

Accounting for Climate Change: Consumptive vs. ‘non-Consumptive’ Conservation in Namibia

“Here people do not have the luxury of not believing in the science. Climate change is all around us, it is undeniable, and it is threatening our way of life in the immediate...”

Maxi Pia Louis, Director, NACSO

Introduction

Many countries in Africa have a history of resource governance that has been marked by the dual challenge of unsustainable extraction which has simultaneously failed to engender broad-based development. Examples of this are perhaps starkest with large-scale extractive industries relating to resources such as oil, gold, diamonds, and other minerals. However, the same remains true for other types of resources that are extracted on a smaller scale but by a much broader segment of the population. This includes commonly used resources such as freshwater reserves, forests and forest products, but also wildlife and their natural habitat and even the atmosphere and quality of the air we all breathe. Common pool resources such as these have been subject to the tragedy of the commons globally, but in southern Africa this tragedy has often played out more acutely, posing particularly complex challenges. As populations have grown across the region, there has been strain on limited freshwater resources and forests have been decimated in most countries (*Environmental Impact Assessment in Southern Africa*, 2003). Beyond this, Africa’s charismatic megafauna have been under increased pressure and at one-point wildlife populations were in steep decline throughout the entire region (Hulme & Murphree, 2001). This strain on resources has resulted from a mix of growing human populations demanding ever-increasing resources to sustain livelihoods, along with environmental pressures as a changing climate shifts precipitation patterns and continues to heat up this already hot continent.

In order to deal with these challenges Community-Based Natural Resource Management (CBNRM) has developed in order to devolve control of resources from national governments to local communities. The idea being that by empowering residents residing close to resources they will gain responsibility for both costs as well as possible benefits accrued and as a result, manage natural resources more sustainably. While CBNRM consists of a broad set of policies and practices, in its most prolific form it involves the management of Africa’s wildlife populations for the purposes of eco tourism. This form of resource governance consists of three pillars which can be summarized as 1) economic development, 2) environmental conservation, and 3) community empowerment (Child, 2003). CBNRM programs began developing across southern Africa throughout the 1980s and by the 1990s and early 2000s the literature outlined that they were experiencing a relative degree of success. Success took the form of increased jobs, infrastructural investments and

various benefits from the program such as freshwater, meat, infrastructure investments and more (Roe et al., 2009; Snively, 2012). It also consisted of protecting natural landscape and habitat as well as a reduction in poaching – all of which contributed to wildlife populations that were rebounding in a number of countries (Saarinen, 2009). Beyond these benefits, by devolving power to the local level, communities have organized to develop democratic institutional governance capacity. I would argue this pillar is perhaps the most important long term win as this capacity has in many cases extended far beyond wildlife management and has served as virtually the sole provider of services and the only interaction with ‘government’ that many rural Africans will encounter in their lifetimes.

Despite these initial successes in which many deemed CBNRM to be a virtual panacea in certain contexts, the scholarly outlook for the programs began to wane into the 2000s and in more recent years many have questioned the degree to which it creates any benefits for local communities or serves to empower those at the local level at all. Some suggest this is due to local level corruption as big men emerge and engage in power grabs and garner resources for themselves and their family members (Hoole, 2010). Others suggest it is a result of national government devolving full control of responsibilities for managing resources, without devolving full control over them – creating quasi-sovereign units, without the tools traditional afforded to sovereign entities (Boudreaux, 2008). There is yet another school of thought that suggests CBNRM amounts to the newest – albeit indirect – form of neocolonialism in which foreign governments (mainly in the West) provide funding through various international institutions and NGOs in order to ‘contribute’ to CBNRM efforts on the ground (Schnegg, 2016; Schnegg & Kiaka, 2018). However, some argue that what occurs in these efforts is a sort of neoliberal environmentality in which resources and power dynamics lead efforts on the ground in specific ways while having it appear as if full power and decision making remains with communities (Fletcher, 2010).

My research has demonstrated that while all these theories maintain a degree of accuracy, the major limiting factor that has changed the outlook on CBNRM has been climate change. However, climate change has yet to be accounted for in the predominant literature on CBNRM which forms what I see as a substantial gap. Part of the reason that I posit this is, is due to the very nature of the power imbalances alluded to above in which various forms of conservation are framed in specific ways and it is largely the framing of those in the West who maintain advantages in certain forms for power. As a result, more traditional African activities such as trophy hunting are deemed consumptive, while activities favoured by those in the West, such as ecotourism, are considered non-consumptive (Tremblay, 2001). These classifications however, ignore the true costs of each activity while also neglecting who in fact benefits as well as the preferences of the communities who are supposed to be empowered by CBNRM to begin with.

In order to understand these complex social relations and power imbalances, I posit that CBNRM is best understood as a global assemblage.

1 This theoretical approach allows us to move outside traditional western-centric
 2 notions to approach difficult issues with a flat ontology to remove pre
 3 conceived notions of who or what ought to constitute an actor as well as what
 4 sorts of power actors may or may not be able to exercise. This approach sees
 5 CBNRM as a phenomenon that is enabled by actors that are both local and
 6 global, public and private and which is enabled off their very social
 7 interactions, rather than as a simple policy tool as is presented in the
 8 predominant literature.

9 This paper will begin by outlining my methodology based on fieldwork
 10 conducted in Namibia. Next, I will further discuss the global assemblage
 11 approach I posit as the best way for understanding CBNRM as a phenomenon.
 12 I will then discuss some of the various conservation activities and the way
 13 these have become classified as consumptive or non-consumptive use forms of
 14 conservation. Next, I will outline the stark reality of climate change in Namibia
 15 and the way it is severally affecting virtually every aspect of life for Namibians
 16 as well as for the flora and fauna there. Finally, I will offer some concluding
 17 remarks on the way power imbalances lead to certain forms of conservation
 18 winning out over others, while the continued actions of those from wealthier
 19 countries are depoliticized in order to remove them from debate. I argue that in
 20 general, all tourism is consumptive and that all costs as well as benefits ought
 21 to be accounted for in developing policy to ensure it is not the continued
 22 interests of the West that are served while doing so in the name of the Global
 23 South.

24 25 26 **Methodology**

27
28 Methods of observation included an ethnographic approach combining
 29 semi-structured key informant interviews, participant observation and multi-
 30 level policy and documentary analysis. Rather than seek to strictly follow the
 31 methodological limits of any one of these approaches this research was multi-
 32 scalar, making use of some participant observation and blending semi-
 33 structured interviews and informal focus group discussions.

34 My fieldwork was conducted over a two-month trip to Namibia which
 35 yielded 75 semi-structured formal or informal interviews, four informal focus
 36 group discussions, as well as several opportunities for participant observation
 37 in a range of diverse and dynamic settings. I spoke with government officials
 38 from local level officers right up to the Minister of Environment and Tourism,
 39 staff from a variety of domestic and international NGOs, academics,
 40 consultants, tourism companies, tourism company employees and managers,
 41 farmers, a number of rural villagers with diverse livelihoods, as well as
 42 conservancy staff, elected officials, game guards and police. In order to obtain
 43 a high number of carefully selected participants for interviews I used a
 44 snowball approach that built on my initial more formal process of recruitment.
 45 These formal means began prior to travelling to Namibia and included sending
 46 emails and calling a number of relevant contacts I found on the websites of

governments, post-secondary institutions, NGOs, and tourism enterprises. One of the most useful of these websites was the Namibian Association of CBNRM Support Organizations (NACSO) which is an umbrella organization that facilitates cooperation between the assemblage of NGOs and other actors that contribute to CBNRM in Namibia. The NACSO website has a list of all its major partners which are the main players, and this provided me with a useful base of contacts that I built up in the months leading up to departure.

CBNRM as Global Assemblage

Much of the literature on CBNRM has approached it predominantly as an apolitical domestic policy tool for conservation. This ignores a great deal however, and my research has demonstrated that it cannot be fully understood outside of global power relations. CBNRM, like many development initiatives, is highly political and it is highly complex. In various countries it is in fact a policy that is implemented through legislation by national governments, however in practice, it is a broad set of policies and practices that are enabled by a plethora of disparate actors operating both locally and globally while simultaneously within the public and private sectors. First, the legislation for these policies is often drafted with the help of NGOs, international institutions, and consultants and each of these will receive funding from foreign governments. Once implemented, CBNRM projects that result from the policies, are generally enabled through direct support by a network of NGOs on the ground which are both local and international and which have increasingly blurred ties to funding and there is evidence that many are becoming increasingly politicized. As funding streams have narrowed, this has often led to increasingly targeted approaches to development in which rather than seeking to broadly fund a project, funders – and hence the NGOs their funds are channeled through – pick certain projects, groups, communities, and individuals based on the activities they are engaged in. This creates a complex assemblage of actors as various forms of power are created based on the very social interactions of those within these networks.

As a result of all of this I posit that CBNRM cannot be understood outside of global power relations and as such is best understood as a global assemblage. This theoretical approach enables me to unpack the many actors who exercise various forms of power and influence the type of activities that occur and how conservation is done. Assemblage thinking is about moving beyond traditional reifying approaches that seek to uncover certain answers based on traditional understandings of what forms of power exist and what types of actors ought to exercise this power (Abrahamsen, 2016). Assemblage thinking is about developing a flattened ontology in order to engage with issues without pre-determined notions about what CBNRM is, ought to do, who are the main players, and what the major challenges are facing it (Acuto & Curtis, 2014). This allows me to base analysis on updated data in order to determine

benefits of various forms of resource management as well as possible costs associated with them, whether direct or indirect.

Consumptive vs. Non-consumptive Conservation

The question of how best to ‘do’ conservation has a long and robust history of debate. As the global environmental movement gained ground during the 1960s and 70s what has been deemed ‘fortress conservation’ became most prominent in which large areas of natural environments were gated off – either physically or legally – and those residing nearby were restricted from using the land or its resources (Doolittle, 2007). For the most part this took the form of large national parks which are still evident both in Africa and elsewhere today. In the 1980s however, development discourse began to shift and notions of participation and ownership were developed (Hulme & Murphree, 1999). These concepts suggested that local populations should be at the heart of conservation efforts and rather than restricted from the use of certain lands and natural resources they should be engaged in their management in order to do so sustainably while creating livelihoods. Fortress conservation had been succeeding in protecting some areas, but it created ongoing tensions and conflict as local residents often lacked the means for survival and were forced to break laws in order to access resources they needed to provide for their families. National parks are by definition managed by the state and in Africa the relationship between rural communities and central governments are often at best non-existent and at worst conflictual in nature (Bratton & van de Walle, 1997). As a result, rather than trying to enforce restrictive land use laws over distant populations community-based forms of conservation developed in order to download responsibility for protecting resources to the communities. Fletcher (2010) argues that this amounts to a form of neoliberal environmentality in which various forms of power are employed at multiple levels in order to control people and use conservation as a way to socialize them and to extend and exercise forms of power. For those of this or similar schools of thought it is about the state maintaining control at a distance while using more indirect, less coercive measures and demanding less resources (Agrawal, 2005). For others, it is more along the lines of development discourse that sees community-based conservation as an effective way to promote sustainable development while empowering communities (Craig & Mayo, 1995). Regardless of what side of the debate one falls on community-based conservation in general became the new gold standard for sustainable development efforts. At the same time fortress conservation came to be seen as a neo-colonial means of protecting Africa’s natural landscapes for the rest of the world, while African populations remain impoverished.

As various forms of community-based conservation developed across much of the continent throughout the 1980s and 90s, there was a general consensus that communities ought to be empowered to carry out activities that would see them gain livelihoods through the sustainable management of their

1 local natural resources. The next question became how to do so, and perhaps
 2 most importantly who decides what is ‘sustainable’ or not? This question has
 3 led to conservation activities generally being classed in two broad categories:
 4 consumptive use, and non-consumptive use. In order to provide a concrete
 5 outline of these I will briefly outline a specific example of community-based
 6 conservation in Namibia.

7 Namibia is often touted as the most successful example of CBNRM in the
 8 world (Jones & Weaver, 2012; Roe et al., 2009). It has experienced some of the
 9 greatest success in rebounding wildlife populations, while creating a vibrant
 10 eco tourism sector and jobs and other economic benefits continue to be enjoyed
 11 across much of the country as a result of this form of resource management
 12 (Hoole, 2010). Traditionally there are two main types of activities that create
 13 both financial and in-kind benefits for Namibian communities: trophy hunting
 14 and photographic tourism. Up until around 2010 for most conservancies trophy
 15 hunting made up the majority of their income and as a result it was one of the
 16 more popular activities (Naidoo et al., 2016). Over time however, it became
 17 increasingly condemned by many in the West which led to donors targeting
 18 funds away from these activities as well as tourists choosing to spend their
 19 money at lodges in conservancies that focused on what was seen as less
 20 consumptive uses. Tremblay (2001) outlines the way in which trophy hunting
 21 has been deemed in the negative sense a consumptive use form of conservation
 22 as each person’s ‘use’ of individual wildlife species directly decreases the
 23 quantity of that resource. This is an understandable, clear and straightforward
 24 argument that speaks especially to those in the West who generally experience
 25 the beauty of Africa’s charismatic megafauna from their television sets and
 26 condemn the thought of someone shooting these animals for sport. As a result,
 27 this framing of trophy hunting has been gradually gaining ground and NGOs
 28 on the ground are finding their funding increasingly ‘targeted’ to specific
 29 measures in what results in various actors in the West, exercising forms of
 30 power on decision making within African communities.

31 On the other side is photographic tourism, the type of activity most in the
 32 West think of when they think of CBNRM. This involves travelling to remote
 33 locations in order to experience African culture, its landscapes and take
 34 pictures of its majestic wildlife and their pristine habitat. Of course, this is not
 35 consumptive in the same way as trophy hunting, as hundreds of tourists can
 36 take photos of a lion without it being detracted from the resource pool. Mike
 37 Knight, World Wildlife Fund (WWF) Transboundary Leaders: Kaza, however,
 38 outlines that everything is a consumptive use and that carbon footprint,
 39 greenhouse gas (GHG) emissions, water and other resource use, waste left
 40 behind and infrastructure development must all be factored in when analysing
 41 various forms of conservation (Interview 7). As I have argued elsewhere
 42 (2019), tourism is an industry with a large footprint – both carbon and
 43 otherwise. In factoring this footprint in, even the most eco-friendly version of
 44 tourism that sees people travel from the Global North to southern Africa, this
 45 ‘non-consumptive’ use form of conservation begins to appear quite
 46 consumptive in its own ways. The effects of this form of consumptive use are

wreaking particular havoc on the fragile landscapes of Namibia and southern African countries as the next section will briefly outline.

Facing an Existential Threat

The language of climate change has become a part of our daily lexicon and it is something that factors into almost every academic conference, policy strategy or NGO platform and is constantly on the global agenda. Despite this, when climate change is studied as a sort of abstract issue it is difficult to grasp the effects it is having on the people's lives and livelihoods who must contend with it daily. To be sure, much of the developed world has long been dealing with the impacts of climate change through floods, wildfires, heat waves, and ever-more powerful storms. However, these are often acute crises that are indeed destructive but something that people often eventually move beyond both physically, by rebuilding, and psychologically, by chalking it up to an act of God. For Namibians, climate change has become a chronic challenge that is slowly changing the very nature of its landscape and threatening its people's way of life. This is primarily for two reasons. First, Namibia's climate is changing faster and more drastically than most countries leading to hotter temperatures and ever-less precipitation in what was already a largely desert country (Coldrey & Turpie, 2020). Second, as with much of the rest of the African continent over 60% of Namibians rely on the land to some degree for their livelihoods, and thus shifts in the climate don't simply cause acute disasters but chronically limit their ability to feed themselves or to obtain sufficient freshwater (Snively, 2012).

In Namibia discussions of climate change quickly lose their abstract nature and become not only a part of almost every conversation but also imbricated in most people's every action. The country has been experiencing a severe drought for the better part of a decade and this is widely visible across its landscapes. While droughts are part of the normal hydrological cycle, dozens of respondents reported that both their severity and frequency have been increasing in recent decades. These interviews are shored up by stark scientific data that demonstrate how the current drought is beginning to pose existential challenges to some of the regions of the country hardest hit as well as to populations that are already least well off (Coldrey & Turpie, 2020).

The Namibian landscape is generally a mix of savanna and semi arid desert with some areas being fully desert (FAO, n.d.). One of the capital, Windhoek's, main source of water stems from the Awis dam and reservoir a few kilometres outside of town. There are pictures of it several years ago with water many metres deep that formed a lake one could jump into from a tower to go swimming. For the past several years however, it has been completely empty and now rather than swim, one can hike through the middle of what was a sizeable lake and is now bone-dry sand and clay. Throughout the city there are billboards communicating the importance of conserving water and there are similarly signs in almost every restaurant, restroom, guesthouse or hotel

pleading for the conservation of water. 2020 saw one of the driest rainy seasons and most of it saw scarcely a few short showers that would barely wet the ground as the scorching hot sun often evaporates any moisture before it falls to the earth.

Namibia is one of the driest countries in Africa outside the Sahara Desert and has one of the oldest deserts on earth (CIA World Factbook, 2020). One of the places that presents the starkest example of the drought is at one of the country's UNESCO World Heritage Sites which is the 'White Lady' Paintings at Brandberg mountain in the Kunene region. These paintings are estimated to be 5,000 years old and their interest have seen a small village develop nearby for guides to live at to take tourists up to the paintings. This area however, has not received any rain in over 4 years which is severally affecting the ability of this village to survive as they dig deeper and deeper boreholes which continuously produce less water. Furthermore, the water is increasingly salinized despite it being about 100km from the coast as the salt seeps into the ground water once bore holes go deep enough (Interview 1).

Nearby is the Brandberg White Lady Lodge, one of the country's most well-known tourist lodges. It is a beautiful lodge nestled at the bottom of the Brandberg Mountain where two of the major rivers meet. This works wonderfully for tourism as both the lodge and the campsites overlook this area and during the dry season when water runs out elsewhere elephants, giraffes, Oryx, Kudu, and other wildlife can usually be seen where these two rivers join for the pleasure of tourists and the benefit of the locals (Interview 2). However, due to the drought these two rivers which are normally sizeable are often bone dry and the tourism operators are often unsure where the local elephant population are as they do not know where there are any sources of water available nearby for the wildlife. This has become a major part of the ongoing struggle in Namibia as riverbeds are key to life there. It is where communities can get much of their water, where wildlife spend much of their time, where farmers water their livestock, as well as an important – and at times treacherous – part of transportation in the country.

Outside of the major cities there has not been sufficient investments to build bridges and as a result, roads tend to go right through riverbeds. When rivers are flowing people generally assess their depth and the strength of the flow of water and likely drive through them with their 4x4 vehicles. These rivers normally pose one of the major challenges to transportation in the country and one of the major dangers especially to tourists who are less familiar with their strength and depth. However, recent years have increasingly seen dry riverbeds, and while this has facilitated land travel for those who can afford vehicles, it is compounding a number of issues for the remaining majority. Rivers are treated like gold in Namibia and this was made clear when the Chairperson of Sorris Sorris Conservancy proclaimed "if river floods, we are rich" at an event unveiling a new solar plant at the Sorris Sorris Lodge. At this same event one of the area's traditional authorities addressing the crowd half-joked that "the area we are in used to be semi-desert, semi-arid. Now it is

1 desert-desert or arid-arid” (Interview 3). This has become less of a joke and
2 more an uncomfortable reality.

3 The chairperson of Uisbasen/Twyfelfontein Conservancy reported that his
4 conservancy has been particularly hard hit and that the “grass there has no
5 energy left in it so the livestock struggle” (Interview 4). In the neighbouring
6 Conservancy of Sorris Sorris the Conservancy manager, David says they have
7 lost 48,000 livestock due to the drought. This is further corroborated by a
8 World Bank report that reports similar numbers (*Overview*, n.d.). He says that
9 they know Namibia is being particularly hard hit by climate change and within
10 Namibia it is the Kunene region that is experiencing the worst of the effects
11 (Interview 5). In similarly asking many rural farmers what the greatest
12 challenges were to the CBNRM program many agreed with one farmer who
13 responded “the main issue is drought so cattle die or lions bite cows and they
14 die. There is a compensation program set up for this, but the government
15 doesn’t give the conservancies enough to dole out, so people are left
16 uncompensated” (Interview 6).

17 The threat climate change is posing to the CBNRM program became clear
18 enough that a report was commissioned by actors to outline the challenges
19 facing the conservancy program as well as provide recommendations for
20 moving forward sustainably. WWF-Norway partnered with other WWF offices
21 including Namibia’s to produce research that would help communal
22 conservancies in Namibia adapt to and mitigate the harmful effects of climate
23 change. The report’s findings suggest that conservancies are experiencing
24 higher population growth rates than the rest of the country and high demands
25 mixed with increasingly fragile environments are compounding an already
26 difficult situation. Satellite data has shown that large parts of the northwest
27 region of Namibia – largely the most CBNRM intensive – have shown that
28 especially within conservancy boundaries there has been considerable declines
29 in the productivity of land over the past 17 years. Of the various types of land
30 use however, wildlife designated zones tend to be actually increasing in
31 productivity. This is leading to worries as “there is also increasing concerns
32 that wildlife areas are being reduced through fencing off land for agriculture as
33 well as through invasion by cattle” (Coldrey & Turpie, 2020, p. vi).
34 Furthermore, 200 ha of forest coverage has been lost on average per year since
35 2001 across northern Namibian conservancies. Core wildlife zones of
36 conservancies have seen 556 ha of forest lost and 2209 ha from multiple use
37 zones between 2001 and 2018.

38 While it is difficult to isolate exact causes of both land degradation and
39 loss in forest cover it is clear that it is in part due to human population
40 pressures/activities and changes in the climate. The report by Anchor
41 Environmental uses forecasting tools based on historical averages and has
42 forecasted total precipitation across Namibia to decrease by nearly 9% for the
43 period between 2040-2060 relative to historical (1960-1990) precipitation. This
44 amounts to expected rainfall decreases of 20% in the dry season and 8% in the
45 rainy season. While these patterns are not uniform across the country, mean
46 annual temperature is expected to increase by 3°C (15%) – well in excess of

the IPCC goals of 1.5°C or even the fallback target of 2°C (Coldrey & Turpie, 2020, p. vi). These increases in temperature and decreases in rainfall are expected in an already extremely hot and dry place where its people rely heavily on their local environments for livelihoods and subsistence.

Power Asymmetries and framing

Conservation in general, and particularly in the context of development, is highly political. There is hard science that says we need to conserve now in order to protect our natural environments for the future, but there remains a great deal of debate about how this ought best to be accomplished. While at one time the consensus favoured fortress conservation, it eventually shifted to community-based activities that saw local populations integrate resource management into sustainable livelihoods (Galvin et al., 2018). As various community-based approaches have proliferated the question eventually became ‘in what ways ought communities to be limited in their approaches?’ This question led to classifications of consumptive vs. non-consumptive use activities and this was a specific type of framing that was intended to depoliticize the issue in order to remove it from debate. Thus, a new consensus developed in the literature that was clear that when attempting to enact ‘conservation’ something ‘consumptive’ must surely be undesirable and counter productive (Tremblay, 2001). For some, this framing makes sense and is correct (Richardson, 1998). For with consumptive use forms of management such a trophy hunting, each animal shot limits the ability of others to travel to southern Africa to enjoy that animal’s beauty. As the academe remains largely western-centric in its theories, institutions and its scholars, this framing largely dominates the literature and a focus has been placed on photographic tourism while trophy hunting has been increasingly squeezed out over time (Koot, 2019).

As discussed in the introduction CBNRM success has begun to wane over the past decade and this framing has created a number of scapegoats. Trophy hunting remains one of the leading causes pointed to, which is also often associated with poaching, despite these being two very different activities. Trophy hunting has been demonstrated to be able to take place sustainably through limited quotas based on scientific research of wildlife populations (Naidoo et al., 2016). This is similar to the type of sport hunting that is prolific throughout the West with deer, moose, bear and other large animals. Most in the West have no problem with the sport hunting of these animals in their backyard but condemn the same activity with animals thousands of kilometres away that they will never see. This framing ignores African history, culture as well as the real and present challenges with living with these often very dangerous and destructive animals. Furthermore, as mentioned trophy hunting is often associated with poaching despite the fact that poaching remains illegal and increasing efforts have gained marked success in recent years to eliminate poaching entirely in some conservancies in Namibia (Lubilo & Hebinck,

2019). Estimates vary but most studies suggest only 1-2 percent of key wildlife populations are killed by poaching every year in Namibia which does not pose great threat to most species. Nonetheless, some frame the recent declines in CBNRM success as a result of continued poaching and over-hunting of wildlife populations which simply is not the case.

This framing is enacted partly out of intellectual laziness, as poaching was and has been a problem in many cases so many continue to assume it remains so. It is also used as a scape goat, to ensure there is some reason to point to, without placing any blame on those in the West who appear to remain utterly altruistic in their goals and seek only to ‘take pictures and leave nothing but footprints.’ While it is quite likely the case that the majority of wealthy tourists that travel to southern Africa to take part in photographic tourism would likely consider themselves environmentalists and likely mean no harm to the wildlife or their habitat, the fact remains that they may be taking nothing but pictures, but what they are leaving is a heavy carbon footprint, increased resource pressures, and forever changed natural environments as will be explored further in the next section.

Ecotourism is Consumptive Tourism

Since the early 1990s which saw the end of the Cold War, tourism in general, and ecotourism in particular have exploded as global industries. The United Nations World Tourism Organization (UNWTO) reports that 1.5 billion international tourist arrivals were recorded in 2019. This marked a 4 percent increase from 2018 and the same growth was predicted for 2020 and 2021 prior to the COVID-19 global pandemic that has rocked the industry. Pandemic aside, the UNWTO confirmed “tourism as a leading and resilient economic sector, especially in view of current uncertainties” (UNWTO, 2020). The UNWTO’s first comprehensive report on global tourism numbers and trends, the World Tourism Barometer, confirmed that 2019 marked the tenth consecutive year of growth, a year in which all regions saw a rise in international arrivals. UNWTO Secretary-General Zurab Pololikashvili has stated that “in these times of uncertainty and volatility, tourism remains a reliable economic sector.” Despite uncertain global economic perspectives, various geopolitical uncertainty, trade tensions and social unrest he affirmed the tourism “sector keeps outpacing the world economy and calling upon us to not only grow but to grow better” (UNWTO, 2020). Growing better is key as the strength of tourism has often had it placed at the centre of development plans and with 2020 kicking off the decade of action to achieve the sustainable development goals by 2030, the time for better is now. This is the same deadline that the Intergovernmental Panel of Climate Change (IPCC) gave in 2018 when issuing a grave warning that the global community had a window of twelve years in which to cut carbon dioxide emissions by 45 percent in order to prevent the rise in global temperature from exceeding the 1.5 degrees Celsius agreed to in the Paris Declaration (IPCC, 2018). The question is can

1 tourism as a form of development help achieve the sustainable development
 2 goals, while also allowing the world to achieve what are becoming existential
 3 climate goals?

4 One of the main issues stems from all aspects of sustainability not being
 5 factored into various development activities. There is a rich body of literature
 6 that outlines the positive impacts tourism, and specifically ecotourism can have
 7 for achieving sustainable development goals (Richardson, 1998; Saarinen,
 8 2009). It is suggested by many from this camp that “ecotourism is promoted by
 9 governments of the North and South, international lending institutions, and
 10 private business, as an ideal development strategy that combines economic
 11 growth with environmental conservation” (Duffy, 2005, p. 96). Most of this is
 12 true. Tourism can and has provided much in the way of economic development
 13 for a variety of developing countries around the world. Furthermore, CBNRM
 14 provides opportunities to empower local communities in order for them to
 15 realize development as well as ownership which is a key aspect of sustainable
 16 development. However, for development to be sustainable, it must also be
 17 ecologically viable over the long term. In this ecotourism can become a quite
 18 complex phenomenon that requires careful analysis to understand the many
 19 costs associated with it as well as the benefits. CBNRM in Namibia has
 20 contributed in many ways to ecological conservation goals specifically with
 21 regard to the protection of wildlife and their habitat. Incomes derived from the
 22 various programs are reinvested in various conservation activities that would
 23 otherwise be impossible in this sparsely populated country with limited
 24 resources. These are the many benefits often pointed to which has seen
 25 proponents widely argue that ecotourism activities are sustainable and
 26 synergistic with ecological goals. However, environmental sustainability is a
 27 complex issue with many moving parts which is also why the world has largely
 28 failed to act effectively to this point in mitigating environmental degradation
 29 and global climate change.

30 Generally, action has been more effective when it comes to tangible efforts
 31 such as cleaning up waste, improving water and soil qualities and protecting
 32 certain species. Where we have been less successful has been in less tangible
 33 environmental issues such as the reduction of greenhouse gas (GHG)
 34 emissions. This is because it is hard for people to link driving their car or
 35 turning on a light to dangerous changes in the climate that they may or may not
 36 see. As GHGs travel easily cross borders and even continents it is also difficult
 37 to pinpoint who is at fault and simultaneously many are unwilling to sacrifice
 38 when others continue pollute. It is for this reason that the effects of
 39 ‘eco’tourism on climate change are so conveniently often left out of analyses.
 40 However, even the most eco friendly excursions that take place across southern
 41 Africa tend to be GHG and resource intensive. Tourists arrive almost solely
 42 from the Global North, contributing a great deal in the way of aviation GHGs.
 43 Once there, they almost always rent a large 4x4 vehicle or have one hired with
 44 a driver and spend a great deal of time driving high powered diesel trucks
 45 through the African wilderness in search of various ecological wonders.
 46 Tourists stay in hotels or fancy lodges, and research has widely shown that

1 people use more water and power, eat more, drink more and generally live in
2 excess when on vacation.

3 All of this occurs in the often fragile environments of southern Africa
4 where freshwater resources are limited, luxury food, drinks and other items
5 must be transported a great distance and these regions are often not equipped
6 with high levels of processing capacities to dispose of waste in a sustainable
7 fashion. In short wealthy tourists from the Global North, visit remote
8 destinations in the African savannah in order to live even more extravagant
9 lifestyles than the already consumptive ones they do on a normal basis.
10 Tourists travel to enjoy the ecological beauty of these distant, exiting and
11 exotic places and in enjoying nature, the term ecotourism has developed largely
12 as a way to depoliticize some of the more harmful known aspects of traditional
13 tourism. Due to the remote nature of most ecotourism and the increased need
14 for travel, larger vehicles, and lack of key infrastructure, ecotourism is likely
15 even more harmful and consumptive than traditional tourism. Moreover,
16 ecotourism which is developed largely through western cultural values and
17 norms becomes far more consumptive than trophy hunting in relation to GHGs
18 and contributing to global climate change. As discussed in a previous section,
19 climate change is presenting an existential threat to Namibia, as well as many
20 of its southern African neighbours, and as a result framing ecotourism as non-
21 consumptive ignores a great deal.

22 23 24 **Conclusions**

25
26 CBNRM and other forms of community-based conservation are both
27 highly political and cannot be understood outside of global power relations.
28 There are a plethora of actors at the local, national and global level that either
29 directly or indirectly exercise various forms of power based on the very social
30 interactions with other actors. The actors involved must be understood and
31 their relative power vis a vis others as well as their motives analyzed in order
32 to unpack often complex political debates that are otherwise depoliticized
33 through the framing of issues. This is not to say that there are always actors
34 'out there' with negative or disingenuous motives who are seeking to gain
35 benefits at the expense of others. Rather it is to suggest that often power
36 imbalances that are inherent in complex global assemblages will create results
37 that seem almost natural or evidence-based, but which might have more murky
38 geneeses.

39 This paper has discussed trophy hunting vs. photographic tourism in
40 relation to CBNRM in Namibia in order to outline an example of the ways
41 these power imbalances can play out and effects framing has on complex
42 issues. It has not been to argue that trophy hunting ought to be a more desirable
43 conservation activity than traditional ecotourism or vice versa. Its purpose is to
44 argue that climate change is the greatest challenge facing CBNRM programs
45 and that this has largely been omitted from the literature due to this type of
46 framing and to the depoliticization of activities seen favourable in the West and

the demonization of activities that may in fact be more favourable, profitable, and in some cases more sustainable that are preferred by some in the Global South.

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- 5

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