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The contribution of wildlife to the economies of Sub Saharan Africa

Roz Price
Institute of Development Studies
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Question

To what extent does wildlife contribute to the economies of Sub Saharan Africa, through tourism, legal trade and consumptive use (legal hunting)?

Contents

1. Overview

There are numerous studies analysing wildlife watching tourism, however, there is limited data and literature on the overall figures of wildlife watching tourism and its economic impacts, and hence these are difficult to quantify. There is also limited data and evidence on the exact economic contributions of consumptive wildlife tourism in Sub Saharan Africa, such as trophy hunting and legal trade in skins. From the studies found, the contribution of trophy hunting to Sub Saharan countries' GDPs is small but it may play a significant role in supporting conservation efforts. Three key challenges/limitations with measuring the economic value of wildlife tourism in Sub Saharan Africa include: the availability of national tourism statistics for African countries (often referring to direct economic contributions); where data are available at the national level, this mostly refers to the whole tourism sector, regardless of different travel purposes; lastly, data on tourism expenditure (both consumptive and non-consumptive) are not collected systematically. Despite these limitations, tourism is a principal export for many African countries and a significant source of foreign exchange. Although the economic importance of tourism in Africa and the continent's share of the worldwide tourism market are relatively modest, tourism numbers and expenditure has been increasing steadily there over the last 20 years (see section 2 below). Wildlife watching tourism is one of the main tourism products for Africa and as such a key contributor to the continent's socio-economic development.

Key findings include:

- The total contribution (including indirect and induced impacts) of travel and tourism to Sub Saharan African GDP was US$ 108.0bn (7.1% of GDP) in 2016, and this is forecast to rise by 4.8% pa to US$ 178.5bn (7.3% of GDP) in 2027.
- In 2016, the total contribution of travel and tourism to employment, including jobs indirectly supported by the industry (for example through construction of hotels), was 6.0% of total employment in Sub Saharan Africa (15,770,500 jobs). This is expected to rise by 3.2% pa to 22,361,000 jobs in 2027.
- International visitor numbers to Sub Saharan African countries is steadily increasing.
- USA and UK remain top sources of tourists to Sub Saharan Africa, however, the importance of China as a source market of tourism is growing.
- A typical wildlife watching tour costs on average US$ 433 and captures an additional US$ 55 in out-of-pocket expenses per person, per day.
- The average length of stay for a typical wildlife watching tour is 10 days.
- A total of 14 countries are generating an estimated US$ 142 million in entrance fees for protected areas.
- Numerous animal species are already subject to a managed trade in Sub Saharan Africa which, in many cases, is sustainable (e.g. crocodile skins, zebra skins).
- Good evidence and data on the economic significance and conservation benefits of hunting in African countries is limited, polarising a fractious debate and making it difficult to fully evaluate the overall effect of trophy hunting.

Definitions of terms have been included as footnotes where necessary.

2. Wildlife Tourism in Sub Saharan Africa

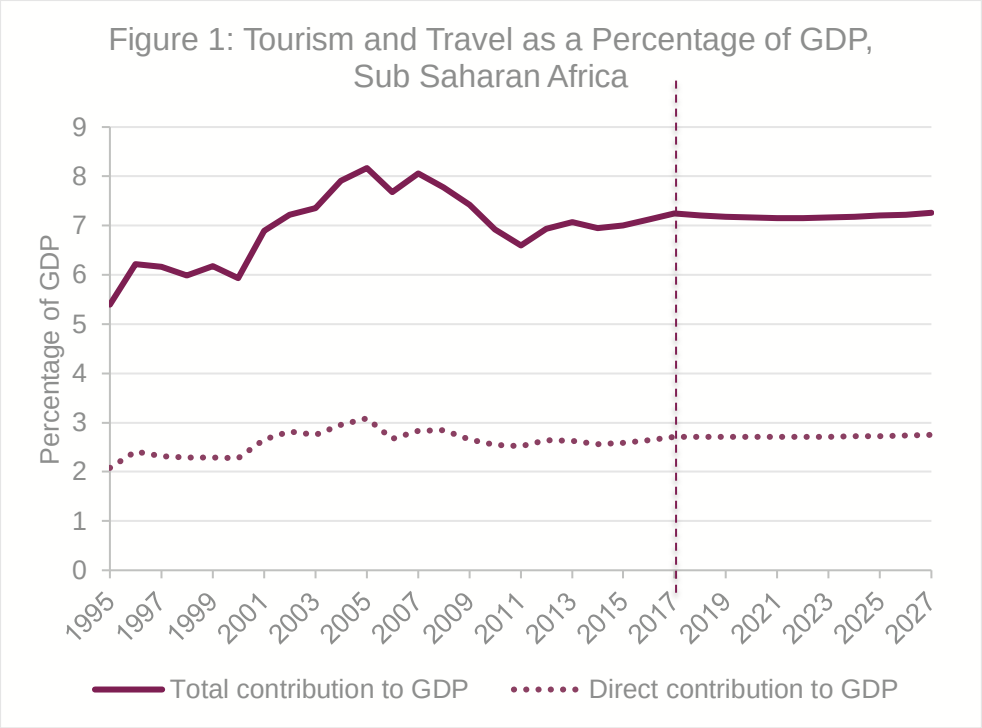
General information on Tourism in Sub Saharan Africa

The World Travel & Tourism Council (WTTC)[1] produce reports and forecasts of the economic and employment impact of travel and tourism[2], also providing 10-year forecasts of Travel & Tourism's future growth, economic importance and social influence (see https://www.wttc.org/research/economic-research/economic-impact-analysis/). WTTC reported the following information for **Sub Saharan Africa** in 2016 (WTTC, 2017):

- The **direct**[3] contribution of travel and tourism to GDP was US$ 40.1bn (2.6% of total GDP) in 2016, and is forecast to rise by 4.4% in 2017. From 2017-2027 it is forecast to rise by 4.8% pa to US$ 66.9bn (2.7% of total GDP) in 2027.
- The **total contribution**[4] (including indirect and induced impacts) of travel and tourism to GDP was US$ 108.0bn (7.1% of GDP) in 2016. This is forecast to rise by 3.4% in 2017, and to rise by 4.8% pa to US$ 178.5bn (7.3% of GDP) in 2027.
- In 2016 travel and tourism **directly**[5] supported 6,171,000 jobs (2.4% of total employment). This is expected to rise by 3.8% in 2017 and rise by 3.3% pa to 8,833,000 jobs (2.4% of total employment) in 2027.
- In 2016, the **total contribution**[6] of travel and tourism to employment, including jobs indirectly supported by the industry (for example through construction of hotels), was 6.0% of total employment (15,770,500 jobs). This is expected to rise by 3.3% in 2017 to 16,289,000 jobs and rise by 3.2% pa to 22,361,000 jobs in 2027 (6.1% of total).
- Visitor exports generated US$ 27.8bn (8.6% of total exports) in 2016. This is forecast to grow by 6.1% in 2017, and grow by 5.9% pa, from 2017-2027, to US$ 52.4bn in 2027 (8.5% of total).
- Travel & Tourism investment in 2016 was US$ 16.9bn, or 5.6% of total investment. It should rise by 0.7% in 2017, and rise by 4.9% pa over the next ten years to US$ 27.4bn in 2027 (5.5% of total).

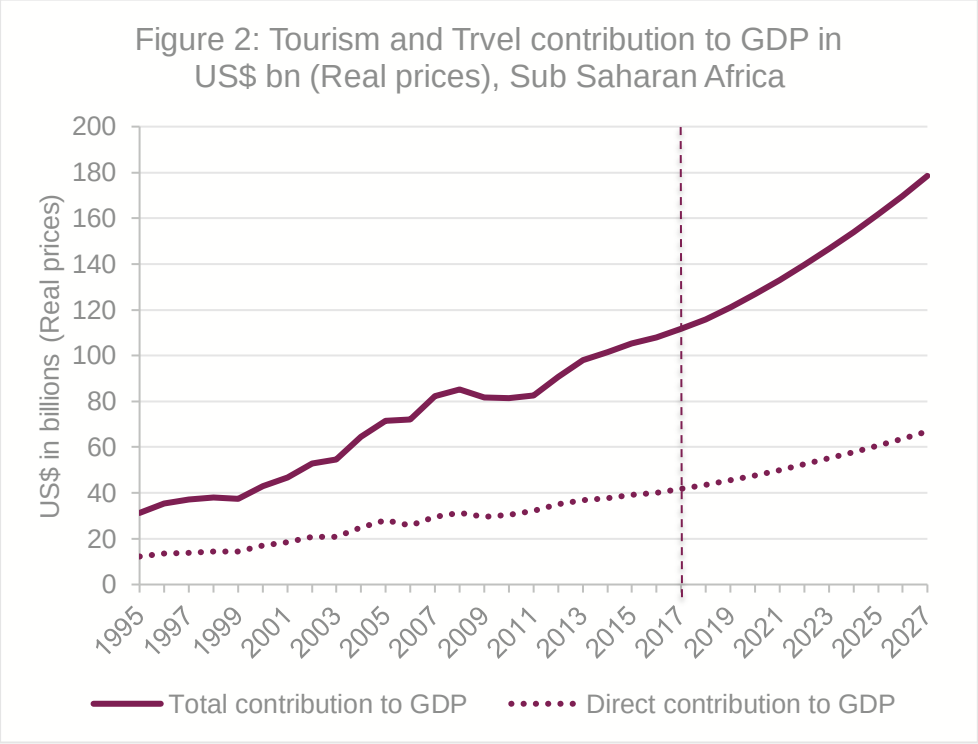
Figure 1 shows the trend in the contribution of tourism and travel as a percentage of GDP for Sub Saharan Africa, including the predicted change from 2017 – 2027. Tables 3 and 4 in Annex 1 show this data, these also show data for specific Sub Saharan African countries.

[1] The UN Statistics Division-approved Tourism Satellite Accounting methodology (TSA:RMF 2008) quantifies only the direct contribution of travel and tourism, WTTC recognises that travel and tourism's total contribution is much greater, and aims to capture its indirect and induced impacts through its annual research (WTTC, 2017).
[2] WTTC (2017, p.15) defines travel and tourism as relating "to the activity of travellers on trips outside their usual environment with a duration of less than one year".
[3] Defined by WTTC (2017, p.15) as "GDP generated by industries that deal directly with tourists, including hotels, travel agents, airlines and other passenger transport services, as well as the activities of restaurant and leisure industries that deal directly with tourists" (see WTTC, 2017, Glossary, p.15 for more information).
[4] Defined by WTTC (2017, p.15) as "GDP generated directly by the travel and tourism sector plus its indirect and induced impacts" (see WTTC, 2017, Glossary, p.15 for more information).
[5] See WTTC, 2017, Glossary, p.15 for more information.
[6] Defined by WTTC (2017, p.15) as "The number of jobs generated directly in the travel and tourism sector plus the indirect and induced contributions"



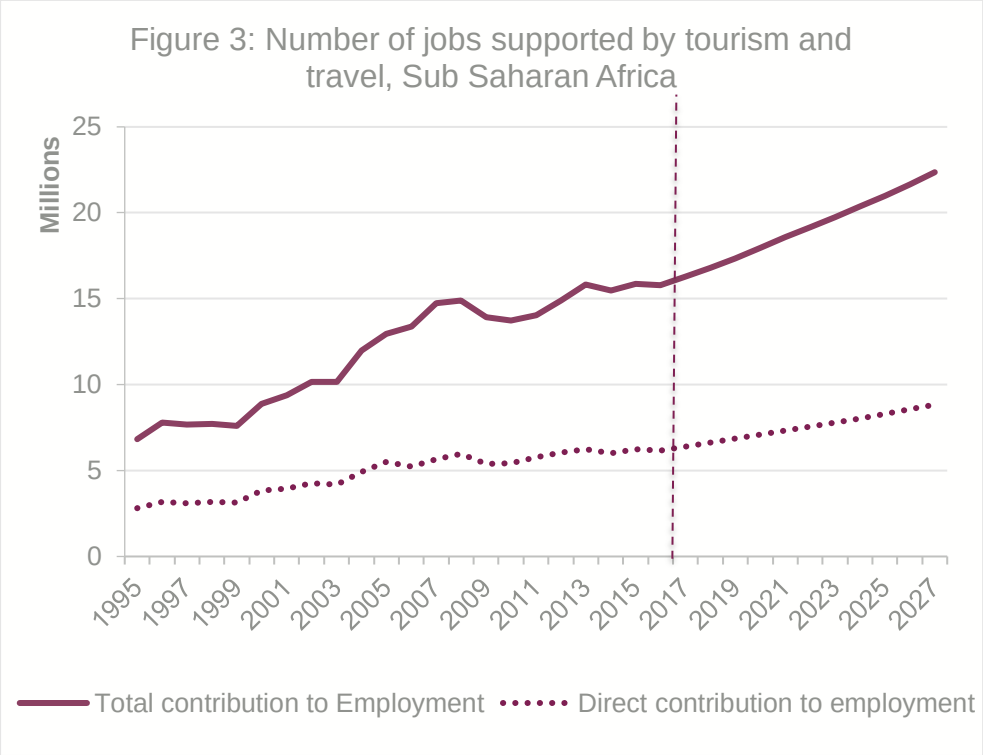
Source: WTTC Data Gateway.

Figure 2 shows the trend in the contribution of travel and tourism in billions of US$ (Real prices) to GDP in sub Saharan Africa between 1995 and 2027, both the total contribution and the direct contribution. Data from 2017 onwards is predicted. Tables 5 and 6 in Annex 1 show this data and data for specific Sub Saharan African countries.



Source: WTTC Data Gateway.

Figure 3 shows the trend in the number of jobs supported by travel and tourism in Sub Saharan Africa between 1995 and 2027, both the total contribution and the direct contribution. Data from 2017 onwards is predicted. Table 7 in Annex 1 shows the data for total contribution to number of jobs and data for specific Sub Saharan African countries.



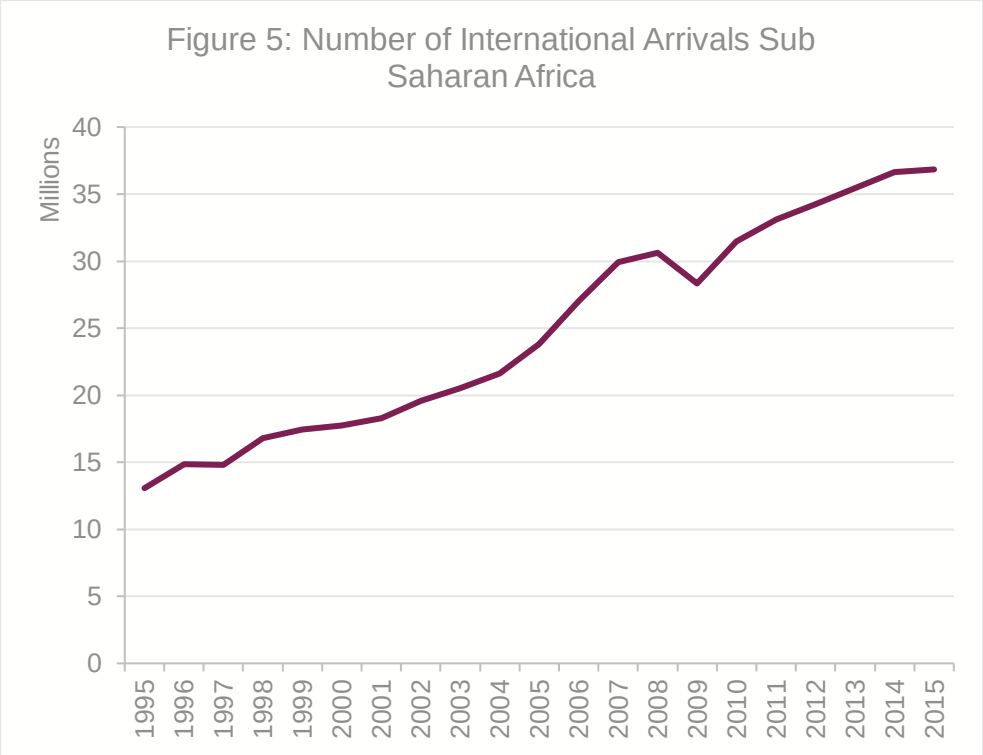
Source: WTTC Data Gateway.

Figure 4 shows the trend in employment from travel and tourism as a percentage share of total employment in Sub Saharan Africa between 1995 and 2027, both the total contribution and the direct contribution. Data from 2017 onwards is predicted. Table 8 in Annex 1 shows the data for total contribution to employment as a percentage share of total employment for Sub Saharan Africa and for specific Sub Saharan African countries.

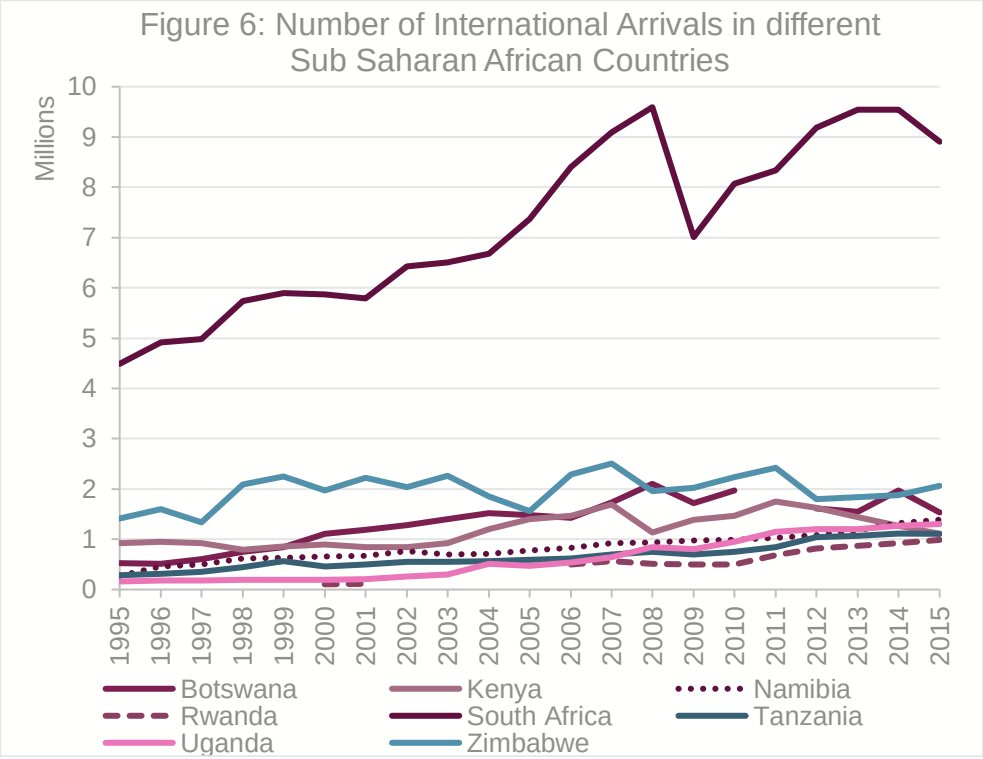
Source: WTTC Data Gateway.

Figure 5 shows the number of international inbound tourist arrivals[7] in Sub Saharan Africa between 1995 and 2015, and shows that these figures have increased year or year, except in 2009 when numbers decreased. Figure 6 shows the number of international arrivals in eight specific Sub Saharan African countries – Botswana, Kenya, Namibia, Rwanda, South Africa, Tanzania, Uganda and Zimbabwe. Trends in the number of visitors for these countries vary, with South Africa having significantly larger numbers of international visitors than the other countries. Most of the countries show a similar trend of visitor numbers increasing year on year, but with a dip in 2009, most likely related to the global financial crash in 2008. Some of the countries trends are more varied showing peaks and troughs, especially Kenya and Zimbabwe, which could be related to the political instability experienced in these countries. Table 9 in Annex 1 gives more detail on both this data and that for Sub Saharan Africa. Please note it is not possible to distinguish whether these tourists visited due to wildlife watching or not.

[7] UNWTO: International inbound tourists (overnight visitors) are the number of tourists who travel to a country other than that in which they have their usual residence, but outside their usual environment, for a period not exceeding 12 months and whose main purpose in visiting is other than an activity remunerated from within the country visited. Methodology varies across countries.



Source: World Tourism Organization, Yearbook of Tourism Statistics, Compendium of Tourism Statistics and data files (February 2017). Taken from World Bank Open Data.



Source: World Tourism Organization, Yearbook of Tourism Statistics, Compendium of Tourism Statistics and data files (February 2017). Taken from World Bank Open Data.

Table 1 shows the top 10 overseas source countries of tourists to Botswana, Kenya, Namibia, South Africa, Tanzania, Uganda, Zambia and Zimbabwe from overseas markets (non-African) for 2015 (2016 data was not available for all countries). Data that disaggregated by country of origin was not available for Rwanda.

Table 1: Top 10 Leading Overseas Countries (non-African) for Inbound Tourism to selected Sub Saharan Countries in 2015

	Botswana	Kenya	Namibia	South Africa	Tanzania*	Uganda	Zambia	Zimbabwe
1	USA	UK	Germany	UK	USA	UK	USA	USA
2	Germany	USA	UK	USA	UK	USA	UK	UK**
3	UK	India	USA	Germany	Italy	India	India	Germany
4	Australia	UAE	France	France	Germany	Austria	China	Australia
5	Netherlands	Germany	Switzerland	Netherlands	France	Germany	Australia	France
6	France	Italy	Netherlands	Australia	India	Canada	Japan	Japan
7	Switzerland	China	China	China	Netherlands	Netherlands	Germany	Benelux
8	Canada	Canada	Italy	India	China	China	Canada	Italy
9	Japan	France	Portugal	Canada	Canada	Italy	France	Nordic countries
10	Spain	Netherlands	Belgium	Italy	Australia	Belgium	Italy	China/Hong Kong

* Data is for 2014 ** Data for Zimbabwe defines UK as Britain and Ireland

Source: Statistics Botswana (2016); Kenyan Tourist Board (2016); Ministry of Environment and Tourism (2016); Statistics South Africa (2016); Tanzania Tourism Sector Survey (2016); Uganda Bureau of Statistics (2016); Ministry of Tourism and Arts (2016); Zimbabwe Tourism Authority (2015).

The table demonstrates the variety in overseas source countries for different African countries. It also highlights that USA and UK remain top sources of tourists to Sub Saharan Africa. However, the growth of China as a target source market of tourism for Sub Saharan Africa has been highlighted by governments, for example the Kenya Tourism Board (2016) and Zimbabwe Tourism Authority (2015). UNWTO highlighted the increasing growth of China, which is now the leading outbound market for tourism globally. In 2016 China continued to lead international outbound tourism spending globally, followed by the United States, Germany, the United Kingdom and France as the top five spenders. This continued growth consolidates China's position as the number one tourism source market in the world since 2012 (WTO, 2017), and this is being seen through the growth in Chinese tourist numbers visiting Sub Saharan countries.

Wildlife Tourism in Sub Saharan Africa

As demonstrated by the above figures, tourism provides a large part of GDP for many Sub Saharan African countries and is a key contributor to Africa's socio-economic development (WTO, 2014). Tourism is considered a priority sector for many African countries and much hope is put into tourism development as a vehicle for economic growth, job creation and poverty alleviation (Christie et al, 2014). Wildlife watching tourism is one of the main tourism products for Sub Saharan Africa; it is a type of tourism undertaken in order to watch or encounter wildlife, and relates exclusively to non-consumptive forms of wildlife-based activities (e.g. observing wildlife

and sometimes touching or feeding animals) (WTO, 2014). The safari is the primary method of wildlife watching tourism for East Africa and Southern Africa. The large diversity of destinations and the high value associated with “big five” game viewing (i.e. African lion, African elephant, Cape buffalo, African leopard, and rhinoceros) give East and Southern Africa a competitive advantage over other areas of Sub Saharan Africa and the rest of the world in the delivery of safari products (Christie et al, 2014). For example, the 2014 Tanzania Tourism Sector Survey (2016) found that Wildlife tourism continued to be the main tourism activity in Tanzania, accounting for 43.5 percent of all visitors in 2014. Most of the visitors who came for this activity were from the USA, UK, France and Italy. Another study (Taylor et al, 2015) found that the wildlife ranching practices (which includes both consumptive and non-consumptive uses of wildlife) in South Africa employ ~65,172 people in a diversity of both skilled and unskilled jobs.

Since 1998, Namibia has created 82 communal conservancies, covering nearly 20 percent of the country, and encompassing approximately 189,000 community members (9% of Namibia’s population) (WWF, 2017). Tourism and consumptive wildlife use generate the largest portions of conservancy returns in Namibia. While overall returns from the two sectors are similar, tourism provides significantly higher cash income to households in the form of wages. Consumptive wildlife enterprises, specifically conservation hunting, generate much higher fees to conservancies, which can be used to cover operational costs and development projects. Hunting also provides an additional benefit in the form of game meat (NACSO, 2015). Benefits from the Community-Based Natural Resource Management (CBNRM) Programme grew from almost nothing in 1994 to over N$ 56 million in 2012 (US$ 6.3m) amounting to cumulative benefits of over N$303 million (US$ 34m) since the programme began in 1991. The contribution to the national economy has grown strongly, reaching almost N$ 400 million (US$ 44.9m) in 2012 (Christie et al, 2014; NACSO, 2014). During 2015, community conservation generated about N$ 102 million in returns for local communities, and community conservation facilitated 5,116 jobs (NACSO, 2015). Sustainable consumptive wildlife use had total returns of N$ 36.4 million in 2015. Conservation hunting makes up most of the returns of the consumptive wildlife use sector (NACSO, 2015).

However, the general scarcity of reliable data, statistical information and studies about the wildlife watching tourism segment and its economic value in Sub Saharan Africa, remains a large gap in the literature. The United Nations World Tourism Organisation (WTO, 2014) developed the Briefing Paper "Towards Measuring the Economic Value of Wildlife Watching Tourism in Africa" as a first step towards filling this gap and undertaking a more systematic measurement of the economic value of the wildlife watching tourism market segment in Africa. The paper builds on a survey of 48 African tourism and conservation authorities from 31 countries, as well as 145 international and African-based tour operators; complemented with available statistics, case study reviews and in-depth interviews with governments and international organisations. UNWTO's findings confirmed that wildlife watching is a very important segment of tourism for most African countries, representing 80% of the total annual sales of trips to Africa, with safari as the most popular product. The research also brings further insights into the economic significance of wildlife watching tourism:

- A typical wildlife watching tour costs on average US$ 433 and captures an additional US$ 55 in out-of-pocket expenses per person, per day.
- The average length of stay for a typical wildlife watching tour is 10 days (this average is reflected in statistics from countries’ ministries, for example see Statistics South Africa (2016) and Zimbabwe Tourism Authority (2015).

- In addition, tours often include locally hired services such as accommodation, transportation, tour guides and cultural performances, creating important job opportunities for the local population.
- A total of 14 countries are generating an estimated US$ 142 million in entrance fees for protected areas, with this figure covering only a small number of countries and being based on some inconclusive data, it can be assumed that protected area receipts are much higher than the figure suggests.

National Park Visitors

Table 2 shows the number of reported visitors to the main National Parks in Kenya, Rwanda, South Africa, Tanzania, Uganda, Zambia and Zimbabwe, comparing visitor numbers in 2012 to 2015 (where data is available). Data was not available for Botswana and Namibia. The majority of National Park visitor numbers increase between the two years, however, those for Kenya decrease significantly. South Africa has the largest numbers of visitors.

Table 2: Visitor Numbers to Top National Parks from selected Sub Saharan Countries in 2012 and 2015

Country	Most Popular National Parks	Visitor Numbers	
		2012	2015
Kenya	Lake Nakuru	253,500	188,900
	Tsavo (East)	176,700	75,200
	Amboseli	141,400	86,900
Rwanda	Volcanoes NP	28,483	27,111
	Akagera NP	25,200	36,862
	Nyungwe NP	7,621	8,817
South Africa	Kruger	-	1,659,793*
	Garden Route	-	376,458*
	Addo	-	204,881*
Tanzania	Serengeti	366,177	-
	Lake Manyara	178,473	-
	Tarangire	161,792	-
Uganda	Murchison Falls	60,803	72,964
	Queen Elizabeth	58,172	65,366
	Lake Mburo	22,927	24,979
Zimbabwe	Rainforest	-	260,575
	Zambezi	-	113,563
	Matobo	-	65,688
Zambia	South Luangwa	35,480	43,653
	Mosi-oa-Tunya	14,659	23,083
	Klower Zambezi	6,937	9,011

*Data for Financial Year 2104/15

Source: Kenya National Bureau of Statistics (2017); National Institute of Statistics of Rwanda (NISR) (2016); South African National Parks (2015); Tanzania National Parks (http://www.tanzaniaparks.go.tz/index.php?option=com_content&view=article&id=14&Itemid=173); Uganda Bureau of Statistics (2016); Ministry of Tourism and Arts (2016); Zimbabwe Tourism Authority (2015).

Revenue information from National Parks is difficult to find for Sub Saharan African countries. For Botswana, Chobe National Park accounts for the majority of park visitors in Botswana, it therefore has the highest proportion of park revenues. Overall, national park revenues have fluctuated between BWP15 to 25 million and show no trends towards increased revenues (Department of Environmental Affairs, 2015). In June 2016, the Uganda Wildlife Authority (UWA) disbursed a total sum of UGX 143,850,000 to the communities adjacent to Kidepo Valley National Park for the financial year 2015/16, to implement livelihood projects. Under the Wildlife Act, UWA is mandated to give 20% of the park entrance fees to the district local governments that surround the protected area, these funds equal 20% of the park entry revenue that has accumulated over the last three years (http://www.ugandawildlife.org/news-a-updates-2/uwa-news/item/409-uwa-shares-143-8m-with-kidepo-park-neighbours). According to the Rwanda Development Board website (http://www.rdb.rw/tourism-and-conservation/conservation/community-initiatives.html), since 2005, a revenue sharing scheme was established which consists of giving 5% of total park revenues to communities as incentives for conservation. RDB-T&C has so far provided US$1,830,000 to support community projects. For South Africa's National Parks, conservation levy and entrance fees for 2015 came to R352,093,000 (South African National Parks, 2015).

3. Legal Wildlife Trade in Sub Saharan Africa

Numerous animal species are already subject to a managed trade which, in many cases, is sustainable, i.e. where legal trade dominates the market and illegal trade is minimal (e.g. crocodilian skins, zebra skins, bush meat) (Bennet, 2014). The legal market is supplied from wild, captive or semicaptive animals or from farmed animals. The CITES Trade database (https://trade.cites.org/en/cites_trade/) lists a number of different purposes for the export of CITES listed animals in Sub Saharan countries, including for "Scientific" uses, "Commercial" uses, "Personal" uses, "Breeding for captivity", "Zoo" etc. Products legally traded can include live animals, skins, trophies, specimens, skulls, teeth, hair, horn etc. For example, in 2015 according to the CITES database, Namibia exported over 60,000 mammal products, including 391 Hartmann's mountain zebra skins. In South Africa, the number of live animals sold (including in private sales and auctions) in 2014 was 255,500, generating total revenue of R4.328 billion (Taylor et al, 2015). The three main species supporting this sector over the last 30 years have been Sable, Roan (Hippotragus equinus) and disease free African Buffalo. Export quotas on species can be set by each member state of CITES. There is no specific requirement in the text of the Convention to establish quotas to limit the trade in CITES-listed species. Nevertheless, the use of export quotas has become an effective tool for the regulation of international trade in wild fauna (CITES https://www.cites.org/eng/resources/quotas/index.php).

The trade in Nile crocodile (Crocodylus niloticus) in parts of Africa (especially South Africa, Zambia and Zimbabwe) is an example of how a legal market has reduced poaching pressure on wild populations. Weber et al (2015) describe how CITES effectively led to a reduction in illegal trade by advancing legal, well-controlled, and strongly enforced trade, ultimately promoting sustainable wildlife use, i.e., a shift in a trade restriction policy to trade as a conservation solution prevented further decline of the species. The Nile crocodile was originally listed under CITES Appendix I but specific populations were transferred to Appendix II under the Ranching Resolution of CITES, meaning that populations not threatened could be used providing the take remained sustainable. After the 1980's, trade in the Nile crocodile was predominantly in

ranched/captive-bred individuals in these countries. Working with CITES, certain African countries developed sustainable use programs, involving stakeholders, i.e. governments, nongovernmental organizations, and private commercial entities. This constituency developed a vested interest in eradicating illegal harvest of the Nile crocodile, which is believed to have stopped in the 1990s (Weber et al, 2015).

Ivory

Throughout history, there has been a human desire for ivory – used in products from jewellery to piano keys. This resulted in the devastation of Africa's elephant population, from 26 million elephants in 1800 to fewer than one million in 2012. In the early 1900s there was an "ivory frenzy" and since there has been a steady decline in the elephant population (National Geographic Society, 2013). International trade in elephant ivory was banned in 1989 at a Convention on International Trade in Endangered Species (CITES) Conference of Parties, following extensive media publicity. After strong protests and a concerted lobbying effort, some southern African countries persuaded CITES Parties to allow two controlled one-off sales to Asian consumer countries, in 1999 and 2008 ('t Sas-Rolfes, 2015). Whereas, the first sale appeared to have little effect, NGOs claim that the second led to subsequent increases in poaching. However, the circumstances surrounding the second one-off ivory sale are complex, and it is not possible to prove or disprove the claim that it resulted in further poaching. 't Sas-Rolfes (2015) highlights three important points to consider. First, the one-off state-to-state mechanism permitted under CITES established an effective intermediary cartel, which was able to extract considerable rents by bidding low, stockpiling the ivory, and subsequently releasing small amounts at substantially elevated prices to supply premium markets. Second, the one-off sale was known to be the last for an extended and indeterminate period, thus creating incentives for speculative stockpiling. Third, the one-off sale coincided with the global financial crisis and sudden surge in rhino poaching, the latter of which also coincided with tighter restrictions on rhino horn supply, which should arguably have the opposite effect to a one-off sale. Notwithstanding these uncertainties, the Parties to CITES seem unlikely to approve of any further international ivory sales for the foreseeable future. Arguments against the legalisation of the trade of ivory include animal rights arguments, but also economic in that it may fail to reduce the price of ivory and hence poaching.

Rhino Horn

In April 2017, South Africa's highest court overturned a ban (in place since 2009) on domestic trade in rhino horn (http://www.telegraph.co.uk/business/2017/04/30/now-legal-trade-rhino-horn-south-africa-will-ruling-save-slay/). There has been fierce debate in recent years on allowing for the legal trade of rhino horn. Biggs et al (2013) argued that the current speculative estimates of the demand for horn based on the illegal supply could be met by the 5000 white rhinos on private conservation land in South Africa alone, stopping the illegal poaching. They argued a legal trade could simultaneously supply horns, fund rhino protection, and provide an incentive for their sustainable use and long-term survival. Opponents of a legal trade in rhino horn argue that the bulk sales of ivory by countries in southern Africa lead to increased poaching elsewhere on the continent.

4. Consumptive Use of Wildlife in Sub Saharan Africa

Good evidence and data on the economic significance and conservation benefits of hunting in African countries is limited, polarising a fractious debate and making it impossible to fully evaluate the overall effect of trophy hunting (Cooney et al, 2017). There are significant trophy hunting industries in South Africa, Mozambique, Namibia, Tanzania, Zambia, and Zimbabwe, and smaller industries in Ethiopia and various West and Central African countries (Lindsey et al, 2016).

Rademeyer (2015) provides a review of available literature on this subject for Africa Check (see https://africacheck.org/factsheets/factsheet-how-much-does-hunting-contribute-to-african-economies/). According to a study from 2007 (Lindsey et al, 2007) economic benefits of trophy hunting in Africa amount to an estimated US$200 million annually. Lindsey et al (2007) set out to review available data on hunting in sub-Saharan Africa and "obtained updated statistics from national hunting associations and regulatory authorities". They focussed on a dozen countries with "significant hunting industries", among them South Africa, Zimbabwe, Zambia and Namibia, plus Botswana, Mozambique and Tanzania. South Africa had the largest hunting industry "in terms of numbers of operators, visiting hunters, animals shot and revenues generated". But as a proportion of GDP, the paper found trophy hunting was most significant in Botswana, comprising 0.13% of GDP, followed by Tanzania at 0.11% and Namibia at 0.08% (*Note: A ban on commercial hunting in Botswana came into effect in January 2014.*) However, some have argued that the US$ 200 million estimate should be used with caution, with the paper being based on weak, unverifiable sources and methodology. They also argue that communities in the areas where hunting occurs derive very little benefit from this revenue (Economist at Large, 2013). Cooney et al (2017) highlight that all revenue from poaching for the illegal wildlife trade flows to criminals; on the other hand, revenues from legal hunting are used in a number of cases to fund law enforcement or provide community benefits that counter the incentives to engage in illegal wildlife trade. However, they also warn that trophy hunting often takes place without meaningful community participation or benefit-sharing mechanisms, with most value captured by hunting operators or government agencies.

There remains a gap in the literature in terms of fully quantifying the economic contribution of trophy hunting and where this money goes. There are also indications that the contribution of trophy hunting to the economy is small compared to that of tourism as a whole. Lindsey et al (2007) estimated "a minimum of 18,500" hunters participated in hunts annually in sub-Saharan Africa (generating revenue of around US$ 201 million), compared to UN World Tourism Organisation estimates of around 36.8 million visitors in 2015, earning the region US$ 39 billion in direct contributions (WTTC, 2017). Lindsey et al (2016) also point out the limitations of trophy hunting as a conservation tool as trophy hunting frequently fails to generate enough income to manage wildlife land effectively, typically generating only $138-1,091/km^2 in gross income (2015 figures), out of which come running costs, fees and profit, sometimes leaving little for the protection of land where hunting occurs. By contrast, estimates of the funding requirements for effective management of protected areas range from $460 to $2,048/km^2.

South Africa's Department of Environmental Affairs estimates trophy hunting generated close to R807 million in 2012, just over R1 billion in 2013 and R1.956 billion in 2014 (Rademeyer, 2015; Taylor et al, 2015). The figures are based on "species fees" paid by hunters to game farmers and landowners to hunt a trophy animal, and daily rates charged by hunting outfitters to "cover expenses related to food and accommodation". The R1 billion generated in 2013 comprised of

species fees of R757 million and daily rates of R314 million, with 44,000 animals hunted for trophies in that year. The department's figures do not take into account indirect income generated through taxidermy and trophy shipping fees, non-hunting companions or tourism-related activities during the hunting safari (Rademeyer, 2015).

Naidoo et al (2016) evaluated financial and in-kind benefit streams from tourism and hunting on 77 communal conservancies in Namibia from 1998 to 2013, where community-based wildlife conservation has been promoted as a land-use that complements traditional subsistence agriculture. They used data collected annually for all communal conservancies to characterize whether benefits were derived from hunting or tourism. Across all conservancies, total benefits from hunting and tourism increased at roughly the same rate, although conservancies typically started generating benefits from hunting within 3 years of formation as opposed to after 6 years for tourism. Disaggregation of data revealed that the main benefits from hunting were income for conservancy management and food in the form of meat for the community at large. The majority of tourism benefits were salaried jobs at lodges. They simulated a ban on trophy hunting, which significantly reduced the number of conservancies that could cover their operating costs, whereas eliminating income from tourism did not have as severe an effect. However, some have questioned the validity of their findings, and have questioned their methods and conclusions, which both rely on opaque assumptions about the value of trophy-hunted meat and trophy (Jacquet and Delon, 2016).

5. References

Bennett, E.L. (2014) 'Legal Ivory Trade in a Corrupt World and its Impact on African Elephant Populations', *Conservation Biology*, 29(1): 54-60. doi:10.1111/cobi.12377 http://onlinelibrary.wiley.com/doi/10.1111/cobi.12377/full

Christie, I., E. Fernandes, H. Messerli and L. Twining-Ward (2014) *Tourism in Africa: Harnessing Tourism for Growth and Improved Livelihoods*, Africa Development Forum series, Washington, DC: World Bank. doi:10.1596/978-1-4648-0190-7 http://hdl.handle.net/10986/18688

Cooney, R., C. Freese, H. Dublin, D. Roe, D. Mallon, M. Knight, R. Emslie, M. Pani, V. Booth, S. Mahoney and C. Buyanaa (2017) 'The baby and the bathwater: trophy hunting, conservation and rural livelihoods', *Unasylva 249*, Vol. 68 (1). https://www.iucn.org/sites/dev/files/trophy_hunting_conservation_and_rural_livelihoods.pdf

Department of Environmental Affairs (2015) *Fifth National Report to the Convention on Biological Diversity.* Republic of Botswana. https://www.cbd.int/doc/world/bw/bw-nr-05-en.pdf

Economists at Large (2013) *The $200 million question: How much does trophy hunting really contribute to African communities?* A report for the African Lion Coalition, prepared by Economists at Large, Melbourne, Australia. https://www.ifaw.org/sites/default/files/Ecolarge-2013-200m-question.pdf

Jacquet, J. and N. Delon (2016) 'The values behind calculating the value of trophy hunting', *Conservation Biology,* 00(0), 1–2. DOI: 10.1111/cobi.12749 http://www.the-eis.com/data/literature/The%20values%20behind%20calculating%20the%20value%20of%20trophy%20hunting.pdf

Kenya National Bureau of Statistics (2017) *Economic Survey 2017.* https://www.knbs.or.ke/

Kenyan Tourist Board (2016) *Total Tourist Air Arrivals by Month of Entry JKIA/MIAM – 2015.* Released by Kenyan Tourist Board. http://ktb.go.ke/wp-content/uploads/2015/12/TOTAL-INTERNATIONAL-ARRIVALS-2015.pdf

Lindsey, P.A., G.A. Balme, P.J. Funston, P.H. Henschel and L.T.B. Hunter (2016) 'Life after Cecil: channelling global outrage into funding for conservation in Africa', *Conservation Letters*, 9: 296–301. doi:10.1111/conl.12224. http://onlinelibrary.wiley.com/doi/10.1111/conl.12224/full

Lindsey, P.A., P.A. Roulet and S.S. Romanach (2007) 'Economic and conservation significance of the trophy hunting industry in sub-Saharan Africa', *Biological Conservation,* 134, 455–469. doi:10.1016/j.biocon.2006.09.005 http://www.africanwildlifeconservationfund.org/wp-content/uploads/2011/09/Economic-and-conservation-significance.pdf

Ministry of Environment and Tourism (2016) *Tourist Statistical Report 2015*, Republic of Namibia. http://www.namibiatourism.com.na/page/research-center

Ministry of Tourism and Arts (2016) *2015 Tourism Statistical Digest*, Ministry of Tourism & Arts, Zambia: Lusaka. http://www.mota.gov.zm/index.php/downloads/data-and-statistics/34-2015-tourism-statistical-digest/file

NACSO (2015) *The state of community conservation in Namibia - a review of communal conservancies, community forests and other CBNRM initiatives (2015 Annual Report)*, NACSO, Windhoek. http://www.nacso.org.na/sites/default/files/The%20State%20of%20Community%20Conservation%20book%202015.pdf

Naidoo, R., L.C. Weaver, R.W. Diggle, G. Matongo, G. Stuart-Hill and C. Thouless (2016) 'Complementary benefits of tourism and hunting to communal conservancies in Namibia', *Conservation Biology*, Volume 30, No. 3, 628–638. DOI: 10.1111/cobi.12643. http://onlinelibrary.wiley.com/doi/10.1111/cobi.12643/pdf

National Geographic Society (2013) *The History of the Ivory Trade,* National Geographic Society Media. https://www.nationalgeographic.org/media/history-ivory-trade/

National Institute of Statistics of Rwanda (NISR) (2016) *Statistical Yearbook, 2016 edition (SYB2016)*. NISR: Kigali. http://statistics.gov.rw/publication/statistical-yearbook-2016

Rademeyer, J. (2015) *FACTSHEET: How much does hunting contribute to African economies?,* Africa Check. https://africacheck.org/factsheets/factsheet-how-much-does-hunting-contribute-to-african-economies/

South African National Parks (2015) *South African National Parks Annual Report 2014/15* https://www.sanparks.org/assets/docs/general/annual-report-2015.pdf

Statistics Botswana (2016) *Tourism Statistics Annual Report 2015*, Statistics Botswana: Gaborone. http://www.statsbots.org.bw/sites/default/files/publications/Tourism%20Statistics%20Annual%20Report%202015.pdf

Statistics South Africa (2016) *Tourism, 2015*, Statistics South Africa: Pretoria. http://www.statssa.gov.za/publications/Report-03-51-02/Report-03-51-022015.pdf

Tanzania Tourism Sector Survey (2016) *The 2014 International Visitors' Exit Survey Report*, Ministry of Natural Resources and Tourism, Bank of Tanzania, National Bureau of Statistics, Immigration Department and the Zanzibar Commission for Tourism. http://www.nbs.go.tz/nbs/takwimu/trade/International_Visitors_Exit_Survey_Report_%202014.pdf

Taylor, A., P. Lindsey and H. Davies-Mostert (2015) 'An Assessment of the Economic, Social and Conservation Value of the Wildlife Ranching Industry and its Potential to Support the Green Economy in South Africa', *Policy Brief 11 Green Economy Policy Brief Series*, Green Fund Research Funding Programme. http://www.sagreenfund.org.za/wordpress/wp-content/uploads/2016/04/Policy-Brief-11_Final.compressed.pdf

't Sas-Rolfes, M. (2015) *The Economics and Politics of Wildlife Trade Regulation*, Paper submitted to PERC Workshop on "Wildlife Conservation, Trade and Property Rights", Bozeman, MT, July 26-29 2015. https://www.z2systems.com/neon/resource/perc/files/tsasPERC%20Wildlife%20Workshop%20MtR(1).pdf

Uganda Bureau of Statistics (2016) *2016 Statistical Abstract*. http://www.ubos.org/onlinefiles/uploads/ubos/statistical_abstracts/2016%20Statistical%20Abstract.pdf

Weber, D.S., T. Mandler, M. Dyck, P.J. Van Coeverden De Groot, D.S. Lee and D.A. Clark (2015) 'Unexpected and Undesired Conservation Outcomes of Wildlife Trade bans—An Emerging Problem for Stakeholders?' *Global Ecology and Conservation,* 3: 389–400. doi:10.1016/j.gecco.2015.01.006. http://www.sciencedirect.com/science/article/pii/S2351989415000074?via%3Dihub

World Tourism Organization (WTO) (2014) *Towards Measuring the Economic Value of Wildlife Watching Tourism in Africa – Briefing Paper*, UNWTO, Madrid. http://cf.cdn.unwto.org/sites/all/files/docpdf/unwtowildlifepaper.pdf

World Tourism Organization (WTO) (2017) *Chinese tourists spent 12% more in travelling abroad in 2016*, Press Release, PR 17046, 12 Apr 17. http://media.unwto.org/press-release/2017-04-12/chinese-tourists-spent-12-more-travelling-abroad-2016

World Travel & Tourism Council (WTTC) (2017) *Travel & Tourism Economic Impact 2017: Sub Saharan Africa*, London: WTTC. https://www.wttc.org/-/media/files/reports/economic-impact-research/regions-2017/subsaharanafrica2017.pdf

World Wildlife Federation (WWF) (2017) Conserving Wildlife and Enabling Communities in Namibia https://www.worldwildlife.org/projects/conserving-wildlife-and-enabling-communities-in-namibia

Zimbabwe Tourism Authority (2015) Tourism Trends and Statistics Report 2015. http://www.zimbabwetourism.net/index.php/trends-statistics/

Expert contributors

- Rochelle Turner, Research Director, The World Travel & Tourism Council (WTTC)

Key websites

- CITES Trade Database: https://trade.cites.org/
- World Bank Open Data: http://data.worldbank.org/
- WTTC Data Gateway: https://www.wttc.org/datagateway/

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About this report

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6. Annex 1

Table 3: Total contribution of Tourism and Travel as a % of GDP

	Botswana	Kenya	Namibia	Rwanda	South Africa	Tanzania	Uganda	Zimbabwe	Sub-Saharan Africa
1995	7.74	14.06	11.59	0.41	5.67	12.73	1.04	2.4	5.39
1996	5.76	11.87	12.33	1.05	6.66	11.74	1.66	2.7	6.22
1997	5.76	12.35	12.86	1.74	7.17	8.76	1.33	6.16	6.16
1998	6.94	11.23	12.9	2.34	7.25	8.58	1.14	5.65	5.99
1999	7.94	13.04	10.04	2.94	7.31	8.84	0.73	6.84	6.18
2000	7.54	9.58	6.12	4.58	7.36	8.34	0.79	6.84	5.94
2001	8.18	8.66	9.84	5.11	7.96	11.44	0.87	7.08	6.9
2002	8.95	7.96	11.39	4.73	8.84	11.76	0.86	12.42	7.22
2003	10.79	10.39	12.67	5.06	8.85	12.14	1.1	7.33	7.35
2004	10.02	12.74	10.85	6.17	8.84	13.38	1.38	11.78	7.9
2005	9.7	13.58	8.97	6.05	9.42	11.6	1.52	10.43	8.17
2006	10.01	13.18	14.25	8.64	10.11	12.03	1.46	15.64	7.68
2007	10.13	13.09	13.98	11.09	9.85	12.59	1.34	15.39	8.06
2008	11.49	11.74	13.02	10.85	9.45	10.42	1.67	21.45	7.77
2009	11.58	10.37	13.55	9.49	9.32	10.77	1.77	9.46	7.42
2010	11.51	11.13	13.61	8.71	9.05	9.76	2.28	7.02	6.92
2011	10.1	11.49	14.65	9.34	8.55	10.63	2.39	7.97	6.6
2012	11.47	11.49	14.74	10.59	9.09	11.01	2.52	8.14	6.94
2013	11.02	10.48	15.01	11.02	9.1	11.42	2.6	7.95	7.07
2014	11.07	10.41	15.12	10.31	9.2	11.54	1.27	7.79	6.95
2015	11.13	9.8	15.41	11.63	9.14	13.01	2.15	7.85	7
2016	10.95	9.81	14.88	11.18	9.33	13.29	1.85	8.05	7.12
2017	11.2	9.77	15.04	11.44	9.45	13.07	1.82	8.31	7.24
2018	11.47	9.76	15.53	11.67	9.46	13.02	1.83	8.45	7.21
2019	11.48	9.78	15.85	11.66	9.58	13.02	1.83	8.5	7.17
2020	11.58	9.8	16.17	11.73	9.78	13.03	1.81	8.58	7.17
2021	11.64	9.84	16.43	11.78	9.88	13.1	1.78	8.66	7.16
2022	11.76	9.85	16.77	11.78	9.99	13.15	1.76	8.74	7.15
2023	11.87	9.82	17.09	11.75	10.2	13.13	1.72	8.8	7.16
2024	11.99	9.78	17.36	11.7	10.43	13.14	1.67	8.84	7.17
2025	12.06	9.68	17.53	11.65	10.73	13.28	1.62	8.87	7.2
2026	12.13	9.58	17.7	11.62	11.07	13.4	1.57	8.91	7.22
2027	12.22	9.47	17.93	11.73	11.47	13.61	1.55	8.95	7.26

Source: WTTC Data Gateway.

Table 4: Direct contribution of Tourism and Travel as a % of GDP

	Botswana	Kenya	Namibia	Rwanda	South Africa	Tanzania	Uganda	Zimbabwe	Sub-Saharan Africa
1995	2.21	5.37	2.05	0.27	1.80	5.91	1.04	1.15	2.08
1996	1.51	4.46	2.15	0.57	2.04	5.07	1.66	1.27	2.41
1997	1.58	4.75	2.13	0.85	2.12	3.49	1.33	2.93	2.31
1998	2.03	4.13	2.23	1.17	2.27	3.44	1.14	2.75	2.30
1999	2.43	4.86	1.69	1.30	2.29	3.71	0.73	3.24	2.29
2000	2.20	3.48	1.09	2.01	2.37	3.47	0.79	2.85	2.28
2001	2.62	3.38	2.02	2.25	2.62	4.92	0.87	3.08	2.66
2002	2.96	3.46	2.47	2.09	2.91	4.89	0.86	5.75	2.81
2003	3.63	3.76	2.83	2.16	2.89	4.86	1.10	3.28	2.75
2004	3.13	4.65	2.74	2.59	2.82	5.08	1.38	5.72	2.96
2005	3.13	4.93	2.15	2.71	2.85	4.29	1.52	5.15	3.09
2006	3.15	4.86	3.14	4.27	2.90	4.50	1.46	7.95	2.66
2007	3.33	4.89	2.64	4.13	2.89	4.72	1.34	7.84	2.83
2008	3.82	4.34	2.50	3.83	2.88	3.99	1.67	11.08	2.84
2009	3.81	3.85	2.66	3.83	2.82	3.56	1.77	4.31	2.65
2010	4.01	4.45	2.64	3.32	2.99	3.45	2.28	3.21	2.54
2011	3.50	4.62	2.93	3.80	2.83	3.55	2.39	3.72	2.53
2012	3.97	4.60	2.90	4.31	2.94	3.80	2.52	3.75	2.65
2013	3.79	4.05	2.95	4.42	2.91	3.85	2.60	3.60	2.63
2014	3.90	3.97	2.84	4.04	2.96	3.93	1.27	3.50	2.56
2015	3.91	3.71	2.90	4.76	2.92	4.55	2.15	3.48	2.59
2016	3.87	3.71	2.77	4.51	2.97	4.65	1.85	3.54	2.64
2017	4.03	3.69	2.86	4.61	3.01	4.56	1.82	3.67	2.71
2018	4.14	3.71	3.03	4.73	3.03	4.51	1.83	3.74	2.71
2019	4.12	3.73	3.15	4.72	3.08	4.47	1.83	3.76	2.71
2020	4.15	3.76	3.25	4.76	3.15	4.45	1.81	3.80	2.71
2021	4.15	3.78	3.35	4.78	3.20	4.47	1.78	3.84	2.71
2022	4.17	3.80	3.45	4.78	3.26	4.50	1.76	3.88	2.71
2023	4.20	3.80	3.53	4.77	3.33	4.49	1.72	3.91	2.72
2024	4.22	3.79	3.62	4.76	3.41	4.51	1.67	3.93	2.72
2025	4.23	3.76	3.70	4.75	3.50	4.58	1.62	3.94	2.73
2026	4.24	3.74	3.78	4.75	3.62	4.64	1.57	3.96	2.73
2027	4.25	3.70	3.88	4.81	3.76	4.74	1.55	3.98	2.75

Source: WTTC Data Gateway.

Table 5: Total contribution of Tourism and Travel to GDP in billions of US$ (real prices)

	Botswana	Kenya	Namibia	Rwanda	South Africa	Tanzania	Uganda	Zimbabwe	Sub-Saharan Africa
1995	0.38	4.09	0.48	0.01	9.23	1.62	1.04	0.35	31.28
1996	0.30	3.60	0.53	0.02	11.31	1.56	1.66	0.44	35.30
1997	0.32	3.76	0.56	0.04	12.51	1.21	1.33	1.03	37.24
1998	0.39	3.53	0.59	0.05	12.71	1.23	1.14	0.97	37.95
1999	0.51	4.19	0.48	0.07	13.12	1.32	0.73	1.16	37.37
2000	0.57	3.09	0.34	0.12	13.76	1.31	0.79	1.13	42.82
2001	0.56	2.92	0.49	0.15	15.29	1.91	0.87	1.18	46.80
2002	0.66	2.70	0.59	0.16	17.60	2.10	0.86	1.89	52.99
2003	0.88	3.63	0.69	0.17	18.14	2.32	1.10	0.93	54.48
2004	0.82	4.68	0.67	0.22	18.94	2.75	1.38	1.40	64.47
2005	0.89	5.28	0.58	0.23	21.24	2.58	1.52	1.17	71.48
2006	0.90	5.45	1.00	0.36	24.09	2.80	1.46	1.69	72.18
2007	1.09	5.78	1.05	0.50	24.72	3.18	1.34	1.61	82.33
2008	1.32	5.20	1.00	0.54	24.48	2.78	1.67	1.84	85.08
2009	1.23	4.74	1.04	0.51	23.76	3.03	1.77	0.86	81.73
2010	1.32	5.52	1.11	0.50	23.79	2.92	2.28	0.71	81.50
2011	1.23	6.04	1.26	0.58	23.20	3.43	2.39	0.91	82.50
2012	1.47	6.32	1.33	0.71	25.21	3.74	2.52	1.02	90.76
2013	1.54	6.09	1.43	0.77	25.84	4.15	2.60	1.04	98.11
2014	1.60	6.37	1.53	0.77	26.52	4.49	1.27	1.06	101.64
2015	1.60	6.34	1.64	0.93	26.71	5.42	2.15	1.08	105.20
2016	1.62	6.72	1.62	0.95	27.34	5.87	1.85	1.11	107.95
2017	1.73	7.12	1.70	1.04	28.02	6.11	1.82	1.12	111.68
2018	1.85	7.61	1.83	1.14	28.63	6.47	1.83	1.15	115.88
2019	1.94	8.12	1.96	1.22	29.72	6.89	1.83	1.17	121.00
2020	2.04	8.61	2.10	1.31	31.09	7.36	1.81	1.20	126.95
2021	2.14	9.15	2.24	1.41	32.12	7.89	1.78	1.23	133.03
2022	2.26	9.70	2.40	1.51	33.23	8.45	1.76	1.27	139.54
2023	2.39	10.21	2.57	1.61	34.74	9.04	1.72	1.31	146.57
2024	2.52	10.73	2.73	1.71	36.34	9.66	1.67	1.35	153.86
2025	2.66	11.23	2.87	1.82	38.22	10.33	1.62	1.40	161.66
2026	2.80	11.76	3.02	1.93	40.18	11.05	1.57	1.45	169.72
2027	2.94	12.28	3.19	2.08	42.43	11.84	1.55	1.50	178.50

Source: WTTC Data Gateway.

Table 6: Direct contribution of Tourism and Travel to GDP in billions of US$ (real prices)

	Botswana	Kenya	Namibia	Rwanda	South Africa	Tanzania	Uganda	Zimbabwe	Sub-Saharan Africa
1995	0.11	1.56	0.09	0.00	2.92	0.75	1.04	0.17	12.24
1996	0.08	1.35	0.09	0.01	3.47	0.67	1.66	0.21	13.46
1997	0.09	1.44	0.09	0.02	3.70	0.48	1.33	0.49	13.89
1998	0.11	1.30	0.10	0.03	3.98	0.49	1.14	0.47	14.29
1999	0.16	1.56	0.08	0.03	4.10	0.56	0.73	0.55	14.32
2000	0.17	1.12	0.06	0.05	4.42	0.55	0.79	0.47	16.97
2001	0.18	1.14	0.10	0.07	5.03	0.82	0.87	0.51	18.43
2002	0.22	1.18	0.13	0.07	5.80	0.87	0.86	0.88	20.92
2003	0.30	1.31	0.15	0.07	5.92	0.93	1.10	0.41	20.96
2004	0.26	1.71	0.17	0.09	6.03	1.05	1.38	0.68	25.03
2005	0.29	1.92	0.14	0.10	6.44	0.96	1.52	0.58	28.09
2006	0.28	2.01	0.22	0.18	6.91	1.05	1.46	0.86	25.78
2007	0.36	2.16	0.20	0.19	7.26	1.19	1.34	0.82	29.50
2008	0.44	1.92	0.19	0.19	7.46	1.06	1.67	0.95	31.32
2009	0.40	1.76	0.21	0.20	7.18	1.00	1.77	0.39	29.55
2010	0.46	2.21	0.21	0.19	7.85	1.03	2.28	0.33	30.43
2011	0.43	2.43	0.25	0.23	7.67	1.14	2.39	0.42	32.22
2012	0.51	2.53	0.26	0.29	8.15	1.29	2.52	0.47	35.20
2013	0.53	2.36	0.28	0.31	8.26	1.40	2.60	0.47	36.81
2014	0.56	2.43	0.29	0.30	8.53	1.53	1.27	0.48	37.62
2015	0.56	2.40	0.31	0.38	8.51	1.90	2.15	0.48	39.14
2016	0.57	2.54	0.30	0.38	8.69	2.06	1.85	0.49	40.07
2017	0.62	2.69	0.32	0.42	8.92	2.13	1.82	0.49	41.83
2018	0.67	2.89	0.36	0.46	9.16	2.24	1.83	0.51	43.58
2019	0.70	3.10	0.39	0.49	9.57	2.37	1.83	0.52	45.53
2020	0.73	3.30	0.42	0.53	10.02	2.52	1.81	0.53	47.72
2021	0.76	3.52	0.46	0.57	10.41	2.69	1.78	0.55	50.02
2022	0.80	3.74	0.49	0.61	10.84	2.89	1.76	0.56	52.49
2023	0.85	3.95	0.53	0.65	11.35	3.09	1.72	0.58	55.09
2024	0.89	4.16	0.57	0.70	11.89	3.31	1.67	0.60	57.77
2025	0.93	4.37	0.61	0.74	12.47	3.56	1.62	0.62	60.63
2026	0.98	4.59	0.64	0.79	13.16	3.83	1.57	0.64	63.64
2027	1.02	4.80	0.69	0.85	13.90	4.12	1.55	0.67	66.88

Source: WTTC Data Gateway.

Table 7: Total Contribution of Tourism and Travel to Employment as % share of total employment

	Botswana	Kenya	Namibia	Rwanda	South Africa	Tanzania	Uganda	Zimbabwe	Southern Africa	Sub Saharan Africa
1995	6.78	13.10	13.85	0.32	5.33	11.04	1.04	2.08	4.35	4.35
1996	5.26	11.07	13.86	0.83	6.35	10.20	1.66	2.35	4.90	4.90
1997	5.74	11.52	13.37	1.41	7.08	7.62	1.33	5.34	4.68	4.68
1998	6.40	10.48	13.81	1.96	7.74	7.46	1.14	4.91	4.60	4.60
1999	7.47	12.17	12.76	2.52	7.68	7.70	0.73	5.95	4.46	4.46
2000	8.55	8.93	8.38	4.01	7.29	7.27	0.79	5.94	5.13	5.13
2001	9.60	8.07	11.98	4.51	7.96	9.98	0.87	6.16	5.29	5.29
2002	8.48	7.42	11.64	4.20	8.90	10.23	0.86	10.79	5.58	5.58
2003	9.21	9.68	11.67	4.48	8.89	10.53	1.10	6.36	5.45	5.45
2004	9.28	11.87	11.18	5.46	8.90	11.57	1.38	10.21	6.24	6.24
2005	8.90	12.65	9.21	5.36	9.47	10.03	1.52	9.03	6.51	6.51
2006	7.89	12.28	16.95	7.64	10.13	10.38	1.46	13.53	6.53	6.53
2007	8.02	12.21	15.26	9.80	9.89	10.86	1.34	13.32	7.00	7.00
2008	9.69	10.92	14.11	9.61	10.17	8.99	1.67	18.53	6.88	6.88
2009	7.53	9.67	14.57	8.42	9.96	8.98	1.77	7.97	6.31	6.31
2010	7.32	10.39	14.46	7.59	9.78	8.23	2.28	5.70	6.07	6.07
2011	7.09	10.86	15.41	8.16	9.48	8.90	2.39	6.26	6.05	6.05
2012	8.18	10.72	15.35	9.34	9.90	9.23	2.52	6.31	6.28	6.28
2013	7.65	9.78	15.48	9.67	9.70	9.93	2.60	5.98	6.43	6.43
2014	7.81	9.72	15.46	8.96	9.82	10.04	1.27	5.45	6.12	6.12
2015	7.69	9.16	15.61	10.10	9.75	11.32	2.15	5.22	6.13	6.13
2016	7.12	9.17	14.93	9.72	9.77	11.61	1.85	5.19	6.03	6.03
2017	7.28	9.13	14.93	9.94	10.23	11.81	1.82	5.16	6.04	6.04
2018	7.69	9.13	15.27	10.15	10.13	11.85	1.83	5.01	6.02	6.02
2019	7.82	9.14	15.43	10.14	10.31	11.94	1.83	4.92	6.02	6.02
2020	7.97	9.17	15.58	10.21	10.65	12.05	1.81	4.84	6.04	6.04
2021	8.09	9.21	15.67	10.25	10.86	12.19	1.78	4.72	6.05	6.05
2022	8.28	9.22	15.85	10.26	11.09	12.30	1.76	4.61	6.06	6.06
2023	8.50	9.19	16.02	10.23	11.41	12.35	1.72	4.49	6.06	6.06
2024	8.68	9.15	16.14	10.20	11.76	12.47	1.67	4.37	6.07	6.07
2025	8.80	9.06	16.16	10.10	12.17	12.67	1.62	4.28	6.09	6.09
2026	8.86	8.97	16.17	10.05	12.64	12.77	1.57	4.22	6.10	6.10
2027	8.91	8.87	16.24	10.14	13.21	12.93	1.55	4.26	6.13	6.13

Source: WTTC Data Gateway.

Table 8: Total Contribution of Tourism and Travel to Employment in thousands of jobs

	Botswana	Kenya	Namibia	Rwanda	South Africa	Tanzania	Uganda	Zimbabwe	Sub Saharan Africa
1995	36	796	60	4	695	702	1	94	6,825
1996	29	698	61	11	815	668	2	108	7,804
1997	33	750	61	20	899	514	1	248	7,664
1998	38	705	66	30	954	518	1	230	7,704
1999	46	845	63	42	975	551	1	281	7,593
2000	54	640	43	69	948	536	1	299	8,887
2001	61	596	62	83	1010	759	1	331	9,385
2002	57	565	65	81	1110	806	1	612	10,163
2003	61	760	67	88	1097	860	1	378	10,143
2004	64	962	63	110	1115	979	1	633	11,974
2005	63	1061	55	111	1252	874	2	563	12,953
2006	61	1061	102	163	1399	932	1	849	13,370
2007	63	1086	98	215	1376	1005	1	848	14,754
2008	75	997	73	218	1484	858	2	1189	14,905
2009	63	908	85	197	1414	885	2	516	13,905
2010	63	1007	94	183	1348	836	2	379	13,719
2011	63	1085	103	203	1333	931	2	427	14,030
2012	74	1105	107	240	1428	996	3	440	14,889
2013	70	1040	109	256	1442	1104	3	427	15,837
2014	73	1065	113	245	1487	1134	1	398	15,477
2015	73	1034	118	285	1535	1319	2	388	15,877
2016	69	1072	116	284	1533	1389	2	393	15,771
2017	71	1104	120	301	1636	1452	2	398	16,289
2018	76	1141	127	317	1651	1496	2	396	16,792
2019	79	1180	132	327	1711	1552	2	399	17,353
2020	81	1220	137	340	1801	1614	2	403	17,970
2021	84	1268	142	354	1868	1678	2	403	18,563
2022	87	1312	148	366	1938	1740	2	404	19,171
2023	90	1351	153	378	2025	1795	2	405	19,762
2024	94	1387	159	389	2117	1867	2	405	20,359
2025	96	1415	163	400	2219	1956	2	408	20,994
2026	98	1447	167	411	2328	2028	2	414	21,649
2027	100	1475	172	427	2459	2117	2	430	22,361

Source: WTTC Data Gateway.

Table 9: Number of International Inbound Tourist Arrivals (in Thousands)

	Botswana	Kenya	Namibia	Rwanda	South Africa	Tanzania	Uganda	Zimbabwe	Sub-Saharan Africa
1995	521	918	272	-	4,488	285	160	1,416	13,067
1996	512	947	461	-	4,915	315	174	1,597	14,865
1997	607	928	502	-	4,976	347	175	1,336	14,815
1998	750	792	614	-	5,732	450	195	2,090	16,797
1999	843	862	635	-	5,890	564	189	2,250	17,461
2000	1,104	899	656	104	5,872	459	193	1,967	17,728
2001	1,193	841	670	113	5,787	501	205	2,217	18,274
2002	1,274	838	757	-	6,430	550	254	2,041	19,577
2003	1,406	927	695	-	6,505	552	305	2,256	20,512
2004	1,523	1,199	716	-	6,678	566	512	1,854	21,600
2005	1,474	1,399	778	-	7,369	590	468	1,559	23,811
2006	1,426	1,464	833	494	8,396	622	539	2,287	27,065
2007	1,736	1,686	929	566	9,091	692	642	2,506	29,907
2008	2,101	1,141	931	507	9,592	750	844	1,956	30,600
2009	1,721	1,392	980	502	7,012	695	807	2,017	28,335
2010	1,973	1,470	984	504	8,074	754	946	2,239	31,457
2011		1,750	1,027	688	8,339	843	1,151	2,423	33,102
2012	1,614	1,619	1,079	815	9,188	1,043	1,197	1,794	34,248
2013	1,544	1,434	1,176	864	9,537	1,063	1,206	1,833	35,439
2014	1,966	1,261	1,320	926	9,549	1,113	1,266	1,880	36,636
2015	1,528	1,114	1,388	987	8,904	1,104	1,303	2,057	36,841

Source: World Tourism Organization, Yearbook of Tourism Statistics, Compendium of Tourism Statistics and data files (February 2017). Taken from World Bank Open Data.