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# TABLE OF CONTENTS

LIST OF FIGURES ........................................................................................................ vii

LIST OF TABLES ........................................................................................................... x

DEDICATION ................................................................................................................ xi

ACKNOWLEDGEMENTS .............................................................................................. xii

ABBREVIATIONS AND ACRONYMS ......................................................................... xiii

CHAPTER 1: INTRODUCTION .................................................................................... 1

CHAPTER 2: TOURISM, GEOGRAPHY, AND THEIR ENVIRONMENTAL LINKAGES .... 6
  a. Tourist Typologies ..................................................................................................... 7
  b. Tourism and its Impacts .......................................................................................... 10
     i. Economic and Social Impacts .............................................................................. 10
     ii. Environmental Impacts .................................................................................... 12
  c. Geography, Tourism, and Environmental Perception ........................................... 21
     i. Geography and Tourism .................................................................................... 21
     ii. Introduction to Behavioral Geography .............................................................. 23
     iii. Environmental Perception ............................................................................. 25
     iv. Environmental Perception and Tourism ........................................................... 27
  d. Conclusion .............................................................................................................. 30

CHAPTER 3: TANZANIA’S TOURISM SECTOR FROM AN HISTORICAL PERSPECTIVE .................................................................................................................. 31
  a. A Century of Change ............................................................................................. 31
  b. Tanzania’s Integration of Tourism ......................................................................... 36
  c. Conclusion .............................................................................................................. 40
i. Environmental Impacts: Positive or Negative ...........................................81
ii. Tourists’ Personal Impacts Compared to Other Tourists’ Impacts .............89
iii. Environmental Behavior at Home and While Away ..............................98
iv. Do All Tourists Positively Impact the Environment? ..........................101

b. Tanzania Tour Operator Survey ...............................................................103
i. Environmental Impacts: Positive or Negative .......................................104
ii. Tourists’ Environmental Impacts ..............................................................105
iii. Tour Company Contributions .................................................................108
iv. Tour Operator Final Comments ..............................................................114

c. Conclusion .................................................................................................116

CHAPTER 7: A SYNOPSIS OF TOURIST PERCEPTIONS ................................117

a. Implications of the International Tourist Survey ......................................117
i. The Implications of Many Impacts ............................................................117
ii. Wildlife ......................................................................................................119
iii. Water .........................................................................................................120
iv. Litter ..........................................................................................................121
v. Infrastructure Development .......................................................................122

b. A Comparison of Tourist and Tour Operator Perceptions ....................122
i. Environmental Impacts: Positive or Negative .......................................123
ii. Tourists’ Environmental Impacts .............................................................125
iii. Tour Operator Contributions and the Perceptions of Tourists .............126

c. Conclusion .................................................................................................128

CHAPTER 8: CONCLUSION ............................................................................130
WORKS CITED ...........................................................................................................................................134

APPENDICES ...........................................................................................................................................149

   a. Tourist Survey......................................................................................................................................150
   b. Tour Operator Survey .......................................................................................................................157
   c. Online Survey Link Card ..................................................................................................................164
   d. IRB Approval .....................................................................................................................................165
   e. Tour Companies ...............................................................................................................................168
LIST OF FIGURES

**Figure 1.1** Cover of Tanzanian tourism magazine by the Tanzanian Tourist Board displaying the highlights of Tanzania ........................................................................................................................................ 3

**Figure 1.2** Second page of Tanzanian tourism magazine displaying the highlights of Tanzania .................................................................................................................. 3

**Figure 2.1** An example of extreme water use within an accommodation in Serengeti National Park ........................................................................................................................................ 16

**Figure 2.2** A beach on the Indian Ocean north of Dar es Salaam strewn with litter amongst the seaweed ........................................................................................................................................ 19

**Figure 2.3** Litter around the shore of Lake Manyara ........................................................................................................................................ 19

**Figure 2.4** A tourist’s journey broken down into three different elements ........................................................................................................................................ 21

**Figure 4.1** Girls in Dar es Salaam fetching water from a communal well ........................................................................................................................................ 45

**Figure 4.2** Map of Tanzania’s protected areas ........................................................................................................................................ 54

**Figure 4.3** Olduvai Gorge, Tanzania ........................................................................................................................................ 56

**Figure 4.4** A tree in Tarangire National Park used by poachers to hide their caught animals from park rangers ........................................................................................................................................ 61

**Figure 4.5** Serengeti National Park has the highest rate of visitors annually, making it a destination other parks are highly dependent on ........................................................................................................................................ 62

**Figure 5.1** Map of participating tour company locations in reference to nearby protected areas in Tanzania and Kenya ........................................................................................................................................ 69

**Figure 5.2** International tourist survey locations of participant’s residence and birth place ........................................................................................................................................ 70

**Figure 5.3** City locations of surveyed tour operator’s companies ........................................................................................................................................ 78

**Figure 6.1** Average tourist perception of how positive or negative a tourism impact is on the environment ........................................................................................................................................ 85
Figure 6.2 Environmental impacts ranked from positive to negative based on tourist typology ....
........................................................................................................................................87

Figure 6.3 Positive or negative rate of environmental impacts based on tourist education level....
........................................................................................................................................88

Figure 6.4 A comparison of the perception of tourist’s own impacts on the environment and their
perception of other tourists’ impacts on the environment .........................................................93

Figure 6.5 Average perception of personal environmental impacts based on tourist typology....95

Figure 6.6 Average perception of other tourists’ environmental impacts based on tourist
typology ........................................................................................................................................95

Figure 6.7 A comparison of average perception of tourists’ personal impacts and other tourists’
environmental impacts based on tourist typology ......................................................................96

Figure 6.8 Perception of tourist’s personal environmental impacts based on participant education
.................................................................................................................................................97

Figure 6.9 Perception of other tourists’ environmental impacts based on participant education ....
.....................................................................................................................................................97

Figure 6.10 Comparison of average perception of tourist’s personal impacts and other tourist
impacts based on participant education .........................................................................................98

Figure 6.11 Comparison of tourist behavior while at home and while traveling..........................100

Figure 6.12 Recycling outside a market in Dar es Salaam ..........................................................101

Figure 6.13 Tour operator’s perception of tourists’ environmental impacts from positive to
negative ........................................................................................................................................105

Figure 6.14 Tour operator perception of the amount of environmental impact by tourists.......106
Figure 6.15 Sign at the entrance to Tarangire National Park explaining the rules and regulations of the park, including the prohibition of driving off-road .................................................................107

Figure 6.16 Evidence of vehicles driving off road creating both vegetation and soil disruption within Tarangire National Park.................................................................108

Figure 6.17 Comparison of environmentally friendly actions taken by participant’s tour companies and actions they wish they were doing ........................................................................110

Figure 6.18 Comparison of environmentally friendly actions and if tourists know that the participant’s tour company partakes in said action, and if the tour operator thinks the action makes tourists feel that they are having a less negative impact on the environment.............113

Figure 7.1 Average positive value of each environmental impact based on both international tourist and Tanzanian tour operator responses.................................................................124

Figure 7.2 Comparison of perception of environmental impacts.................................................126
LIST OF TABLES

Table 4.1 Major protected areas in Tanzania .................................................................51
Table 4.2 Protected area conservation fees ....................................................................52
Table 5.1 All Tanzanian tour operators by city location ..................................................77
Table 6.1 Tourist perception of how positive or negative a tourism impact is on the environment
........................................................................................................................................83
Table 6.2 Tourist perspective on their own personal direct or indirect impacts on these aspects of the environment ..............................................................91
Table 6.3 Tourist perspective on other tourists’ direct or indirect impacts on these aspects of the environment ..............................................................92
Table 6.4 Percent of tourist answers in response to whether or not all tourists positively impact
the environment .................................................................................................................102
Table 6.5 Response rate for statement that all tourists positively impact the environment in correlation with tourist typologies .........................................................102
To Mom, Dad, and Sara
Thanks for always knowing what I can achieve, and pushing me to do so.

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Asanteni Sana.
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ABREVIATIONS AND ACRONYMS

CIA Central Intelligence Agency
EA East Africa
EAHC East African High Commission
EAPA East African Publicity Association
EATTA East African Tourism Travel Association
GDP Gross Domestic Product
IMF International Monetary Fund
IRB Institutional Review Board
ITR International Tourism Receipts
KSU Kent State University
LDC Least Developed Country
MDG Millennium Development Goals
MNRT Ministry of Natural Resources and Tourism
NCAA Ngorongoro Conservation Area Authority
NGO Non-Governmental Organization
SAP Structural Adjustment Program
SDG Sustainable Development Goals
SPFE Society for the Preservation of the Fauna of the Empire
TANAPA Tanzania National Parks
TNTB Tanzanian National Tourism Board
TTC Tanzanian Tourist Corporation
TTB Tanzanian Tourist Board
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<th>Acronym</th>
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<td>Tzsh</td>
<td>Tanzanian Shillings</td>
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<td>UNCDP</td>
<td>United Nations Committee for Development Policy</td>
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<td>UNEP</td>
<td>United Nations Environmental Programme</td>
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<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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<td>UNICEF</td>
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<td>UNWTO</td>
<td>United Nations World Tourism Organization</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>USD</td>
<td>United States Dollar</td>
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<tr>
<td>VAT</td>
<td>Value Added Tax</td>
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<td>WCMC</td>
<td>World Conservation Monitoring Center</td>
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<td>WTTC</td>
<td>World Travel and Tourism Council</td>
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CHAPTER 1 - INTRODUCTION

“Wildlife galore, idyllic beaches, snow-capped Kilimanjaro, moss-covered ruins, friendly people, fascinating cultures – Tanzania has all this and more wrapped up in one adventurous and welcoming package” (Fitzpatrick & Bewer, 2012, p. 3).

Tourism is a growing industry throughout the world and it is particularly popular in places of cultural, historical, and natural significance. The diversity of Sub-Saharan Africa constitutes one such area. With the tourism sector of Sub-Saharan Africa substantially increasing over the last few decades, questions must be posed in order to understand the environmental impacts occurring from the spread of this economic and cultural phenomenon.

As the countries of the world become more interconnected through the expansion of globalization, the interactions of people from drastically different ends of the cultural spectrum will be increasing evermore. This globalization has led to a recent shift in the tourism industry of Sub-Saharan Africa, causing an influx of international tourists to the region. With this introduction of tourists from largely developed countries into developing countries (primarily consumed with poverty and insufficient infrastructure) one must consider the consequences that this has on the host economy, society, and environment. This is particularly evident throughout Sub-Saharan Africa, where, because of its age, constant use, and extremely vulnerable land and climate, the region is incredibly fragile and highly susceptible to stressors such as international tourism (Nyang’oro, 1996; Stock, 2013).
Tanzania, or the United Republic of Tanzania, is a least developed country (LDC) (United Nations Committee for Development Policy [Hereafter UNCDP], 2016) located in Eastern Africa on the coast of the Indian Ocean, just south of the equator. It borders other popular tourist destinations such as Kenya and Uganda, as well as Rwanda, Burundi, Zambia, Malawi, and Mozambique. Tanzania has been home to much of this change in tourism due to its widely varying landscape. There are warm sandy beaches, crystal clear waters, grandiose mountains, lush forests, vast savannas, and numerous forms of wildlife specific to the region. With so many contributions, the physical geography of Tanzania is a necessary component of the tourism industry. Most brochures, magazines, and advertisements display this natural scene of “the big five” amongst a savannah, with Kilimanjaro lingering in the distance (Figure 1.1) or Maasai in their traditional clothing amongst thatched roofs and mud-coated walls (Figure 1.2).

Due to nature-based tourism being at the center of Tanzanian marketing, there is a need to better understand the environmental impacts of tourism, both positive and negative. Economically speaking, the cost of environmental degradation is typically not accounted for. Yet within the nature-based tourism industry, due to the reliance that the economy does have on the environment and visa-versa, there becomes a greater need to manage and protect the destination landscape. This becomes not only an economic issue for one of the world’s largest industries, but it becomes an ethical issue as well with the need to sustain not only the tourism sector, but the entire local population. Although environmental precautions can be taken by the local community and tourism businesses, these solutions typically only address one issue at a time. In order to fully understand how to control the environmental impacts of tourism, we must first be able to understand the entirety of the ecosystem in which the tourist activities take place. There has been a tremendous amount of research done pertaining to social, economic, and
Figure 1.1 – Cover of Tanzanian magazine by the Tanzanian Tourist Board (TTB) displaying the highlights of Tanzania (TTB et al., 2016).

Figure 1.2 – Second page of Tanzanian tourism magazine displaying the highlights of Tanzania (TTB et al., 2016).
environmental impacts of tourists within developed and developing countries including host quality of life (Andereck et al., 2005), stress put on locals (Ap, 1990), sociocultural changes from globalization (Doğan, 1989), balancing resources (Crater, 1987), water pollution and overuse from tourism (Gössling et al., 2012), and loss of habitat and resources from deforestation caused by infrastructure development for tourism (Sechambo, 2001). These issues and many more have been examined by researchers, but there has not been an ample amount of questions posed relating to how the tourists feel that they influence the tourist destination or how cognizant they are of the environmental impacts that do take place.

This study aims to ask the questions: Are tourists self-aware of what influences they have on a host environment while traveling? Is there a relationship between tourist typology and how much environmental impact tourists are able to perceive? Does educational background and “social status” play a role in tourist environmental impact awareness? This thesis hopes to find correlations between the tourists and what environmental impacts they perceive in order to further the literature, education, and understanding of tourists around the world. I answered this question through two online surveys; one for international tourists traveling within Tanzania and the other for Tanzanian tour operators who interact with both tourists and the environment and thus have a good understanding of the issues facing the industry.

This thesis is organized into eight chapters. In Chapter 2, I review the literature within tourism and geography in order to understand the complex linkages between the subjects and to give a broad insight into the basic ideas of tourists, impacts, and perception. Using an historic approach, Chapter 3 examines the transformation of Tanzania’s tourism industry from its beginning in colonial times to its evolution to the modern tourism industry thriving today. Chapter 4 delves into Tanzania’s more recent tourism industry beginning in the 1990’s when
major reforms were created in order to fully maximize the potential of nature-based tourism. I then explain further, the ways that tourism has grown into the industry that is seen today.

Chapter 5 outlines the research methods and analysis used in this thesis, and Chapter 6 provides an overview of the data and results found through both the international tourist survey and the tour operator survey. In Chapter 7, I discuss the results presented in Chapter 6. This discussion elaborates on the results of both surveys as well as gives a comparison of each in order to provide a detailed synopsis of international tourist perceptions of their environmental impacts. Finally, Chapter 8 gives concluding details to what was found in this research through the literature and data collection. It also provides ideas for future research, follow-up issues, and a potential use for this research.
CHAPTER 2 – TOURISM, GEOGRAPHY, AND THEIR ENVIRONMENTAL LINKAGES

From the days of the earliest explorers to our modern age of international travel, tourism has had the ability to break barriers and expose travelers to new places and cultures, but it can also have negative consequences for the communities these travelers visit. Defined in numerous ways and contexts, tourism is an incredibly complex subject. The term “tourist” was first used in 1814, by *The Oxford English Dictionary*, but its meaning has developed considerably since that first usage (Cohen, 1974). Today we understand tourism as “the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business, or other purposes” (United Nations World Tourism Organization [Hereafter UNWTO], 1995). Even with agreed upon definitions, there continues to be much controversy over the exact usage and context of the words tourism or tourists (Cohen, 1974; Pearce, 1985).

Although the origins of tourism can be traced back to the time of explorers in search of new lands and societies, these men were not the same as contemporary travelers. Tourists officially date back to the late 16th century with the beginning of the “Grand Tour.” This was a trip taken by young affluent males in order to broaden their knowledge of the arts and sciences in cities of culture and history such as London, Paris, Venice, and Rome (Sorabella, 2003; Towner, 1985). Much like the Grand Tour, bath towns and seaside resorts were also major draws for the social elite beginning in the 18th century (Borsay & Walton, 2011). These were the foundations of what would become one of the largest industries in the world. Unlike tourists today, travelers of the past tended to be in search of similar destinations and means of travel. The wealthy
classes of Europe wanted culture, education, and leisure. Tourist motivations began to develop more during the 19th and 20th century with the push of colonialism throughout the global south. This became particularly evident in Sub-Saharan Africa, where hunting safaris became popular for these rich white Europeans. Nature-based tourism within this region was pushed in efforts to see “untouched” environments and explore unknown cultures (Bruner, 2001; Nelson, 2003).

Tourism has been evolving ever since these first European tourism concepts. In our modern age of tourism, the draw of destinations vary infinitely for tourists. This can be seen especially within LDCs, such as in Sub-Saharan Africa, where tourists can experience both high-end tours and accommodations or a more budgeted trip focused on an intimate and local experience.

**Tourist Typologies**

Travel-related roles within society play a dominant part of the modern tourism model. Still, there is much controversy over what can be considered the acceptable definition of tourist. Especially concerning the “fuzzy” difference between those that travel for pleasure and those that travel for other reasons (such as religious pilgrimage, business, or immigration) (Carr, 2002; Cohen, 1974; Jansen-Verbeke & Dietvorst, 1987; Moore et al., 1995; Pearce, 1985). With such a fine line, there have been numerous studies conducted in the attempt to identify tourist typologies, particularly for pleasure travelers. This area of identification began with a foundational piece by Eric Cohen (1972), in which he analyzed who can be classified as international pleasure tourists. These tourists are grouped into four different categories: organized mass tourists, individual mass tourists, explorers, and drifters. The first two types are called institutionalized tourists and they are distinguished by their desire to stay in an “environmental bubble” of comfort and familiarity while traveling. The last two types are
termed non-institutionalized tourists. These are people who enjoy novelty and being immersed in the host society (Cohen, 1972; Mo et al., 1993).

These are only a sampling of how tourist roles can vary depending on personality and mode of travel. There are many more examples of ways in which tourists can be classified such as Plog’s (1974) psychocentrics and allocentrics based on desire for travel and adventure or Dann’s (1977) ideas on a tourist’s desire of escape from his or her daily life and what they hope to acquire at a destination. There have also been numerous works verifying or trying to better understand classifications that have already been developed (Dann, 1977; Decrop & Snelders, 2005; Jiang et al., 2000; Keng & Cheng, 1999; Plog, 1974). These works tend to focus greatly on Cohen’s (1972) institutionalized tourists. This group tends to vary much more in what they are looking to do while traveling and how they go about the pursuit of that pleasure while still staying within their environmental bubble (Wickens, 2002).

Roles within tourism not only vary based on personality and destination, but also vary based on motivation for travel. People are influenced to travel for any number of reasons, particularly when traveling for pleasure and other forms of enjoyment. This motivation can be presented in a tourist’s attempt to obtain relaxation, education, novelty, an enhancement of relationships, the facilitation of social interactions, an exploration and evaluation of self, an escape from their perceived mundane environment, prestige, regression toward a previous lifestyle or feeling, and cultural motives (Crompton, 1979). This desire for certain pleasure, however, does not begin with travelers seeking out a destination, but rather starts with a motivation to leave their current life and reach some form of escape (Dann, 1977; Wahlers & Etzel, 1985).
This need to alleviate one’s self from their everyday lifestyle is based on the attempt to obtain an optimal stimulation level. This is essentially a tourist’s desire to fill a void in their life either by creating more excitement or novelty/adventure if they lead a fairly mundane life or by creating less stimulation through relaxation if their typical life is filled with stress and constant commotion (Wahlers & Etzel, 1985). These desires to leave home behind and seek out pleasure at a destination can also be referred to as push and pull factors. These are the reasons an individual may desire to leave their home and the different factors that bring them to a certain destination, based on what it can provide for the tourist (Klenosky, 2002).

Destinations around the world contribute an endless number of services for the pleasure-seeking individual, whether they are an institutionalized or non-institutionalized tourist. Some destinations can even provide experiences that can entice both tourist typologies. A destination typically consists of the “front region,” or area that is provided for and seen by the tourists, which can be compared to a staged performance. Destinations also have a “back region” which is the area that is typically concealed by the host such as their home or true cultural identity, this could be compared to the backstage of a theatre where props are kept and makeup is done (MacCannell, 1973). The front region of a destination is what the institutionalized tourists desire to see. However, the desire of the non-institutionalized tourists is to attempt to infiltrate the back region and experience what truly goes on within the host society.

Success of a destination is largely influenced by the tourists that travel to it and the host’s ability to accommodate as many different tourist types as possible (Akama & Kieti, 2003). It is incredibly important to have a well-balanced destination in order to provide for numerous tourist types as well as to provide for the host population. In Tanzania and throughout Sub-Saharan Africa, this can be seen in the many varieties of travel and safari packages that are available.
These range from high- to low-end experiences based largely on accommodations and type of experience.

Tourism and its Impacts

There are very few industries in the world that have such widespread linkages as the tourism industry (Williams & Shaw, 1991). Not only does the money spent by tourists directly influence the host economy, but it manages to affect the entire landscape of the destination including the national economy, the local society, and the environment. Each of these areas are distinctly intertwined, in both positive and negative ways. The following sections review these impacts, but with the focus of this thesis being environmental impacts of tourism, more detail is given toward this area specifically.

Economic and Social Impacts

Tourism is typically regarded as having a positive impact on host societies primarily due to the fact that money generated from tourism is derived from the tourist’s home rather than from the destination; in other words, it is new money coming into the local economy (Cohen, 1974). However, there are many different approaches that must be considered when weighing the positive impacts against the negative.

As of 2015, the global tourism industry was worth US $1.26 trillion, with a total of 1.186 billion international tourist arrivals, making it one of the largest industries in the world (UNWTO, 2016). International Tourism Receipts (ITR)\(^1\) within developed countries account for the majority of economic impact. However, African and Middle Eastern countries produce about

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\(^1\) **International Tourism Receipts** are defined as spending by international tourists. This includes accommodation, food and drink, entertainment, shopping, as well as other goods and services (UNWTO, 2016).
7% of the global ITRs which constitutes about US $87 billion (UNWTO, 2016). Although this may not seem substantial when compared to the total global economic contribution of tourism, it is a significant number when considering what a large part tourism plays in these countries’ gross domestic products (GDP) and how much it has increased in only the last few decades. In 1990, the number of visitors to Africa was 14.7 million. There was a considerable increase, however, with 56 million visitors in 2014 (UNWTO, 2015).

Particularly in developing countries, tourism can give local communities many benefits such as employment, resident tax revenues, economic diversity, attractions, recreation opportunities, and international social relations. However, tourism can also have negative impacts on a host community’s quality of life (Andereck et al., 2005). Numerous studies have been conducted in order to understand the perceptions of residents within destination communities (Belisle & Hoy, 1980; Berno, 1999; Besculides et al., 2002; Brunt & Courtney, 1999; Doxey, 1976; Green, 2005; Horn & Simmons, 2002; Lepp, 2007; Ross, 1992; Tosun, 2002). Findings show that there is typically a great deal of stress put on a host society when tourism is incorporated at a large scale. This stress can be seen in things such as overcrowding, the high cost of goods and services, increased crime rates, and pollution (Ap, 1990). However, it is not always clear what a host will distinguish as positive and negative. This distinction is highly dependent on the characteristics and level of tourism development within the host society (Butler, 1980; Doğan, 1989; Doxey, 1976). For example, Doğan (1989) suggests that sociocultural changes due to tourism, such as globalization, vary greatly from country to country. These changes can range from active resistance to adoption of another culture, typically Western, based on the reactions of the host society (Doğan, 1989).
Tourism within LDCs has many positive impacts such as employment, economic development, and even linkages to the rest of the world (Ashley & Roe, 2002; Mitchell & Faal, 2007). This is particularly seen in cases of pro-poor tourism\(^2\), but even in situations where there is low or concentrated employment, there is a large benefit to the greater community through the “trickle down” or “multiplier effect” in which the spending of employed citizens will eventually reach those that are unemployed (Ashley & Roe, 2002). However, a major problem that LDCs face is that many of the tourism-related companies are owned by people from external or typically developed nations. Governments must work closely with the host community in order to establish a local tourism industry that ensures the money generated stays in the hands of the host society rather than experiencing leakage to foreign countries and people. Although there is this potential for government policy and international cooperation to benefit locals, it is a rather difficult process when so much of the global tourism industry is owned and run by large corporations based in developed nations; this is particularly seen within the airlines, hotel, and transportation sectors (Mbaiwa, 2005; Salazar, 2009; Sechambo, 2001; Sood & Chougle, 2016; Turner, 1976).

*Environmental Impacts*

Although tourism can be seen as a way of fast-tracking development (Hall, 1995), in order for LDCs to reap the benefits of tourism, the process must be strictly managed. Particularly within LDCs, tourism can have much greater negative impacts than on developed countries due to the very delicate balance between humans and the resources within such regions.

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\(^2\) **Pro-Poor Tourism** is “tourism that results in increased net benefits for poor people and ensures that tourism growth contributes to poverty reduction” (Nelson, 2013, p. 288).
(Crater, 1987). This is particularly evident in areas of mass tourism or enclave tourism\(^3\) (Mbaiwa, 2003). Tourism in LDCs tends to focus around nature-based activities. With an attractive and unspoiled environment as the industry’s main draw, there is a growing need to protect the natural resources within these countries (Pearce, 1979). Numerous policies have been researched and put in place within areas of nature-based tourism, such as carrying capacity (Goldsmith, 1974; Pearce, 1979), Visitor Impact Management (Jamal & Robinson, 2009) and Limits of Acceptable Change (Stankey et al., 1985).

Just as the term is used in biology, carrying capacity is a tool for determining a sustainable limit of use for a destination’s environment. This way of measurement has been used within four different categories: physical, ecological, economic, and perceptual. Physical and ecological carrying capacity look explicitly at the extent of visitors and activities an environment can withstand over a limited amount of time. Economic carrying capacity focuses on resources and available services a destination can provide, while perceptual carrying capacity takes the host society’s tolerance for number of visitors into consideration as well as the quality of the visitor’s satisfaction (Goldsmith, 1974). These areas of impact have been studied for decades separately, but only on the rare occasion have they been linked. This stresses the importance of assessing the amount of environmental impact that tourists are aware of and understand while traveling (Hillery et al., 2001).

Although activities, culture, and events tend to be some of the main draws of a destination, most areas of tourism thrive because of one simple thing: the environment. Recent shifts in tourism have shed light on the many challenges to policy makers and local communities

\(^3\) Enclave Tourism can be defined as “geographically isolated and spatially concentrated tourism facilities and activities” (Nelson, 2013, p. 286).
in creating sustainable development, particularly through the balance of conservation objectives with economic and social development (Sechambo, 2001).

Many of these tourism areas within LDCs tend to have sizable problems balancing the needs for environmental conservation for tourism and environmental sustainability with the needs of local populations. Especially in cases like Eastern Africa, the creation of national parks for nature and wildlife protection have led to the displacement of native populations. These areas have proven to be sites of massive conflict between humans and nature simply due to the initial policies set in place to protect the natural space over the lives of the humans (West et al., 2006). An example of this is seen in the pastoralist Maasai ethnic group of Northern Tanzania and Southern Kenya where victims have been exiled from their homelands within national parks through both peaceful and violent means. This expulsion not only affects the physical living arrangements of these ethnic groups, but also their economic status, denying them access to fuelwood, water, food, lumber, and other resources (Brockington, 2002; Brockington, 2005; Brockington et al., 2008; Sood & Chougle, 2016).

There has been much recent interest in the relationship between tourism and the environment, particularly the concern that environmental degradation due to overuse, climate change, and pollution has created problems for the tourism sector. The industry, however, is the cause for many of these problems. Although the exact type of environmental impact depends on the location and precise landscape of the destination, there are numerous overlapping problems (Priskin, 2003). Some of these issues include resource overconsumption (such as water, land, and energy), degradation (to the soil, water, and vegetation), pollution (such as litter and noise, air, and water pollution), and the disruption of wildlife (including their migration and hunting patterns, resources, and habitats) (Nelson, 2013).
The ability to participate in the overconsumption of resources is something that developed countries typically take for granted. If someone has the financial ability to purchase resources such as water, fuel, energy, or land, they may tend to have little concern about the amount they use, how it gets to them, or who they may be taking it away from. This is not to say that it is always intentional. In many cases, what may be seen as overuse by some, is normal or average use for another. There has been a recent trend within these developed countries to increase sustainability, using economic stability to further the use of clean energy and resource alternatives, or to find ways to limit use.

Although tourist numbers within a country make up only a small percentage of the people using resources (currently tourists account for around 1% of global water consumption), this percentage tends to become much more substantial at the regional or local level of a tourist destination. Particularly within LDCs where water resources are scarce and hard to obtain, incoming travelers put extra strain on this delicate water supply, not only through drinking water but through their indirect uses as well including showers, flush toilets, laundry, pools, and even the upkeep and watering of hotel landscaping (Figure 2.1) (Gössling et al., 2012). This burden is increased when considering the seasonality of incoming tourists. Most evident within Sub-Saharan Africa, tourist season tends to be during the drier months of the year, which is a time when water resources are even scarcer than usual. This seasonal trend leads to tremendous conflict between the water needs of the tourists and the rights of the local population, proving how important the concept of carrying capacity is (Becken, 2014; Cole, 2012; Gössling et al., 2012; Romeril, 1989).
Overconsumption by tourists can also be seen indirectly in the use of land for food production and the infrastructure development of roads, hotels, camps, restaurants, and shopping complexes. Although the economic potential of increased food and infrastructure has the ability to create many positive effects from tourism, it also challenges the resources of the local people, wildlife, and environment (Mbaiwa, 2003). Through such development, there is also an increase in energy consumption in hotels, camps, transportation, restaurants, airports, and in the construction of all of these buildings, roads, and other infrastructure. Not only does tourism have a significant impact on energy use through these means, but it also contributes exceptionally high amounts to the world’s carbon emissions and other forms of air pollution, creating even more lasting negative effects for the local and global environments (Katircioglu, 2014; Mbaiwa, 2003).
Other impacts of infrastructure development and the creation of tourist areas include deforestation and other vegetation and habitat loss. Deforestation, in particular, causes much strife for the rural populations who need timber to supply their fuel and building materials, or food through hunting and scavenging. Much landcover change has also occurred over the last few decades, largely due to land use for croplands, some of which are used to supply food for increased numbers of incoming tourists (Sechambo, 2001). A decrease in trees also creates a drop in wildlife populations due to loss of habitat, an increase in carbon emissions, a negative impact on water supplies around the area, and it can also create a potential surge in erosion and soil degradation (Brockington et al., 2008; Nelson, 2013; Nyang’oro, 1996; Osei, 2010; Sechambo, 2001; Stock, 2013).

This problem of soil erosion is notably evident in coastal regions where development takes place directly along the beaches and destroys natural protection such as coastal wetlands, sand dunes, and mangroves, therefore creating an even more delicate ecosystem. Coral reefs along East Africa in the Indian Ocean are also increasingly vulnerable and suffering from bleaching due to above-normal water temperatures (Stock, 2013). Individual tourists can also cause issues for coral reefs along the coast where they may break the fragile coral either accidentally or on purpose in order to take home souvenirs (Buzinde, 2010; Nelson, 2013; Phillips & Jones, 2006; Sood & Chougle, 2016; UNWTO, 2015; Xue et al., 2009).

With the environment at the heart of Sub-Saharan Africa’s tourism industry, there also comes a need for the protection of the wildlife which so many people come to see. However, with the creation of roads and infrastructure as well as an expansion of agricultural settlement around protected areas⁴, numerous animals have been negatively affected by being restricted into

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⁴ Protected Area is a “geographically defined area which is designated or regulated and managed to achieve specific conservation objectives” (Nelson, 2013, p. 288).
smaller areas as well as being blocked from traditional migration routes (Sechambo, 2001).
Along with the protection of wildlife, hunting has also been a major concern for many nations of Sub-Saharan Africa. There is a great divide between the needs of the tourism industry to continue with the conservation of wildlife in order to have them as a resource for viewing, and the potential that hunting has to contribute considerable amounts of financial support to conservation efforts (Brockington et al., 2008).

Tourists do not always see these environmental issues due to the abstractness of some of them; for example a tourist can easily see litter on the side of the road and understand what its harm is but may not be able to understand the implications of noise pollution on wildlife. Individual tourists can have vast impacts on the environment in areas of water pollution, air pollution, and litter (Figure 2.2). Water pollution is a major issue within Sub-Saharan Africa, where water supplies are already of low quality and quantity. Large hotels and resorts produce substantial amounts of solid and liquid waste in areas which typically lack proper sewage systems to dispose of the waste. This is also seen in safari camp areas where pit latrines and septic tanks do not have to follow any environmental standards and have the potential to overflow or contaminate groundwater. Lack of sanitation is especially dangerous in campsites where drinking water is typically supplied by boreholes (Mbaiwa, 2003; Nelson, 2013; Pearce, 1979).

Air pollution is a tremendous concern in local and global environments due to its carbon emissions and effects on climate change and tourists manage to contribute to these emissions through their use of transportation getting to and traveling within their destination. Beyond climate change, air pollution also raises concern for air quality affecting the health and quality of
Figure 2.2 - A beach on the Indian Ocean north of Dar es Salaam strewn with litter amongst the seaweed. Photo courtesy of Ruth Poutanen.

Figure 2.3 – Litter around the shore of Lake Manyara. Photo courtesy of Jim Hayward.
life of local residents (Nelson, 2013). With increased transportation methods, even something as simple as noise pollution has been seen to have great impacts on not only the local people, but on wildlife in protected areas as well. The noise created by construction and development as well as the noise of vehicle engines can disturb wildlife and birds, in some cases decreasing populations in areas due to migration or death caused by stress (Mbaiwa, 2003).

Visual pollution such as litter is also cause for alarm in areas of Sub-Saharan Africa where due to a lack of disposal resources as well as tourist laziness, water and land are being polluted by bags, paper, cans, and bottles, and even human waste (Figure 2.3). This is particularly seen in areas of the environment where people are hiking, camping, or climbing and have limited access to proper disposal techniques (Mbaiwa, 2003; Sood & Chougle, 2016).

Although tourism can create environmental problems, it also helps to promote conservation and preservation of these natural attractions in order to continue a sustainable tourism industry (Nelson, 2013). Sustainable tourism5 and its other forms like eco-tourism and green tourism6 have begun to take shape over the last two decades due largely to society’s shift to a more environmentally-conscious lifestyle. The demand for a tourism industry that has the ability to help the environment, the local community, and the travelers was realized and is now something that can be found anywhere in the world.

“If properly managed, tourism has the potential of being a renewable industry, where resource integrity is maintained or even enhanced. If mismanaged, or allowed to expand within short-term goals and objectives, it has the capability of destroying the very resources upon which it was built” (Mbaiwa, 2003, p. 454).

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5 **Sustainable Tourism** can be defined as "tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities (UNEP & UNWTO, 2005, p. 12)."

6 Unlike sustainable tourism, eco-tourism or green tourism focus specifically on the environmental sustainability of tourism within a destination landscape rather than incorporating many aspects of tourism such as social and economic sustainability.
With sustainable tourism, we see that this area of tourism does have tremendous positive impacts through its promotion of conservation, local development, and sustainability. However, in order for ecotourism and community-based sustainable tourism to properly benefit all involved, it requires positive action from decision-making authorities in conjunction with the local community (Charney, 2005; Nelson, 2004; Ross & Wall, 1999a; Ross & Wall, 1999b; Sood & Chougle, 2016).

**Geography, Tourism, and Environmental Perception**

*Geography and Tourism*

Tourism, itself, is an inherently geographical concept. Simply looking at the process of a tourist’s journey, there are three different elements that can be analyzed: the tourist’s origin which their travels begin and conclude at, the tourist destination, and the area covered during transit between the origin and destination (Figure 2.4) (Gunn, 1972; Leiper, 1979). There is also a considerable amount of spatial context that can be applied to tourism on each of these three elements.

![Figure 2.4 – A tourist’s journey broken down into three different elements](image)

The origin of the tourist is defined as a tourist generating region which must have the necessary behavioral factors for the motivations or “pushes” of tourism (Crompton, 1979; Dann, 1977) as well as the market and economy in order to supply a potential tourist demand. For example, international tourists typically come from specific economic and social classes within
developed countries; one must have both ample time and monetary resources in order to travel (Dann, 1977; Guthrie, 1961; Leiper, 1979).

The tourist destination regions must also have certain characteristics which will attract those tourists that are being pushed away from their region of origin. These destinations can vary on many different levels in order to pull in distinct tourists for their own specific reasons. This may be seen in particular areas where tourists come for beach holidays and expect appropriate accommodations, services, entertainment, and recreational facilities to support their needs and desires. This beach holiday fulfillment for certain tourists can be compared to that of a tourist looking for cultural or historical attractions who will need a different variety of provisions at said destination such as museums, historical landmarks, or cultural displays and performances (Leiper, 1979).

While traveling to and from the tourist origin and destination, transit routes are taken by tourists. These also vary depending on the time, finances, and desires of the tourists in transit. Depending on the efficiency and characteristics of these routes, travelers may take many disparate ways to get to and from one region. These transit routes highly influence the tourist flows between places (Leiper, 1979). Movement between these spaces is a major component of tourism as well as geography. This movement can be impacted by numerous factors, such as social, economic, environmental, seasonal, and convenience. While driving within the United States, tolls are a terrific example of convenience. Although it may be less economically beneficial to take a tollway while driving through a state, it is much more convenient and faster to take this route of transit. All of these various factors create an intricate web of motivations for travel which influence how and why tourists travel in certain ways.
Accessibility is one of the major elements which influences the movement of tourists. Accessibility of a location is based on physical distance, financial implications, and social or cultural aspects such as language or religious factors. Each of these concepts can have different effects on the decision-making of a tourist and where they decide to travel. However, not only are these decisions based on what accessibility the destination has, but also on what accessibility the destination has in relation to the origin of the tourist (Nelson, 2013). Language is a major way in which this is played out. Institutionalized tourists, especially, tend to travel to other areas that have similar language to their own in order to remain within their environmental bubble that was discussed earlier in this chapter. Comparatively, non-institutionalized tourists may also be influenced by language, but may want to travel to a destination that has a different language than their own in order to experience a different culture and environment.

The complexity of tourism as a geographical concept is highly determined by many of these basic geographical phenomena such as accessibility, space, place, and distribution. In order to fully understand tourism, one must first understand its geographic context on a local, regional, national, or global scale (Nelson, 2013).

*Introduction to Behavioral Geography*

Geography began to explore the behavior of people in relation to place and space early in the 20th century. However, it was not until the quantitative revolution of the social sciences in the 1960s that numerous geographers began to realize the need for a representation of an individual’s point-of-view. Doing so through the processes leading to observed spatial patterns (Golledge et al., 1972). Although the goal of behavioral geography began with this desire to
better understand a human’s perception, these early approaches were focused almost entirely on a structural perspective and had very little to do with individual behavior and experience.

Numerous researchers within various fields of human geography realized the need for expansion within the discipline. This was particularly seen in areas of imaginary maps (Lynch, 1960; Trowbridge, 1913), human imagination (Wright, 1947; Kirk, 1951), the perception of spatial orientation (Gulliver, 1908), and perceptions of natural hazards (Golledge & Stimson, 1987; White, 1945). Although these initial ideas had been explored throughout the early part of the 20th century, it was not until the lectures and writings of men such as John K. Wright, William Kirk, and Carl O. Sauer, that interest in behavioral geography and environmental perception truly became evident (Moore & Golledge, 1976). These men studied the subjective behavior of people in the “real world” within the context of qualitative research rather than the quantitative and theoretical methods that most others in the discipline were pursuing at the time (Bunting & Guelke, 1979).

Toward the end of the 1960s, there was some consensus that classical spatial theories were unable to describe or predict most behavioral phenomena with a satisfactory degree of accuracy (Burnett, 1976). This consensus led to more variation in the ways researchers studied behavioral geography. This trend brought about the desire to better understand human decision-making, particularly within social contexts, as well as understanding a human’s comprehension of “self” and “community,” furthering behavioral research within geography (Amedeo & Golledge, 2003; Gold, 2009).

Human geography, in particular, has found a need for the incorporation of behavior and perception within its field. Although the ideas remain the same, the approach has changed over the last four decades in order to fit with an ever-changing mold of geography. Multiple
perspectives in the underlying research approaches have also contributed to great variability in the way these behavioral studies have been conducted (Amedeo & Golledge, 2003). Although multiple areas of geography dealt with this thrust toward a behavioral approach, it was most apparent in urban and economic geography and to a slightly lesser extent, historical and cultural geography (Gollege et al., 1972). This behavioral geography emerged primarily due to the need to have a clear distinction between studies of spatial behavior and of behavior in space. Although geography as an overarching field has had components of behavioral elements within most of its studies, there was a need to expand upon the theory regarding human behavior in the contexts of spatial activity (Cox & Golledge, 1981).

Other academic disciplines could have incorporated this spatial side of behavioral research, but there was a need to thoroughly understand spatial structure in order to accurately arrange decisions and behavioral phenomena over space (Cox & Golledge, 1981). As was addressed earlier, during the time this was happening in the 1960s, the social sciences were concentrating on quantitative backing to their research for validity. Due to this, much of the early behavioral research focuses on directly measurable concepts such as locations, distributions, and interactions (Golledge & Rushton, 1976).

*Environmental Perception*

Although there are numerous areas of focus within behavioral geography, many geographers find themselves pursuing the perceived components of the environment (or “cognized” environment). The main goal of these studies has been to understand how and why choices concerning those particular environments are made, notably being based on a person’s previous knowledge (Golledge & Rushton, 1976). Environmental cognition can be defined as
“the study of the subjective information, images, impressions, and beliefs that people have of the environment, the ways in which these conceptions arise from experience, and the ways in which they affect subsequent behavior with respect to the environment” (Moore & Golledge, 1976, p. 3). This environmental cognition is similar to environmental perception but unlike perception it typically consists of indirect material and is involved in both conceptualizing environment and designing it. In other words, cognition is using information from outside sources like people, their values, views, and interpretations which can make it somewhat culturally affected (Rapaport, 1976).

This idea of a person’s perceptions being influenced by others can be categorized as ethnogeography. This is the world view of a person based on their culture with an emphasis on their knowledge in relation to environmental processes and patterns, spatial organization, and their ability to apply different techniques to various portions of the environment (Knight, 1971). Therefore, the environment is actually how a person understands and comprehends it, giving him/her the ability to respond to it as he/she personally conceives it to be (Moore & Golledge, 1976).

There have been four main areas of geographical research in relation to environmental cognition. These consist of

“studies of contemporary conceptions of aspects of spatial environment, studies of conceptions of the environment over historical time, studies of cognition of the environment across different cultures, and studies of cognition of various social groups. The largest body of work has addressed the issue of contemporary conceptions of and attitudes toward different environments, such as landscapes, outdoor recreation areas, wilderness areas, cities, and larger geographic regions” (Moore & Golledge, 1976, p. 18-19).
This thesis focuses on the issue of attitudes toward various landscapes and environments, particularly across different cultures. Using cognitive or environmental behaviorism allows for the ability to understand how a person truly perceives and reacts to their environment based not simply on what they are experiencing at the moment, but based on their previous knowledge and background such as their origin, education, or even tourist typology (Bunting & Guelke, 1979).

Although environmental perceptions can sometimes produce behavior or some type of response, this is not always the case. Likewise, behavior cannot always be accurately predicted. This is why, separate from environmental perception, environmental personality is another large component of environmental behavior study. While these two concepts can be linked, they are not necessarily joined (Sonnenfeld, 1976).

The desire for many to study environmental perception and related concepts is to better the environment. There is an assumption with this area of study that we can better understand people’s actions, needs, and desires when it comes to the natural and built environment. This then directly relates to a person’s beliefs with respect to natural and man-made hazards, air pollution, depletion of resources, and numerous other environmental problems and concerns (Moore & Golledge, 1976). The hope is that this understanding can lead to better environmental learning in people of all ages. If this process of learning to understand, navigate, and use the environment in proper ways can be studied, perhaps it can be applied in the future to bring about positive changes to our degraded environment (Klett & Alpaugh, 1976).

Environmental Perception and Tourism

Perception and behavior within the discipline of tourism have been studied since the 1970s. This has led to an extensive amount of work on the subjects of tourist, host, and policy-
maker perceptions (Tosun, 2002). These studies on tourism and perception include many analyses on host or residential perceptions of tourism which explore the interactions of locals and tourists, as well as their reactions to the tourism industry within their daily lives (Belisle & Hoy, 1980; Berno, 1999; Besculides et al., 2002; Brunt & Courtney, 1999; Doxey, 1976; Green, 2005; Horn & Simmons, 2002; Lepp, 2007; Ross, 1992; Tosun, 2002). Tourist perception of risk and destination image is another major area of study which has included research from physical or political issues within a landscape and also how publicity may influence a tourist’s perception of risk (Hugo, 2014; Kozak et al., 2007; Lepp & Gibson, 2003; Lepp & Gibson, 2008; Lepp et al., 2011; Ragavan et al., 2014; Rajesh, 2013). And more recently, tourist perceptions of the environment have become predominant within the tourism research, particularly in relation to climate change and pollution (Buzinde et al., 2010; Garavaglia et al., 2012; Gössling et al., 2006; Hillery et al., 2001; Petrosillo et al., 2006; Priskin, 2003).

Since the late 20th century, there has been a drastic increase in concern and awareness of environmental issues. With this understanding, tourism has also become increasingly aware of the impacts of the industry (Mitchell & Murphy, 1991), leading to an introduction of options for travelers such as ecotourism, sustainable tourism, nature-based tourism, and other environmentally friendly travel techniques. The popularity of environmental issues has also led to an increase in research surrounding environmental problems caused by tourism and how tourists perceive these impacts that they are creating (Andereck, 2009).

There has been research on tourist perception of climate change (Garavaglia et al., 2012; Gössling et al., 2006), tourist impact within small recreational areas of developed countries (Hillery et al., 2001), and tourist impact on coastal areas (Buzinde et al., 2010; Petrosillo et al.,
However, there are numerous gaps within this research that must be filled in order to fully comprehend the tourist perception.

How a person perceives environmental quality within a destination has been proven to be directly related to their socio-economic status, cultural ties, and past experiences (Renn et al., 1992). Perception tends to become a process of filling in empty spaces of a situation with previous knowledge. This creates the question: Is there a correlation between tourist typology, geographical origin, and societal status with what a tourist is capable of perceiving within a destination?

Studies have shown that tourists are aware, to an extent, of their impacts, individual and communal. However, it has been shown that the environmental impacts that they are aware of tends to be much less than what is truly happening around them. Typically, this awareness consists only of visual signs such as litter and other severe forms of pollution. Examples of this have been seen in nature-based tourism destinations within multiple sites in Australia (Hillery et al., 2001; Priskin, 2003). This becomes an important issue to address within various environments and ecosystems, especially in areas where local populations and wildlife are highly dependent on the environment where tourists frequently travel. There is a sizable gap between the perception of tourists and the reality of what impacts they are creating. In order to counteract the dilemma of environmental degradation, visitor education is a key solution (Buckley, 2001).

With recent trends in ecotourism as well as other forms of sustainability, there is a need for an updated assessment on the perceptions of tourists and their awareness of environmental impacts in association with social and economic impacts. Many of the latest studies on tourist perceptions of the environment were in the very early 2000s. Since then, there has been a
substantial increase in societal knowledge and comprehension of environmental problems due to
the prevalence of issues such as climate change within media and politics, yet the literature has
not kept up with these changes. Having an up-to-date understanding of what perceptions tourists
have can give better information on what changes in education and management must be made,
as well as what progress may or may not have already been done. This understanding will lead
to a much more sustainable industry that can better the tourists, hosts, and the environments it
involves.

Conclusion

Tourism is an industry which touches all ends of the earth. Its linkages extend
economically, politically, socially, culturally, and environmentally, and they do so at various
scales across the globe. Therefore, tourism is an exceptionally geographical concept. Due to
such broad angles of tourism, it becomes something that nearly anyone with the means can
enjoy. There are numerous types of tourists and endless motivations for their travels, including
relaxation, business, education, religion, and adventure. Of the typical pleasure tourists, there
are two sub-groups: institutionalized and non-institutionalized. Although each of these groups
are in search of pleasure, they go about their travels in different ways and therefore have
different interactions with the destination.

Tourism has both positive and negative impacts for the host society, host economy, host
environment, and even to the tourists themselves. This variety of impacts creates an
exceptionally fragile setting for the global status of tourism as a whole. Tourism can work
positively within the environment, such as through conservation efforts, wildlife protection, and
the spread of environmental knowledge. Yet, where there are instances of tourism working
favorably for the destination, there are also many repercussions that can occur. Negative ramifications of tourism include pollution, environmental degradation, resource overuse, and the disruption of the same wildlife that is being protected in instances of ecotourism. Due to these numerous interconnections of the industry, there is a need to understand the perceptions of the various groups involved on all ends of the tourism scale, especially that of the tourists.
CHAPTER 3 – TANZANIA’S TOURISM SECTOR FROM AN HISTORICAL PERSPECTIVE

Tanzania has seen decades of altering governmental and economic systems, which have had major consequences for its tourism industry. Its tourism sector has also played an intricate role within the economy, policies, and social tensions of the country for over a century. From conflicts with early explorers, to over 70 years of colonial rule, to a push toward African Socialism, and to the current capitalist economy that shapes Tanzania today, this myriad of transitions has had numerous implications for tourism within the country. In order to look at the evolution of tourism in Tanzania, we must first understand the economic and political changes that took place over the last century, beginning with the German colonial rule of the late 1800s and continuing through to the present-day capitalist economy of Tanzania. Those historical references will then be used to describe the way tourism has evolved over this same time period, resulting in the industry that we see today.

A Century of Change

European Colonialism played a major role in the development and integration of numerous policies throughout countries all over the world, including most African countries. Tanzania’s case was no different. The first people came to the region between the 15th and 19th centuries in hope of domination when the Swahili Coast of Africa was in the hands of Portuguese traders and explorers as well as Omani Arabs. Both groups wanted claim over the island of Zanzibar. It was a key port for many traders of goods, services, and slaves, and it was of
particular importance because of its central location connecting (current) Mozambique, Somalia, and the Middle East with the East African coast’s resources of gold, ivory, tortoise shell, and coconut oil (Iliffe, 1969). The island developed into a leading commercial center for the Arabs as well as the main slave trade post in the 1800s with thousands of slaves passing through annually (Austen, 1988; Kazuzuru, 2014).

From 1884 to 1918, the mainland of what is today Tanzania, was a colony within German East Africa. This area consisted of mainland Tanzania, Rwanda, Burundi, and the Kionga Triangle, a small section of what is now Mozambique (Iliffe, 1967b). German rule brought much progress through the development of buildings and infrastructure, ports, and railways. This was highly evident in northeast highlands of German East Africa throughout West Usambara toward the mountain region of Kilimanjaro and Meru, where railroads were constructed in order to benefit the European agriculture sector and to provide easy access to the coast as well as a central location for German military forces (Iliffe, 1969). Remnants of German influence can still be seen today, particularly in terms of architecture and religion, within many of Tanzania’s larger cities such as Dar es Salaam, Arusha, and Bagamoyo - the former capital of German East Africa (Deutsch, 2002; Lucian, 2010; Swai, 2016). Although positive development was made within German East Africa, German rule also brought with it tension between races, social classes, and urban and rural populations. With this period of segregation and dominance by the Germans, there was also much resistance from the Africans which included rebellion such as the tragic Maji Maji (Swahili for “water water”) Rebellion from 1905-1907 in which over an estimated 75,000 Africans died of violence, hunger, and disease (Iliffe, 1967a; Iliffe, 1969).
After the defeat of Germany and the Central Powers at the end of World War I (WWI), the League of Nations mandated the rule of Germany’s colonies to other countries. The mainland portion of Tanzania was mandated to Great Britain in 1919 and renamed Tanganyika territory. It became the first East African country to receive independence in 1961 (Kazuzuru, 2014; Nyerere Centre for Peace Research, 2017; Nyerere, 1974; Salazar, 2009). Under British rule, although hardship and segregation continued, there was also continued progress. World War II (WWII) in particular brought much economic growth with massive amounts of food exported for the Allies. Over a ten-year period between the start of the war in 1939 and 1949, the country’s export income grew six times. Although Tanganyika became the largest exporter of agricultural goods in all of Africa, this also meant high prices for the local people, which they typically could not afford. In turn, this promising economic growth only benefited the British due to the colonial roots of development policies, leaving Tanganyikan farmers unable to afford their own produce (Heale & Wong, 2010; Iliffe, 1969).

In 1964, the mainland of Tanganyika and the island state of Zanzibar unified to create the United Republic of Tanzania which still exists today. The first leader of Tanzania was Julius Nyerere, who took over in a peaceful transition of power from the colonial government to the people’s elected government (Nyerere, 1974). He was responsible for instating policies of African Socialism throughout his years of service from 1960-1985, in which he drew from the ideas of Rousseau, Kantian liberalism, and traditional African society. His socialist values were first issued in 1967 with the Arusha Declaration in which he created the concept of *ujamaa* (Swahili for “familyhood”), hoping to take Tanzanians back to a traditional form of sharing and cooperation that had existed in tribal communities before the colonization of the country (Ibhawoh & Dibua, 2003). His hope was that the retreat back to traditional ways of life and a
constant focus on community support would result in the end of capitalism within Tanzania (Nyerere Center for Peace Research, 2017; Nyerere, 1974; Nyerere, 1967). This, however, is far from what played out in reality.

*Ujamaa* focused on policies that hoped to spread wealth horizontally throughout the greater community rather than vertically (Nyerere Center for Peace Research, 2017). The implementation of *ujamaa* and numerous related policies were designed to work toward the interest of self-reliance in Tanzania. In order to pursue this self-reliance, directly after the announcement of the Arusha Declaration in February of 1967, Nyerere nationalized all housing, banks, and large industrial enterprises which included the massive agricultural trade within the country (Ibhawoh & Dibua, 2003; Nyerere, 1974).

With such large-scale agricultural processing industries, Nyerere put focus on the rural development of Tanzania. This was particularly done through the *ujamaa* villagization scheme (*ujamaa vijijini*) in which he encouraged people to locate their homes around a communal service center. Nyerere urged citizens to see the potential in these communal areas. He stated that these were areas where “people [were] living together in villages to an ever-increasing extent; they [were] getting access to basic health care, to clean water near at hand, and to a pool of expert knowledge on ma[n]y subjects of direct relevance and interest to their welfare. People [were] working together in cooperative production for their common benefit” (Nyerere, 1974, p. 7). Although there was this utopian push towards villagization, people were reluctant to relocate and the “encouragement” of the government turned to forceful methods that made people move to these *ujamaa* villages. By 1975, it was recognized that the villagization policy had failed and it was abandoned (Ibhawoh & Dibua, 2003).
Although these years of socialism caused much economic suffering for Tanzania, it did increase literacy rates and life expectancy in a country contending with mass poverty. There was also success in terms of greater social equality between income groups as well as the country’s ethnic groups; this success was due in part to the adoption of Swahili as the national language (Ibhawoh & Dibua, 2003; Nyerere, 1977). It is evident that many socialist policies look good on paper but are often executed very poorly, and this is exactly what was seen in Tanzania. Due to the failure of his socialist policies of communal and national ownership of farms and industries, Nyerere stepped down as president in 1985, making him the first African head of state to retire voluntarily (Nyerere Centre for Peace Research, 2017).

Proceeding Nyerere’s retirement, Tanzania had to reintegrate itself into the global capitalist system. The process began with the removal of trade restrictions, particularly for access to imports from developed country economies. This was instated with the help of Structural Adjustment Programs (SAPs) through the International Monetary Fund (IMF) and the World Bank. These SAPs are loans given out to countries that have experienced an economic crisis; therefore, they have been of particular assistance throughout all of Africa (Salazar, 2009; Wade et al., 2001). These are neoliberal programs put in place to ensure debt repayment and economic restructuring within developing countries by implementing policies which push for privatization, increased exports, less regulation, less state interference, and cutbacks in social services (among other things). Although the IMF and World Bank continue to claim that these policies reduce poverty, SAPs have received criticism, particularly that they increase a country’s dependency on developed nations (Konadu-Agyemang, 2001; Shah, 2013). Tanzania continues its struggle today of recovering from colonial rule and Nyerere’s socialism in addition to
problems created by SAPs and its national debt. One way in which it has been able to grow as a country in recent years is through its tourism industry.

**Tanzania’s Integration of Tourism**

In terms of tourism, Tanzania has gone through many different transitions since the first tourists came to the Swahili Coast. These first tourists were the European explorers (such as David Livingston, Richard Francis Burton, John Speke, and Henry Morton Stanley) who were credited with the discoveries of many of the country’s natural wonders. Although these explorers were in the region for a longer duration than most tourists would stay today, they were the first people to travel to East Africa for the purpose of exploration, mountain climbing, hiking, and other forms of recreation. The European explorers were typically geographers, biologists, naturalists, and writers. This is in contrast to other explorers, particularly Arab and Portuguese traders, who came to East Africa with the aim of extracting ivory, gold, slaves, and other resources (Kazuzuru, 2014). This is not unlike what ensued with colonialism, by these very Europeans, and continues today with the exploitation of people and resources throughout the countries of Sub-Saharan Africa by wealthy Westerners.

During the German colonial rule of German East Africa, many of the region’s first game reserves were created. These areas were specifically designed for the personal enjoyment of white European travelers and colonists. Even in the early 1900s, there was a popular idea among Europeans that these areas within Sub-Saharan Africa were “untouched” nature. The Europeans wanted to explore this “Garden of Eden” that they had now tamed for their own use. This same idea continues today for many western tourists who come to visit Tanzania in search of the “Wild Africa” that is portrayed in movies, T.V., and magazines such as National Geographic.
(Bruner, 2001; Nelson, 2003). However, it was not simply for the views and grandeur that Europeans wanted to set aside land for protection. This was the initiation of some of the first conservation plans. Westerners were worried that animal populations were dropping due to increased hunting and a lack of regulation. In order to make sure there were enough animals left for future hunting, policies set aside areas of land in order to monitor and protect animals for their later harvest. This led to the development of many sub-groups of conservation-based efforts regionally, such as the Convention for the Preservation of Wild Animals, Birds and Fish in Africa, the Society for the Preservation of the Fauna of the Empire (SPFE), and the Convention for the Protection of African Flora and Fauna (Adams & McShane, 1992).

When the British took over colonial rule from the Germans after WWI, they created the first policy toward tourism within East Africa: the Game Reserve Ordinance in 1921. Overtime, this statute designated many of the first national parks within Tanganyika including, but not limited to Selous Game Reserve, Ngorongoro Conservation Area, and Serengeti National Park (Charnley, 2005). Between the end of WWI and beginning of WWII, many parks were created and progress was made within Tanganyika. During this period, there were also numerous organizations and agreements toward tourism development established. These included the 1933 International Agreement for Tourism and the 1938 formation of the East African Publicity Association (EAPA) which were in response to the worldwide depression, calling for the creation of tourism organizations throughout the globe (including East Africa) (Adams & McShane, 1992). It must be pointed out, however, that these were created on an international and regional level (as their names suggest), rather than focusing on Tanganyika specifically. WWII brought with it little opportunity for growth in the tourism industry in East Africa, but post-war additional tourism organizations were created such as the East African High
Commission (EAHC) and the East African Tourism Travel Association (EATTA) (Salazar, 2009).

Simply by looking at these names the focus toward regional tourism can be seen. Due to the British rule over Kenya and Uganda as well as Tanganyika there was a great push toward policies that would cover the entire region rather than simply each country individually. Although this way of governing worked well for Kenya, who tended to be at the center of British concern, it led to the neglect of Tanganyika and Uganda, which stunted their tourism growth (Kazuzuru, 2014; Salazar, 2009; Wade et al., 2001).

During this time, wildlife tourism and hunting safaris remained the focus within East Africa; the tourism industry during colonial times was created for Europeans, funded by Europeans, and used by Europeans. Although Black Africans were not allowed within the parks, other than being *wapagazi* (Swahili for “personal porters”) for the tourists (Kazuzuru, 2014), they also tended to not want any involvement with the colonial ways of tourism. Their focus remained with the agricultural sector, which continued its growth after WWII (Salazar, 2009; Wade et al., 2001).

After Tanganyika gained its independence in 1961 and joined with Zanzibar to become the United Republic of Tanzania, there was a demand for country cohesion. This called for focus on Tanzania’s own tourism industry rather than the regional focus of the British. This switch can be seen in the creation of the Tanzanian National Tourism Board (TNTB) in 1962 (Salazar, 2009). Although tourism endured with the peaceful change of government into Tanzanian independence, it became a major conflict with the ideals of *ujamaa* and the policies of Nyerere’s African Socialism (Curry, 1990; Wade et al., 2001). *Ujamaa* was a push towards self-reliance, nationalism, and the ways of traditional African culture, whereas tourism was a way of
modernization and a drive toward western culture (which was highly vilified after the years of colonialism) (Ibhawoh & Dibua, 2003; Nyerere Center for Peace Research, 2017; Nyerere, 1974; Nyerere, 1967). With this push, all tourism facilities and organizations were converted to (inefficient) public control, as were all other sectors within the economy. For example, it was at this time that the recently created TNTB became the Tanzanian Tourist Corporation (TTC) in order to show its transition into the public’s hands. The TTC was responsible for the building, ownership, and management of 15 different tourist properties and hotels, although later proving unsuccessful (Salazar, 2009; Wade et al., 2001).

Although tourism numbers rose during the 1960s and 1970s, much was happening within the country that should not have led to this growth. The worldwide oil crises in 1973 and again in 1979 in particular led to economic hard times for many within Tanzania (Salazar, 2009; Wade et al., 2001). During this time, there was also a war with Uganda from 1978 to 1979 due to Tanzania’s intake of refugees from Uganda and the harboring of its overthrown president Milton Obote (Acheson-Brown, 2001).

There was also tension between Tanzania and Kenya, who had (and continues to have) a very successful tourism industry due to the British investment during colonialism. Yet tourists on safari within the southern circuit of Kenya would often cross the border into the northern circuit of Tanzania for a day. This created many negative economic implications for Tanzania because tourists would benefit from its national parks while continuing to only spend their money in Kenya. Due to this conflict, Tanzania closed its border with Kenya in 1977 and it did not reopen until 1985. Although the border was reopened, there continues to be tension between the two countries due to the fact that the actual gate at the border physically has remained sealed since 1977 (Curry, 1990; Kweka et al., 2003; Wade et al., 2001).
A significant impact on the tourism industry was the push toward privatization after the retirement of Nyerere in 1985 and achieved with the help of SAPs and their encouragement of international investment. Just as in other businesses and corporations within the country, tourism had to reach out to local elites and foreign investors in order to build its industry after years of socialism. Although this did help to increase tourism, particularly through the development of hotels at international standards, it also created major problems for Tanzanians. Total investment within Tanzania is largely in the hands of foreigners. As of 2003, Tanzania lost two thirds of its foreign earnings in tourism to international investors. This issue is not simply one from the transition of socialism to capitalism, but it continues to be a major issue today in many LDCs (Chachage, 1999; Curry, 1990; Salazar, 2009; Wade et al., 2001).

After the struggles of African Socialism, new policies and organizations had to be created in order to help further the development of tourism under a capitalist society. The 1991 National Policy on Tourism and the creation of the TTB in 1993 are only a few examples of the changes that have come. The greatest contribution to tourism policy in Tanzania was the 1996 Tourism Master Plan. This was enacted to create strategies for the further development of the industry. This plan had the intention of the improvement and refurbishment of existing facilities and to implement other action programs between 1996 and 2005. Since its application, there was a growth in investments in accommodation, restaurants, and other facilities of international standards as well as the revision of the National Tourism Policy in 1999, and other institutional reorganization. Due to many changes in the industry, the original 1996 Master Plan was revised in April 2002 and is still in use today (Salazar, 2009; Ministry of Natural Resources and Tourism [Hereafter MNRT], 2002).
Conclusion

Tanzania has seen much change over the last century, from colonial rule and no local involvement within the tourism industry, to socialism and a national boycott of tourism, to today’s capital driven international tourism sector. There is still much to be done for the industry if it is to be fully beneficial to the country and its people, but this progression is possible. Tanzania is a strong country that has been through many difficult times and continues to persevere. *Ujamaa* does not have to be a socialist word of the past, but can be a term in moving forward to “familyhood” and a nation working together in the future. This chapter outlined the tourism industry of Tanzania in relation to the economic and political transitions that occurred in the nation over the last century. Detail about the tourism industry today and projections for the future follows in Chapter 4.
CHAPTER 4 – TOURISM IN TANZANIA TODAY

In the previous chapter I discussed Tanzania’s tourism industry in regard to its economic and political changes over the last century. The following sections will examine Tanzania’s current tourism industry in relation to its economic, social, and environmental development. I also describe the key issues that can be found within Tanzania’s tourism sector, and briefly detail the physical and social landscape of the industry throughout the country.

The Current State of Tanzania

As of 2016, Tanzania’s estimated population was 52,482,726 and growing at a rate of about 2.77% per year. This population is comprised of over 130 different ethnic groups, however, due to the effects of modernization, migration, and politicization some of the smaller groups are beginning to disappear. Even with such large numbers of ethnic groups, there are only two official languages of Tanzania, Swahili and English, making it a welcoming destination to foreigners (Central Intelligence Agency [Hereafter CIA], 2017).

Although the country’s GDP has been growing about 7% each year over the last decade, this growth is unsustainable, and Tanzania continues to struggle with issues of poverty, low levels of education, and dwindling resources. The 2011 estimate of Tanzanians living below the extreme poverty threshold ($1.90/day) was over 46% (United States Agency for International Development [Hereafter USAID], 2016). The majority of the population lives in rural areas and works in the agricultural sector, which makes up over a quarter of the nation’s GDP. Although the agricultural sector employs 80% of Tanzania’s labor force, the service sector provides 47.3%
of the GDP and industry contributes 27.6% (CIA, 2017). The service sector includes jobs and income related to the tourism industry. These links can be seen both directly and indirectly. Direct income and employment includes tour operators, hotels, and specific destination planning, promotion, or management. Tourism can also be indirectly related to other sectors such as industry with the construction of facilities, manufacturing of goods used by tourists, and even the agricultural sector through food (Nelson, 2013).

Today there remains a discontinuity between rural and urban populations. With a large portion of the country living in rural areas (68.4%), there is difficulty in getting these populations access to basic needs such as water, sanitation, and health care. 77.2% of water sources within urban areas are improved, whereas only 45.5% are improved in rural locations (CIA, 2017). Although these are improved water sources, the actual quality of the water provided and how physically accessible the source is, are not measured – only the actual type of water source. This creates a health concern for people who do not have true access to clean water and continue to drink and expose themselves and their families to contaminated water (Bain et al., 2012; United Nations International Children’s Emergency Fund [Hereafter UNICEF], 2015; Smiley, 2016).

Not only is the quality of water an issue, but a lack of sanitary facilities creates even more issues. Only 31.3% of sanitation in urban areas is improved, but within rural areas, the number drops further to 8.3%. This creates a problem for the health of individuals, especially for those without access to proper health care; throughout the entire country, there are only 0.03 physicians for every 1,000 people (CIA, 2017). Although these are worrisome numbers, with the assistance provided through programs such as the Millennium Development Goals (MDGs) and various Non-Governmental Organizations (NGOs), these statistics have improved over the last two decades. Further work is also in progress through the United Nation’s Sustainable
Development Goals (SDGs) which hopes to “ensure access to water and sanitation for all” by 2030 (SDGs, 2017). Despite progress made by these organizations, there remains work to be done with regard to health in Tanzania, especially for the rural populations.

Although Tanzania has a relatively calm political history with no civil war, these issues of health and sanitation create a major problem of identity and perception of safety for the country; both for its own citizens as well as its visitors. These problems have the ability to directly impact both the number of incoming international tourists to the country, as well as how these tourists feel about their health and safety while traveling in Tanzania. Not only for the sake of its own citizens, but also in order for further tourism growth to occur within the region, these are key areas of concern that must be addressed.
Tanzania’s Current Tourism Industry

Today, tourism contributes a substantial portion to the country’s GDP; a combination of both direct and indirect contributions totaled 13.3% of Tanzania’s GDP in 2016, and it is expected to grow by 4.1% in 2017 (World Travel and Tourism Council [Hereafter WTTC], 2017). Not only does tourism bring in a considerable portion of money, but its total contribution to employment was about 11.6% of the country’s total workforce with over one million jobs in 2016. Direct employment from tourism alone totals 3.9% of the total workforce and employs 470,500 Tanzanians. With these numbers, Tanzania is ranked 34th in the world for tourism’s direct contribution to employment, and they are 31st when looking at total contribution to employment. These are substantial numbers for a country that has only truly begun working on their tourism sector over the last couple of decades. In several of these economic categories, Tanzania even ranked above other African countries that are typically considered leaders in the tourism industry including Kenya, Uganda, and South Africa (WTTC, 2017).

Although the development of the tourism industry in Tanzania is exceptionally positive in terms of jobs and income, there continue to be problems within the country which are stunting much of the potential tourism growth. One of these issues is the lack of proper infrastructure, especially that of roads, hotels, communications, power, and water. This is of particular importance in the rural locations located near many of the protected areas that tourists visit. Although tourist numbers are rising, there are only certain types of tourists that can be supported by this type of destination. Plog (1974) specifically points out that tourists typically visiting destinations within less developed regions are willing to be exposed to harsher environments and fewer resources than they would customarily have at home (he refers to them as allocentrics). Although there is no problem in having these tourists visit Tanzania, they do limit other tourists.
(what he calls psychocentrics) from coming to visit the country until more convenient infrastructure is installed (Plog, 1974).

There also tends to be a lack of trained staff within the country who are capable of doing jobs such as working in hotels to being tour operators. Many of the workers in Tanzania are coming from Kenya where there are greater resources for the training of these individuals. Governmental and bureaucratic factors such as a lack of communication between the government, private sector actor groups, and NGOs tends to play a key role in the issues that surround Tanzania’s tourism industry (Wade et al., 2001).

Tanzania also has seen struggle between the need for conservation within the national parks and the needs of the native populations in and around these protected areas. Conservation within the national parks is crucial to the expansion of the tourism industry; it benefits the plants and animals in these areas, and it is one way of increasing income, investment, and foreign financial aid to the country. However, since the creation of parks during colonial rule, the Tanzanian government has been expelling indigenous people out of the confines of these protected areas (Brockington, 2002; Brockington et al., 2008).

This conflict continues today and can be seen within the northern circuit of Tanzania and the southern circuit of Kenya, where pastoralist Maasai cattle herders have been forced from their homes in a 21st century form of primitive accumulation7, all for the purpose of having the protected areas sanctioned specifically for wildlife. The Maasai have found themselves in a losing battle for decades due to the progression of tourism within their lands (Brockington, 2002; Brockington et al., 2008, Kashwan, 2017).

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7 **Primitive accumulation** is the act of “taking land, say, enclosing it, and expelling a resident population to create a landless proletariat, and then releasing the land into the privatized mainstream of capital accumulation” (Harvey, 2005, p. 149).
There have also been conflicts between the conservationists and Maasai who have been known to kill lions that attack their cattle and kill elephants that tear down their fences and eat their crops. The killing of lions in particular has been a critical part in the rite of passage for young men within Maasai culture for centuries (Brockington, 2002; Brockington et al., 2008; Kashwan, 2017; Marion Institute, 2012; Wyatt, 2017). Yet, for the sake of conservation, there are now some programs working with various Maasai people and tribes within Kenya and Tanzania. These have been put in place to further conservation and wildlife protection without undermining the value of the community’s culture. Examples of these successful programs include the Predator Compensation Fund, which provides payment to Maasai herders who have had cattle killed by predators (Conservation International, 2008), the Lion Guards who find Maasai warriors to work with the program in order to track and monitor lions within their land (Verbree, 2011), and the Big Cats Initiative, which is working to build “living walls” of chain-link fencing, acacia thorns, and native trees which protect the Maasai livestock from predators while also planting more vegetation around the community boma\(^8\) (Dell’Amore, 2014).

The success of these programs depends on working with the Maasai, rather than for or against them. Especially around areas inhabited by native populations, indigenous knowledge is key to finding sustainable solutions to existing problems. Kenyan Maasai, Shani, explained his culture and the role they play in conservation during a speech in 2012:

\[
\text{“Maasai are known to be natural conservationists. In nature, the way we are brought up, and the way that we live with the landscape. We actually ensure that the way that we live on the land, and the way that we graze, the way we build our houses, the way we drink the water; it’s all meant to conserve the environment” (Marion Institute, 2012, 7:10).}
\]

\(^8\) **Boma** is the compound in which Maasai families and communities reside (Dell’Amore, 2014).
This becomes a key way of thinking in the consideration of how to move forward with sustainable practices in wildlife and land protection into the future.

Shani also expressed the impending issues of climate change and the instability that it has brought to the Maasai land in terms of extreme drought and rains. This has created the need for Maasai communities to diversify their resource base through the implementation of business other than livestock. In order to do this, many Maasai tribes have begun to take part in the tourism industry, whether it be through opening a lodge, renting out their land to investors, opening up their boma to tourists, or selling jewelry made by Maasai women (Marion Institute, 2012; Porini Camps, 2012; Ranzanici, 2012; Vest, 2013).

Even with the progress made in various communities around Tanzania, there is also an issue with the ways in which conservation is portrayed. Again, tourism and conservation are seen as European or Western ideals – remnants of the days of colonialism. This places strain between the ways of black Tanzanians and the conservationists whom are typically white Westerners. European and American conservationists enter these protected areas within Tanzania and tend to impose their ideas of what is good and what is bad, usually undermining the efforts of the African conservationists; this form of interaction has coined the term “environmental colonialism” (Nelson, 2003).

**Tanzania’s Tourism Landscape**

Although many developing and least developed countries in the world have a growing tourism industry, I chose Tanzania as the site of this research due to its numerous national parks and protected areas as well as the large percentage of land cover that they occupy; Tanzania’s terrestrial protected areas total 38.15% of the country’s total landmass (United Nations
Environmental Programme [Hereafter UNEP]- World Conservation Monitoring Center [Hereafter WCMC], 2017). These protected areas serve as the majority of the nation’s tourist attractions. With a history of political stability, this country is seen as a much safer destination than that of its neighbors. Tanzania is also a country with a varying landscape, making it the perfect tourist destination for a large number of people. Within a single country there are islands, beaches, lakes, savannahs, forests, and mountains. Tanzania even includes Mount Kilimanjaro, the highest peak in Africa.

Tanzania’s tourism industry began in the late 19th century and early 20th century with the introduction of game hunting by people like Frederick Selous (whom Selous Game Reserve was named after), former British Prime Minister Winston Churchill, and former President of the United States Theodore Roosevelt. With this growth in popularity, numerous game reserves and national parks were created under British rule.

Tanzania’s tourism industry began to grow considerably in the 1980’s with the introduction of reforms in foreign tourism policy (Wade et al., 2001). Since then, money generated from tourism and the numbers of international tourists has increased exponentially. Over the years, the area of tourism that began to increase was nature-based tourism as opposed to the earlier draw of hunting (Curry, 1990). With this form of attraction as the primary draw, there is a need to understand and protect the environmental landscape on which the country depends.

In addition to the various protected areas around the county, Tanzania also possesses seven United Nations Educational Scientific and Cultural Organization (UNESCO) World Heritage Sites which are of great importance around the world for cultural, historical, and scientific significance and are strategically set aside for outstanding value to all of humanity (UNESCO, 2017). These sites include Kilimanjaro National Park, Kondoa Rock Art Sites, Stone
Town in Zanzibar, Ngorongoro Conservation Area, Selous Game Reserve, Serengeti National Park, and the ruins of Kilwa Kisiwani and Songo Mnara (MNRT, 2017; UNESCO, 2017). Table 4.1 illustrates the importance of UNESCO World Heritage Sites in terms of attracting large numbers of international tourists each year. These areas are also crucial to the income of Tanzania’s parks because they are among the higher priced locations to visit (Tables 4.1 & 4.2).

### Table 4.1 – Major protected areas in Tanzania (Tanzanian National Parks [Hereafter TANAPA], 2017a; UNEP-WCMC, 2017).

* - UNESCO World Heritage Site

<table>
<thead>
<tr>
<th>Protected Area</th>
<th>Regional Circuit</th>
<th>Area (km²)</th>
<th>Year Created</th>
<th>Number of International Tourist Arrivals (2012/2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arusha National Park</td>
<td>Northern</td>
<td>111.78</td>
<td>1960</td>
<td>33,106</td>
</tr>
<tr>
<td>Gombe National Park</td>
<td>Western</td>
<td>34.41</td>
<td>1968</td>
<td>1,094</td>
</tr>
<tr>
<td>Jozani Chwaka Bay National Park</td>
<td>Coastal</td>
<td>50.0</td>
<td>2004</td>
<td>N/A</td>
</tr>
<tr>
<td>Katavi National Park</td>
<td>Western</td>
<td>4,207.57</td>
<td>1974</td>
<td>1,512</td>
</tr>
<tr>
<td>* Kilimanjaro National Park</td>
<td>Northern</td>
<td>1,831.81</td>
<td>1973</td>
<td>54,584</td>
</tr>
<tr>
<td>Kitulo Plateau National Park</td>
<td>Southern</td>
<td>465.4</td>
<td>2005</td>
<td>117</td>
</tr>
<tr>
<td>Lake Manyara National Park</td>
<td>Northern</td>
<td>108.01</td>
<td>1960</td>
<td>126,124</td>
</tr>
<tr>
<td>Mahale Mountain National Park</td>
<td>Western</td>
<td>1,465.02</td>
<td>1980</td>
<td>1,032</td>
</tr>
<tr>
<td>Mikumi National Park</td>
<td>Southern</td>
<td>3,233.88</td>
<td>1964</td>
<td>20,308</td>
</tr>
<tr>
<td>Mkomazi National Park</td>
<td>Northern</td>
<td>3,445.65</td>
<td>1951</td>
<td>597</td>
</tr>
<tr>
<td>* Ngorongoro Conservation Area</td>
<td>Northern</td>
<td>8,257.86</td>
<td>1959</td>
<td>N/A</td>
</tr>
<tr>
<td>Ruaha National Park</td>
<td>Southern</td>
<td>14,506.69</td>
<td>1964</td>
<td>12,963</td>
</tr>
<tr>
<td>Rubondo Island National Park</td>
<td>Northern</td>
<td>210.82</td>
<td>1977</td>
<td>492</td>
</tr>
<tr>
<td>Saadani National Park</td>
<td>Coastal</td>
<td>1,062</td>
<td>1969</td>
<td>4,185</td>
</tr>
<tr>
<td>Saanane National Park</td>
<td>Northern</td>
<td>2.8</td>
<td>2013</td>
<td>187</td>
</tr>
<tr>
<td>* Selous Game Reserve</td>
<td>Southern</td>
<td>44,800</td>
<td>1905</td>
<td>N/A</td>
</tr>
<tr>
<td>* Serengeti National Park</td>
<td>Northern</td>
<td>13,039.49</td>
<td>1951</td>
<td>175,356</td>
</tr>
<tr>
<td>Tarangire National Park</td>
<td>Northern</td>
<td>2,615.8</td>
<td>1970</td>
<td>102,140</td>
</tr>
<tr>
<td>Udzungwa Mountains National Park</td>
<td>Southern</td>
<td>2,088.69</td>
<td>1992</td>
<td>3,878</td>
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<tr>
<td>Uwanda Game Reserve</td>
<td>Western</td>
<td>2,140.62</td>
<td>1961</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Table 4.2 – Protected area conservation fees (Ngorongoro Conservation Area Authority [Hereafter NCAA], 2013; TANAPA, 2017a).

*Prices vary based on age. These figures are for adults of or above the age of 16 years.
*10,000 TShs = approx. US $4.49 (May 13, 2017)
*5,000 TShs = approx. US $2.25 (May 13, 2017)

<table>
<thead>
<tr>
<th>Protected Area</th>
<th>Non-EA Citizen (USD)</th>
<th>Expatriates/Residents (USD)</th>
<th>EA Citizens (TShs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arusha National Park</td>
<td>45</td>
<td>22.50</td>
<td>10,000</td>
</tr>
<tr>
<td>Gombe National Park</td>
<td>100</td>
<td>50</td>
<td>10,000</td>
</tr>
<tr>
<td>Katavi National Park</td>
<td>30</td>
<td>15</td>
<td>5,000</td>
</tr>
<tr>
<td>*Kilimanjaro National Park</td>
<td>70</td>
<td>35</td>
<td>10,000</td>
</tr>
<tr>
<td>Kitulo Plateau National Park</td>
<td>30</td>
<td>15</td>
<td>5,000</td>
</tr>
<tr>
<td>Lake Manyara National Park</td>
<td>45</td>
<td>22.50</td>
<td>10,000</td>
</tr>
<tr>
<td>Mahale Mountain National Park</td>
<td>80</td>
<td>40</td>
<td>5,000</td>
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<tr>
<td>Mikumi National Park</td>
<td>30</td>
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<td>5,000</td>
</tr>
<tr>
<td>Mkomazi National Park</td>
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<td>15</td>
<td>5,000</td>
</tr>
<tr>
<td>*Ngorongoro Conservation Area</td>
<td>60</td>
<td>10,000 TShs</td>
<td>10,000</td>
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<tr>
<td>Ruaha National Park</td>
<td>30</td>
<td>15</td>
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<td>5,000</td>
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<td>*Selous Game Reserve</td>
<td>N/A</td>
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</tr>
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<td>*Serengeti National Park</td>
<td>60</td>
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<td>Tarangire National Park</td>
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<td>10,000</td>
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<td>Udzungwa Mountains National Park</td>
<td>30</td>
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<td>Uwanda Game Reserve</td>
<td>N/A</td>
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</tbody>
</table>

International tourist arrivals to Tanzania are of particular significance. Although domestic tourists in Tanzania do visit and make up a large portion of visitors to the various protected areas within the country, they pay less money to enter the parks and reserves. Tanzanian citizens pay a registration fee ranging from approximately US$2 to US$5 to enter the protected areas within the country. International tourists, on the other hand, pay a registration fee ranging from US$30 to upwards of US$100 per day (Table 4.2) (TANAPA, 2017a). These fees allow the parks to manage the areas efficiently while also contributing to conservation efforts. The financial impact that international tourists have while visiting is substantial, especially when considering that their money is generated outside the country.
**The Draws of Tanzania**

Tanzania is made up of numerous protected areas, with a current total of 15 national parks, 31 game reserves, and 38 game controlled areas dispersed throughout the country (Kazuzuru, 2014), totaling approximately 38% of Tanzania’s total land area, with protected marine areas covering another 3% of the country’s total marine area (UNEP-WCMC, 2017). It is worth mentioning that this thesis specifically looks at the 19 most visited protected areas in Tanzania. Saadani National Park was the most recent addition to the list of protected areas, attaining the status of national park in 2005 (TANAPA, 2017b).

Each location within Tanzania has a different pull for tourists. Some locations have hiking, others have different species of wildlife, some are good for bird watching, and some are just good places to relax and unwind. The most popular destinations, such as Serengeti National Park, Ngorongoro Conservation Area, and Mount Kilimanjaro, are situated within the Northern Circuit. These protected areas and other tourist attractions are typically categorized by two major regions within the country: the Northern Circuit and the Southern Circuit. For the purpose of this paper, I have also included information about other notable areas within Tanzania. All information in the following section was taken from the Tanzania edition of the *Lonely Planet* travel guide (Fitzpatrick & Bewer, 2012).

**Northern Circuit**

When people visit Tanzania, they typically find themselves in the Northern Circuit. This is the area around the Arusha and Kilimanjaro regions along the southern border of Kenya (Figure 4.2). This area has two of the world’s best places for wildlife viewing: Serengeti National Park and Ngorongoro Conservation Area. These locations have earned themselves a
Figure 4.2 – Map of Tanzania’s protected areas (compiled by author using Google Maps).

a name as the embodiment of Africa. Serengeti’s infamous wildebeest migration and Ngorongoro’s rating as name in the eyes of tourists from around the world through movies, T.V., and print as the having the highest density of lions and predators in all of Africa are the draws that keep Tanzania’s tourism industry growing.

For those not looking for wildlife, Mount Kilimanjaro and Mount Meru are world-renowned for their intense hikes and spectacular views. Mount Kilimanjaro is famous for being Africa’s tallest peak as well as the highest freestanding mountain in the world. Each of these mountains provide difficult multi-day climbs up extreme terrain, but they are frequented by
many types of climbers and tourists because they do not require the use of ropes or technical climbing experience.

This region is also home to the Maasai tribes who have become the epitome of East African culture and tradition. Tourists flock from all over the world with their romanticized ideas of these seminomadic pastoralists. Many Maasai tribes continue to live traditional lives: living off the land, sleeping in houses with thatched roofs and mud walls, and slaying lions as their rite of passage. Although many Maasai have incorporated modern technologies (such as cellphones) into their daily lives, they are still perceived as a people untouched and unchanged by globalization and modern life.

For persons interested in Tanzanian culture, there are numerous programs to take part in, particularly around the Arusha area. Mto wa Mbu, along Lake Manyara, is one such area that has received praise for their hiking and biking tours of nearby villages with an emphasis on agriculture. This region is not only home to the Maasai, but also other ethnic groups, including the Chagga who are known for living along the slopes of Mount Kilimanjaro, and whom have been a longtime rival of the Maasai. These programs are a great way to experience local life of an area while being able to support community organizations and local people.

For those looking for history, the Northern Circuit is home to Olduvai (Oldupai) Gorge, one of Africa’s most significant archeological sites (Figure 4.3). This is the location where the earliest remains of hominids have been found, including Homo habilis, dating back to over two million years ago. Tourists can visit both the gorge as well as a museum along the rim of the gorge in order to see actual skulls, footprints, and other remnants of these human ancestors.
Southern Circuit

The lesser known Southern Circuit has numerous opportunities for tourists as well. Selous Game Reserve is one of the first pieces of Tanzanian land set aside, dating back to 1896. This reserve covers a massive 48,000 km², making up 5% of Tanzania’s total land mass, making it Africa’s largest wildlife reserve. Selous is not only extensive, it also provides numerous opportunities for wildlife viewing, especially along the Rufiji River, where boat safaris are available. Water views and boating safaris are also available in Ruaha National Park along the Great Ruaha River and around Kitulo National Park where tourists can access Lake Nyasa (Lake Malawi).
The Southern Circuit of Tanzania also includes many mountains and scenic views including the waterfalls of Udzungwa Mountains National Park. This national park is also home to ten species of primates (more than any other Tanzanian park), many botanically important plants and animals, and has scenic hiking trails without the crowds that would be found in the busier parks of the Northern Circuit.

Along with wildlife, mountain views, rivers, and numerous markets and shopping, the Southern Circuit is easily accessed by tourists from Dar es Salaam, Tanzania’s largest city. Dar es Salaam offers direct international flights from cities such as Dubai, Abu Dhabi, Nairobi, and Istanbul, and with it being only a four-hour drive from the city, Mikumi National Park makes a great place to visit for those that want a quick trip while still being able to see diverse wildlife and breathtaking views.

Other Areas

For tourists seeking a relaxing beach holiday, the islands along the coast of Tanzania in the Indian Ocean are perfect locations. Pemba Island, Mafia Island, and Zanzibar all offer exceptional beaches, diving, and resorts. The latter of these is the most famous around, not only Africa, but the world. Its history dates to early settlement and trade by Arabs and Portuguese. This history provides wonderful cultural and architectural opportunities for tourists, especially on the western coast in Stone Town.

Jozani-Chwaka Bay National Park on Zanzibar also provides opportunity for tourists to experience natural scenes and wildlife without having to leave the island. This park is home to more than 50 species of butterfly, the rare red colobus monkey, and the largest area of mature
forest left on the island. Along the coast, there are also considerable opportunities for dolphin
and whale watching, along with Whale Shark (the largest fish in the world) swimming tours.

Gombe National Park is located in Western Tanzania and although it is the country’s
smallest park, it is greatly known for its chimpanzee population and was the location of Jane
Goodall’s research. This park includes many attractions relating to the famous researcher such
as Jane’s old chimp feeding station, the viewpoint on Jane’s Peak, and Kakombe Waterfall.
Tourists can go on treks through the forest in order to visit these chimps.

Tanzania also has two lakes with diving, snorkeling, boat safaris, bird watching, fishing,
and they are surrounded by parks which offer other wildlife viewing. Both Lake Tanganyika and
Lake Victoria offer rare fish species, interesting volcanic traits, islands, and intriguing
communities with cultural attractions. Lake Tanganyika also happens to be the longest, second-deepest, and second-largest by volume freshwater lake, as well as one of earth’s oldest lakes.

A Closer Look at Tanzania’s National Parks

Tanzania has many different tourism organizations running various functions throughout
the country. With the Tanzanian government owning all land within the nation’s borders (only
allowing 99 year leases for citizens), it is mostly governmental organizations such as the TTB,
MNRT and TANAPA working on and around the protected areas (CIA, 2017). TANAPA is in
charge of all 16 national parks. Its primary functions include the “protection of natural
resources, park facilities, and tourists visiting the parks; park management and development;
ecological and wildlife health monitoring; tourism development; and community involvement in
conservation efforts” (TANAPA, 2017a).
Although part of the duties of TANAPA include the development and promotion of tourism within the parks, its main goal is conservation. With the expansion of many of the parks, as well as an increased number of visitors, this job does not come easy. Major challenges facing TANAPA include mining, poaching, development, and dependency on the major parks such as Serengeti National Park.

Two of Tanzania’s national parks are currently facing issues caused by mining: Lake Manyara National Park and Saadani National Park. The mining within Lake Manyara is currently small scale and artisanal mining for alexandrite and emerald gemstones. Although there is no official mineral reserve, over 1,000 carats of alexandrite have been mined in and around Mayoka Village at the southern tip of Lake Manyara (Izon, 1995; Tsarstone Collectors Guide, n.d.). Salt mining has been conducted in Saadani since 1992 when it was still a game reserve. The mining within these parks creates issues such as pollution, the introduction of invasive plant species, and the destruction of wildlife migratory routes (TANAPA, 2017a).

Although trophy hunting is illegal in countries such as Kenya (Howley, 2013; The Economist, 2007), animals are free to roam across borders and could potentially be shot in other countries, including Tanzania. Legal hunting in Tanzania, however, is rigorously managed and executed in a way that best serves the tourists, the animals, and the protection of the animals as well. Hunting, especially in recent years, has been seen in a mixed light. There are numerous animal-welfare groups that argue it is an unsustainable practice which harms more than helps. However, others argue that when done correctly, hunting can be managed in a way which brings in revenue that can be used for the protection of the animals within these parks (The Economist, 2007).
Although hunting may have positive repercussions for conservation, poaching is an entirely different story. Poaching has become a challenge facing Tanzania’s national parks, particularly due to the large-scale poaching of elephants for their tusks (Figure 4.4). The trading of ivory has become not only a local issue, but an international one as well with it being at the center of the global black market. The elephant population has declined by 64% within central Africa in the last decade alone (Scriber, 2014). This has meant a great deal for TANAPA, including the need to increase and diversify anti-poaching strategies which takes additional monetary and labor resources. TANAPA has also been working on finding stakeholder support in order to keep funding available, as well as political support to get better governmental backing on the issue of poaching (TANAPA, 2017a).

The development of private lodging facilities such as tented camps, lodges, and campsites within the national parks are economically beneficial to the local communities around them, but they also create stress and competition for TANAPA which uses earnings from their own businesses to improve the land. Development also dictates a concern for the carrying capacity of the environment as well as visitor experience (Goldsmith, 1974). When visitors expect to be surrounded by wilderness, but encounter other lodges along the way, this can create less of a tourist demand in these areas of higher development (TANAPA, 2017a).

A smaller, but still complex issue that faces TANAPA is the problem of “dependency syndrome”. This is the tendency of many of the less acclaimed parks to not be able to generate proper revenue in order to meet their financial needs. Because of the inability to “break even” these eleven parks⁹ are left to depend on the better-known parks such as Serengeti National Park.

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Figure 4.4 – A tree in Tarangire National Park used by poachers to hide their caught animals from park rangers. Source: author.
Figure 4.5 – Serengeti National Park has the highest rate of visitors annually, making it a destination other parks are highly dependent on. Photo courtesy of Jim Hayward.

(Figure 4.5) which typically generate surplus profits. Some solutions that TANAPA is currently working on are improving activities within the parks, promoting and developing more tourism products such as VIP routes and close viewing experiences, as well as enhancing water tourism activities (TANAPA, 2017a).

In addition to these issues within the parks, many areas throughout Tanzania have had to deal with climate change through the impacts created by severe weather including both flooding and droughts. This not only harms animal and plant populations, it also destroys infrastructure, and suppresses incoming tourist numbers within the affected regions (TANAPA, 2017a).
Tanzania’s Tourism into the Future

Moving forward, there is still work to be done within Tanzania’s tourism sector. Researchers have been able to pinpoint various goals for the industry as it prepares for the future and identified four distinct areas of improvement. Firstly, local investments must become the center of the industry. Without local involvement conflicts will continue, and the days of colonial rule will remain a constant struggle for the Tanzanian people (Downie et al., 2016; Mbaiwa, 2005). Second, the issues between tourism development, conservation, and the local populations in and around the national parks must be resolved. This must be done through cooperation between the locals, park rangers, conservationists, and tour operators by coming to agreements so the interests of all can best be met. Some progress has been made through the implementation of various programs, such as the ones described working with Maasai communities to support predator protection. However, more work needs to be done in order to further the progress for all parties involved within the protected areas of Tanzania (Brockington, 2002; Brockington et al., 2008, Kashwan, 2017).

Third, the infrastructure throughout the entire country must be improved. Ideally, this should start with the supplies of energy and water. There is inconsistency in the delivery of these resources, as well as poor quality when it comes to water (Smiley, 2016; Banerjee & Morella, 2011). This not only will help to increase the number and types of tourists that would feel safe coming to the country due to the negative perception of African nations as unsafe or risky (Akama & Kieti, 2003; Carter, 1998; Elsrud, 2001; Lepp & Gibson, 2003), but it would also help better the lives of the local population, some of who are at risk of death without it. Next, roads and transportation must be extended, updated, and improved in order to bring proper access to many parts of the country that are secluded and unreachable (Wade et al., 2001). Tax revenues
generated through tourism may be a way to support the development of such infrastructure projects, creating a benefit for and by tourism (Kweka, 2004). In 2016 the Tanzanian government did instate a valued added tax (VAT) of 18% on many tourist services which include transportation, park fees, guide fees, camping fees, and other various safari and wildlife-viewing packages. Although there were many concerned tourists and tour operators, once the initial shocks of the increase have settled, this could be a push towards the right direction which will help with sustainable development within the industry (Feldberg, 2016).

Fourth, the image of Tanzania must be better communicated with the world. Travelers from developed countries tend to look poorly upon African nations, typically grouping them together and not knowing the difference between countries like Kenya, South Africa, Ghana, and Tunisia - all of which have very different identities. If people could understand the things Tanzania has to offer without being bombarded by negative and sometimes incorrect ideas of Africa’s image as a whole, such as civil war, poverty, disease, malnutrition, instability, and corruption, there would be much more hope for what the tourism industry could become (Carter, 1998; Hunt, 1975; Lepp et al., 2011; Lepp & Gibson, 2003).

**Conclusion**

While talking about wildlife protection within Sub-Saharan Africa, the narrator of the documentary *Terra* stated that “observing animals is a captivating experience, but these sources of entertainment are living things – turning nature into a sanctuary doesn’t solve a great deal, it’s a precautionary measure to delay the end of a world” (Stanimirovic et al., 2016, 1:05). This statement stresses the importance of nature-based and wildlife-based tourism within Tanzania
among other Sub-Saharan African countries, while also shedding light on the issues that it can cause, not only for the landscape itself, but the tourism industry as well.

There is still much to be done for the industry if it is to be fully beneficial to the country, but this transition is possible. In a time when sustainability and environmentally friendly industries are emerging, there is more potential than ever for the tourism industry around the world to take on a responsible role in society as well. Conservation, in particular, is one area which needs to be managed in a respectful way of local people who do not necessarily have the resources to participate in or worry about issues of wildlife and land conservation. Even with these difficulties, we have witnessed changes around the region in response to these issues such as seeing local communities coming together with their government, NGOs, and other organizations to make tourism work for everyone involved. Yet through these changes we are still aware of the needs that remain in this time of transition.
CHAPTER 5 – RESEARCH METHODS

This thesis seeks to understand the factors that influence tourists’ perceptions of a destination’s landscape and their impacts upon it. Three overarching questions were used within this research. Are tourists self-aware of what influences they may have on a host environment while traveling? Is there a relationship between tourist typology and how much environmental impact tourists are able to perceive? And does educational background and “societal status” play a role in tourist environmental impact awareness?

To answer these questions, this thesis utilized web-based surveys of international tourists who had traveled to Tanzania. These surveys used Likert scales and open-ended questions to obtain both quantitative and qualitative data which gave the ability to generalize the perceptions of participants. This method created a well-balanced data source and analysis in order to have an understanding of what tourists believed their environmental impacts may or may not have been while traveling within Tanzania.

To fully comprehend the environmental impacts of tourists and how they play a role within the tourism industry in Tanzania, another survey was distributed among tour operators that work within the country. This allowed for a diverse and multilateral approach to this research; rather than simply exploring the thoughts of visitors to an area, this study was able to discern both perceptions of those from abroad as well as the locals who interact with these tourists and the Tanzanian environment on a daily basis.
Data Collection

International Tourist Survey

In order to answer the research questions posed, primary data was collected through anonymous surveys of international tourists who had been on safari in Tanzania. These surveys were conducted over an eight-month period between May and December of 2016; this time period corresponds with the peak tourist season in Tanzania. As discussed in Chapter 2, there are numerous parameters for defining tourists, but for the sake of this research I define tourists as people traveling outside of their typical environment for their own pleasure over the course of no more than one consecutive year. The only limitation on participants was that they had to be over the age of 18 when taking the survey; no other restrictions were applied about length of trip, the number of places visited, tour company used, or tourist demographics such as country of origin or education.

Participants were found with the help of tour companies in Tanzania who handed out business cards with the information for online survey access (Appendix C) at the completion of their client’s safari. In total, I contacted over 70 tour companies based in Tanzania through email and ended up with six different companies who agreed to help (Appendix E). These companies were identified and verified through various reliable websites and from personal connections from my own travels in Tanzania. Three of the participating tour companies are based in Moshi with the other three from Arusha. These are two of the cities in which most of the country’s tour companies are located. Arusha and Moshi are both centrally situated between a high concentration of protected areas; these include the most visited tourist attractions in the country: Mount Kilimanjaro, Ngorongoro Conservation Area, Serengeti National Park, Tarangire National Park, and Lake Manyara National Park. These cities are also close to the southern

67
border of Kenya so they provide quick access to its major protected areas Maasai Mara National Reserve and Tsavo National Park, as well as its largest city and capital, Nairobi (Figure 5.1). Situated between Arusha and Moshi is a major international airport, Kilimanjaro International Airport (KIA), which allows these companies close proximity to the hub where tourists typically begin and end their trips to Tanzania. Although the companies conduct their business out of these cities, the actual tours occur throughout the entire country (and sometimes region). This allows a large scale of company access to numerous destinations, particularly around the Northern Circuit, providing opportunities for tourists to see numerous areas and a variety of environmental landscapes, shaping their perceptions differently.

After they consented, I mailed each of the six tour companies 200 business cards for them to hand out to clients in Tanzania. The companies got the cards as well as directions to give out a business card to each international tourist at the conclusion of their safari. Because the card was small – the same size as a typical business card – it allowed the tourists to easily carry it around with them for the remainder of their trip. Although participants could save the card and wait until returning home to take the survey, they had the option to complete it while traveling as well with a mobile device such as laptop, tablet, or phone, allowing for a convenient process for participants.

In addition to connections made through these six tour companies, tourists were also recruited through my own personal contacts with convenience and snowball sampling. Emails were sent out to people that I know have been to Tanzania, and I asked for those people to also give me the contact information for people that they traveled with and know have been on safari in Tanzania as well. As can be seen by the conglomeration of points in Figure 5.2, I am from Northern Michigan and therefore many participants are also from this area. Although the
Figure 5.1 – Map of participating tour company locations in reference to nearby protected areas in Tanzania and Kenya (Tanzania map compiled by author using Google Maps; inset map compiled by author using ArcMap).

- Tanzanian Protected Area
- Kenyan Protected Area
- Tour Company City
majority of surveyed tourists originate from the United States, I do not believe this had any negative implications for this study. I do not know any of the participants well, and have not discussed my research with any of them prior to their completion of the survey.

Lastly, tourists were found with the help of the Facebook group *Team Tanzania*. This is a closed social media group in which people can get information about various events, locations, businesses, and much more within Tanzania. This group also consists of people asking about pricing or availability of tour companies for various safari operations. On these safari posts, I would ask the individual to send me a private message if they had, in fact, been on safari in Tanzania, and if they were willing to participate in my online survey. If they were so willing, I sent them the link to the online survey, letting them know it would take approximately 10 minutes of their time to complete and that there would be more information on the first page of
the survey (Appendix A). Although this allowed the potential for people to complete the survey who possibly had not traveled in Tanzania, I only provided the link through private messages to people that confirmed they did take a safari; therefore I felt comfortable giving out the web link to these individuals.

The use of online surveys as well as distribution of the web link by tour operators and via social media was convenient for all participants, was a dependable way to get a diverse sampling of international tourists, and was an accessible form of collecting data without being in the field. With this mode of survey option, this study provided a reliable, simple, and confidential way of better understanding the perceptions of international tourists after their travels throughout Tanzania.

Tour Operator Survey

Along with the international tourist survey, I also had an anonymous online survey available for Tanzanian tour operators between September and December of 2016. These tour operators could include guides, owners, or consultants currently working for a Tanzanian tour company. Participants for this survey were found during my correspondence with companies while trying to get guides to hand out cards for the international tourist survey, therefore all of the same precautions were taken in order to make sure these people were legitimate employees within Tanzania’s tourism industry. Contact was usually only made with one person per company, but they were then asked to circulate the link to their co-workers and fellow tour operators. Although the main goal of this research was to understand tourist perceptions, this tour operator survey aided in understanding the difference in views between the visiting tourists and the local tour operators who are surrounded by Tanzania’s environment on a daily basis.
This was also done to see what tour companies are doing in order to lessen their negative environmental impacts and increase their positive environmental impacts. Particularly in an age of “green” or “eco-friendly” movements, it is important to see what changes are actually being made within the various industries around the world that claim they are moving in a sustainable direction.

Survey Design and Analysis

Tourism research has often utilized survey data for studies on perceptions of both hosts and tourists. Particularly when looking at perceptions of environmental impacts of tourism or environmentally friendly accommodations, surveys were utilized as a quick and convenient way to get tourist perceptions (Dalton et al., 2007; Dalton et al., 2008; Hillery et al., 2001; Petrosillo et al., 2007; Xuan et al., 2002). Studies have also been conducted on the use of online versus mailed paper survey format in tourism research, and although they both have their advantages and drawbacks, online questionnaires were shown to have better response rates due to a larger convenience factor. This convenience is only increasing with the spread of information technologies to more people than ever before (Dalton et al., 2007; Dolnicar et al., 2009).

The international tourist survey used in this research contained four different categories of questions. The first type consisted of demographic questions for the participants to complete, such as country of birth and current residence, age, education, and occupation. The second type of questions were about the participant’s travel experience in Tanzania, such as where they visited and how long they were there, what activities they participated in, what tour company they used, and which of Cohen’s (1972) international tourist typologies they would classify themselves as. The third type of questions consisted of three different Likert scales in order to
decipher what their understanding was of environmental impacts; this included ranking impacts from positive to negative and an assessment of their own and other tourists’ environmental impacts while in Tanzania. And the fourth type of questions attempted to compare the environmental behavior of participants while at home and while traveling. The complete survey can be found in Appendix A at the end of this thesis.

The tour operator survey included five different types of questions, beginning with a similar set of demographic questions including country of birth and current residence, age, and education. The second type asked participants about their occupation within the tourism industry in Tanzania including their tour company name and location, what areas they typically worked in, their exact job title or description, and how long they have been working within Tanzania’s tourism sector. The third type of questions is almost identical to the Likert scales used in the international tourist survey with one question asking the tour operators to rank environmental impacts from positive to negative, and another ranking how much impact they thought tourists (in general) have on the environment. Within the fourth type of questions, participants were asked several questions about their own company’s contribution to environmental impacts, such as what actions they do in order to lessen negative environmental impacts, what they wish they were doing to lessen their impacts, and if tourists know about these actions that they take part in. Fifth, unlike the international tourist survey, there was also an open-ended option at the end of the survey to write in anything else that they wished for me to know. The complete survey can be found in Appendix B at the end of this thesis.

Both surveys were written in English. Although that could have excluded some potential participants, I do not believe that language substantially limited my sample size. English is one of Tanzania’s official languages (CIA, 2017) and most safaris in the region are conducted in
English (Fitzpatrick & Bewer, 2012; TTB, 2017b). Therefore both operators and tourists should be proficient in the language.

Many studies previously conducted on tourist perceptions utilized survey data and statistical analysis such as chi-square, ANOVA, and t-test (Akama & Kieti, 2003; Husbands, 1989; Yu & Goulden, 2006). However, there are other studies that have analyzed tourism survey data with the use of descriptive univariate statistics (Dalton et al., 2007; Dalton et al., 2008; Perdue et al., 1990; Yu & Goulden, 2006). For the purpose of this research, descriptive analysis of the data was used in order to get a generalized understanding of the data collected, particularly when analyzing Likert scale questions. This allowed for an easy and comprehensive summary of tourist perceptions as well as a reliable way to compare questions within each survey and between the tourist and tour operator surveys. In addition to descriptive analysis, I also used SPSS to run a correlation analysis. This component of analysis was utilized to give deeper understanding and significance to the data. Please take note that only statistically significant data is discussed in Chapter 6.

Both online surveys were created with Qualtrics Survey Software. This is a free and convenient way to create online surveys. The software allowed for me to easily organize questions in many different forms as well as to export the questionnaire into a Word, Excel, or PDF document for review. Although there were a few questions that could be qualitatively assessed through content analysis, most data was assessed from a quantitative aspect. Qualtrics has analysis capabilities built into the online software with numerous options available for review. It automatically created tables of the Likert questions with the number of participants that answered each response along with the percentages already calculated. I was also able to
create cross tabulation tables in order to compare the tourist demographic or travel information with that of their perceptions of environmental impacts of tourism.

In my own analysis of the Likert scales, I gave numerical values for each response within the various questions of the survey. This allowed for an easier way of quantitatively assessing answers of perception. For instance, the first Likert question asked participants to classify various environmental impacts as either very positive (5), somewhat positive (4), neutral (3), somewhat negative (2), or very negative (1). For this, each response was given a numerical representation (the numbers in parenthesis) which corresponds to the positivity of each response: five being the most positive to one being the most negative. This process allowed for an average numerical classification to be representative for how positive or negative each impact was perceived to be. People who selected I do not know as their response were not included in the final average for each environmental impact, however, they were still accounted for when analyzing the response rate for each impact.

The Likert scale responses were also analyzed based on percentage of participants that selected each classification in order to understand each impact individually. This method was also used with other questions such as demographic questions, travel experience, tour operator information, and environmental behavior to evaluate the entire participant population as percentages.

**Sampling Overview**

*International Tourist Survey*

71 different people were reached with the international tourist survey, however only 47 of those surveys were completed and usable after screening. Participants were from a total of 21
different countries. Six of the people surveyed currently reside in Tanzania, however they are originally from other countries and have been living there for less than one year; as these people still fit my previously stated definition of a tourist, they were still used in the assessments.

Figure 5.2 shows the locations (in red) of where the participants currently reside as well as the locations (in blue) of the birthplace of participants for whom their current location is not the same. Although the participant may not currently reside in their country of birth, it gives a good understanding of the way in which their perception may have been molded by various past conditions.

The age of participants ranged from 22 to 83 years old with the average age being 51. Everyone surveyed had at least some college education and many had a graduate degree. Most people were traveling in groups of two to six people however, there were a few outliers. 14 different tour companies were specified as being used by participants and 12 people were unsure of what company they used. An additional eight participants said that they had a self-guided safari. Further analysis of the international tourist survey can be found in Chapter 6.

Tour Operator Survey

24 tour operators within Tanzania consented to taking the online survey, but only 16 surveys were completed and used in data assessment. All except one currently reside in Tanzania; the exception is from Berlin, Germany (he/she owns a company based in Arusha and has led tours in six different protected areas in the Northern Circuit).

The age of participants ranged from 24 to 52 years old, with the average being 30 years of age. Each participant has some form of higher education in tourism services ranging from a
certificate for a course on professional tour guide and driving to an MBA. Most operators have a bachelor’s degree.

No two operators work for the same tour company, making the survey sample diverse. However, 13 of the participants work for a company based in Arusha, while two work in Moshi, and one company is based in Haidom (which is in the Arusha region). Each of these companies are based within the general tourism region where most companies tend to be located (Table 5.1) due to their proximity to the major national parks and other protected areas, as was discussed earlier in this chapter (Figure 5.3). Further analysis of the tour operator survey can be found in Chapter 6.

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Tour Operators</th>
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<tbody>
<tr>
<td>Arusha</td>
<td>254</td>
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<td>Dar es Salaam</td>
<td>59</td>
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<tr>
<td>Moshi</td>
<td>25</td>
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<td>Iringa</td>
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<tr>
<td>Mwanza</td>
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<tr>
<td>Bukoba</td>
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<td>Rujiji</td>
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</tr>
<tr>
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<tr>
<td>Tanga</td>
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<td><strong>Total</strong></td>
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</table>
Conclusion

With the help of Tanzanian-based tour companies and a snowball sampling from my personal contacts, I was able to get a sufficient sample of international tourists and tour operators to conduct this research. Through two different online surveys, participants were asked various questions about their experience while traveling or working in various destinations throughout Tanzania. These included the rankings of environmental impacts from positive to negative and from no impact to significant impact. These surveys also analyzed individual environmental behavior at home and while traveling as well as asking what tour companies are doing in order to lessen or enhance various impacts on the environment in Tanzania.

This chapter explored the methods utilized in this research in order to explore tourist perceptions of their environmental impacts while traveling within Tanzania. Chapters 6 and 7 will explore the results of each survey and what conclusions can be drawn from this research.
CHAPTER 6 – ENVIRONMENTAL PERCEPTIONS IN TANZNIA’S TOURISM INDUSTRY

As discussed in Chapter 5, in order to understand the perceptions of tourist environmental impacts, this research used two different online surveys, one for international tourists visiting Tanzania and the other for tour operators who work within Tanzania. This method gave the ability to analyze environmental impacts of tourism from both visitors and locals, with the goal of comparing the two to determine what awareness tourists have of their impacts while traveling. For clarification, this analysis is limited to participants of this survey, it is not a generalization of all tourists. The following chapter is broken down into two major sections: analysis of the international tourist survey and analysis of the Tanzanian tour operator’s survey. Discussion and a final comparison of the two surveys can be found in Chapter 7.

International Tourist Survey

A total of 71 people took the online survey for international tourists. However, only 47 (66.20%) of those surveys were complete and useable after screening. Of the 47 tourists, 5 (10.64%) self-identified as organized mass tourists, 12 (25.53%) as independent mass tourists, 13 (27.66%) as explorers, and 17 (36.17%) as drifters (refer to p.7 for further explanation of tourist typologies). This shows that, as expected from literature on tourists visiting LDCs in areas such as Sub-Saharan Africa, the majority of tourists want to absorb the local culture and interact with the destination on a deep level (Cohen, 1972; Plog, 1974).
Although the protected areas visited by participants are located throughout the entire country, the majority of tourists surveyed toured around the northern circuit of Tanzania; the most visited destinations were Ngorongoro Conservation Area (74.47%), Tarangire National Park (51.06%), Serengeti National Park (40.43%), and Lake Manyara National Park (38.3%). Although each individual went to multiple sites, most participants visited an average of between three and four different protected areas while in Tanzania; this figure includes all times traveling to Tanzania, not only their most recent trip.

While on safari, wildlife watching (95.74%), photography (78.72%), visiting cultural and historical sites (57.45%), and bird watching (51.06%) were the most popular activities. Other less popular activities included swimming, diving, hiking, mountain climbing, camping, boating, and shopping; one respondent also added star gazing as an activity.

In the following sections regarding the international tourist survey, I focus on four different themes that were emphasized throughout the questionnaire. First, tourists rated twelve different environmental concepts pulled from the literature discussed in Chapter 2 – which can be caused both directly and indirectly by tourism – from positive to negative impact. Second, tourists rated their own personal influence as well as the influence of other tourists that they saw on the same twelve environmental impacts. Third, tourists compared their environmental behaviors at home with those while traveling. Fourth, participants indicated whether or not tourism positively impacts the environment.

Each of these sections contains an overall synopsis of the tourist responses, as well as an analysis based on a few different categories which were determined by the initial research questions. These categories include tourist typology, highest level of education attained, age, and number of times participants have been on safari. The various categories are only discussed
in this chapter if there was a valid pattern found within the data when analyzed. Although it was one of the research questions, due to the fact that a large majority of participants of this survey are from the United States of America, I also decided that there was not enough information to make any assumptions regarding how the country of birth or residence of a tourist impacts their perception of environmental impacts while traveling.

Environmental Impacts: Positive or Negative

The survey presented twelve different environmental concepts that are either directly or indirectly impacted by tourism. Participants were asked to rate the degree of impact of each effect by Likert scale. When asked to rank the twelve determined environmental impacts of tourism from positive to negative, there were many answers that fit well with patterns that would be expected from the literature; for example, 57.78% of people said that conservation is either very positive or somewhat positive. This answer would be expected from tourists, who are usually shown the benefits of conservation in efforts to strengthen financial and social support toward the protection of animals and landscapes. There were, however, 17.77% of people who considered conservation to be somewhat negative or very negative. And although it is possible that these tourists were aware that conservation can lead to the displacement of indigenous people from the protected areas among other potential drawbacks, these responses could be considered outliers or simply unaware tourists. Either way, we would expect the majority of respondents to rate conservation positively.

There were also some impacts that had unexpected answers. When asked to rank deforestation, only a small minority answered that it was somewhat negative or very negative (31.92%). Many others answered that they do not know (25.53%) or that it has a neutral impact.
Deforestation, particularly in fragile environments throughout East Africa, tends to have negative implications for the environment as well as for people amongst it. These negative impacts can include soil erosion, loss of habitat and biodiversity, water shortages, damage to the whole ecosystem, and the loss of firewood and other resources for native populations (Brockington et al., 2008; Nelson, 2013; Nyang’oro, 1996; Osei, 2010; Sechambo, 2001; Stock, 2013). Although these are key issues within Tanzania, tourists may have limited knowledge or understanding of the effects of deforestation because most participants only toured within the Northern Circuit of Tanzania where wildlife viewing in large open areas was their main activity. Perhaps, if they had been exposed to protected areas with forested land, they may have had a more detailed understanding of what issues deforestation causes. Participants could also have been thinking about the implications that deforestation has for the economy, such as infrastructure development or income from selling timber.

In Table 6.1, each impact is broken down by the percentage of responses for each rating from very positive to very negative; the rating with the highest percent response for each environmental impact is shaded. There are several impacts which have neutral as the highest percent response, and I do not know received an ample amount of responses as well (and is highest for deforestation). Although this could be for a variety of reasons, I would like to clarify that participants were not given the definition for any of these environmental impacts in order to not influence the decision making of any of the tourists. A lack of definitions may have contributed to the amount of neutral and I do not know responses if participants felt unable to fully rank each impact.
**Table 6.1** – Tourist perception of how positive or negative a tourism impact is on the environment. (n=47)

<table>
<thead>
<tr>
<th>Impact</th>
<th>Very Positive</th>
<th>Somewhat Positive</th>
<th>Neutral</th>
<th>Somewhat Negative</th>
<th>Very Negative</th>
<th>I Do Not Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deforestation</td>
<td>2.13%</td>
<td>14.89%</td>
<td>25.53%</td>
<td>12.77%</td>
<td>19.15%</td>
<td>25.53%</td>
</tr>
<tr>
<td>Soil Loss/Erosion</td>
<td>0.00%</td>
<td>8.51%</td>
<td>29.79%</td>
<td>25.53%</td>
<td>12.77%</td>
<td>23.40%</td>
</tr>
<tr>
<td>Water Pollution</td>
<td>0.00%</td>
<td>10.64%</td>
<td>17.02%</td>
<td>31.91%</td>
<td>21.28%</td>
<td>19.15%</td>
</tr>
<tr>
<td>Conservation</td>
<td>22.22%</td>
<td>35.56%</td>
<td>13.33%</td>
<td>13.33%</td>
<td>4.44%</td>
<td>11.11%</td>
</tr>
<tr>
<td>Vegetation Loss</td>
<td>0.00%</td>
<td>12.77%</td>
<td>25.53%</td>
<td>34.04%</td>
<td>12.77%</td>
<td>14.89%</td>
</tr>
<tr>
<td>Disruption of Wildlife</td>
<td>2.13%</td>
<td>2.13%</td>
<td>25.53%</td>
<td>36.17%</td>
<td>25.53%</td>
<td>8.51%</td>
</tr>
<tr>
<td>Water Overuse</td>
<td>0.00%</td>
<td>2.13%</td>
<td>27.66%</td>
<td>21.28%</td>
<td>25.53%</td>
<td>23.40%</td>
</tr>
<tr>
<td>Infrastructure Development</td>
<td>12.77%</td>
<td>36.17%</td>
<td>12.77%</td>
<td>12.77%</td>
<td>8.51%</td>
<td>17.02%</td>
</tr>
<tr>
<td>Air Pollution</td>
<td>4.26%</td>
<td>2.13%</td>
<td>27.66%</td>
<td>31.91%</td>
<td>17.02%</td>
<td>17.02%</td>
</tr>
<tr>
<td>Wildlife Protection</td>
<td>23.91%</td>
<td>58.70%</td>
<td>6.52%</td>
<td>4.35%</td>
<td>2.17%</td>
<td>4.35%</td>
</tr>
<tr>
<td>Energy Overuse</td>
<td>4.26%</td>
<td>6.38%</td>
<td>29.79%</td>
<td>23.40%</td>
<td>19.15%</td>
<td>17.02%</td>
</tr>
<tr>
<td>Litter</td>
<td>6.38%</td>
<td>10.64%</td>
<td>23.40%</td>
<td>23.40%</td>
<td>19.15%</td>
<td>12.77%</td>
</tr>
</tbody>
</table>

In order to better compare the average perception of tourists, responses for each environmental impact were averaged using a scale from 1 to 5 based on the positive or negative ratings, with 5 representing *very positive* and 1 representing *very negative* (further explanation can be found on p. 75 in Chapter 5).

As can be seen in Figure 6.1, wildlife protection (4.02) was deemed the most positive impact of tourism in the eyes of the participants. Although conservation has the ability to
incorporate many other positive outcomes along with wildlife, environmental, and social protection, it was second to wildlife protection (3.65), with infrastructure development (3.38) being the third most positive impact. These results could be expected due to the goals and activities of international tourists to Tanzania. As was seen earlier, the majority of tourists were in Tanzania in order to participate in wildlife and bird watching which would influence their feelings toward or understanding of wildlife protection. This is also the case for conservation and infrastructure development, which are staples of the tourism industry both in Tanzania and around the world. Related to the positive impact of wildlife protection was that of participants ranking of wildlife disruption (2.12) as one of the most negative impacts of tourism. Participants, again, seemed to be greatly aware of wildlife and the role that it plays within Tanzania’s tourism industry, due to the type of activities they were participating in and the landscapes they experienced while on safari.

Other highly negative impacts included deforestation (1.71), water overuse (2.08), and water pollution (2.21). The latter two are particularly interesting due to the fact that in Tanzania, like many other African countries, water quality and quantity are key issues (Banerjee & Morella, 2011; Smiley, 2016). This shows that tourists are potentially aware of these problems of water access within the continent and the areas in which they traveled. This could be a reaction to the information that tourists to African countries, including Tanzania, typically receive regarding the warning to only drink bottled water, which is the safest option (Fitzpatrick & Bewer, 2012; TTB, 2017c).
Figure 6.1 – Average tourist perception of how positive or negative a tourism impact is on the environment. (n=47)

(1=very negative, 2=somewhat negative, 3=neutral, 4=somewhat positive, 5=very positive)

In addition to looking at the entire tourist sample, I also looked at other subgroups among the participants. The first group assessed is tourist typologies. When asked about environmental impacts, organized mass tourists tended to respond with either neutral or I do not know more frequently while drifter type tourists chose I do not know the least of all the typologies. These results show that, as would be expected from the literature, drifters were likely more immersed in the destination than the other tourist types, and visa-versa for organized mass tourists.

Among this data, there was only one variable that came across as statistically significant when using correlation analysis. It was found that organized mass tourists thought of energy overuse as significantly more positive than that of any other tourist typology ($F[3,43] = 2.93, p = .04$). This could be explained by the type of traveling these tourists were participating in; with
less engagement with locals and potentially higher-end accommodations, they may not have witnessed the energy struggles that face Tanzania to the same extent that other typologies would have.

The largest range between the most positive impact and most negative impact were both designated by explorers, with protection of wildlife and disruption of wildlife (Figure 6.2). This continues to demonstrate the importance of wildlife to tourists in Tanzania. The biggest difference between tourist types within one single environmental impact was in energy overuse, where the highest rating was by organized mass tourists (3.4, giving it a positive rating) and lowest rating by explorers (1.90). In addition to energy overuse, water overuse happened to be the impact with the second greatest difference in tourist typology ratings between the same two tourist types: organized mass tourists (3.00) and explorers (1.82). Although the trend does not continue, having these considerable differences between organized mass tourists and explorers shows the potential difference in views between the various typologies, especially with energy overuse in which organized mass tourists actually thought of it as being somewhat positive.

Another subgroup with interesting results was education, in which all tourists surveyed had at least some form of college education. These were broken down into four different levels: those with some college, bachelor’s degree, master’s degree, and doctorate degree. Out of each education level, people with a doctorate degree were most likely to select I do not know as their response when asked how positive or negative an environmental impact was. Society tends to deem those with a higher education as knowing more, yet, within this survey it seems that those with a higher degree realize that they are unfamiliar with issues outside their area of expertise, giving them the ability to comfortably mark their uncertainty.
Figure 6.2 – Environmental impacts ranked from positive to negative based on tourist typologies
(1=very negative, 2=somewhat negative, 3=neutral, 4=somewhat positive, 5=very positive)

As for people with a lower level of education, participants with some college were most likely to select extreme responses; typically either very positive or very negative. This can be seen in Figure 6.3, in which the most positive (wildlife protection) and most negative (water overuse) responses by any group was selected by people with some college education rather than people with a four-year degree or more.
There were a couple of other findings relating to participant age and number of safaris a participant had been on when analyzed using correlation analysis. It was found that older people viewed the following impacts as more positive than younger participants: deforestation ($r = .31, p = .04$), water pollution ($r = .31, p = .04$), water overuse ($r = .32, p = .03$), and air pollution ($r = .50, p < .001$), which has a comparatively high probability. In addition, people who have been on more safaris responded that the following impacts were more positive than people who had been on less safaris: deforestation ($r = .42, p = .01$), soil loss/erosion ($r = .42, p = .01$), water pollution ($r = .39, p = .01$), and water overuse ($r = .34, p = .03$).
In addition to various individual impact assessments by categories of tourist, there were many other correlations found between individual impacts. Broadly speaking, people who perceived environmental impacts in one way were likely to perceive other impacts in the same way. For example, people who perceived water overuse as being very negative, also perceived water pollution to be very negative \( r = .53, p < .001 \). This suggests that participants do possibly see relationships between different environmental impacts within a system. Rather than breaking up each impact individually, they may be capable of understanding that, at least certain, environmental concepts work together with many linkages.

Tourists’ Personal Impacts Compared to Other Tourists’ Impacts

In addition to ranking impacts from positive to negative, participants were asked to identify their own personal impacts (Table 6.2) and other tourists’ impacts (Table 6.3) on a scale from no impact to significant impact (with 0 representing no impact and 5 representing significant impact) (further explanation can be found on p. 75 in Chapter 5). Tables 6.2 and 6.3 show tourists’ perceptions of their own impacts and other tourists’ impacts, respectively. In each of the tables, the shaded cells identify the highest percent of responses for each environmental impact. Figure 6.4 presents these findings in graph format. Although some environmental effects have similar responses, many rows show that participants thought of other tourists as having greater impact on environmental issues than themselves. This is particularly seen with deforestation, vegetation loss, disruption of wildlife, air pollution, and litter. Overall, the survey showed that tourists thought they personally had the most impact on wildlife protection (2.14) and the least amount of impact on soil loss and erosion (0.70). In the case of other tourists, participants thought the most impact was on infrastructure development (2.09) and the least amount of impact was on deforestation (0.94) (Figure 6.4).
There was an interesting relationship between the amount of environmental impact and whether tourists saw the same impact as positive or negative (Figure 6.1). Participants were more likely to say that they personally had significant impact or some impact for environmental effects that were thought of as positive. For those positive impacts, they also rated themselves as having more impact than other tourists they encountered while traveling. Likewise for environmental issues that were rated negative, tourists saw themselves as having much less impact than other tourists (Figure 6.4).

The greatest difference can be seen with litter. While 74.47% of participants thought of themselves as having little impact to no impact on litter while traveling, only 44.45% thought of other tourists as having little impact to no impact on litter. This discrepancy becomes very evident in Figure 6.4, in which the average rating of impact for participants’ personal impacts can be seen compared to those of other tourists. This finding reinforces research that found tourists are typically more aware of their environmental impacts when they consist of visual pollution such as litter (Hillery et al., 2001; Priskin, 2003).

The least responses of I do not know for both personal impacts and other tourist impacts were both environmental effects that were thought as positive (Figure 6.1): conservation and wildlife protection. This could indicate that these tourists are more knowledgeable and familiar with the positive implications of tourism and are more likely to associate themselves with the benefits of tourism rather than its drawbacks. It is also important to point out that for every single environmental impact listed, fewer participants chose I do not know as their response when identifying their own impact compared to other tourists’ impact. This could show that tourists are more likely to be aware of their own impacts but less able to perceive the environmental impacts of other tourists or tourism more broadly.
Table 6.2 – Tourist perspective on their own personal direct or indirect impacts on these aspects of the environment (measured in percent of total tourists surveyed). (n=47)

<table>
<thead>
<tr>
<th>Impact</th>
<th>Significant Impact</th>
<th>Some Impact</th>
<th>Little Impact</th>
<th>No Impact</th>
<th>I Do Not Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deforestation</td>
<td>2.13%</td>
<td>6.38%</td>
<td>34.04%</td>
<td>42.55%</td>
<td>14.89%</td>
</tr>
<tr>
<td>Soil Loss/Erosion</td>
<td>0.00%</td>
<td>6.38%</td>
<td>36.17%</td>
<td>36.17%</td>
<td>21.28%</td>
</tr>
<tr>
<td>Water Pollution</td>
<td>0.00%</td>
<td>12.77%</td>
<td>53.19%</td>
<td>21.28%</td>
<td>12.77%</td>
</tr>
<tr>
<td>Conservation</td>
<td>8.51%</td>
<td>36.17%</td>
<td>34.04%</td>
<td>12.77%</td>
<td>8.51%</td>
</tr>
<tr>
<td>Vegetation Loss</td>
<td>0.00%</td>
<td>14.89%</td>
<td>31.91%</td>
<td>38.30%</td>
<td>14.89%</td>
</tr>
<tr>
<td>Disruption of Wildlife</td>
<td>2.13%</td>
<td>34.04%</td>
<td>44.68%</td>
<td>8.51%</td>
<td>10.64%</td>
</tr>
<tr>
<td>Water Overuse</td>
<td>4.26%</td>
<td>19.15%</td>
<td>46.81%</td>
<td>19.15%</td>
<td>10.64%</td>
</tr>
<tr>
<td>Infrastructure Development</td>
<td>6.38%</td>
<td>27.66%</td>
<td>25.53%</td>
<td>25.53%</td>
<td>14.89%</td>
</tr>
<tr>
<td>Air Pollution</td>
<td>2.13%</td>
<td>23.40%</td>
<td>40.43%</td>
<td>23.40%</td>
<td>10.64%</td>
</tr>
<tr>
<td>Wildlife Protection</td>
<td>12.77%</td>
<td>34.04%</td>
<td>25.53%</td>
<td>17.02%</td>
<td>10.64%</td>
</tr>
<tr>
<td>Energy Overuse</td>
<td>4.26%</td>
<td>29.79%</td>
<td>31.91%</td>
<td>21.28%</td>
<td>12.77%</td>
</tr>
<tr>
<td>Litter</td>
<td>2.13%</td>
<td>10.64%</td>
<td>29.79%</td>
<td>44.68%</td>
<td>12.77%</td>
</tr>
</tbody>
</table>
Table 6.3 – Tourist perspective on other tourists’ direct or indirect impacts on these aspects of the environment (measured in percent of total tourists surveyed). (n=47)

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Significant Impact</th>
<th>Some Impact</th>
<th>Little Impact</th>
<th>No Impact</th>
<th>I Do Not Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deforestation</td>
<td>0.00%</td>
<td>10.87%</td>
<td>34.78%</td>
<td>26.09%</td>
<td>28.26%</td>
</tr>
<tr>
<td>Soil Loss/Erosion</td>
<td>0.00%</td>
<td>17.39%</td>
<td>32.61%</td>
<td>23.91%</td>
<td>26.09%</td>
</tr>
<tr>
<td>Water Pollution</td>
<td>2.17%</td>
<td>15.22%</td>
<td>43.48%</td>
<td>10.87%</td>
<td>28.26%</td>
</tr>
<tr>
<td>Conservation</td>
<td>4.44%</td>
<td>22.22%</td>
<td>33.33%</td>
<td>13.33%</td>
<td>26.67%</td>
</tr>
<tr>
<td>Vegetation Loss</td>
<td>0.00%</td>
<td>17.78%</td>
<td>35.56%</td>
<td>22.22%</td>
<td>24.44%</td>
</tr>
<tr>
<td>Disruption of Wildlife</td>
<td>2.17%</td>
<td>41.30%</td>
<td>30.43%</td>
<td>6.52%</td>
<td>19.57%</td>
</tr>
<tr>
<td>Water Overuse</td>
<td>8.70%</td>
<td>21.74%</td>
<td>36.96%</td>
<td>8.70%</td>
<td>23.91%</td>
</tr>
<tr>
<td>Infrastructure Development</td>
<td>6.67%</td>
<td>33.33%</td>
<td>28.89%</td>
<td>8.89%</td>
<td>22.22%</td>
</tr>
<tr>
<td>Air Pollution</td>
<td>4.35%</td>
<td>28.26%</td>
<td>28.26%</td>
<td>17.39%</td>
<td>21.74%</td>
</tr>
<tr>
<td>Wildlife Protection</td>
<td>4.35%</td>
<td>36.96%</td>
<td>26.09%</td>
<td>15.22%</td>
<td>17.39%</td>
</tr>
<tr>
<td>Energy Overuse</td>
<td>2.22%</td>
<td>28.89%</td>
<td>37.78%</td>
<td>8.89%</td>
<td>22.22%</td>
</tr>
<tr>
<td>Litter</td>
<td>6.67%</td>
<td>28.89%</td>
<td>26.67%</td>
<td>17.78%</td>
<td>20.00%</td>
</tr>
</tbody>
</table>
When looking at personal and other tourists’ impacts by tourist typology, the various typologies seem to have different perceptions of their personal impacts, and this is especially apparent between organized mass tourists and drifters. For example, in terms of wildlife protection, organized mass tourists think they have more impact than drifters (3.67 and 1.4 respectively). There were other large differences in perception for energy overuse and deforestation between these two groups as well (Figure 6.5). When looking at other tourists’ impacts, there was not an overall pattern. Each typology saw others as having both the least impact and the most impact; an example of this can be seen in water overuse and wildlife protection, in which organized mass tourists thought of other tourists as having the least amount

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**Figure 6.4** – A comparison of the perception of tourist’s own impacts on the environment and their perception of other tourist’s impacts on the environment. (n=47)
(0=no impact, 1=little impact, 3=some impact, 5=significant impact)
of impact and drifters thought of other tourists as having the most impact on water overuse and visa-versa for disruption of wildlife (Figure 6.6).

Furthermore, organized mass tourists thought of themselves as having, on average, more impact on the environment than other tourists. It is surprising that these tourists would think of themselves as having more impact than others, particularly when looking at the high number of effects that were thought of as negative (Figure 6.7). This could be due to the nature of the type of tourism these people were taking part in, and their knowledge that they were not being as careful or deliberate about their footprint or impact on the destination due to a lack of interaction with the local community. But as can be seen in Figure 6.5, the organized mass tourists did rate themselves, typically, much higher than other tourists for impacts that were thought to be favorable for the environment (especially wildlife protection), which played a substantial role in this high average impact assessment. This could be due, in part, to these tourists potentially contributing much more financially to the tourism sector in Tanzania. However, I chose not to ask about financial spending in order to not be intrusive or make participants uncomfortable.

Statistically speaking, explorers had the highest consensus in two categories of impacts, this may be because this group had the highest number of participants, making it a more reliable data source. Explorers were found to have a high probability of perceiving themselves as having less personal impact on deforestation ($F[3,43] = 2.61, p = .06$) and more personal impact on infrastructure development ($F[3,43] = 3.17, p = .03$). Again, this coincides with the great amount of negativity toward deforestation and the highly positive perception of infrastructure development.
Figure 6.5 – Average perception of personal environmental impacts based on tourist typology
(0=no impact, 1=little impact, 3=some impact, 5=significant impact)

Figure 6.6 – Average perception of other tourists’ environmental impacts based on tourist typology
(0=no impact, 1=little impact, 3=some impact, 5=significant impact)
Figure 6.7 – A comparison of average perception of tourist’s personal impacts and other tourists’ environmental impacts based on tourist typology.  
(0= no impact, 1= little impact, 3= some impact, 5= significant impact)

To further explore the perceptions of tourist impact, responses were broken down by participant’s highest level of education. Overall, each group of participants thought of themselves as having less environmental impact than that of the other tourists that they encountered while in Tanzania just as was seen in the overall tourist sample (Figure 6.10). Again, participants with a higher level of education were more likely to select I do not know when analyzing both personal and other tourist impact, however, unlike what was seen with the rating of impacts from positive to negative, participants with a master’s degree were the group to have the highest percent of I do not know selection for both personal and other tourist impacts rather than those with a doctorate degree.

Participants with only some college education tended to see more differences between themselves and other tourists (Figure 6.10). When looking at other tourists’ impacts there was
Figure 6.8 – Perception of tourist’s personal environmental impacts based on participant education
(0=no impact, 1=little impact, 3=some impact, 5=significant impact)

Figure 6.9 – Perception of other tourists’ environmental impacts based on participant education
(0=no impact, 1=little impact, 3=some impact, 5=significant impact)
much more variation between the four groups, for example those with some college education perceived other tourists as having more impact on water pollution than participants of the other three education levels \( (F[3,42] = 2.32, p = .09) \). People with a doctorate degree also stood out; viewing other tourists as having less impact on infrastructure development than those with less education \( (F[3,41] = 2.80, p = .05) \).

**Environmental Behavior at Home and While Away**

In addition to reflecting on their environmental impacts, tourists were asked to describe their environmental behavior while traveling compared to their behavior at home. Participants were asked whether they participate in environmentally friendly activities at home and while traveling. These included minimizing water consumption/use; turning off lights when they are not in a room; turning off fans, air conditioning, or heat while not in a room; putting all trash in a receptacle; and recycling.
While most participants indicated that they tried to lessen their negative environmental impacts, only slightly more do so at home than during their travels. Recycling was the only activity which had a substantial difference between participation at home and away. 42 people said that they recycle at home but only 29 of those people recycle while traveling (Figure 6.11). Although this was not stated by participants, I believe this could be due to a lack of available access to recycling facilities while traveling. It is also important to mention that, due to health recommendations, tourists typically use only plastic water bottles to ensure that they are drinking safe and clean water. This creates a plethora of used plastic bottles which must be disposed of somehow while traveling without the ability to refill them with tap water.

Due to the fact that most of the behaviors had only minor differences between home and away, I cannot extrapolate that all tourists have similar environmental behaviors at home and while traveling. I do believe, however, that a larger sample size might support this theory. Even among a small sample, I would still suggest that resources for environmentally responsible options during travel are limited, in addition to a lack of education on the part of tourists. Tourists are dependent on the facilities they are given access to while traveling, which might not provide the necessary means to carry out environmentally conscious behavior. For example, in the next section, you will see that of the 16 tour operators surveyed, only 7 of their companies recycle (Figure 6.17).

Although the majority of Tanzania’s population lives in rural settings, like many other African nations, it is rapidly urbanizing. This urban growth causes substantial issues for waste disposal, especially within cities with high unemployment and high poverty. The key takeaway is that resources for waste disposal are limited (Myers, 2005). Much of the population disposes of waste in the form of illegal dumping in places like the roadside, in open spaces, drains,
valleys, and rivers. The lack of recycling combined with a lack of waste disposal infrastructure creates a problem, especially for areas where overcrowding and population growth are at an all-time high (Mbuligwe & Kassenga, 2004; Myers, 2005).

Tanzania is ranked number one for most waste intensive consumption\(^\text{10}\) (1.09 kg/$), and there is a lack of data concerning recycling methods and volume within the country (D-Waste, 2017). Although recycling does exist within Tanzania (Figure 6.12), just as many other services, it is unreliable and difficult to attain. Within Tanzania’s largest city, Dar es Salaam, it was not until 2015 that recycling had been incorporated into their waste management planning (World Bank, 2013). Due to the many other issues facing the country, when compared with other household and community needs, waste management is important, but it falls far behind water, food supply, cash reserves, and electricity (Palfreman, 2014). This gives some context to the poor recycling ability of the country but there are steps being taken toward a more sustainable future for locals and tourists alike.

### Figure 6.11 – Comparison of tourist behavior while at home and while traveling. (n=47)

\(^\text{10}\) Waste Intensive Consumption is “the amount of Municipal Solid Waste generated in a country per dollar of household consumption expenditure” (D-Waste, 2013, p. 43)
Figure 6.12 – Although recycling is done in Tanzania, it is highly unorganized and mostly unavailable to tourists. Recycling outside a market in Dar es Salaam. Photo courtesy of Ruth Poutanen.

Do All Tourists Positively Impact the Environment?

The final question in the tourist survey asked how much participants agreed with the statement that all tourists positively impact the environment. Many people responded that they somewhat disagree (45.64%) (Table 6.4). It seems that even though participants thought of some potentially controversial issues within the tourism industry as being somewhat positive or even very positive (such as deforestation or energy overuse) (Table 6.1), they also thought less favorably upon tourism more generally. In this question, it was rather interesting to see that there were no responses for strongly agree. Throughout the previous survey questions there were often outliers, however, this final generalized question had one of the highest percentages of agreement.
Table 6.4 – Percent of tourist answers in response to whether or not all tourists positively impact the environment. (n=47)

<table>
<thead>
<tr>
<th>Response</th>
<th>Percent Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>0%</td>
</tr>
<tr>
<td>Somewhat Agree</td>
<td>17.93%</td>
</tr>
<tr>
<td>Neither Agree nor Disagree</td>
<td>23.91%</td>
</tr>
<tr>
<td>Somewhat Disagree</td>
<td>45.65%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>13.04%</td>
</tr>
</tbody>
</table>

Table 6.5 – Response rate for statement that all tourists positively impact the environment in correlation with tourist typologies.

<table>
<thead>
<tr>
<th>Response</th>
<th>Organized Mass Tourist (n=5)</th>
<th>Independent Mass Tourist (n=12)</th>
<th>Explorer (n=13)</th>
<th>Drifter (n=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Somewhat Agree</td>
<td>20.00%</td>
<td>16.67%</td>
<td>15.38%</td>
<td>18.75%</td>
</tr>
<tr>
<td>Neither Agree nor Disagree</td>
<td>40.00%</td>
<td>25.00%</td>
<td>23.08%</td>
<td>18.75%</td>
</tr>
<tr>
<td>Somewhat Disagree</td>
<td>20.00%</td>
<td>41.67%</td>
<td>46.15%</td>
<td>56.25%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>20.00%</td>
<td>16.67%</td>
<td>15.38%</td>
<td>6.25%</td>
</tr>
</tbody>
</table>

When responses to this final question were compared with the participant’s answers to what tourist type they identified with, it was found that organized mass tourists were the group to have the least amount of opinion; this group was most likely to select that they neither agree nor disagree. Comparatively, drifter type tourists were the group most likely to select that they somewhat disagree. These answers support the hypothesis that the more engagement a tourist has with the landscape they visit, the more likely they are to disagree that tourism is always a positive thing for the environment. Table 6.5 displays the correlation between the groups from least engaged to most engaged, with the amount of agreement corresponding respectively.
Tanzania Tour Operator Survey

A total of 24 people took the online tour operator survey, but only 16 of those surveys were complete and usable after screening. Of the 16 tour operators, 9 are owners of their company, 4 are guides or drivers, 2 are consultants, and 1 is specifically a mountain tour guide. Although these are the job titles that participants currently have, almost all of them have worked another job in Tanzania’s tourism industry. The length of time participants have worked in Tanzania’s tourism industry ranges from 1 to 20 years, with an average time of 5.75 years.

These tour operators primarily work in Kilimanjaro National Park (93.75%), Serengeti National Park (87.50%), Arusha National Park (87.50%), Tarangire National Park (81.25%), Ngorongoro Conservation Area (81.25%) and Lake Manyara National Park (81.25%). Although these were the most common responses, the various operators have worked in a total of 18 protected areas.

Similar to the previous section regarding the international tourist survey, the following segment consists of four different themes. The first two are an assessment of tour operator responses to the same questions asked of international tourists, allowing for an easy comparison: the rating of environmental impacts of tourism from positive to negative and the amount of impact tourists have on each of the same twelve environmental concepts. The third looks at what environmentally friendly activities participant’s tour companies are doing and how those activities affect tourist perceptions of their impacts. The fourth and final theme discusses the last question of the survey, in which tour operators had the ability to write additional comments if desired.
Environmental Impacts: Positive or Negative

When asked to rate twelve different environmental impacts of tourism from very positive to very negative, Tanzanian tour operators tend to see conservation (4.07), infrastructure development (3.88), and wildlife protection (3.88) as being positively impacted by tourism. On the other hand, they saw vegetation loss (2.57) and litter (2.57) as negative impacts (Figure 6.13).

As can be seen in Figure 6.13, deforestation (3.14) and water overuse (3.06) were rated just slightly more positive than neutral in impact. Deforestation may be viewed as a beneficial impact due to the economic generation which could be brought either through the selling of timber or in the new use of the land for agriculture or infrastructure development clearing way for more buildings, farms, and economic growth. As for water overuse, reasons for its positive rating by tour operators could also be in response to its potential economic implications, however, it is strange that there would not also be the same rating for energy overuse if this was the case. I would like to clarify that, just as with the international tourist survey, participants were not given the definition for any of these environmental impacts so as not to influence the decision making of any of the tourists. This lack of definitions may have been a contributing factor to these responses.

Although deforestation had a positive rating by tour operators, it is curious that the three most negatively rated environmental impacts consisted of very landscape- and vegetation-oriented impacts: vegetation loss, litter, and soil loss/erosion. With this trend of negative impacts, deforestation would seemingly fit in with the operator’s perception of negative impact. Even with this being the case, overall the tour operator’s perceptions of the twelve environmental impacts was somewhat moderate, with minimal variation.
Tourist’s Environmental Impacts

When asked how much impact tourists that they work with have on the environment, operators suggested they have the most impact on conservation (3.19), wildlife protection (3.07), and infrastructure development (2.75) (Figure 6.14). Given that operators thought these were positively impacted by tourism, these answers are not surprising. The tour operators indicated tourists as having the least amount of impact on vegetation loss (1.00), deforestation (1.13), and water overuse (1.31).

It is interesting that vegetation loss was rated by tour operators as being the most negative of all the impacts, as well as being the impact least influenced by tourists. Since most tourists typically travel during safari by vehicle rather than on foot, it would be the drivers who are in
control of vegetation loss and other soil issues while in the vehicle. Although it is the tour operators with this direct influence, tourists and the tourism industry continue to impact the landscape without ever having direct physical contact with anything. This is one of the main issues of the tourism industry: how so many impacts seem to be out of the tourist’s hands, yet continue to be attributed to them.

Soil loss/erosion was also rated as a low impact (1.50). This impact would typically be caused in the same manner as vegetation loss, by way of safari vehicles driving off-road or by tourists walking through undesignated areas. Although this activity is strictly prohibited (Figure 6.15), it does happen and rules must be more strictly enforced (Figure 6.16). This, again, is a case where tourists are not directly responsible for the impacts, but rather that they are caused by tourism as a whole.

Figure 6.14 – Tour operator perception of the amount of environmental impact by tourists. 
(n=16)  
(0=no impact, 1=little impact, 3=some impact, 5=significant impact)
Figure 6.15 – Sign at the entrance to Tarangire National Park explaining the rules and regulations of the park, including the prohibition of driving off-road. Photo courtesy of Ruth Poutanen.
Figure 6.16 – Evidence of vehicles driving off road creating both vegetation and soil disruption within Tarangire National Park. Source: author.

Tour Company Contributions

In order to further understand the tourism industry in Tanzania and what tourists experience, tour operators were asked whether their company engages in various environmentally friendly activities. The nine activities were found through assorted company websites and some of the previous literature stated. If they do not engage in one of the activities, they could respond that they wish their company did do that activity. For each activity, all 16 participants either responded that their company does it or that they wish their company did (Figure 6.17).

Most of the tour operators surveyed said that their company partakes in environmentally friendly activities like the consideration of plants and animals while driving on safari (100%),
educating tourists on environmental issues (93.75%), and the use of fuel-efficient vehicles (87.50%). These responses show that many of the key players in Tanzania’s tourism industry are willing to work toward the goal of more environmentally responsible practice. However, there are also many activities in which there is room for improvement; particularly with recycling, participating in offsetting carbon emissions, and supporting resource protection from developers.

In addition to the environmentally friendly activities that I provided in the survey, tour operators were given the opportunity to write in other activities their company does or wishes their company was doing. I received 9 different activities that are currently being implemented by the participant’s company. These are found beneath Figure 6.17. Of the written-in activities, many of them were simply reiterations of activities already suggested in the survey. Many of these redundant statements focused on the ways to lessen negative impacts while driving, efforts toward tree planting, and tools for education of tourists. There were three unique responses though: the use of reusable water bottles, community involvement with wildlife protection, and taking a dust bin (trash can) while on safari. These responses show not only the efforts companies and their employees are taking to lessen their environmental footprint, but also displays the understanding of participants in what environmentally friendly options for the tourism industry look like.
**Figure 6.17** – Comparison of environmentally friendly actions taken by participant’s tour companies and actions they wish they were doing. (n=16)

Written-in responses include (✔ - Company currently does this ✔✔ - Wishes their company did this):
- Use of long-term bottle waters especially for mountain treks (i.e. Kilimanjaro Mountain) (✔)
- Regulation and law of National Parks (✔)
- Community involvement in wildlife protection (✔)
- Avoid drive off roads (✔)
- Driving limited speed in the park (✔)
- Somewhat encourage tourists to visit schools under special safari package to plant trees as memory trees (✔)
- The thing which consider in national park is information at information center for any national park (✔)
- Taking small dust bin while on safari (✔)
- Give clients briefing before the trip (✔)
Tour operators also expressed what level of engagement and understanding tourists may have with the various environmentally friendly activities done by their tour company. Participants were first asked if tourists using their company are aware that their company does the specified action. They were then asked if they believe that the environmentally friendly actions make tourists feel that they are having less of an impact on the environment. Figure 6.18 displays the responses to these questions.

Although tour companies engage in many environmentally friendly activities, tour operators indicate that tourists do not necessarily know about these actions. Only four of the nine activities listed were known about by tourists of all companies that participate in them: recycling, educating tourists on environmental issues, supporting resource protection from developers, and tree planting. This suggests that although some positive steps are being taken toward environmentally responsible tourism, many tourists are unaware of what activities or challenges are being faced by the industry. Of the nine activities, operators thought that programs in offsetting carbon emissions would have the greatest influence in making tourists feel they are having a positive impact on the environment. Other activities like this were recycling and booking them at hotels that promote conservation of water and energy.

Although these are the activities that tour operators thought would make tourists feel they have the least environmental footprint, they are also the activities which their tourists know the least about and are the activities being done the least. This becomes an issue both for the knowledge of the tourists, but also for the promotion and development of the company itself.

As was an option for participants in the previous question, tour operators were also given the ability to write in additional activities. Most responses were redundant, such as about driving rules while on safari and educating tourists. The overarching issue within these tour operator
responses is that things that the industry knows are a good idea for the environment are not always being done. My main concern is that tourists are not aware of most environmentally friendly activities taking place in Tanzania. If tour operators took the time and effort to engage with the tourists and relay to them the steps that they are taking toward sustainability and environmental responsibility, maybe tourists would in turn be more aware of their own impact.
Figure 6.18 – Comparison of environmentally friendly actions and if tourists know that the participant’s tour company partakes in said action, and if the tour operator thinks the action makes tourists feel that they are having a less negative impact on the environment. (n=16)

Written-in responses include (✓ - The tourists using their company know that they do this  ✓✓ ✓ - This action makes tourists feel that they are having a less negative impact on the environment):

- Driving the limited speed in the park (✓✓ ✓)
- Giving them briefing before safari (✓✓ ✓)
Tour Operator Final Comments

At the conclusion of the survey, an open-ended question allowed tour operators to add anything else they deemed important. This resulted in a total of six responses. Although each response was unique, I found that they could be grouped into two different categories: those that suggested issues and solutions within Tanzania’s tourism sector and those that reaffirmed the contents of the survey.

As was pointed out in the surveys of tourist and tour operator perceptions, both groups believe tourists impact infrastructure development in Tanzania. An operator specified the type of development in a comment about hotels. This type of development can be seen as counter-productive to the concept of vegetation and wildlife protection, however, it is one of the key components of tourism.

“Massive infrastructure [d]evelopment in parks, esp[ecially] [h]otel[s] inside parks may lead to the high destruction of park and [v]egetation as many [h]otels tend to be concentrated where there is high [c]oncentration of [a]nimals so as to favor the [g]ame viewing [i.e.] in the Serengeti North and Center Serengeti, I think under special [g]overnment and [c]onservation [a]uthorities the [g]overnment should mostly encourage the [u]se of either [m]obile [t]ent or [s]ingle entry park [f]ees so that operators will not be too concentrate[d] with their clients inside the [n]ational [p]ark to avoid the double entry and the high demand for inside [n]ational [p]ark [l]ocated [h]otels.”

- Comment from a tour operator

Within this statement, the participant also approaches the subject of government and conservation authorities having the responsibility to come up with solutions for these issues, particularly that of the concentration of infrastructure and guests within the parks. This is not the only tour operator who has this concern. Previous research on tour operator perceptions of sustainable development concluded that most participants thought the job of ensuring appropriate destination development and other enforcement belonged to the host government (Curtin &
Busby, 1999). Unfortunately, this has been rather difficult for most governments in the developing world because of their dependence on outside funding and large businesses.

Another comment points out an issue that environmental management teams are facing, particularly within Sub-Saharan Africa, where the local people have issues coexisting with some of the wildlife and conservation efforts around their communities. This creates a growing conflict between the protection of wildlife, promotion of tourism growth, and interests of the local communities:

“There is [a] problem with community population grow[th] near to the park [borders] which leads to conflict with the park management and block[ing] the wildlife corridor.”

- Comment from a tour operator

These types of issues were explored in Chapter 4 (p. 47-49) regarding the conflicts between the Maasai and protected area restrictions. This comment, however, delves further into the problems for people both within and around the protected areas. Not only does population growth create complications with carrying capacity, but it also effects the already delicate relationship between humans and wildlife. Increased population, including tourists, creates an even further strained ecosystem that needs strict enforcement of policy and care in order to ensure sustainable development.

Some solutions suggested by Tanzanian tour operators include better education for tourists on their environmental impacts. I believe this is key, as it is an overarching solution targeting many people and areas, rather than one thing at a time. There is still a need for individual solutions as well, such as better promotion and a bigger push towards walking safaris rather than such a reliance on vehicles:
“Driving off road is prohibited but some tourists complain but through education they understand.”  
- Comment from a tour operator

“Air pollution is by far the biggest issue! There should be more walking safaris or other alternatives!”  
- Comment from a tour operator

Easy to implement policies like increased education will have broad benefits to the environment, while also touching other areas of concern in the process; this could include the problems mentioned above like infrastructure development, and impacts on and by local populations in addition to the tourists.

There were two comments reaffirming that the tour operator survey touched on the important issues encountered by Tanzania’s tourism sector:

“No more things, all of the basic required things have been listed.”  
- Comment from a tour operator

“No[thing] that I can add on top of all you mention.”  
- Comment from a tour operator

Comments such as these suggest that the survey included the major environmental issues.

Conclusion

This chapter summarized and described the data collected through online surveys of international tourists and tour operators in Tanzania. Major findings included tourists’ greater awareness of environmental impacts pertaining to wildlife and water, their likelihood of perceiving themselves as having less negative impacts on the environment than other tourists, and that tour companies are doing things to lessen negative impacts on Tanzania’s environment such as participation in tree planting and other programs to offset carbon emissions. Further analysis, comparison, and discussion of these and other major findings continue in Chapter 7.
CHAPTER 7 – A SYNOPSIS OF TOURIST PERCEPTIONS

We established what some predominant findings of the international tourist and tour operator surveys are, relating to participant perceptions of environmental impacts in Tanzania, but it is crucial to fully discern the linkages between these two sets of results. This chapter gives a detailed discussion examining the major findings within the international tourist survey as well as a comparison between the perceptions of the tourists and that of the tour operators. Again, I would like to stress that this is simply a discussion relating to participants of this study, in order to generalize further in relation to all tourists, greater research is needed.

Implications of the International Tourist Survey

Based on data from the international tourist survey, which was presented in the previous chapter, I highlight the key findings which help explain tourist perceptions of their environmental impacts. This section is organized by the predominant impacts that were emphasized throughout the tourist survey, including wildlife, water, and litter, in addition to other characteristics that stood out during data analysis.

The Implications of Many Impacts

Tourists surveyed seem much more capable of perceiving tourism’s positive environmental impacts, while being less likely to perceive its negative implications. On average, participants named wildlife protection as the most positive impact, followed by conservation and infrastructure development. In addition to being the most positive environmental impact,
wildlife protection also had the least amount of unsure responses, with just over 4% of participants responding with *I do not know*. As for deforestation, which was seen as the most negative impact, over 25% of participants selected *I do not know*. With this high response of uncertainty, I believe there is evidence to show that tourists may not be highly aware of their environmental impacts, or at least not have the understanding of what the impacts entail on a deeper level, particularly for that of negative impacts.

According to Cohen (1972) and Plog (1974), tourists who classify themselves as organized mass tourists or allocentrics would typically be less engaged with the host destination, and therefore also be less aware of what implications tourism may have on the destination landscape (including all aspects of the landscape: the people, the economy, and the environment). All participants who classified themselves as an organized mass tourist visited three or less (less than the average number visited by participants) protected areas while in Tanzania. One of the tourists did not even know the name(s) of the place(s) they visited, which shows a substantial lack of engagement with the local area and community as would be expected of an organized mass tourist. This finding helps to verify that tourists most likely identified themselves as the correct typology of tourist.

This lack of engagement was evident in the analysis of tourist typologies in Chapter 6, in which most organized mass tourists rated the impacts described as negative in the literature (for example deforestation) as more positive than other typologies. This displays the potential lack of understanding of what implications tourism has on these areas of environmental impact by tourists who classify themselves as being less engaged with the host destination.

Age also seemed to play a role in tourist perceptions. With correlation analysis, I found that it was statistically significant that older people viewed deforestation, water pollution, water
overuse, and air pollution much more positively than that of younger participants. I believe this may be due to the fact that, broadly speaking, older people may have less understanding of environmental issues than younger people. With the way environmental awareness has become a very media-centered topic in recent years, older people may simply be less engaged with these issues. It may also be in relation to older people typically being more conservative (Fay, 2012; Tilley, 2015), which likely insinuates apprehensive views of climate change among other environmental concepts.

There was also a correlation between the number of times a participant had been on safari and how they perceived environmental impacts. People who have been on more safaris were found likely to view deforestation, soil loss/erosion, water pollution, and water overuse as more positive than those who had been on fewer safaris. I believe this displays a relationship in confidence of tourists. It would seem that if a tourist has been on safari numerous times but has not seen these environmental impacts, maybe they are more likely to underplay their severity of impact. Whereas people who have been on fewer safaris might be unsure of the type and severity of impacts due to less exposure.

*Wildlife*

Overall, the most dramatic participant perceptions were toward wildlife; this was both when looking at the positive perceptions of protection of wildlife and the negative perceptions toward the disruption of wildlife. This highlights the importance of animals for these tourists due to their activities while in Tanzania. Almost 100% of people surveyed stated that they were in Tanzania on safari to watch wildlife. This activity becomes heavily reliant on access to these animals and the guarantee that they will be present for the enjoyment of the tourists. With this
dependency on wildlife, it also becomes a major focus of the Tanzanian tourism industry.

Without the care and protection of these animals, the entire sector would face the possibility of losing their key commodity – nature. Tourists seem to be cognizant of this reality, whether it be for their own interests or the interests of Tanzania as a whole.

Water

Sub-Saharan Africa has many problems relating to water quality and quantity, and these did not seem to be missed by participants of this survey; two of the most negative ratings of tourism impacts were water overuse and water pollution. Although tourists are typically made aware of the dangers of drinking tap water while in Tanzania (Fitzpatrick & Bewer, 2012; TTB, 2017c), it is not simply an issue of what they are told while on safari, but the perceptions of people all over the globe in relation to Africa’s stereotypically negative image, particularly those of water problems.

Perceptions of Africa vary widely, but there is no doubt that these perceptions are usually flawed and center around negative stereotypes. Curtis Keim (2014) points out many of these misconceptions held by most countries within the developed world. He establishes four categories of imagery that Americans tend to associate with Africa including “traditional words” such as jungle, native, and tribe; “news words” like coup, poverty, drought, and famine; “change words” such as development, foreign aid, and missionary; and of course, “tourism words” like wild animals, safari, lion, and elephant (Keim, 2014). These all seem to cover many of the preconceptions tourists may have coming in to Tanzania, and therefore these terms and concepts likely have great influence on many of the participant responses within this survey.
With these preconceptions of Africa, water quantity and access tends to also be a major issue as seen by the word *drought* (Keim, 2014). Areas of tourism are particularly prone to water stress. In places such as Tanzania, tourism numbers rise during the summer (dry season) which depletes much of the protected areas’ water resources. Proper management and conservation of water must be strictly implemented to make sure everyone has access to sufficient water, especially in these tourism landscapes where water must be shared between the (typically) high-income tourists and the (typically) low-income locals (Briassoulis, 2002; Essex et al., 2004; Garcia & Servera, 2003).

*Litter*

The greatest discrepancy between personal impacts and other tourist impacts was seen with litter. Participants consider other tourists to have much more impact on litter than themselves. According to previous research, it has been found that tourists, although not usually aware of abstract forms of environmental impacts, are able to comprehend most visual pollution such as litter (Hillery et al., 2001; Priskin, 2003). Litter not only is a visual impact which can be seen on the road or in a stream, but it is also a type of environmental issue that people tend to be aware of from their own personal life; this can be in the form of warning signs or being taught not to litter as a child. The exposure to litter and its impacts tends to be rather different from other more abstract impacts like energy overuse or air pollution which are not so easily recognized.
Infrastructure Development

Statistically speaking, infrastructure development was an impact that appeared most frequently in the correlation analysis of the tourist survey data. This is an interesting environmental impact, to say the least. With its positive economic and social implications, infrastructure development is easily seen as an all-around good thing for a destination, especially when thinking of tourism. However, this impact also has many negative environmental and social implications. This can be seen in the destruction of the landscape, interference with wildlife habitat and migration, along with displacement of people. Due to the various ramifications of infrastructure development, responses varied. For example, people with a doctorate degree viewed other tourists as having significantly less impact on infrastructure development than participants with other education levels. And when looking at tourist typology, explorers were more likely to say that infrastructure development was a positive impact compared to other tourists.

A Comparison of Tourist and Tour Operator Perceptions

It is important to understand the perceptions of visitors within a destination as well as the local tour operators who witness the influx of tourists on a daily basis. Moreover, being aware of the linkages between the two is vital to the health of the tourism industry as well as the local dynamics between people and environment. This section compares and discusses the perceptions of the international tourists with that of the tour operators in Tanzania.
Environmental Impacts: Positive or Negative

As was pointed out in the last section, there were several issues that seemed to stand out within the international tourist survey including water and wildlife. With the water issues that face Tanzania and the main reason for travel by participants being wildlife viewing, it is not surprising that these two areas of environmental impact stood out. It is surprising, however, that these issues were not as prominent in the tour operator survey.

In general tourists surveyed tended to view the twelve environmental impacts as less positive than did tour operators. In fact, only one was rated more positive by tourists (wildlife protection), with two others having only a miniscule difference in rating (litter and vegetation loss). This displays that tourists, perhaps, perceive environmental impacts as having more negative implications for a host environment than that of the actual hosts or the people that work within that environment on a daily basis.

There were two impacts that were rated similarly between the perceptions of tourists and tour operators: vegetation loss and litter. As discussed previously, litter is an environmental impact which has been proven to be the most easily seen and perceived by tourists (Hillery et al., 2001; Priskin, 2003). With such a close response by both groups, it can be assumed that this is accurate and that people are much more capable of understanding visual impacts of tourism. This could also be the case for vegetation loss. Although it is not as straightforward as litter, it is also an issue where the effects could be seen by tourists and operators alike.

In contrast, the environmental impact which had the most disparity was that of deforestation. Tour operators surveyed not only perceive deforestation to be more positive than tourists, but they perceive it as actually having a somewhat positive impact (3.14). I believe this may be in relation to the economic implications of deforestation. Perhaps tour operators see the
economic benefits as outweighing the potential negative environmental implications such as soil degradation and erosion, loss of habitat and biodiversity, water shortages, and the loss of a major fuel source for local populations. Economically speaking, deforestation allows for agricultural development and infrastructure development which could greatly benefit local people. Deforestation, unlike litter or vegetation, is also a rather indirect impact of tourism. It has many more factors at play, compared to litter, which is a much more straight-forward impact.

**Figure 7.1** - Average positive value of each environmental impact based on both international tourist and Tanzanian tour operator responses. (1=very negative, 2= somewhat negative, 3=neutral, 4= somewhat positive, 5=very positive)
Tourist’s Environmental Impacts

When the overall perceptions of tourists and tour operators are compared, the data show that tourists perceive themselves as having less of an impact on the destination’s environment than tour operators think they have. However, there was a contradictory difference in perceptions of positive impacts. Tour operators thought of tourists as having substantially more impact than tourists thought of themselves or of other tourists in regard to conservation, wildlife protection, and infrastructure development. This may be due to the fact that tour operators (like other locals) possibly see the long-term implications of investment in conservation and wildlife protection along with the increased infrastructure development throughout the country, which most tour operators deemed as positive. Tour operators surveyed had worked in the industry in Tanzania for an average of about five years. This means that they have had years of experience and exposure to the changing landscape of Tanzania’s tourism industry. The rapid growth of tourism in Tanzania has affected these operators and they must see it as a positive development.

There were a few impacts which had close responses between groups. This is particularly seen in litter, in which tourists’ view of other tourists and tour operator’s perception of tourists had very close rankings. There was also a comparably close rating between tourists’ personal impact and the perception of tour operators with vegetation loss, water overuse, and air pollution. Lastly, the one impact that had close ratings between all three categories was energy overuse. These responses continue with the pattern of visible impacts standing out, like litter and issues of resource overuse like with water. It has been apparent throughout much of the analysis that these are key impacts that tourists are potentially more aware of than others due either to their preconceptions of the region or to the visual element of impacts like litter. This helps to
show that it is not only tourists that see the implications of these particular impacts, but that they possibly coincide with the perceptions of tour operators as well.

Tour Operator Contributions and the Perceptions of Tourists

Within the tour operator survey, participants were asked to identify various environmentally friendly activities that their company takes part in and if tourists are aware of these actions. When looking only at the operator’s answers, I was concerned that tourists were not being educated enough on what progress is being made toward environmental sustainability within these companies. However, once the perceptions of how positive or negative the twelve environmental impacts assessed were compared between the tourists and tour operators, I
realized the difference in perceptions of the two groups. It is curious how negatively tourists view these impacts compared to the tour operators. Is this due to education or the society that the tourists come from? Is it due to a lack of education on the side of the tour operators rather than tourists? Or are the tourists simply much more extreme in their view of the environment in Tanzania because they are less familiar and less engaged with it? These are all questions that require more research in order to answer.

Although none of the survey responses were compared with what country of birth or residence tourists are from, I do still find it interesting to discuss these findings more generally. Almost every international tourist surveyed is from a developed country, whereas the tour operators are working and living (all except one) in Tanzania. This brings me to wonder how different the society of a developed country versus an LDC truly are when it comes to sustainable practices, awareness, and education. Are the differences between tourist and tour operator perception due to these potential societal discrepancies? As was stated in Chapter 2 (p. 49), there has been research done on conservation differences between countries, particularly developed and developing, such as in Nelson’s (2003) article on environmental colonialism. This has shed light on the frequent imposition of Western conservationists who undermine the efforts of African conservationists (terms of “Western” and “African” are being used broadly). With these very generalized statement, I would argue that there very well could be differences between the societal view of conservation, but am unsure what it could be, therefore further research is required.
Conclusion

Due to low sample sizes, not many findings were statistically significant. Still, there were a number of interesting conclusions that can be drawn from this data with the hope that future research can strengthen our understanding of the awareness of international tourists.

Overall, tourists surveyed seem to be aware of some of the positive and negative impacts of tourism, but this tends to be biased toward their own agendas. With tourism being, first and foremost, an industry within the capitalist system, its focus is typically directed toward economic growth. This can be seen in the positive outlook by tourists of impacts such as infrastructure development. There is also a push toward environmentally friendly options for natural areas, particularly within Tanzania, which is a nature-based tourist landscape. This is evident in positive responses by tourists toward conservation and wildlife protection. Tourists were also more likely to be aware of, or at least acknowledge, their positive impacts than their negative impacts. However, this could also be due to the fact that tour operators tend to convey the positive impacts of tourism more so than the negative impacts. Although this is a tactic to help increase tourism numbers, it is also potentially detrimental to the long-term stability of the destination. This is where further visitor education is needed.

I believe tourists are somewhat aware of the impacts they have on the environment while traveling within Tanzania, but they are still greatly unaware of the major issues that happen behind the scenes, and they are naïve of many hidden or indirect contributions that tourism has on the various impacts that occur. Due to the extensive linkages of the tourism industry, there is a need to understand the perceptions of the many groups involved on all ends of the tourism spectrum, especially those of tourists. Some research has been done pertaining to tourist perceptions of climate change and visual forms of environmental degradation, but this is not
enough. I urge for more questions to be asked of tourists in order to understand how to better educate them and how to lessen their negative impacts while simultaneously strengthening their positive impacts.
CHAPTER 8 – CONCLUSION

The East African country of Tanzania faces many economic, social, and environmental issues due, in part, to its long history of political change. International tourism has been a way for Tanzania to further progress and development, however, tourism has also become a hindrance for many areas of sustainable development. With nature-based tourism at an all-time high, there is a demand to continue tourism in a responsible way for the economy, society, and the environment. Although this research focuses specifically on the implications of environmental impacts, there are extreme linkages between all three areas. This is the case especially in a destination of natural tourism, where environmental degradation impacts not only the physical landscape – but also the economic and social wellbeing of the host community. One example of this is infrastructure development, in which it increases economic growth and other tourism development to the destination, while also potentially harming local businesses, taking over local land, and greatly degrading the environment for plants, soil, animals, and even natural resources that would be used by the local people.

Tourism is an exceptionally geographical concept, which touches all ends of the earth; and does so at various scales. With tourism being such a broad phenomenon, it has many implications and can have both positive and negative impacts for the host economy, host society, host environment, and even to the tourists themselves. This creates a rather fragile setting for global tourism as a whole. As specified by participants through this research, positive impacts include wildlife protection, conservation, and infrastructure development, whereas deforestation, soil loss/erosion, water pollution, vegetation loss, disruption of wildlife, water overuse, air
pollution, energy overuse, and litter were classified as negative impacts. Although these impacts may seem cut-and-dry, one must realize that there is much overlap between what can be considered good or bad, beneficial or harming, depending on the person perceiving the impact and the conditions in which they are placed.

The repercussions of tourists’ lack of recognition and understanding when it comes to their environmental impacts could result in potential harm to the tourism industry as well as the destination’s other economic or social elements. Understanding the perceptions of tourists traveling is one way to help ensure that negative impacts to the environment can be lessened and positive impacts increased. For example, a tourist with the ability to accurately perceive their indirect environmental impacts, may make more environmentally-conscious decisions when it comes to the companies they chose to use, where they want to go, how they travel, or where they stay. And the more people living and traveling responsibly, the better the repercussions will be for the destination landscape.

This thesis aimed to answer three research questions. First, I asked the overarching question of this research: are tourists self-aware of what influences they may have on a host environment while traveling? Through the analysis of survey data, I found that surveyed international tourists in Tanzania are only somewhat aware of their environmental impacts. Overall, there was a stark difference between tourist’s perceptions of themselves compared to other tourists; tourists tended to see themselves as having more positive environmental impacts than other tourists. When looking at general impacts from positive to negative, there is evidence to show that tourists may not be highly aware of their environmental impacts, or at least not have the understanding of what the impacts entail on a deeper level, particularly for that of negative impacts.
The second research question asked if there is a relationship between tourist typology and how much environmental impact tourists are able to perceive. Although results were less straightforward, there is a possible connection between the two variables. Although all tourists surveyed were some form of pleasure tourist, they went about their travels in different ways, and therefore had different interactions with the destination. Within the findings of this study, there were multiple differences between participants who identified as organized mass tourists and those who identified as drifters. Specifically, organized mass tourists rated themselves as having the highest amount of environmental impact, while drifters rated themselves as having the least impact. This finding correlates with the hypothesis that those tourists who are less engaged with a host destination would have more negative impacts. This is also interesting because I did not think that organized mass tourists would classify themselves as having a high impact due to less engagement and understanding of the destination landscape. This could, however, be due to their high ratings of their personal influence on positive environmental impacts rather than negative.

The third research question aimed to understand if educational background or “societal status” plays a role in tourist environmental impact awareness. I found that education and age did influence the responses of tourists surveyed – but in a less uniform way. Patterns regarding these two categories were not as clear as with the previous two questions. Age, especially, had statistical significance that older people viewed deforestation, water pollution, water overuse, and air pollution much more positively than younger participants. I believe this could be due to younger people being better educated on environmental issues because of environmental awareness’s current media-centered place in society.
Looking at my three initial research questions, I was able to generalize the awareness of participating tourists traveling within Tanzania. These tourists tend to be perceptive of positive impacts of tourism, with an understanding of the good repercussions being created through the industry. When it comes to the negative implications of tourism, it is likely that tourists are inadvertently unaware of what may truly be caused through their travels.

Further research is needed in order to continue to understand tourists and their interactions with a destination’s environment. Due to a small sample size, this thesis was only able to generalize on a few points surrounding tourist perceptions. Yet, I believe that it can be seen that there is a general lack in the knowledge of tourists when it comes to their environmental impacts, along with a gap in the education for tourists by tour companies. Therefore, this data can be used to see where the largest discontinuities are within tourist perception and can be used as a starting point for furthering the conversation, particularly between tourists, locals, and that of government officials to make a more sustainable tourism industry for everyone.

I have been asking further questions throughout the final chapters of this thesis, particularly in relation to perceptions of water in LDCs, tourist versus tour operator or resident perceptions, and perceptions of those in developed versus developing countries. I truly hope that research will continue in order to answer these questions and find the proper balance within the tourism industry, especially in these areas of nature-based tourism throughout LDCs. I believe this is the key to research and the further development of academics. If we continue to ask questions, we will continue to find answers. I urge for more questions to be asked of tourists in order to understand how to better educate them, and how to lessen their negative impacts while simultaneously strengthening their positive impacts.
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Marion Institute. (2012, November 8). CFC keynote – Shani – Maasai culture, conservation tourism and climate change | @marioninstitute [Video file]. Retrieved from https://www.youtube.com/watch?v=8MGrc2WxGlw


APPENDIX A – INTERNATIONAL TOURIST SURVEY

International Tourist Perceptions
Anna Solberg
Department of Geography
Kent State University

You are being asked to participate in this research study of how international tourists perceive environmental impacts. The study should take only 5 minutes to complete. You are being asked to partake in this study because you have traveled to different tourist destinations throughout Tanzania and are now capable of explaining what impacts you may have seen.

What the study is about: The purpose of this study is to better understand how aware international tourists are of their environmental impact on Tanzania.

What you will be asked to do: If you agree to participate in this study, you will be asked to complete the following survey. You must be 18 years or older in order to take part in this research. All answers are confidential and will be kept entirely anonymous. The survey will take you approximately 5 minutes to complete. If you close out of the internet browser window, please note that you will lose any answers that you have already filled in. However, you may choose to leave the survey at any time if you change your mind and wish to withdraw participation. Please answer all questions as honestly as possible.

Risks and Benefits: Participation in this survey has no foreseeable risks. There are no direct benefits to you, however, the knowledge acquired through this survey has the possibility to help create a more sustainable and eco-friendly tourism industry within developing countries.

Your answers will be confidential: Any answers supplied in this survey will be kept entirely confidential and anonymous. Once submitted, your answers will be sent to a secure server only accessible to the researcher.

Taking part is voluntary: Participation in this survey is completely voluntary. If you decide to participate, you have the ability to leave any questions unanswered. If you find that after beginning the survey you do not wish to complete it, you have the right to withdraw participation simply by closing out of the web browser.

If you have any questions: If you have any questions, comments, or concerns about this study or your rights as a participant you may contact the researcher, Anna Solberg, at asolberg@kent.edu; or the Kent State University Institutional Review Board, at (330) 672-2704 or researchcompliance@kent.edu.

Statement of Consent: If you have read the above information and fully consent to participate in this survey, please click on the first button below. By clicking on this button, you will indicate your consent to participate in this study.

I agree and give my consent to participate in this research project. I understand that participation is voluntary and that I may withdraw my consent at any time.

○ I do not agree to participate and will be excluded from the remainder of the questions.

○ If I do not agree to participate... Is Selected, Then Skip To End of Survey
The following questions are about you as well as other tourists that you saw while traveling on safari in Tanzania.

Q1 Country of Residence:

Q2 Country of Birth (if different from current residence):

Q3 Age:

If Date of Birth: Is Less Than 18, Then Skip To End of Survey

Q4 Occupation:

Q5 Highest Level of Education:

Q6 Tour Company Traveling With:

Q7 Number of People Traveling With (Including Yourself):

Q8 Number of Nights Spent in Tanzania:

Q9 What is the month and year of your most recent trip to Tanzania?

Q10 Have you been to Tanzania before this trip? If yes, how many times?
   - No
   - Yes ____________________

Q11 How many times have you been on safari in Tanzania or any other African countries (including this safari)?
Q12 Tourist Destination(s) Visited (please check all that apply):

- Tarangire National Park
- Serengeti National Park
- Kilimanjaro National Park
- Ruaha National Park
- Mikumi National Park
- Arusha National Park
- Saadani National Park
- Saanane National Park
- Selous Game Reserve
- Katavi National Park
- Mkomazi National Park
- Kitulo Plateau National Park
- Udzungwa Mountains National Park
- Gombe National Park
- Lake Manyara National Park
- Mahale Mountain National Park
- Ngorongoro Conservation Area
- Uwanda Game Reserve
- Jozani Chwaka Bay National Park
- Rubondo Island National Park
- Other ____________________

Q13 What activities did you do while on safari? Please check all that apply.

- Wildlife Watching
- Bird Watching
- Photography
- Swimming
- Diving
- Hiking
- Mountain Climbing
- Fishing
- Hunting
- Camping
- Boating/Sailing
- Shopping
- Visited Cultural/Historical Sites
- Other ____________________
Q14 How would you classify yourself as a tourist? Please check one that applies best to you.

- Category A: You were only interested in main attractions. Most of your plans were made through a travel agency. You stayed with your group that you were traveling with most of the time. You did not have much engagement with the local people, other than the workers of the places you stayed and possibly your tour guides.
- Category B: You were mostly interested in main attractions. Most of your plans were made for you, but you still had some flexibility in your trip. Most of the interaction that you had with the local people was while speaking with workers of the accommodations that you stayed at or your tour guides.
- Category C: You planned your trip. You wanted to see some of the main attractions, but spent most of your time trying to get to know the culture. You ate a lot of local food. You had a very flexible schedule.
- Category D: You were on your trip for a long period of time. You spent your time trying to blend in with the local culture, and getting to know the local people. You were possibly staying with local people while traveling or living in hostels.

Q15 This is a list of possible direct and indirect environmental impacts of tourists in Tanzania. Based on your experience in Tanzania, please rate the impacts of each from positive to negative.

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<tr>
<th>Impact</th>
<th>Very Positive</th>
<th>Somewhat Positive</th>
<th>Neutral</th>
<th>Somewhat Negative</th>
<th>Very Negative</th>
<th>I Do Not Know</th>
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Q16 Think about your most recent safari experience and indicate your personal direct or indirect impacts on these aspects of the environment.

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Q17 Think about the other tourists that you saw while on your most recent safari in Tanzania. Please rate the extent of these other tourists' direct and indirect impacts on the environment.

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<th>Impact</th>
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Q18 Do you do anything while at home or while traveling to lessen your negative environmental impacts? Please check all that apply.

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<tr>
<th>Activity</th>
<th>At Home</th>
<th>While Traveling</th>
<th>Never</th>
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<tbody>
<tr>
<td>Minimize water consumption/use</td>
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<td>Turn off lights when not in the room</td>
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<td>Turn off fans, air conditioning, or heat when not in the room</td>
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<td>Put all trash in a receptacle</td>
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<td>Recycle</td>
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Q19 All tourists positively impact the environment.

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree
You are being asked to participate in this research study of how international tourists perceive environmental impacts. The survey should take only 5-10 minutes to complete. You are being asked to partake in this study because you have been involved in the tourism industry within Tanzania.

What the study is about: The purpose of this study is to better understand how aware international tourists are of their environmental impact on Tanzania.

What you will be asked to do: If you agree to participate in this study, you will be asked to complete the following survey. You must be 18 years or older in order to take part in this research. All answers are confidential and will be kept entirely anonymous. The survey will take you approximately 5-10 minutes to complete. If you close out of the internet browser window, please note that you will lose any answers that you have already filled in. However, you may choose to leave the survey at any time if you change your mind and wish to withdraw participation. Please answer all questions as honestly as possible.

Risks and Benefits: Participation in this survey has no foreseeable risks. There are no direct benefits to you, however, the knowledge acquired through this survey has the possibility to help create a more sustainable and eco-friendly tourism industry within developing countries. Your answers will be confidential: Any answers supplied in this survey will be kept entirely confidential and anonymous. Once submitted, your answers will be sent to a secure server only accessible to the researcher.

Taking part is voluntary: Participation in this survey is completely voluntary. If you decide to participate, you have the ability to leave any questions unanswered. If you find that after beginning the survey you do not wish to complete it, you have the right to withdraw participation simply by closing out of the web browser.

If you have any questions: If you have any questions, comments, or concerns about this study or your rights as a participant you may contact the researcher, Anna Solberg, at asolberg@kent.edu; or the Kent State University Institutional Review Board, at +1-(330) 672-2704 or researchcompliance@kent.edu.

Statement of Consent: If you have read the above information and fully consent to participate in this survey, please click on the first button below. By clicking on this button, you will indicate your consent to participate in this study.

I agree and give my consent to participate in this research project. I understand that participation is voluntary and that I may withdraw my consent at any time.

- I do not agree to participate and will be excluded from the remainder of the questions.
- If I do not agree to participate... Is Selected, Then Skip To End of Survey

157
Q2 Age:

If Age: Is Less Than 18, Then Skip To End of Survey

Q3 Country of Birth:

Q4 Country of Current Residence:

Q5 What is your highest level of education? Please list degree and area of study.
   Example: Bachelor's Degree in Tourism Management

Q6 What is the name of the tour company you currently work for?

Q7 In what city is your tour company located/based in?
Q8 What parks do you work in or lead tours to? Please check all that apply.

- Tarangire National Park
- Serengeti National Park
- Kilimanjaro National Park
- Ruaha National Park
- Mikumi National Park
- Arusha National Park
- Saadani National Park
- Saanane National Park
- Selous Game Reserve
- Katavi National Park
- Mkomazi National Park
- Kitulo Plateau National Park
- Udzungwa Mountains National Park
- Gombe National Park
- Lake Manyara National Park
- Mahale Mountain National Park
- Ngorongoro Conservation Area
- Uwanda Game Reserve
- Jozani Chwaka Bay National Park
- Rubondo Island National Park
- Other ____________________

Q9 What is your current job description/title?
Example: Company Owner, Driver, Guide...etc.

Q10 How long have you been employed in your current position?
Example: 1 year and 3 months

Q11 How long have you been working within the tourism industry as a whole, not just in your current position? This can include work in Tanzania as well as other countries.

Q12 Please list all other previous tourism industry employment that you have had. Please give title, company, and length of employment.
Example: Position 1: Driver, Anna’s Safaris Ltd., 4 years
        Position 2: Owner, MyOwn Tours Co., 8 years
Q13 This is a list of possible direct and indirect environmental impacts of tourists in Tanzania. Based on your experience in Tanzania, please rate the impacts of each from positive to negative.

<table>
<thead>
<tr>
<th>Impact</th>
<th>Very Positive</th>
<th>Somewhat Positive</th>
<th>Neutral</th>
<th>Somewhat Negative</th>
<th>Very Negative</th>
<th>I Do Not Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deforestation</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Soil Loss/Erosion</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Water Pollution</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Conservation</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Vegetation Loss</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Disruption of Wildlife</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Water Overuse</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Infrastructure Development</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Air Pollution</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Wildlife Protection</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Energy Overuse</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Litter</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Q14 Think about the tourists that you work with on a daily basis, please rate how much impact you think they have on the environment in Tanzania while they are on safari.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Significant Impact</th>
<th>Some Impact</th>
<th>Little Impact</th>
<th>No Impact</th>
<th>I Do Not Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deforestation</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Soil Loss/Erosion</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Water Pollution</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Conservation</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Vegetation Loss</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Disruption of Wildlife</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Water Overuse</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Infrastructure Development</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Air Pollution</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Wildlife Protection</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Energy Overuse</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Litter</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Q15 This is a list of some actions different tour companies take in order to lessen the negative environmental impacts of tourism. Please check all of the actions that your company does in the first column. And in the second column please indicate if you wish your company did any of these actions. Please check all that apply.

<table>
<thead>
<tr>
<th>Does your company do this?</th>
<th>Do you wish your company did this?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycle</td>
<td>□</td>
</tr>
<tr>
<td>Use fuel efficient vehicles</td>
<td>□</td>
</tr>
<tr>
<td>Educate tourists on environmental issues</td>
<td>□</td>
</tr>
<tr>
<td>Participate in programs to offset carbon emissions</td>
<td>□</td>
</tr>
<tr>
<td>Book guests at hotels that promote conservation of water and energy</td>
<td>□</td>
</tr>
<tr>
<td>Support resource protection from developers building roads, homes, hotels, and other infrastructure</td>
<td>□</td>
</tr>
<tr>
<td>Support animal protection from poachers</td>
<td>□</td>
</tr>
<tr>
<td>Tree planting</td>
<td>□</td>
</tr>
<tr>
<td>Consider animals and vegetation while driving in parks</td>
<td>□</td>
</tr>
<tr>
<td>Other __________</td>
<td>□</td>
</tr>
<tr>
<td>Other __________</td>
<td>□</td>
</tr>
<tr>
<td>Other __________</td>
<td>□</td>
</tr>
</tbody>
</table>
Q16 This is a list of some actions different tour companies take in order to lessen the negative environmental impacts of tourism. In the first column please indicate if the tourists using your company are aware of the measures you are taking. In the second column please indicate if you think these actions make tourists feel that they are having less negative impact while traveling in Tanzania. Please check all that apply.

<table>
<thead>
<tr>
<th>Action</th>
<th>Do the tourists using your company know that you do this?</th>
<th>Do you think this action makes tourists feel that they are having less negative impact on the environment?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use fuel efficient vehicles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educate tourists on environmental issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participate in programs to offset carbon emissions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Book guests at hotels that promote conservation of water and energy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support resource protection from developers building roads, homes,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hotels, and other infrastructure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support animal protection from poachers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tree planting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consider animals and vegetation while driving in parks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other ________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other ________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other ________</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q17 Is there anything else related to tourism or the environment that I missed, or you would like to expand upon?
APPENDIX C – TOURIST RECRUITMENT CARD

Anna Solberg
Department of Geography
asolberg@kent.edu

Please connect to the link below in order to fill out a short survey on tourist perceptions in Tanzania. Thank you!

Please go to http://goo.gl/R7bTzT
APPENDIX D – IRB APPROVAL

RE: Protocol #16-269 - entitled “International Tourist Perceptions on Environmental Impact Within Tanzania”

We have assigned your application the following IRB number: 16-269. Please reference this number when corresponding with our office regarding your application.

The Kent State University Institutional Review Board has reviewed and approved your Application for Approval to Use Human Research Participants as Level I/Exempt from Annual review research. Your research project involves minimal risk to human subjects and meets the criteria for the following category of exemption under federal regulations:

Exemption 2: Educational Tests, Surveys, Interviews, Public Behavior Observation

This application was approved on April 25, 2016.

***Submission of annual review reports is not required for Level 1/Exempt projects. We do NOT stamp Level I protocol consent documents.

If any modifications are made in research design, methodology, or procedures that increase the risks to subjects or includes activities that do not fall within the approved exemption category, those modifications must be submitted to and approved by the IRB before implementation. Please contact an IRB discipline specific reviewer or the Office of Research Compliance to discuss the changes and whether a new application must be submitted. Visit our website for modification forms.

Kent State University has a Federal Wide Assurance on file with the Office for Human Research Protections (OHRP); FWA Number 00001853.

If you have any questions or concerns, please contact us at Researchcompliance@kent.edu or by phone at 330-672-2704 or 330.672.8058.

Doug Delahanty | IRB Chair | 330.672.2395 | ddelahan@kent.edu
Tricia Sloan | Administrator | 330.672.2181 | psloan1@kent.edu
Kevin McCreary | Assistant Director | 330.672.8058 | kmccrea1@kent.edu
Paulette Washko | Director | 330.672.2704 | pwashko@kent.edu
IRB Amendment/Change Approval I

RE: IRB # 16-269 entitled “International Tourist Perceptions of Environmental Impacts in Tanzania”

Hello,
The Kent State University Institutional Review Board (IRB) has reviewed and approved your protocol amendment/change request. It is understood that the research is continuing with modifications including to use revised measures. The modification to this protocol was approved on 5/20/16.

*If applicable, a copy of the IRB approved consent form is attached to this email. This “stamped” copy is the consent form that you must use for your research participants. It is important for you to also keep an unstamped text copy (i.e., Microsoft Word version) of your consent form for subsequent submissions. Note that if you are conducting an online study the stamped consent form is only for record keeping purposes.

Federal regulations and Kent State University IRB policy requires that research be reviewed at intervals appropriate to the degree of risk, but not less than once per year.

HHS regulations and Kent State University Institutional Review Board guidelines require that any changes in research methodology, protocol design, or principal investigator have the prior approval of the IRB before implementation and continuation of the protocol. The IRB must also be informed of any adverse events associated with the study. The IRB further requests a final report at the conclusion of the study.

Kent State University has a Federal Wide Assurance on file with the Office for Human Research Protections (OHRP); FWA Number 00001853.

If you have any questions or concerns, please contact us at Researchcompliance@kent.edu or by phone at 330-672-2704 or 330.672.8058.

Thank you

Doug Delahanty | IRB Chair | 330.672.2395 | ddelahan@kent.edu
Tricia Sloan | Administrator | 330.672.2181 | psloan1@kent.edu
Kevin McCreary | Assistant Director | 330.672.8058 | kmcrea1@kent.edu
Paulette Washko | Director | 330.672.2704 | pwashko@kent.edu
IRB Amendment/Change Approval II

RE: IRB # 16-269 entitled “International Tourist Perceptions of Environmental Impact Within Tanzania”

Hello,
The Kent State University Institutional Review Board (IRB) has reviewed and approved your protocol amendment/change request. It is understood that the research is continuing with modifications including to directly recruit participants and to survey tour company guides, owners, and drivers. The modification to this protocol was approved on 9/26/16 for compliance with:

• DHHS regulations for the protection of human subjects (Title 45 part 46), subparts A, B, C, D & E

*If applicable, a copy of the IRB approved consent form is attached to this email. This “stamped” copy is the consent form that you must use for your research participants. It is important for you to also keep an unstamped text copy (i.e., Microsoft Word version) of your consent form for subsequent submissions. Note that if you are conducting an online study the stamped consent form is only for record keeping purposes.

Federal regulations and Kent State University IRB policy requires that research be reviewed as full board (level III) or expedited (level II) at intervals appropriate to the degree of risk, but not less than once per year. Exempt applications do not require annual review.

HHS regulations and Kent State University Institutional Review Board guidelines require that any changes in research methodology, protocol design, or principal investigator have the prior approval of the IRB before implementation and continuation of the protocol. The IRB must also be informed of any adverse events associated with the study. The IRB further requests a final report at the conclusion of the study.

Kent State University has a Federal Wide Assurance on file with the Office for Human Research Protections (OHRP); FWA Number 00001853.

If you have any questions or concerns, please contact us at Researchcompliance@kent.edu or by phone at 330-672-2704 or 330.672.8058.

Thank you

Bethany Holland | Assistant [330.672.2384] bhollan4_stu@kent.edu
Tricia Sloan | Coordinator [330.672.2181] psloan1@kent.edu
Kevin McCreary | Assistant Director [330.672.8058] kmccrea1@kent.edu
Paulette Washko | Director [330.672.2704] pwashko@kent.edu
Doug Delahanty | IRB Chair [330.672.2395] ddelahan@kent.edu
APPENDIX E – TOUR COMPANIES

Another special thanks to these tour companies who assisted in the processes of getting the online survey to various international tourists working with their companies.

<table>
<thead>
<tr>
<th>COMPANY NAME</th>
<th>WEBSITE</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>J.M. Tours</td>
<td><a href="http://www.jmtours.co.tz/">http://www.jmtours.co.tz/</a></td>
<td>Arusha, Tanzania</td>
</tr>
<tr>
<td>Eastland Adventure</td>
<td><a href="http://eastlandadventure.com/">http://eastlandadventure.com/</a></td>
<td>Moshi, Tanzania</td>
</tr>
<tr>
<td>Nyange Adventures</td>
<td><a href="http://www.nyangeadventures.com/">http://www.nyangeadventures.com/</a></td>
<td>Moshi, Tanzania</td>
</tr>
<tr>
<td>Zuri Tours and Safaris</td>
<td><a href="http://www.zurisafaris.com/">http://www.zurisafaris.com/</a></td>
<td>Moshi, Tanzania</td>
</tr>
<tr>
<td>Active Tanzania Adventures</td>
<td><a href="http://www.activetanzania.com/">http://www.activetanzania.com/</a></td>
<td>Arusha, Tanzania</td>
</tr>
</tbody>
</table>