Chobe community and Muchenje Safaris to build a five-star lodge.³⁴ Not only does the income provide an incentive for conservation, but as a condition of the partnership the community has set aside land for conservation.

Botswana's community-based natural resource management (CBNRM) programme is based on community-based organizations (CBOs) to which the government devolves land. Of the country's rural population, 61 per cent live in CBO areas. While primarily used for wildlife-based revenues, this has widened to include veld products, historical sites, landscapes and other natural resources.³⁵ Of natural resource revenue generated, 35 per cent goes directly to CBOs and the other 65 per cent goes to the National Environment Fund (NEF). The government has also introduced initiatives with communities to reduce human—wildlife conflicts (HWC) – such as those caused by farming of chilli peppers and bees, livestock and herding dogs – in part to help reduce the financial pressures of government compensation to these communities. Critics have argued that CBO initiatives need additional political support through legislation and policy at a national level to make a real difference.³⁶ Furthermore, one interviewee noted that 'gatekeeper' scenarios have emerged, where individuals take control of CBOs to distribute funds to empower themselves at the expense of citizens.³⁷ A hunting ban imposed in 2014 has generated considerable debate and political tension over the ability of local communities to develop alternative wildlife-use options to continue incentivizing conservation.

Successive national development plans have emphasized the importance of biodiversity and wildlife for agriculture and tourism.³⁸ The national budget 2017 stated that natural resources 'account for one-third of the country's total wealth and underpin many important contributions that drive the economy such as nature-based tourism, mining and agricultural activities'. Recognition of this importance is evident in the implementation of several land, wildlife and natural resource management plans, including the Okavango Delta Management Plan 2008 and Makgadikgadi Framework Management Plan 2010.³⁹ The purpose of these is to ensure the protection of the ecosystem, as well as benefit local, national and international stakeholders.

The country's National Biodiversity Strategy Action Plan identifies the main cases of biodiversity loss to be habitat destruction, conversion and disturbance, including through high populations of elephants concentrated in ecologically sensitive areas. Poaching is also listed as a key contributor to wildlife loss. Implementing previous strategy plans has been hampered by a lack of human and

³⁴ African Wildlife Foundation (undated), 'Kazungula', https://www.awf.org/landscape/kazungula (accessed 16 Sep. 2018).

³⁵ Centre for Applied Research (2016), 2016 Review of Community Based Natural Resources Management in Botswana, https://www.car.org.bw/wp-content/uploads/2016/05/Botswana-CBNRM-2016-Review.pdf (accessed 2 Oct. 2018).

³⁶ Chevallier, R. and Harvey, R. (2016), *Is Community-based Natural Resource Management in Botswana Viable*, Policy Insights 31, South African Institute of International Affairs, http://www.saiia.org.za/wp-content/uploads/2016/04/Pi-31-GARP-chevallier-harvey-FINAL-WEB.pdf (accessed 16 Sep. 2018).

³⁷ Interview, London, August 2018.

³⁸ Ministry of Finance (2016), *National Development Plan 11: April 2017 – March 2023*, Government of Botswana, Gaborone, http://www.finance.gov.bw/images/NDP_11_2017-2023.pdf (accessed 2 Oct. 2018).

³⁹ Department of Environmental Affairs (2008), *Okavango Delta Management Plan*, Government of Botswana, Gaborone http://archive.ramsar.org/pdf/wurc/wurc_mgtplan_botswana_okavango.pdf (accessed 2 Oct. 2018); Department of Environmental Affairs and Centre for Applied Research (2010), *The Makgadikgadi Framework Management Plan*, Government of Botswana, Gaborone, https://www.car.org.bw/wp-content/uploads/2016/06/MFMP-Vol-1-Main-report.pdf (accessed 2 Oct. 2018).

financial resources, poor coordination and communication, and insufficient research capacity. Wildlife conservation is mainly supported through the government budget, but external financial assistance for biodiversity management is estimated to be around \$14.8 million.⁴⁰ Botswana held biodiversity symposiums in 2016 and 2018 in response to the acknowledgment that there was a lack of domestic research on environmental issues.⁴¹

One of the notable advancements in Botswana is the adoption of natural capital accounting (NCA) initiatives to better optimize the use of natural resources. The government is a partner to the World Bank-led Wealth Accounting and Valuation of Ecosystems Services (WAVES) programme whose main objective is to take stock of available natural resources and provide economic indicators to measure their use or depletion.⁴² The government's priority areas are water, mineral and energy resources; the creation of credible macroeconomic indicators of sustainable development; and calculating the tourism component of land and ecosystems to inform ecotourism and land-use management.

In Botswana, management and planning have been crucial for the protection of wildlife from poaching. For example, the Okavango Management Plan provides for a buffer zone around the Moremi Game Reserve specifically to reduce poaching within the reserve. The Botswana Defence Force (BDF) and other state organizations also have key roles in protecting wildlife.

Botswana's success in conservation and in protecting elephants is seen in the countries significant current natural stock levels. However, without continued conservation management, including translocation programmes, this success will put an increasing strain on broader ecosystems and potentially increase HWC. For example, elephants are moving into areas where they have been absent for a long time. In a request to parliament to purchase used helicopters to monitor elephant movements, the outspoken environment minister stated: 'The world is busy praising us for having a large number of elephants but they are not assisting us with the problems. We would have to at some point ask the world to assist us.'⁴³

Zimbabwe and Namibia: Devolved management rights

The protection of the environment is enshrined in Zimbabwe's 2013 constitution.⁴⁴ It provides a mandate to local authorities for environmental management and cooperation with traditional leaders on enforcement. In April 2018, the government launched its aspirational plan, 'Towards an Upper-middle-income Country by 2030: New Dispensation Core Values' in which it proposed the inclusion of wildlife production into its command agriculture programme, underlining the importance of wildlife to the economy.⁴⁵

⁴⁰ Department of Environmental Affairs (2016), *National Biodiversity Action Plan*, Government of Botswana, Gaborone, https://www.cbd.int/doc/world/bw/bw-nbsap-v3-en.pdf (accessed 2 Oct. 2018).

⁴¹ Pelontle, K. (2018), 'Botswana: Bio-Diversity Important to Economy', *AllAfrica.Com*, 14 February 2018, https://allafrica.com/stories/201802150136.html (accessed 2 Oct. 2018).

⁴² WAVES (2018), https://www.wavespartnership.org/en (accessed 2 Oct. 2018).

⁴³ Botswana Guardian (2017), 'Khama wants P42m to buy 3 used Choppers', *Botswana Guardian*, 15 August 2017,

http://www.botswanaguardian.co.bw/news/itemlist/tag/Ministry%20of%20 Environment,%20 Natural%20 Resources%20 Conservation%20 and%20 Tourism.html (accessed 2 Oct. 2018).

⁴⁴ Constitution of Zimbabwe Amendment (No 20) Act (2013).

⁴⁵ Government of Zimbabwe (2018), *Towards an Upper-middle Income Country: New Dispensation Core Values*, Washington DC, 19 April 2018, http://www.veritaszim.net/sites/veritas_d/files/GoZ%20Presentation%20DC%20-%2019-4-2018.pdf (accessed 26 Sep. 2018).

The link between tourism, biodiversity and counter-poaching was emphasized by Zimbabwe's former minister of tourism, Walter Mzembi, in his bid to be voted secretary-general of the UNWTO.⁴⁶ He stated, 'Poaching remains, in my view, the biggest scar in the conscience of humanity, and threatens tourism development considering that wildlife is the backbone of the tourism industry. We have aptly named it biodiversity terrorism.'⁴⁷

One of the key economic incentives for conservation has been the devolution of management and utilization rights to communities through the CAMPFIRE programme, which when first introduced was a model of its kind. This framework distributes the gross revenue that accrues directly or indirectly from a community-managed, natural resource, with 55 per cent going to the community and the rest to the district council for support costs, administration and levies. A decline in tourism in Zimbabwe in the last two decades, due to the political situation and allegations of corruption, has negatively impacted the earning potential of the programme and the benefits it distributes.⁴⁸ Critics also argue that a lack of genuinely local representation in decision-making also undermined the project.⁴⁹ However, the programme does report an average revenue of \$2 million per year, primarily through hunting licences, over 50,000 km² (12 per cent) of Zimbabwe's territory.⁵⁰

Namibia is a model of success for fully devolved ownership rights. The country is home to 34 per cent of the largest remaining free-ranging black rhino population in the world. While poaching and IWT remain a threat, the government has claimed a conservation success. In 2017, 27 rhinos killed by poachers, down from 60 in 2016, and 95 in 2015. Pohamba Shifeta, minister of environment and tourism, puts this success down to 'More resources... allocated to fight poaching, more government agencies, non-governmental organizations, private sector, international development partners, communities and the general public have come on board to support our efforts to stop poaching, '51

Namibia's constitution includes the protection and maintenance of ecosystems, essential ecological processes and biodiversity as part of the state's commitment to promoting the welfare of the people. The country's National Development Plan and its Vision 2030 reinforce this link between people, the environment, and sustainable socio-economic development.⁵²

Tourism contributed NAD 16.7 billion (\$1.1 billion) to the Namibian economy in 2016, 10.5 per cent of overall GDP, and generated 101,000 jobs (14.9 per cent of total employment). In 2020, this is set

13 | Chatham House

-

 ⁴⁶ Mzembi, W (2016), 'Making Tourism Work for Africa: Building Capacity and Political Support', Audio Recording, Chatham House Africa
 Programme Event, 7 November 2017, https://www.chathamhouse.org/event/making-tourism-work-africa-building-capacity-and-political-support (accessed 26 Sep. 2018).
 47 Steinmetz, J. (2017), 'Tourism Development and Conservation: Challenges and Opportunities', eTurboNews, 21 July 2017,

⁴/ Steinmetz, J. (2017), Tourism Development and Conservation: Challenges and Opportunities, eturbonews, 21 July 2017, https://www.eturbonews.com/160138/tourism-development-conservation-challenges-opportunities (accessed 2 Oct. 2018). ⁴⁸ Interview, London, August 2018.

⁴⁹ Harrison, E., Stringer, L. and Dougill, A. (2014), *The importance of the sub-district level for community-based natural resources management in rural Zimbabwe*, Sustainability Research Institute, Paper No. 69,

https://www.see.leeds.ac.uk/fileadmin/Documents/research/sri/workingpapers/SRIPs-69.pdf (accessed 4 Oct. 2018).
⁵⁰ CAMPFIRE (2018), 'Community Benefits Summary', http://campfirezimbabwe.org/index.php/news-spotlight/3-community-benefits-summary (accessed 2 Oct. 2018).

⁵¹ Reuters (2017), 'Rhino, elephant poaching declines in Namibia', 23 October 2017, https://www.reuters.com/article/us-namibia-poaching/rhino-elephant-poaching-declines-in-namibia-idUSKBN1CS1WJ (accessed 2 Oct. 2018).

⁵² Ministry of Environment and Tourism (2018), 'Environmental Impact Assessment', Government of Namibia, Windhoek, http://www.met.gov.na/services/environmental-management/233/ (accessed 2 Oct. 2018).

to increase to NAD 26.4 billion (\$1.8 billion), 11.7 per cent of overall GDP, and create more than 123,000 jobs (16.4 per cent of total employment).⁵³

Namibia is internationally acclaimed for its CBNRM programme. In the 1960s and 1990s, conditional consumptive utilization ownership rights were devolved to freehold farmers and community conservancies, respectively, which has facilitated a repopulation of wildlife. The 2007 Policy on Tourism and Wildlife Concessions on State Land sets clear empowerment objectives to further incentivize communities living in those areas to promote conservation and enable them to benefit economically from wildlife resources.⁵⁴

The CBNRM programme has been successful in incentivizing conservation and disincentivizing poaching because communities keep 100 per cent of the benefits accrued from wildlife utilization. In Namibia, 46.8 per cent of the country is under some form of conservation management, including 83 registered community-run conservancies, land held on trust for communities by the state, which cover around 19.8 per cent of the country.⁵⁵ In these programmes communities are given extensive rights to manage and benefit from the consumptive and non-consumptive forms of wildlife use in conservancies. In 2016 community conservation created 5,147 jobs and generated nearly \$9 million in returns for local communities.⁵⁶ Hunting is the most direct way for local communities to extract value from wildlife, and it is argued that a ban in Namibia would significantly reduce the number of conservancies able to cover their own operating costs.⁵⁷ However, farming is still the main source of livelihood for most of the population living in conservancies.

The National Association of CBNRM Support Operations (NASCO) has made successful interventions to mitigate HWC. The Kwando Carnivore Project has worked with local farmers to build lion-proof enclosures for livestock.⁵⁸ The organization has also worked with the Ministry of Environment and Tourism, which funds a self-reliance scheme. In 2016 conservancies were granted NAD 60,000 (\$4,093) each to compensate farmers who had suffered financial losses from HWC. Other areas of HWC remain contentious, including regulations on beef trade from areas with high buffalo populations with a high prevalence of foot and mouth disease. The Namibian Chamber of Environment is lobbying around this issue. NASCO notes that conservancies increasingly manage their own affairs, with growing levels of advocacy to government from regional and national conservancy associations.⁵⁹

Namibia Tourism Board (2018), Namibia Tourism Satellite Account: 5th Edition, Government of Namibia, Windhoek, http://www.namibiatourism.com.na/uploads/file_uploads/TSA%20fifth%20Edition%20(5).pdf (accessed 3 Oct. 2018).
 Ministry of Environment and Tourism (2007), Policy on Tourism and Wildlife Concessions on State Land, Government of Namibia, Windhoek, http://www.the-eis.com/data/literature/Namibia%20Tourism%20and%20Wildlife%20Concessions%20Policy%202007.pdf (accessed 2 Oct. 2018).

⁵⁵ NASCO (2016), The state of community conservation in Namibia: annual report, The Namibian Association of CBNRM Support Organizations: Windhoek, http://www.nacso.org.na/sites/default/files/State%200f%20Community%20Conservation%20book%20web.pdf (accessed 2 Oct. 2018).
55 NASCO (2016), The state of community conservation in Namibia: annual report, The Namibian Association of CBNRM Support Organizations: Windhoek, http://www.nacso.org.na/sites/default/files/State%20of%20Community%20Conservation%20book%20web.pdf (accessed 2 Oct. 2018).

⁵⁷ Naidoo, R., Weaver, L. C., Diggle, R. W., Matongo, G., Stuart-Hill, G. and Thouless, C. (2016), 'Complementary benefits of tourism and hunting to communal conservancies in Namibia', *Conservation Biology*, 30(3), pp. 628–638, https://onlinelibrary.wiley.com/doi/abs/10.1111/cobi.12643 (accessed 20 Sep. 2018).

⁵⁸ NASCO (2016), *The state of community conservation in Namibia: annual report*.

Mozambique and Zambia: Population pressures and alternative livelihood development

Mozambique is endowed with excellent natural capital resources and biodiversity, including more than 10,000 species, of which 10 per cent are endemic or near-endemic. But, of the countries included in this study, Mozambique faces the toughest security and economic challenges. Mozambique ranks 180 out of 189 countries on the UN human development index,60 70 per cent of its 28 million population live in extreme poverty,61 and it is ranked the third most vulnerable country to climate change in Africa. The potential for Mozambique to develop a world-class liquefied natural gas (LNG) industry has attracted considerable investment and has stimulated growth, however, it has also increased government debt. Improved governance and transparency are key to securing international investment across the country, including in wildlife resources.

Wildlife resources are an important part of rural development in Mozambique. Of its citizens, 70 per cent live in rural areas and depend on the direct use of natural resources for survival. It is estimated that the harvesting of miombo woodland contributes 19 per cent of household cash income and 40 per cent of non-cash income. One study estimated the value of ecosystem services in 2009 to be \$5 billion, equivalent to half the country's GDP. The effective management and governance of these resources is a significant aspect of the relationship between government, state and society.

Conservation areas cover 25 per cent of Mozambique in the form of seven national parks, 10 national reserves, one environmental protection area, 17 hunting blocks, over 50 private game farms, and two community reserves. These are managed primarily through the National Administration for Conservation Areas (ANAC), formed in 2011. However, this organization lacks human capital and resources. The average annual state funding for conservation areas in Mozambique is \$34/km², compared to \$187/km² in Zimbabwe, \$2,500/km² in Kenya, and \$2,720/km² in South Africa. Unlike its TFCA partner, South Africa, Mozambique has several communities living within its conservation areas, which puts further pressure on wildlife due to agriculture and poaching.

There are approximately 35,000 people living in 44 villages within the Limpopo National Park.⁶⁴ Local attitudes towards conservation tend to be negative, and revenge killings present an additional problem. In the past, farmers used traps and snares to protect livestock and crops. A 2017 study found that 65 per cent of households see the prohibition of killing predators as the most significant reason for the increase in predation of livestock, compared to 35 per cent of households who

⁶⁰ UNDP (2018), 'Human Development Indices and Indicators: 2018 Statistical Update', http://report.hdr.undp.org/ (accessed 3 Oct. 2018). 61 World Bank (2018) 'World bank Data: Poverty', https://data.worldbank.org/ (accessed 3 Oct. 2018).

⁶² World Bank (2018), Mozambique's Conservation Areas for Bio Diversity and Development – Phase 2, World Bank Report No: PAD2860, http://documents.worldbank.org/curated/en/183911537673432887/pdf/MOZAMBIQUE-08312018.pdf (accessed 2 Oct. 2018).

⁶⁴ Givá, N. and Raitio, K. (2017), "Parks with People" in Mozambique: Community Dynamic Responses to Human–Elephant Conflict at Limpopo National Park', Journal of Southern African Studies, 43(6), pp. 1199–1214, DOI: 10.1080/03057070.2017.1374810 (accessed 2 Oct. 2018).

attribute higher levels of HWC to the increase in lion numbers.⁶⁵ The article reported similar findings in crop destruction.

Diminished state capacity in rural Mozambique continues to undermine the full implementation of policies and programmes to protect conservation areas. IWT fuels this state erosion and broader society suffers as a result. Highlighting this impact, in 2014, former president Joaquim Chissano said, 'I condemn poaching and condemn those who entice young people to go hunting, because the game they kill is not for them... it is at the behest of the powerful... there is someone who makes a lot of money... but those who die are often young people who innocently do it thinking that it makes life easy, it makes easy money'.66

Zambia has taken a different approach. The Zambia Wildlife Act 2015 states that the 'absolute ownership of every wild animal within Zambia is vested in the President on Behalf of the Republic', and 'wildlife shall be conserved and managed as an asset for present and future generations and to achieve economic growth'. ⁶⁷ The management of wildlife is overseen by the Department of National Parks and Wildlife (DNPW) within the Ministry of Tourism and Arts, which is mandated to manage and conserve Zambia's wildlife, across 20 national parks, 36 game management areas and one bird sanctuary. Combined, these areas cover 31 per cent of the country's land mass.

Ecotourism is a critical sector for the Zambian economy. According to government statistics, this extensive wildlife estate accounts for about 80 per cent of Zambia's tourism activities. ⁶⁸ In 2017, the total sector contribution to GDP was \$1.7 billion, 7.3 per cent of GDP, and the industry supported 5.3 per cent of total employment (313,500 jobs). ⁶⁹ The tourism sector represents a significant return on investment compared to other sectors. One study estimates that a \$250,000 investment can create 182 full-time jobs – 50 per cent more than the same investment in agriculture or mining. ⁷⁰ But the depletion of wildlife stocks due to IWT hinders the development of tourism products and services and disincentivizes investment.

In 2016, the rate of poaching and deforestation in the country exceeded natural regeneration.⁷¹ In the south of Zambia, IWT is facilitated by organized criminal networks. But despite a 74 per cent

 $^{^{65}}$ Massé, F. (2016), 'The political ecology of human-wildlife conflict: Producing wilderness, insecurity, and displacement in the Limpopo National Park', Conservation and Society, 14(2), pp. 100–111, http://www.conservationandsociety.org/article.asp?issn=0972-4923;year=2016;volume=14;issue=2;spage=100;epage=111;aulast=Mass (accessed 4 Oct. 2018).

⁶⁶ Anderson, B. and Jooste, J. (2014), 'Wildlife Poaching: Africa's Surging Trafficking Threat', Africa Security Brief No. 28, Africa Centre for Strategic Studies, https://africacenter.org/publication/wildlife-poaching-africas-surging-trafficking-threat/ (accessed 2 Oct. 2018).
67 The Zambian Wildlife Act 2015.

⁶⁷ The Zambian Wildlife Act 2015, http://www.parliament.gov.zm/sites/default/files/documents/acts/The%20%20Zambia%20Wildlife%20Act,%202015.pdf (accessed 26 Sep. 2018).

⁶⁸ DNPW (2018), 'Who we are', https://www.zambiatourism.com/about-zambia/conservation/department-of-national-parks-wildlife/(accessed 2 Oct. 2018).

⁷⁰ Christie, I., Fernandes, E., Messerli, H. and Twining-Ward, L. (2014), *Tourism in Africa: Harnessing Tourism for Growth and Improved Livelihoods*, Washington: World Bank Group and Agence Francaise de Development, p. 26, http://documents.worldbank.org/curated/en/738471468299123752/pdf/886560PUB0978100B0x385230B00PUBLICo.pdf (accessed 20 Sep. 2018).

⁷¹ Lusaka Times (2016), 'Zambia's rate of poaching and cutting down trees exceeds natural regeneration', *Lusaka Times*, 8 June 2016, https://www.lusakatimes.com/2016/06/08/caritas-zambia-worried-poaching-deforestation/ (accessed 2 Oct. 2018).

conviction rate for IWT offences,⁷² those convicted are predominantly on the fringe of the network, and the higher-level criminals are much harder to convict.73

'Even the best community engagement can't stop international illegal hunters with cash.'

Kerri Rademeyer, CEO, Wildlife Crime Prevention⁷⁴

IWT undermines Zambia's ability to capitalize on its natural resources. Attempts to tackle the issue are being carried out in conjunction with programmes that counter other threats to ecosystems. Zambia has a higher population density and growth forecast than neighbouring Namibia or Botswana. This exacerbates agriculture and industrialization pressures on ecosystems. To date, successful interventions that incentivize conservation have tackled these issues in this combined approach.

For example, COMACO (Community Markets for Conservation) is working with 179,000 farmers in Eastern Zambia to incentivize conservation of wildlife and reduce poaching by helping develop wildlife products and facilitating a route to market for them.⁷⁵ The programme teaches poachers alternative skills and promotes conservation. Products are sold under the It's Wild! brand. Similarly, WWF Zambia is training farmers in climate-smart agriculture. At present, 2,356 farmers participate in the scheme, which helps them better adapt to climate change impacts and farming in wildlife corridors and reduces IWT and incentives for poaching,76

African Parks has partnered with the Department of National Parks and Wildlife and six community resource boards (CRBs) - all part of the Zambian CBNRM programme - to manage the Bangweulu Wetlands. The six communities represented are resident within the 6,000 km2 site and the communities and wildlife are dependent upon each other for survival. African Parks normally manage national parks, so this community-owned game management area is a unique test for their broadening into new sectors.

South Africa: A transformative wildlife economy

South Africa is the third most biodiverse country in the world and is thought to be home to more than 80 per cent of the world's rhinos. The government regards biodiversity as a vehicle for the improvement in living standards and social upliftment.77 The right to conservation and the 'secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development' are enshrined in the South African constitution.78 The country has five separate TFCA agreements with Botswana, Namibia, Lesotho, Mozambique and Swaziland, although sometimes it has differing priorities to its regional neighbours within these TFCAs. In 2010, South Africa signed a memorandum of understanding (MoU) with China on 'Cooperation in

⁷² Telephone interviews, London, August 2018.

⁷³ WWF-UK (2014), 'Parliamentary Briefing: International Wildlife Crime',

http://assets.wwf.org.uk/downloads/parliamentary_briefing_for_commons_debate_on_international_wildlife_crime_6_2_14.pdf (accessed 31 Aug. 2018).

⁷⁴ Skype interview, London, August 2018. 75 COMACO (2018), 'About Us', https://www.itswild.org/ (accessed 26 Sep. 2018).

⁷⁶ WWF Zambia written submission to authors

⁷⁷ Department of Environmental Affairs (2018), 'Biodiversity Economy',

https://www.environment.gov.za/projectsprogrammes/biodiversityeconomy (accessed 2 Oct. 2018).

⁷⁸ Citation of Constitutional Laws, 2005 (Act No. 5 of 2005).

the field of Environmental Management', to work together on environmental management and biodiversity conservation. In 2012, South Africa signed an MoU with Vietnam to fight rhino poaching and other environmental crimes.79

South Africa accounted for 91 per cent of the rhinos killed by poachers on the continent in 2016.80 In 2017, 1,028 rhinos were killed by poachers, the fifth year in a row that this number was over 1,000. The country has taken a hard line in response to its poaching crisis. In 2017, 200 suspects were arrested. From 2008 to 2015, at least 220 poachers were killed by security forces and rangers in Kruger National Park, South Africa, 81 Environmental protection is acutely politically sensitive in South Africa. Most of the land involved in post-1994 land restitution claims fell within protected areas. This means that too robust a security response to the loss of wildlife has the potential to stoke the economic frustrations 'of a large, predominantly black, under-class, which for generations has been excluded from wildlife management and conservation by white "exceptionalism".'82 That said, the Department of the Environment still sees slow progress as the biggest challenge to expanding the country's wildlife economy, 83 The Peace Park Foundation was in part founded to overcome these legacies of inequality, in South Africa and elsewhere, with the ambition of rebuilding the connection between wildlife and people including by removing boundaries.

South Africa has a burgeoning wildlife economy. In 2013, consumptive use contributed ZAR 1.7 billion (\$115.9 million) to GDP through trophy hunting, and ZAR 8.6 billion (\$586.3 million) to GDP from biltong hunting.84 In 2016, live auction sales of wildlife contributed ZAR 1.7 billion (\$115.9 million) to the economy. Of the hunting sector, 60-70 per cent of its value comes from the provision of ancillary goods and services, such as veterinary services, translocation services, accommodation, equipment, transport, and firearm and ammunition supplies.85 This trend is replicated in the non-consumptive sector. For example, the iSimangaliso Wetland Park in South Africa generated \$1.5 million in the 2015–16 financial year, creating 1,600 direct jobs and 6,000 indirect jobs. 86 For every job created in the park, a further 3.75 were created beyond the gate.

South Africa has one of the most developed tourist industries on the continent. The government aims to increase tourism's contribution, both direct and indirect, to the economy from the 2009 baseline of ZAR 189.4 billion (\$12.9 billion), 7.9 per cent of GDP, to ZAR 499 billion (\$34 billion) by 2020. Tourism supports one in every 12 jobs in South Africa, and one report calculates that the linkages to other sectors in the country means that every tourist rand spent increases GDP by ZAR

⁷⁹ Department of Environmental Affairs (2012), 'South Africa and Vietnam sign an MOU to fight rhino poaching and other Environmental $Crimes', Press \ Release, 10 \ December \ 2012, \ https://www.environment.gov.za/?q=content/southafrica_vietnam_sign_mou \ (accessed \ 2 \ Oct.)$

⁸⁰ Moneron, S., Okes, N. and Rademeyer, J. (2017), Pendants, Powder, and Pathways: A rapid assessment of smuggling routes and techniques used in the illicit trade in African rhino horn, TRAFFIC Report, September 2017, https://www.traffic.org/site/assets/files/1313/pendants-powder-pathways.pdf (accessed 2 Oct. 2018).

81 Russell, A. (2015), 'Rhino poaching: inside the brutal trade', Financial Times, 2 October 2015, https://www.ft.com/content/f71d53ea-67b3-

¹¹e5-97do-1456a776a4f5 (accessed 17 Aug. 2018).

Humphreys, J. and Smith, M. L. R. (2014), 'The 'rhinofication' of South African security', International Affairs, 90(4), 1 July 2014, pp. 795-818, https://doi.org/10.1111/1468-2346.12141 (accessed 20 Sep. 2018).

⁸³ Department for Environmental Affairs (2018), 'Unlocking The Socio-Economic Potential Of South Africa's Biodiversity Assets Through Sustainable Use Of Wildlife Resources', Biodiversity Economy (Wildlife) Presentation, Parliament: Cape Town, http://pmg-assets.s3-websiteeu-west-1.amazonaws.com/180227DEA.pdf (accessed 3 Oct. 2018).

⁸⁵ Ibid.

⁸⁶ World Bank (2018), Supporting Sustainable Livelihoods through Wildlife Tourism, Knowledge Series, Tourism for Development, Washington: World Bank Group, https://openknowledge.worldbank.org/handle/10986/29417 (accessed 20 Sep. 2018).

1.24.87 Domestic tourism accounts for 52 per cent of total tourism consumption, which is an important driver of national engagement in conservation. Wildlife is a significant part of South Africa's diversified tourism product. In addition, the country is actively promoting other nonconsumptive wildlife uses, including silk production.

There is a high level of philanthropic and business investment in conservation and anti-poaching in South Africa. In the 2014–15 financial year, South Africa received more than ZAR 437.7 million (\$29.8 million) from international donors towards anti-rhino poaching. Most of this was spent in Kruger National Park. This provides additional support for the considerable level of domestic conservation management and planning. Rhino poaching has been designated as a national priority crime, and multiple departments from across government, including the security cluster, environment and provincial government are involved in the implementation of the Integrated Strategic Management of Rhinoceros. South Africa is an active participant in several international agreements for combating wildlife crime, and in 2016 hosted the 17th CITES Conference of the Parties, the fourth African country to do so after Kenya (2000), Zimbabwe (1997), and Botswana (1983). South Africa's membership remains a point of domestic contention, but its hosting of the conference was seen as an attempt to amplify African views on conservation.⁸⁸

Angola: Post conflict ambition

Angola has the potential to host one of the most diverse mammal populations on the continent and could be an important destination for large mammals to move from areas with pressure on their carrying capacity. But a lack of infrastructure, difficult implementation of new land ownership laws, and human security threats from remnants of war, have prohibited the country from fully benefitting from this important natural capital resource.

Large mammals have returned to Angola following the end of the country's 27-year-long civil war in 2002. In 2014, CITES highlighted Angola as a country that was 'important to watch' and recommended the preparation of a national ivory action plan (NIAP), which was signed in July 2018.89 The plan was informed by cross-government participation, including the ministries of agriculture, trade, hotels and tourism, and defence. The plan's primary objectives are to combat the illegal ivory trade and demonstrate the countries commitment to tackling poaching and IWT to an international audience, which is indicative of Angola's increasing assertiveness on regional and international issues. In doing this, the government has already taken a step to shut down the domestic ivory trade, and it has revised the criminal code to cover poaching and trafficking.

HWC has increased as elephant populations have risen. In Cuando Cubango Province local communities were trained in techniques to scare away elephants from their fields and local HWC mitigation associations have been formed.90 The NIAP includes a plan for local government in

⁸⁷ Muchapondwa and Stage (2013), "The economic impacts of tourism in Botswana, Namibia, and South Africa: Is poverty subsiding".

⁸⁸ Vegter, I. (2016), 'African Nations should withdraw from CITES', Daily Maverick, 23 August 2016,

https://www.dailymaverick.co.za/opinionista/2016-08-23-african-nations-should-withdraw-from-cites/ (accessed 25 Sep. 2018). ⁸⁹ Government of Angola (2018), 'National Ivory Action plan of Angola (NIAP) 2018 - 2020'

https://cites.org/sites/default/files/common/prog/niaps/ANGOLA%20 signed %20 revised %20 NIAP%202018. pdf (accessed 3 Oct. 2018).

Cabinda Province to work with UNFAO to develop an instruction manual for communities to reduce HWC.

Angola accounts for 17 per cent of the KAZA TFCA including the protected spaces of Luiana and Mavinga national parks, and Luengue, Luiana and Mucusso hunting areas. But the development of a tourist industry to match that of its neighbours, or in some areas even allow access for conservationists, is prevented by the widespread prevalence of landmines. Remnants of war, such as landmines and unexploded ordnance present a danger to wildlife and communities. Those who dare enter these areas do so with relative impunity for high-risk, high-reward illegal activities, such as poaching or illegal logging. In addition, minefields cause animal deaths and cut off migratory routes. They prevent the development of agriculture and ecotourism by denying local people access to the land.

An emergency de-mining programme in Mavinga National Park ran from 2003 until 2005, with the end of the UN Airlink service. ⁹¹ The access road remains at risk from landmines, preventing the area's 40,000 inhabitants from sustainably benefiting from the park's economic potential. There is considerable opportunity in linking conservation education with mine awareness programmes. In the past, mine risk education (MRE) to local communities in remote areas has shared logistics with HIV awareness programmes, subject to funding. This model could be replicable for conservation.

'Education is the biggest pillar. We need to teach peaceful co-existence.'

Nachilala Nkombo, Zambia Country Director, WWF92

Angola currently does not have a well-established international tourist trade. However, the country wants to open for tourism. In 2017, the World Economic Forum forecast that Angola would be among the 10 fastest growing tourism destinations worldwide over the next decade. The sector has the potential to generate more jobs across the country than the offshore oil and gas industry currently does. In July 2018, tourism was listed as one of nine investment priority sectors. As part of this, the government has launched a visa on arrival for nationals of 61 countries, overcoming a major hurdle to increased tourism. Furthermore, the country is seeking to develop its tourism offering beyond natural wildlife, including a government proposal for Cuito Cuanavale, a significant battlefield from the regional liberation struggle, to be listed as a UNESCO world heritage site.

⁹¹ Interview, London, August 2018.

⁹² Skype interview, London, August 2018.

KAZA - KAVANGO ZAMBEZI TRANSFRONTIER **CONSERVATION AREA**

- Established in 2006 by Angola, Botswana, Namibia, Zambia and Zimbabwe, KAZA is home to 2.7 million people and covers nearly 520,000 km².
- The TFCA includes 20 national parks; 85 forest reserves; 22 community conservancies; 11 sanctuaries; 103 wildlife management areas; and 11 game management areas.

Biodiversity: Civil war has decimated the mammal

ANGOLA

population, which is now recovering. Angola will

become an important area for excess elephant

stewardship is invaluable. Such communities are the first lines of defence Across KAZA partner states, the work towards the promotion of wildlife as an acceptable and competitive land-use option through community against poaching.

IWT and pursuing conservation-driven development is

Province in KAZA remains one of the most heavily-

mined provinces in the country.

dependent on mine clearance. Cuando Cubango

Economic and development impact: Countering

populations in Botswana, where carrying capacity

is under strain.

ZAMBIA

- 7,600 elephants in KAZA. About one-third of the country is protected areas, including 20 national Biodiversity: Zambia is home to approximately parks and 36 game management areas
- for an estimated 4,700 people. In the Silowana complex, Economic and development impact: In the Simalaha and protect wildlife. The project ensured food security trained in agricultural practices to support livelihoods more than 3,200 farmers have received support for conservation agriculture, increasing food security Community Conservancy, 887 farmers have been for an estimated 17,200 people.

ZIMBABWE

/ictoria Falls/

Tsodilo Hills

- Biodiversity: 650 bird species and over 76 mammals, Africa of nearly 83,000. In 2016, 443 arrests resulted including the second largest elephant population in in 57 poaching convictions.
- 1989-2001. The initiative was a successful model, but has suffered from a drop in tourist visits to Zimbabwe Economic and development impact: CAMPFIRE generated \$20 million for local communities from and increased political instability.

BOTSWANA

- within the Okavanga Delta, generating a revenue of more 2015-16, the country's CBOs were home to 557,447 people; partnerships with private entities to maximize revenues people were employed by 14 ecotourism organizations otal CBO revenue was BWP 26.8 million (\$2.5 million). than \$600,000. CBOs tend to enter into joint venture Economic and development impact: In 2012, 610 skills transfer, access to finance and marketing. In

- largest elephant population in Africa at over 135,000. Biodiversity: 164 mammal species, including the

- black rhino population; wildlife numbers have recovered Biodiversity: Namibia holds 34 per cent of the global significantly since the 1960s.
 - enterprises have generated over \$81 million in financial conservancies that retain all of the revenues generated. renowned CBNRM model operates through communal Economic and development impact: The country's Since 1998, more than 200 communal conservancy The programme is credited with reviving Namibia's and economic benefits for conservancy members. wildlife stock.

Intergovernmental cooperation through TFCAs

The SADC has several enabling policies and frameworks for the establishment of TFCAs in the region. One of these is the Protocol on Wildlife Conservation and Law Enforcement (1999), which commits member states to promote the conservation of shared wildlife resources through the establishment of TFCAs. The approach extends beyond wildlife and encourages the conservation of shared natural resources including forests, river basins, lakes that border more than one country and across multiple land-use areas. These policies and frameworks are founded on the recognition that contiguous natural resources are a shared asset, which can be harnessed to foster peace, stability and development.93 In 2013, the SADC launched the 'Programme for TFCAs' to implement the Protocol on Wildlife Conservation and Law Enforcement.94 The approach to these TFCAs varies between countries, in part driven by different historical legacies and populations living in the TFCAs. But research has shown that TFCAs can have positive ecological and economic impacts where strong governance institutions exist in areas with significant natural resources.95

'In terms of the potential of wildlife for development, it is a big un-tapped sector. With investments, we could have large achievements.'

Nyambe Nyambe, Executive Director, KAZA TFCA secretariat⁹⁶

The establishment of a thriving ecotourism sector has been critical for the success of TFCAs such as KAZA, which has contributed to socio-economic transformation and protection of wildlife in partner countries. This has been achieved through community engagement that has further developed the area into a competitive tourism product and attracted investment. Consistent with its founding vision and mission, the promotion of KAZA as a holistic tourism destination offering has been central. In this regard, for example, at the 2016 KAZA symposium, participants suggested the development of a brand to help further promote the area. As a result, KAZA launched the UniVisa project, which allows tourists to visit Zambia and Zimbabwe on the same visa. Tourists may also conduct a day trip to Botswana on the same visa. The project has been successful and there are ambitions to roll it out across all KAZA partners. The advancement of TFCAs has also led to greater law enforcement cooperation.

SADC is increasing its cooperation on law enforcement through the Southern African Regional Police Chiefs Co-operation Organisation, the primary police force in Southern Africa for the prevention and fighting of cross-border crime. In February 2017, the SADC adopted the Law Enforcement and Anti-poaching Strategy (LEAP). The focus of the strategy is to strengthen legislation and judicial processes; reduce wildlife crime and illegal trade; improve and bolster field protection; integrate local people in natural resources management; and ensure sustainable trade and use of natural resources. There are plans for further security cooperation including international technical assistance and training. In May 2018, six SADC states agreed to deepen

⁹³ SADC (2017), Transfrontier Conservation Areas Brochure, http://zimparks.org/wp-content/uploads/2017/09/SADC-TFCA-BROCHURE.pdf (accessed 4 Oct. 2018).

⁹⁴ Ibid.

⁹⁵ Muchapondwa, E. and Ngwaru, T. (2010), 'Modelling Fugitive Natural Resources in the Context of Transfrontier Parks: Under what conditions will conservation be successful in Africa?', Working Papers 170, University of Cape Town, https://ideas.repec.org/p/rza/wpaper/170.html (accessed 20 Sep. 2018).

⁹⁶ Skype interview, London, August 2018.

cooperation on poaching, particularly that of rhinos and elephants, at the fourth multilateral meeting of defence and security chiefs on anti-poaching.

The TFCA secretariat can play an important role in ensuring equitable benefit distribution between member countries and targeted stakeholders to offset the inequalities of wildlife utilization. Similarly, administrative bodies mandated by a regional economic community (REC) can be important interlocutors for international agreements regarding local natural resources. One such agreement is the proposed Defending Economic Livelihoods and Threatened Animals (DELTA) Act in the US. This aims to 'promote inclusive economic growth through conservation and biodiversity programs that facilitate transboundary cooperation, improve water and natural resource management, and build local capacity to protect and preserve threatened wildlife species in the greater Okavango River Basin and neighbouring watersheds and conservation areas.' ⁹⁷ The draft act states that the support it provides will be in coordination with regional frameworks to ensure regional integration of conservation, wildlife trafficking and water management initiatives. For international stakeholders engaging in transfrontier conservation initiatives, regional bodies can be an important facilitator to mitigate regional diplomatic risks.

Box 1: The economic costs of IWT and incentives for pursuing conservation-driven development

Economic costs of IWT

Impact on GDP

- Illicit financial flows generated by IWT of seven species in eight Southern African countries is estimated to be \$1.6 billion in 2006–14.98
- IWT-related corruption undermines the effectiveness of state institutions, drains state resources and creates an environment for other crimes to thrive.
- Lost tourism revenue from poaching. Estimated direct economic losses from elephant poaching in Southern Africa is \$4.64 million annually. Across Africa this was \$9.1 million annually.
- Estimated minimum law enforcement cost to protect the rhino: estimated \$20,000 per rhino.
- · High state enforcement costs redirect government budgets away from development investment.

Natural capital cost

- Reduced carrying capacity of ecosystems has an impact across the economy.
- IWT decreases positive externalities from biodiversity.
- Natural capital loss from elephant poaching is estimated to be \$12–18 billion in 2010–12.¹⁰¹
- The extent of the cost of IWT to natural capital is often undervalued due to an absence of data.

23 | Chatham House

⁹⁷ Defending Economic Livelihoods and Threatened Animals Act of 2018, https://docs.house.gov/billsthisweek/20180716/HR4819.pdf (accessed 4 Oct. 2018).

⁹⁸ Martin and Stiles (2017), 'Assessing the Extent and Impact of Illicit Financial Flows in the Wildlife and Tourism Economic Sectors in Southern Africa'.

⁹⁹ Naidoo, Fisher, Manica, and Balmford (2016), 'Estimating economic losses to tourism in Africa from the illegal killing of elephants'.

100 Martin, R. B. (2011), 'A Legal Trade in Rhino Horn: Hobson's Choice', Rhino Resource Centre,

http://www.rhinoresourcecenter.com/index.php?s=1&act=refs&CODE=ref_detail&id=1331766207 (accessed 5 Oct. 2018).

¹⁰¹ Smith and Porsch (2015), The Costs of Illegal Wildlife Trade: Elephant and Rhino.

Human and social capital cost

- Harm to poachers, rangers and community members. In 2009–17, 264 rangers were killed in Africa, 102 In 2008-15, 220 poachers were killed in South Africa. 103
- IWT erodes intercommunity trust and undermines the rule of law.

Incentives for pursuing conservation-driven development

- Combating IWT protects vulnerable citizens and allows communities to take stewardship of the diverse natural resources from which they derive material benefit.
- Stronger law enforcement against the associated ills of IWT, such as corruption and organized crime, stems revenue loss and cash externalization associated with illicit financial flows.
- Including communities in decision-making and stewardship enhances empowerment, such as promoting gender balance in resource management, and provides direct economic benefits at a community level.
- Conservation initiatives themselves can provide tangible benefits, such as clinics, and jobs.
- The tourism industry is worth \$57 billion to the seven countries in this study. This is forecast to rise to \$90 billion by 2028. The majority of tourism, 80 per cent, is wildlife driven. Addressing IWT and promoting conservation is one aspect of protecting this industry and the direct and indirect jobs it provides.
- Combating IWT is an integral part of adopting a landscape approach to conservation and restoring the traditional connection between people and landscape.

'Responsible management of natural resources underpins economic opportunity and quality of life for all communities. The loss of natural resources can lead to poverty, hunger, and compromised health and security. Conservation and development must go hand in hand so that nations may benefit from their natural wealth, while preserving it for future generations.'

Senator Sheldon Whitehouse and Congressman Jeff Fortenberry for Global Environment Facility (GEF)104

Conclusion

The prevalence of IWT has significant economic cost implications for African economies. It erodes natural capital stocks, diminishing the ability of citizen to derive sustainable revenue streams from them. The economic benefits of these ecosystems are often under-recognized, especially where they remain unquantified. More broadly, IWT hinders human and social capital formation, which further limits development in countries with these natural wildlife resources.

More directly, IWT has an impact on national budgets. Illicit financial flows from IWT deny revenue to governments where legal wildlife product trade exists. The perpetrators often rely on organized crime to facilitate the illegal trade through money laundering, which creates cash externalization. The trade is enabled by corruption, which undermines the effectiveness of state institutions. National budgets are being spent on countering IWT, rather than on social or development programmes. In expanding wildlife economies and pursuing conservation-driven development models, governments will still incur the costs of counter-poaching, however, these can

¹⁰² International Ranger Federation (2017), Ranger roll of honour,

¹⁰³ Clark, J. (2017), Overkill: The Race to Save Africa's Wildlife, Cape Town: Penguin Random House.

¹⁰⁴ Whitehouse, S. and Fortenberry, J. (2017), 'Maximising Value', Our Planet, Global Environment Facility, UNEP.

be recouped through income generated by legitimate economic activity that derives revenue from wildlife products. IWT increases insecurity and threatens vulnerable populations. Combating this trade is an important step towards allowing legitimate business and communities to develop.

There are significant economic incentives to tackling IWT. The exercise of utilization rights of wildlife – at the state or local level – allows for the generation of revenue streams from these assets, such as through tourism or the development of wildlife product markets. It is widely acknowledged that tourism alone is not sufficient to create rural jobs to incentivize conservation and disincentivize IWT. In conjunction with this approach, agricultural development must also be shaped to protect wildlife and ecosystems.

Southern African countries wish to send a message to the international community that their economies are open for business. Global investment in the wildlife economy, and the growth potential of the sector, presents a significant opportunity for the region. But wildlife preservation needs to be higher up the policy agenda for conservation-driven economic development to truly take root and provide a long-term sustainable revenue stream, which will reduce economic dependence on extractive industries.

Governments need to create an investment environment that attracts the level of funding required to develop tourist offerings and to fully capitalize on wildlife economies. Many of the policy and governance initiatives required to reduce international IWT markets are not specific to conservation and have positive impacts across multiple sectors, such as: improved resource and administrative governance; a more attractive investment climate, including secure land tenure and transparent tax regimes; a competent and robust judiciary; a skilled workforce with managerial capacity; and regional cooperation and coordination. It also requires infrastructure development that is achieved in an accountable and transparent way. All of which requires political will at the highest level.

It is increasingly accepted that development and conservation must engage local communities not just in benefit sharing, but in ownership and decision-making. Incentives presented to communities as public goods have limited impact.¹⁰⁵ Engagement strategies should also ensure gender balance, especially in African contexts with gender specific divisions of labour where women often hold responsibilities over elements of agricultural production. There are already successful Africa-conceived models and best practice that can be supported. Different partnership models between communities, governments and the private sector are helping provide the requisite financial capital, management skills or profile to support sustainable livelihoods.¹⁰⁶ This extends beyond tourism to other activities that derive income from wildlife resources.

Across the countries within this study there are significant differences in how wildlife data are collected and analysed. The lack of available data on the broader economic costs of IWT and ecosystem degradation mean that conclusions are often intuitive, rather than empirically

ts_and_Beyond (accessed 20 Sep. 2018).

106 World Bank (2018), 'Supporting Sustainable Livelihoods through Wildlife Tourism'.

٠

¹⁰⁵ Newmark, W. D. and Hough, J. L. (2000), 'Conserving Wildlife in Africa: Integrated Conservation and Development Projects and Beyond', *BioScience*, 50(7), pp. 585–592,

https://www.researchgate.net/publication/232666877_Conserving_Wildlife_in_Africa_Integrated_Conservation_and_Development_Projects_and_Revond(accessed 20 Sep. 2018)

demonstrated. This has contributed to subdued political interest. The opportunities presented by impact investing in conservation is creating a need for improved data collection. Improved monitoring and evaluation are critically important, but key performance indicators need to be domestically defined by governments and citizens with a greater awareness of what is possible and feasible, rather than by international NGOs.

The destruction of wildlife endowments is increasingly resonating with African stakeholders. African voices are becoming more prominent in international discussions on conservation and IWT. The evolution of national debates around wildlife and conservation are important for policy evaluations. They also support and facilitate the domestically-defined conservation approaches that have been successful.

Combating IWT and further pursuing conservation-development models could help generate considerable economic benefits for African countries, while ensuring the long-term preservation of Africa's wealth of natural capital. The cases presented in this paper show that different African models of conservation demonstrate success in different areas and assist governments to achieve development ambitions. Leveraging international support to pursue these ambitions will not only protect wildlife, but further sustain the important relationship between ecosystems, people and socio-economic prosperity on the continent.

About the authors

Christopher Vandome is a research associate in the Africa Programme at Chatham House. His research focuses on the political economy of Southern Africa.

Dr Alex Vines OBE is the head of the Africa Programme at Chatham House, where he is also director for Area Studies and International Law. He has previously worked at Human Rights Watch as a senior researcher on business and human rights. He is also a senior lecturer at Coventry University. Alex is a co-author of the 2014 Chatham House report *Global Impacts of the Illegal Wildlife Trade: The Costs of Crime, Insecurity and Institutional Erosion*.

Acknowledgments

The authors would like to thank the 40-plus practitioners, policymakers, experts and researchers that contributed to this research. In particular, Bob Dewar, Chatham House associate fellow; Kaddu Sebunya, president of the African Wildlife Foundation, and his team for their valuable input; Nyambe Nyambe, executive director of the KAZA TFCA, for his helpful comments; and Farida Shaikh at the UK Foreign and Commonwealth Office for her input. Also, thanks go to Rebekka Rumpel, former research assistant with the Chatham House Africa Programme, for providing a position paper on the costs of IWT. Hanna Desta, Chatham House Africa Programme intern for her support in data collection and graphic production. Michael Tsang for editing, and Soapbox for graphic design. This research was made possible by a small grant from the UK Foreign and Commonwealth Office as a side initiative ahead of the Illegal Wildlife Trade Conference: London 2018.

Independent thinking since 1920



Chatham House, the Royal Institute of International Affairs, is a world-leading policy institute based in London. Our mission is to help governments and societies build a sustainably secure, prosperous and just world.

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical including photocopying, recording or any information storage or retrieval system, without the prior written permission of the copyright holder. Please direct all enquiries to the publishers.

Chatham House does not express opinions of its own. The opinions expressed in this publication are the responsibility of the author(s).

Copyright © The Royal Institute of International Affairs, 2018

Cover image: Field scout recording desert black rhino data, Save the Rhino Trust, Palmwag, Torra Conservancy, Damaraland, Namibia.

Photo credit: Copyright © Mint Images/Frans Lanting/Getty Images

ISBN 978 1 78413 297 2

Charity Registration Number: 208223

The Royal Institute of International Affairs Chatham House 10 St James's Square, London SW1Y 4LE T +44 (0)20 7957 5700 F +44 (0)20 7957 5710 contact@chathamhouse.org www.chathamhouse.org