

**Following Elephants: Assembling Nature Knowledge,
Values and Conservation Spaces in Namibia's Zambezi
Region**

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Abstract

This thesis aims to explore the production of nature knowledges and values in the context of Namibian Community-Based Natural Resource Management (CBNRM). In that respect, it is a response to calls for in-depth research into the lived experience of CBNRM, and this study attends to those situated knowledges and values crucial to the programme's success. It does so by adopting a case study approach in Kwandu Conservancy, in Namibia's Zambezi Region. The conceptual approach embraces the collaborative potential between political ecology studies that have critiqued dominant constructions of (neoliberal) natures, and posthuman approaches adopting a more expansive view of socio-natures. As part of a 'more than-human ethnography', this involves 'following' African elephants (*Loxodonta africana*) in order to trace their relational connections with other (non)humans as they assemble space. Through these affective interactions relational knowledges and values are produced. These nature-culture ontologies do not inhere in elephants or other 'things', but are processual and formed in open-ended encounters between (non)humans. Relational interactions between humans, elephants and other lively things (de)territorialise topographical space and (de)stabilise neoliberal governmentalities. The study therefore emphasises the role of agentic nonhumans in (re)assembling CBNRM spaces that are contingent and fractious, offering hope to political ecologists seeking to challenge capitalist nature-culture framings. Relatedly, the fluid, multiple, and provisional socio-natures assembled also necessitate a re-thinking of conservation policy and practice. As such, the study recommends CBNRM practitioners embrace this generative ontology, nurturing the open-ended relational values that humans and nonhumans produce together in order to assemble more equitable and ecologically healthy socio-natural futures.

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Acronyms

AEC	African Elephant Coalition
CANU	Caprivi African National Union
CBNRM	Community-Based Natural Resource Management
CDSS	Conservancy Development Support Services
CGG	Community Game Guard
CITES	Convention on the International Trade in Endangered Species of Wild Fauna and Flora
DTA	Democratic Turnhalle Alliance
GPTF	Game Products Trust Fund
GRN	Government of the Republic of Namibia
HEC	Human-Elephant Conflict
HWC	Human-Wildlife Conflict
HWSRS	Human-Wildlife Self Reliance Scheme
IFAW	International Fund for Animal Welfare
IIED	International Institute for Environment and Development
IRDNC	Integrated Rural Development and Nature Conservation
IUCN	The World Conservation Union
JTHS	Jamy Traut Hunting Safaris
KaZa	Kavango-Zambezi Transfrontier Conservation Area
KEF	Kenya Elephant Forum
MCA-N	Millennium Challenge Account-Namibia
MET	Namibian Ministry of Environment and Tourism
MIKE	CITES ‘Monitoring the Illegal Killing of Elephants’ Programme

NACSO	Namibian Association of CBNRM Support Organisations
NWT	Namibia Wildlife Trust
NAPHA	Namibia Professional Hunting Association
NGO	Non-Governmental Organisation
PLCA	Protected Landscape Conservation Area
SADF	South African Defence Force
SOP	Standard Operating Procedure
SWAPO	South West Africa People's Organisation
TA	Traditional Authority
UNEP	United Nations Environment Programme
USAID	United States Agency for International Development
USFWS	United States Fish and Wildlife Service
WWF	World Wide Fund for Nature

Chapter 1: Introduction

The aim of this thesis is to explore the production and transformation of nature knowledges and values in conservation spaces. It does so by following African elephants as they assemble alongside other (non)humans in Namibian conservancies and beyond. In that sense, the following section introduces Namibia's Community-Based Natural Resource Management (CBNRM) programme, in order to provide the research context. It also discusses the elephant and its importance to the CBNRM programme. The chapter then moves on to outline the study's aims and objectives, before contextualising the specific research questions. The chapter concludes with a roadmap of the thesis structure.

1.1 Research Context: Namibia, CBNRM and Elephants

1.1.1 CBNRM

Community-Based Natural Resource Management (CBNRM) is based on the understanding that appropriate incentives to use natural resources sustainably can be developed if they have sufficient value to local people, allowing for their rights of use, benefit and management. The term 'CBNRM' is used somewhat as a 'catch-all' for decentralised management approaches across southern Africa, whereas similar initiatives in other parts of Africa or on other continents use different terms.¹ However, all share certain characteristics, including: a commitment to involving community members and local institutions in the management and conservation of natural resources; an interest in devolving power and authority from central/state government to local institutions and peoples; a desire to link and reconcile the objectives of socioeconomic development and environmental conservation; and a belief in the desirability of including local knowledge and values in resource management (Kellert *et al.* 2000).

¹ Different expressions of CBNRM include: community forestry; community wildlife management; co-management; communal area management for indigenous resources; community outreach; and extractive reserves

In Africa, the roll-out of CBNRM from the 1980s was symptomatic of a shift in global policy from ‘fortress conservation’ approaches towards ‘sustainable utilisation’ (Brockington 2002). With their promise of combined conservation and poverty alleviation, these programmes held much appeal to western international donors committed to sustainable development. However, in southern Africa specifically, CBNRM was also a response to the end of colonial political structures. In countries like Namibia, then, these democratic transitions created momentum for conservation and development policies that addressed historical inequities in access to land and resources (Hoon 2014).

1.1.2 CBNRM in Namibia

Today’s extensive CBNRM programme in Namibia can be traced back to the early 1980s, almost a decade before the country gained independence from South Africa. Witnessing rampant poaching of elephant and rhino in the Kaokoveld², a group of concerned conservationists formed the Namibia Wildlife Trust (NWT) in 1982. The Trust’s objectives were to assist government in controlling illegal hunting, create awareness of the need for conservation amongst communities, and to train local individuals in conservation monitoring and enforcement (Owen-Smith 2002). To that end, having directed NWT’s field operations in the area, Garth Owen-Smith worked alongside government officials and traditional leaders in order to secure the appointment of the region’s first six Community Game Guards (CGGs). These well-respected men were chosen by the traditional leaders, and were charged with monitoring wildlife, conducting anti-poaching patrols, and carrying out conservation extension work within their communities in return for food rations³ (IRDNC 2015).

The project proved successful in helping to recover wildlife numbers in the region, and over eighty people were convicted of illegal hunting between 1982 and 1987. More

² Kaokoveld (also informally known as Kaokoland) was an administrative unit established during the apartheid era, in the rugged and mountainous north-west corner of South West Africa. Since Namibia’s independence the political unit of administration has been Kunene Region, one of the least populated areas of the country and home to the Himba ethnic group.

³ Funds used to buy this food were provided by the Endangered Wildlife Trust (EWT), based in Johannesburg, South Africa.

importantly, this community-led approach defied the political climate of the time, and the active participation of local people in conservation activities began to nurture a vision of wildlife as a valuable cultural, social, and economic resource (IRDNC 2015). In 1990 the project was renamed Integrated Rural Development and Nature Conservation (IRDNC) - an NGO that was later registered as a Trust - incorporating the former Namibia Wildlife Trust and other NGOs involved in the programme (Owen-Smith 2002). Shortly thereafter, and at the request of traditional leaders, IRDNC began a similar programme in Caprivi Region⁴ (now named 'Zambezi' Region) in the north-east, with similar success (IUCN *et al.* 2015; IRDNC 2015).

Soon after Independence, then, the Ministry of Environment and Tourism (MET) introduced policy aimed at 'redress[ing] past discriminatory policies and practices' that had endowed commercial farmers with substantial rights over wildlife, but had ignored black Namibians living on communal land⁵ (MET 1995: 1). As such, the Namibian government enacted the *Nature Conservation Amendment Act* the following year, providing for the granting of wildlife use rights to communal land residents that formed a management unit called a 'conservancy'.⁶ These rights include the 'consumptive and non-consumptive use and sustainable management of game [...] in order to enable the members to derive benefits' (GRN 1996: 24A, (4)).

Indeed, this legislation confirms Namibia's commitment to utilising its diverse natural resources in order to generate growth. The country's constitution emphasises the importance of maintaining biological diversity and 'utilising living natural resources on a sustainable basis for the benefit of all Namibians, both present and future' (GRN 1990). In its most recent 'National Biodiversity Strategy and Action Plan', MET states the sustainable use of Namibia's biodiversity shall be a 'key driver of poverty alleviation and equitable economic growth, particularly in rural areas' (MET 2014: 23). As a means of capitalising on the country's charismatic wildlife through tourism and hunting, then,

⁴ Namibia's Caprivi Region was controversially re-named 'Zambezi Region' in August 2013 in an attempt to eliminate the names of former colonial administrators from Namibia's maps. Hereafter, this thesis will use the latter term when referring to the region.

⁵ 'Communal land' refers to those areas set aside as 'homelands' for black Namibians under the South African colonial regime. This land is now vested in the state, held in trust for the benefit of the traditional communities residing in these areas (GRN 2002).

⁶ Provided that the community applying has selected a representative management committee, adopted a legal constitution, and defined its boundaries, amongst other conditions (GRN 1996).

CBNRM is made explicit as a rural development strategy in the country's long-term development framework - 'Vision 2030' (GRN 2004). At the same time, conservancies are deemed crucial to connecting fragmented habitat between protected areas for species such as elephants (MET 2012).

In this context, and combined with extensive donor support totaling over US\$50 million since 1990 (Humavindu and Stage 2015a), the programme's growth to date is perhaps unsurprising. Communities have seized the opportunity to gain rights over natural resources, and there are now 82 communal conservancies gazetted in Namibia (Figure 1.1), covering nearly 20% of the country's total land area (NACSO 2015a). Broadly speaking, the programme is recognised as having contributed to a strong recovery in wildlife numbers (Naidoo *et al.* 2016), and is generally held up as a case of CBNRM 'best practice' (IUCN *et al.* 2015). On a national scale, economic returns have been impressive, too. By the end of 2013, conservancies had generated a total income over US\$6 million since the beginning of the programme (IRDNC 2015). The next section introduces a species integral to both Namibia's CBNRM programme and this study - the African elephant.

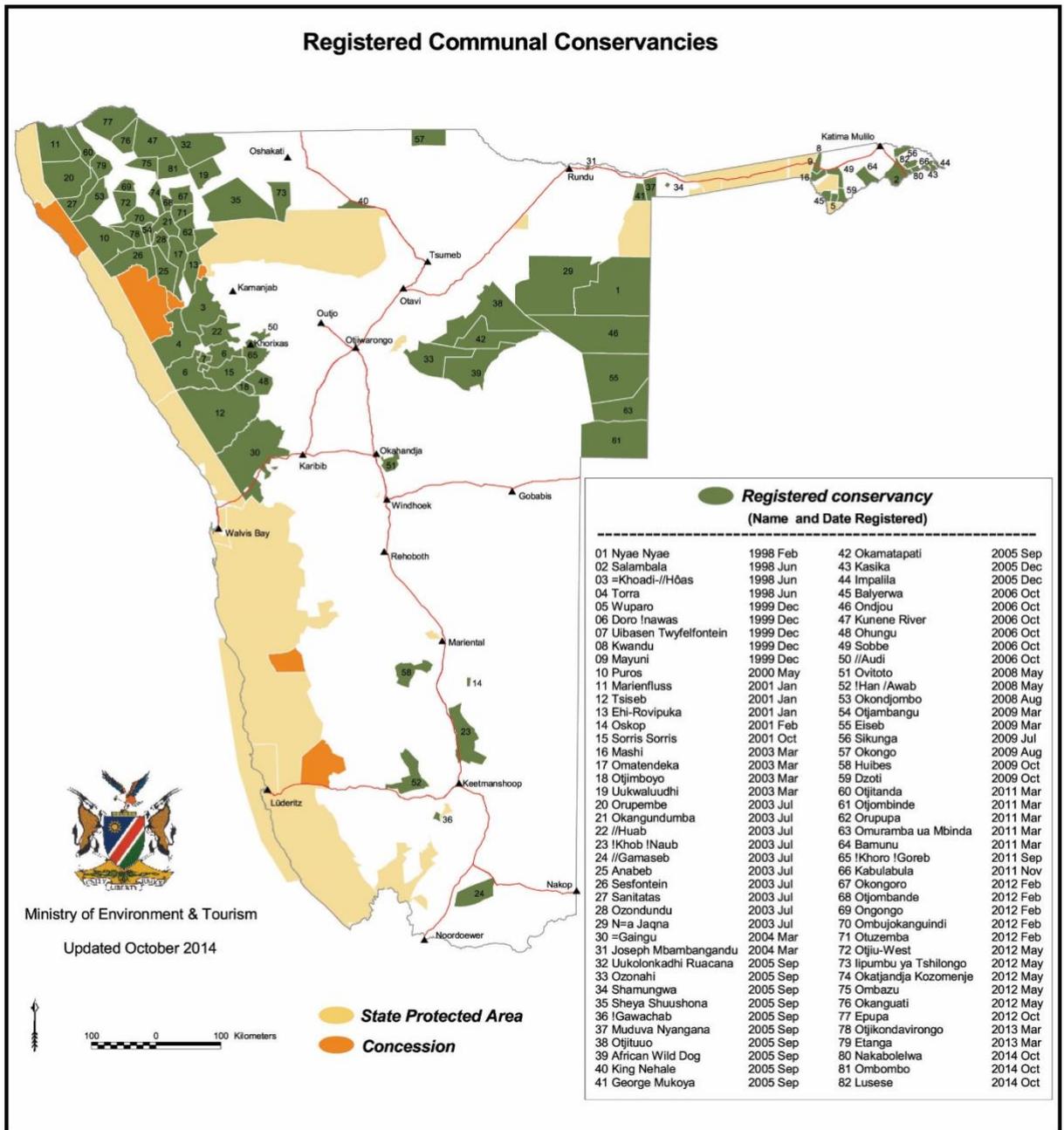


Figure 1.1: Map of State Protected Areas and Communal Conservancies in Namibia
(www.nacso.org.na)

1.1.3 Elephants

The African elephant (*Loxodonta*)⁷ is arguably the world's most charismatic mega-herbivore. The genus consists of two species - the savanna (or 'bush') elephant (*Loxodonta africana*), which is the world's largest terrestrial mammal, and the smaller forest elephant (*Loxodonta cyclotis*). A highly intelligent animal, the elephant holds significant cultural value in many societies around the globe. It is also a species of considerable ecological importance, shaping landscapes in its megafaunal movements. Due to its environmental significance and iconic appeal, the elephant is of significant economic value in terms of conservation funding and (non-)consumptive tourism revenue.

But the animal faces numerous threats including habitat loss, human-wildlife conflict, and poaching for its ivory. Having recovered somewhat from rampant poaching in the 1970s, the past decade has seen upwards of 20,000 elephants killed illegally in Africa each year (for a detailed discussion see chapter 5) (CITES 2014a). As such, the World Conservation Union (IUCN) lists the species as 'vulnerable' on its 'Red List' of threatened species.

It is thought over 20 million elephants lived in Africa before European colonisation, and 1 million as recently as the 1970s (Chase *et al.* 2016). However, based on aerial and ground surveys from multiple sources and range states⁸, the current population of elephants is estimated at around 434,000 (IUCN 2013), although many experts believe it could be as low as 250,000 (Brandford 2014) (Figure 1.2).⁹ The vast majority of elephants are found in southern Africa, believed to contain around 300,000 animals, and equating to over 60% of Africa's total elephant population (Figure 1.3) (CITES 2016a).

⁷ *Loxodonta* belongs to the taxonomic family *elephantidae*, the only family in the Order *proboscidea* (mammals with trunks), which is one of three Orders in the Superorder *subungulata* (elephants, dugongs and hyraxes) (MET 2007: 2)

⁸ There are currently 37 African elephant range states with a known and possible elephant range of over 3.3 million square km (CITES 2016a: 11)

⁹ Estimating elephant numbers is problematic - especially at a continental scale - and IUCN (2013) reports a reduction in the overall reliability of data on elephant populations.

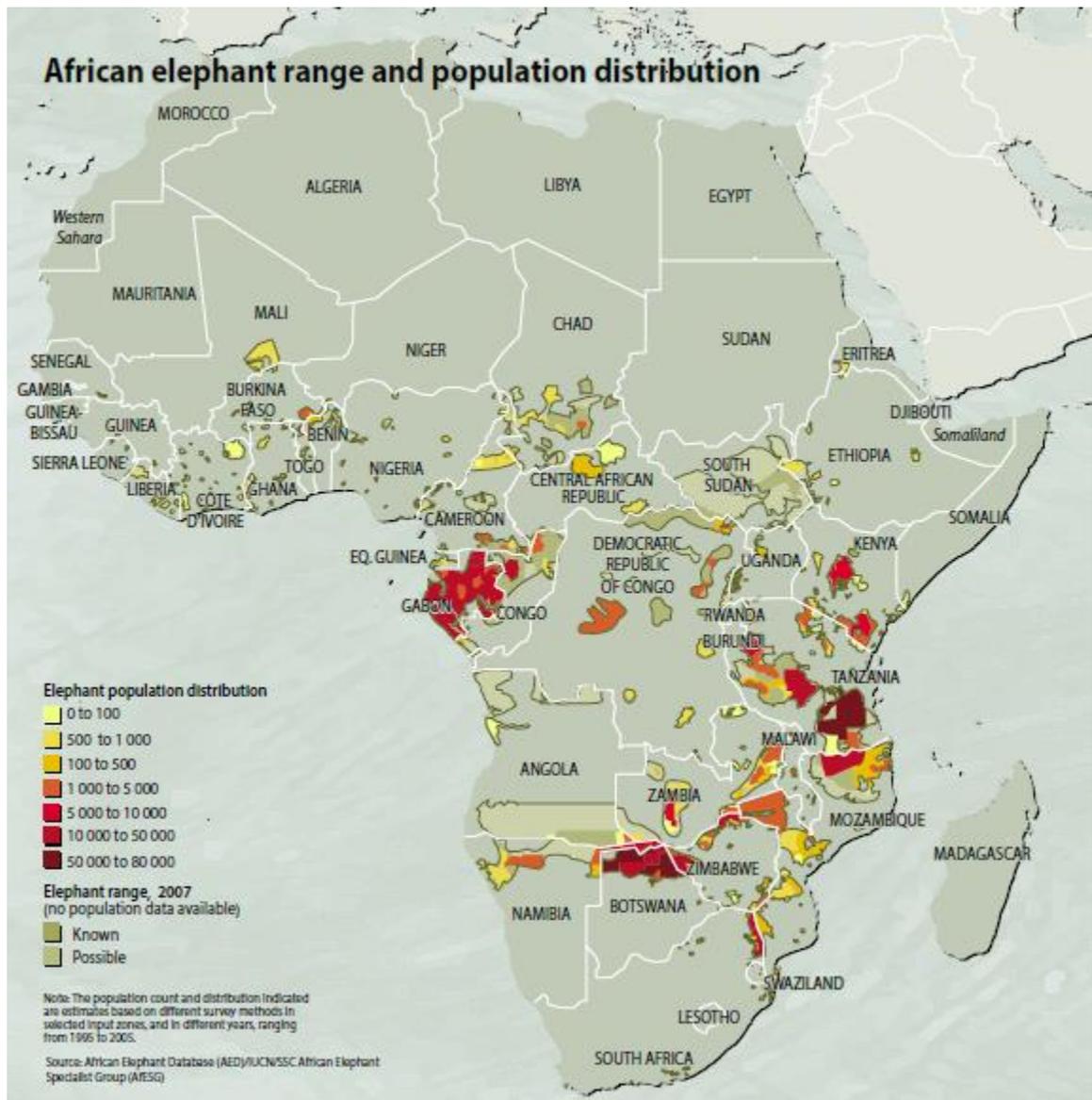


Figure 1.2: African elephant range and population distribution (UNEP *et al.* 2013: 19)

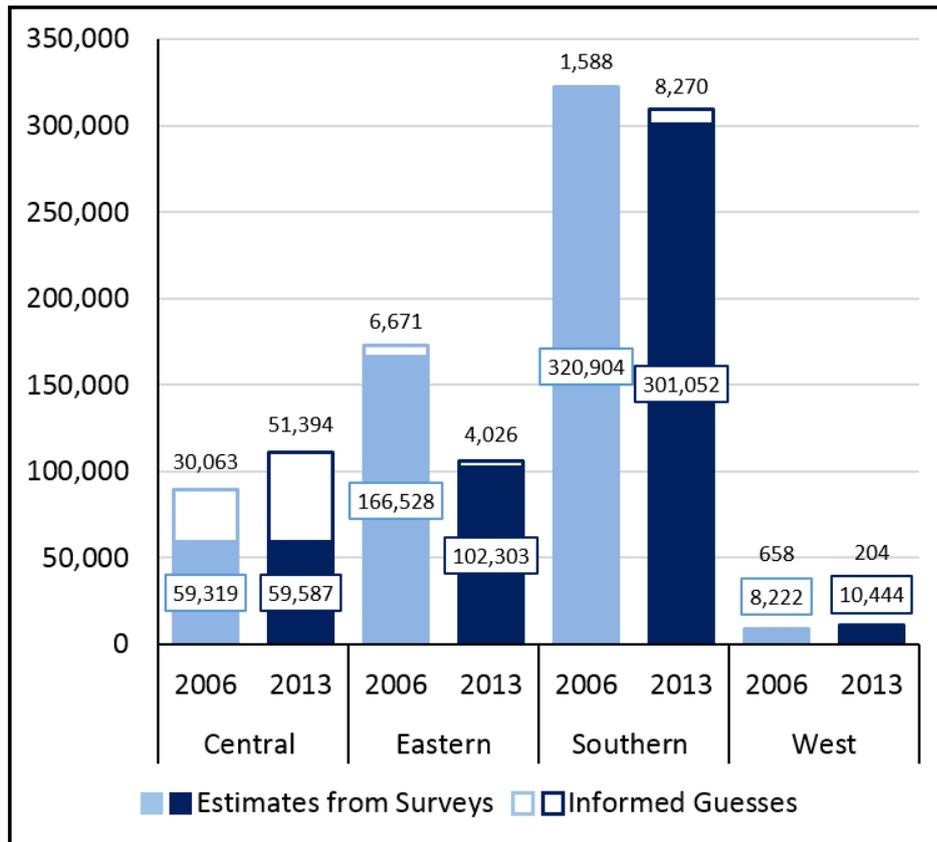


Figure 1.3: Sub-regional summary of elephant numbers in Africa (CITES 2016a: 13)

In Namibia, elephant populations had declined rapidly around the turn of the 20th Century due to extensive hunting for ivory, limiting the animals to the Kaokoveld and north-east Caprivi Strip by 1934 (Martin 2005). These local populations also deteriorated between 1960 and 1989 when the South African Defence Force (SADF) were active in northern Namibia. It is understood Apartheid South Africa funded its military campaigns in Namibia, Angola and Mozambique largely through ivory poaching and trafficking (Duffy 2014; Douglas and Alie 2014).

There is consensus that elephant numbers have increased since the end of the Independence War, continuing to grow with the inception of the CBNRM programme (MET 2007; CITES 2016d). From around 7,500 in 1995, Namibia’s elephant population is now believed to be over 20,000 (Figure 1.4 and Table 1.1) (NACSO 2015a). Being migratory nomadic, they typically have distinct dry season ranges and a much larger wet season dispersal range, estimated at over 1,000 square km (CITES 2016d). As such, the

animals occur across the entire north of the country, consisting of two main sub-populations in the north-west and north-east (Figure 1.5) (MET 2007).

The north-east population (in Kavango and Zambezi Regions) is said to support approximately 10-15,000 elephants, many of which are moving into and through the area from neighbouring Botswana (MET 2007; KaZa Secretariat 2011). The Namibian government acknowledges the management challenges posed by this dispersal, and with MET permission elephants can be hunted in conservancies, despite being listed as 'specially protected game'. As such, the government is committed to generating substantial revenues from elephants through both ecotourism and international trophy hunting in conservancies.

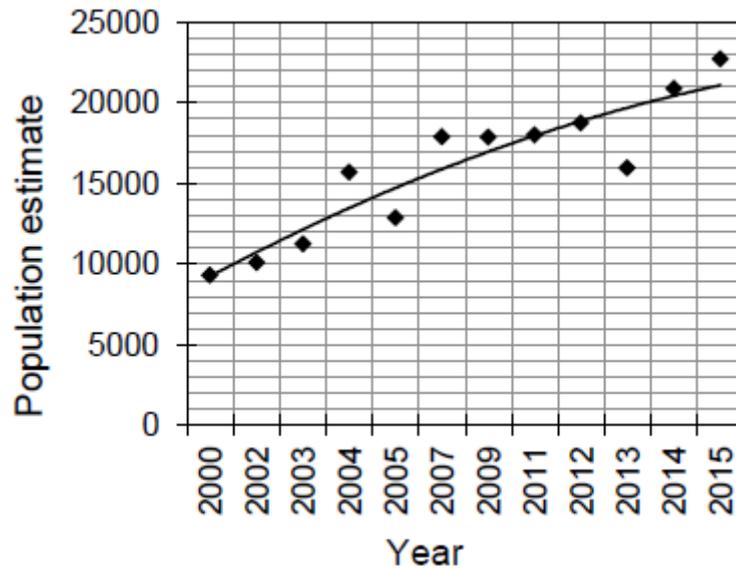


Figure 1.4: Elephant population estimate in Namibia (CITES 2016d: 4)

Area	Year of latest estimate	Estimated elephant population
North-East Parks and surrounding areas	2015	13 136
Khaudom National Park	2015	4 150
Nyae-Nyae Conservancy	2015	2 263
Kunene Region	2009	352
Etosha National Park	2015	2 810
Total		

Table 1.1: Estimated elephant population in Namibia (CITES 2016d: 4)

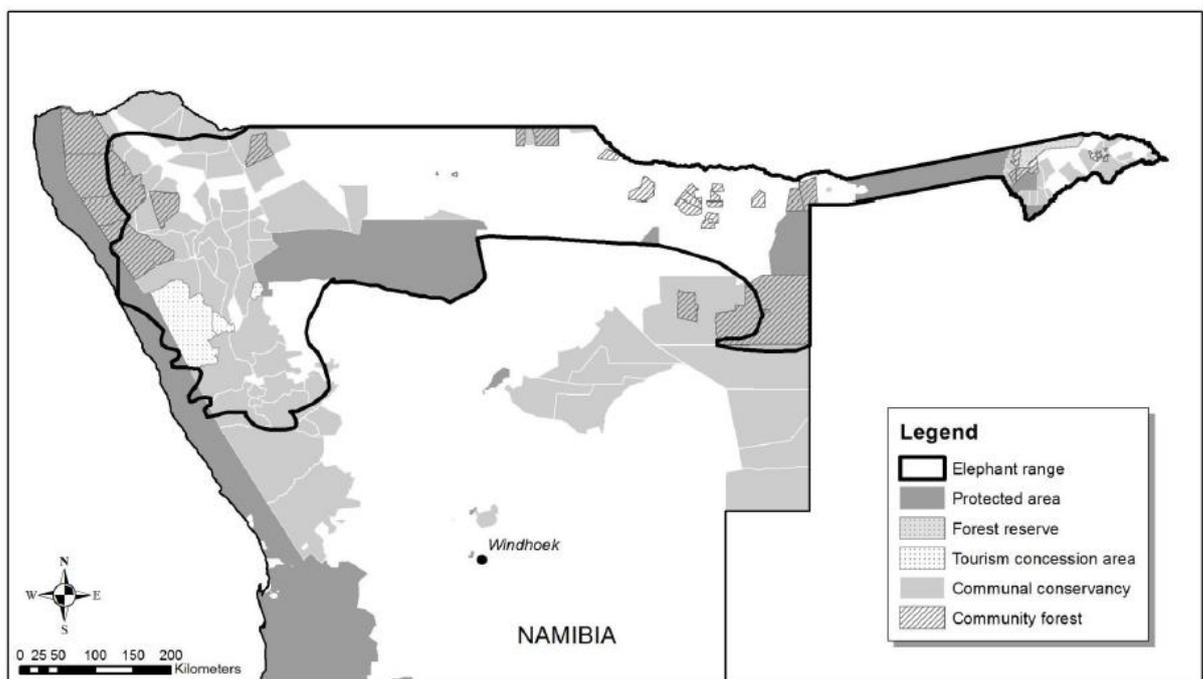


Figure 1.5: Map indicating elephant range, protected areas, concessions and conservancies in northern Namibia (CITES 2016d: 11)

1.2 Aims, Objectives and Research Questions

This thesis aims to explore the production of nature knowledges and values in the context of Namibian Community-Based Natural Resource Management (CBNRM). In that respect, it is a response to calls for in-depth research into the lived experience and ‘messy reality’ of CBNRM (Murphree 2009; Büscher 2010a). There exists an academic consensus that these initiatives must be site and context specific, and this study attends to those situated knowledges and values crucial to the programme’s success. It does so by adopting a case study approach in Kwandu Conservancy, in Namibia’s Zambezi Region (see chapter 3).

Yet this academic consensus on local context sits uncomfortably alongside dominant policy discourse and practice focused on large-scale landscape ‘connectivity’. Given the embedding of Namibian CBNRM within broader transboundary approaches, it is therefore important to explore the transformation of knowledges and values within and between these (dis)connected conservation spaces.

In doing so, the conceptual approach embraces the collaborative potential between political ecology studies that have discussed the power to represent and construct (neoliberal) natures, and posthuman approaches adopting a more expansive view of socio-natures (Bakker 2010; Lorimer 2012). As part of a ‘more than-human ethnography’ (Barua 2014a), this involves ‘following’ African elephants in order to trace their assembled relations with other (non)humans as they move through and produce space.

Engaging with the ‘emergent form’ of these assemblages (Bear 2013), the study attempts to highlight the (non)human labour, representations and practices through which socio-natures are produced. This allows for an exploration of the coming together of (non)human things in ways that stabilise socio-natures and CBNRM spaces. At the same time, it attempts to uncover the multifarious ‘spaces between relation’ (Massey 2005) in which socio-natures may be reassembled.

Given that CBNRM success is contingent upon situated knowledges and values, then, this study addresses the question: *How do different CBNRM stakeholders know and value ‘nature’ / African elephants?* Against a backdrop of transboundary conservation and

recognising that these socio-natures are relational and ‘more-than-human’, however, the second research question is: *How and why does knowledge/value vary and transform within and between different spaces through relational assemblages? Where and when are the (dis)connections, and for what reasons?* In attending to the relational production of space between humans, elephants and other lively things, the study aims to provide recommendations for a reformed CBNRM practice. As such, the third research question asks: *What are the implications of this relational approach to socio-natures for CBNRM policy and practice? What policy/institutional changes are required to assemble more equitable and ecologically healthy socio-natures?*

1.3 Thesis Structure

The following chapter sets out the theoretical framework and conceptual approach adopted to address the research aims. Reviewing existing literature on CBNRM, it engages with political ecology studies that have critiqued (neoliberal) CBNRM and other forms of market-based conservation. The chapter also makes the case for ‘following’ African elephants as a means of bridging the divide between these studies and posthumanistic approaches to the relational assembling of socio-natures.

Chapter 3 sets out the methodological approach adopted to achieve the research aims. It introduces the case study and research context, before discussing the data collection and analysis methods utilised which are underpinned by assemblage thinking. The ethical and practical challenges of assembling the ‘field’ are also considered, before the chapter reflects on some of the study’s methodological limitations.

As a means towards answering the first research question, chapter 4 explores situated knowledge of African elephants amongst CBNRM stakeholders. Specifically, the chapter discusses the co-production of representational knowledges through practices that seek to put elephants ‘in place’, both spatially and conceptually. The chapter focusses on arborescent practices that territorialise human-elephant relations and sediment powerful (neoliberal) nature ontologies in Kwandu Conservancy and beyond.

These territorialising processes are largely geared towards producing elephants for consumptive use through ‘conservation hunting’. This hunting practice is central to CBNRM in Namibia, and chapter 5 moves alongside these commodified creatures and those attempting to hunt them. In doing so it attempts to shed light on the embodied and situated nature of knowledge and values produced through practices of tracking, watching, and killing elephants. As well as attending to the representation of elephants, then, this chapter introduces a more-than-human framing to the thesis, illuminating the elephant’s affective agency in co-producing these socio-natures. At the same time, it begins to address the second research question, engaging with the emergent form of assemblages and the spatial transformation of knowledge and value therein. As such, the chapter attempts to highlight the (non)human relations, detachments, and ‘outside’ actors that (dis)assemble hunting spaces in Kwandu.

Building upon the previous chapter’s discussion of spatial transformation in Kwandu, chapter 6 moves beyond this in-depth ethnography by following the disassembling, material transformation, and circulation of elephant commodities post-hunt. Importantly, this involves following the animal’s tusks, flesh, and money derived from the kill in order to trace value (dis)connects between diverse assemblages of multi-scalar actors. Moving beyond ontological and epistemological sedentarism, then, the chapter attempts to uncover the elephant’s relational connections with assemblages of actors ‘outside’ Namibia. In doing so, it goes some way towards illuminating the places where the animal’s economic value gets ‘stuck’, and the existence of alternative values threatens the holding together of CBNRM in its current form.

Having ‘followed’ the elephant within and beyond Kwandu Conservancy in the previous chapters, the final empirical chapter knits this ‘more-than-human’ ethnography together with a political ecology framing in order to elucidate and critique the workings of neoliberal CBNRM. As such, it explores the dynamic interactions between humans and lively nonhumans that (de)stabilise these neoliberal governmentalities. Importantly, the chapter attempts to explore the elephant’s role in stabilising and forging connections between institutional assemblages. This helps generate an empirical understanding of the power relations and structuring effects of dominant ontological framings, whilst also elucidating alternative socio-natures and relational values. As such, the chapter goes on

to directly address the third research question and consider the implications of these assembled socio-natures for CBNRM practice and policy.

Chapter 8 assesses and synthesises the study's findings as they relate to the original aims and objectives. Based upon these ethnographic insights, the chapter puts forward practical policy recommendations geared towards assembling a more equitable and ecologically healthy future for CBNRM in Namibia. The thesis concludes with a critical reflection upon its limitations, before suggesting future research directions that would build upon this study's conceptual approach and empirical findings.

Chapter 2: Literature Review and Conceptual Approach

2.1 Introduction

The aim of this thesis is to explore nature knowledges and values in CBNRM spaces, and the way in which these factors transform and connect between different spatial assemblages of (non)human actors. As such, this chapter sets out the theoretical framework and conceptual approach utilised to address the research aims. The chapter is split into four main parts, the first of which reviews existing literature critiquing CBNRM before briefly discussing the turn to transboundary conservation approaches. The second engages with political ecology studies that have discussed the power to represent, value, and create discourse about (neoliberal) natures, and the impact of these governmentalities on local CBNRM socio-natures. In attempting to theorise these socio-natures, the third section pulls this work on capitalist ecology into conversation with the burgeoning literature on ‘more-than-human’ geographies. Having done so, the fourth section proposes following a nonhuman ‘thing’ - the African elephant - as part of a ‘more-than-representational’ approach that traces the (dis)assembling of socio-natures within and beyond CBNRM spaces.

Section 2.2 begins by engaging with existing analyses of CBNRM programmes. As such, it draws attention to the apparent consensus amongst academics that these programmes must be site and context specific, and aligned to the local commonage (2.2.1). However, the section moves on to discuss the ‘connectivity turn’ currently taking place in conservation (Lorimer 2015), and how these large ecosystem-scale approaches sit somewhat uncomfortably alongside local CBNRM programmes (2.2.2).

As such, section 2.3 elaborates upon the conceptual approach to theorising these socio-natures, including a political ecology framing that attempts to overcome the pervasive nature/society binary (2.3.1). Crucially, these Marxist ‘production of nature’ perspectives have underpinned work by political ecologists concerning ‘neoliberal’ natures and conservation, and section 2.3.2 engages with work that problematises economic ‘value’ and uncovers the ways natures are used, transformed and ‘saved’ through the expansion of capitalism.

Faced with the displacement of alternative value practices under neoliberalism, section 2.4 explores relational and ‘more-than-human’ ontologies as means by which to theorise and nurture more ethical socio-natures. These approaches draw upon non-representational theory’s attention to the embodied, emotional, and affective nature of life and thought that is practiced and always in process, discussed in 2.4.1 and 2.4.2. Crucially, these vital materialist ontologies expand the notion of agency to entities beyond the human. As such, section 2.4.3 considers how posthumanistic approaches to socio-natures centred on ‘hybridity’ and actor-networks have challenged entrenched dualities, such as that between human and nonhuman.

Such ‘lively geographies’ underpin this study’s theorisation of ‘assembled’ socio-natures, and the utility of assemblage as a conceptual framework is discussed in 2.4.4. Attending to the relational (be)coming together of disparate entities, assemblage cultivates a sensitivity to the material role of nonhumans in the constitution of politics and space. This is especially the case with regard to nonhuman animals, and section 2.4.5 engages with geographic approaches to the complex topologies and ‘bestly places’ of animals, including elephants.

This turn to relational and more-than-human ontologies has important political implications. As such, section 2.4.6 explores the co-production of knowledge and value derived from relational practices between (non)humans, creating space for alternative natureculture ontologies currently suppressed by modernity’s great divide. At the same time, a world of immanent, assembled socio-natures necessitates a rethinking of (community-based) conservation policy and practice. Therefore, section 2.4.7 explores the confluence between relational ontologies and conservation approaches that abandon the notion of a singular ‘nature’, embracing the instability of ecosystems in which complex (non)human agents interact.

The benefits of bringing these multi-natural ontologies into closer conversation with political ecology approaches to (neoliberal) natures are discussed in section 2.5. As part of a more-than-representational approach, it considers how ‘following’ these (non)human relations can shed light upon the dynamic (dis)assembling of CBNRM spaces through which nature knowledges and values are produced. The chapter concludes in section 2.6.

2.2 CBNRM and Landscape Conservation

2.2.1 Critiquing CBNRM

More than three decades since it rose to prominence in global conservation circles based on its promise of combining biodiversity conservation and rural development, Community-Based Natural Resource Management (CBNRM) now finds itself at somewhat of a crossroads. CBNRM successes have proved sporadic, and the initiative is experiencing a crisis of identity and purpose against a backdrop of increasingly militarised and protectionist approaches (Duffy 2014; Lunstrum 2014). But that is not to say CBNRM has become redundant; far from it. Perhaps surprisingly given its many failures, but likely a symptom of meagre viable alternatives for stewardship of the majority of Africa's landscape, CBNRM remains vibrant in conservation and development discourse, practice, and research (Murphree 2009; Child and Barnes 2010; Horowitz 2016). CBNRM is still very much 'happening on the ground' (Shackleton *et al.* 2010: 1), academics and practitioners alike remaining committed and actively engaged in assessing the conditions for its success.

Thus, despite having lost some of its initial lustre, CBNRM remains a powerful 'win-win' discourse. Founded upon a shift in decision-making and natural resource governance from centre to periphery, it is a powerful idea in post-colonial Africa (Adams and Hulme 1998; Murphree 2009). On that point, aside from its promise of economic and environmental benefits, it may well be CBNRM's commitment to local political transformation through democratisation, transparency and accountability that continues to motivate CBNRM scholar-practitioners. If that is the case, then Torqebiau and Taylor (2009: 2546) are probably correct in labelling a return to top-down fortress conservation in rural African landscapes as 'unthinkable'.

Much of the condemnation levelled at CBNRM is synonymous with the broader critique of Integrated Conservation and Development Projects (ICDPs), namely that such initiatives fail to achieve either good development or good conservation. Despite quantitative studies highlighting the importance of CBNRM in providing economic benefits to local communities (Child and Barnes 2010; Naidoo *et al.* 2011; Silva and Khatiwada 2014), some remain sceptical about the programme's capacity to achieve

simultaneous conservation and development. Despite perceived conservation successes in places like Namibia (Humavindu and Stage 2015), scholars argue these have been at the expense of social equity and development (Suzman 2001; Gibbes and Keys 2010). Conversely, others such as Algottson (2006) take the view that CBNRM's human development aspirations have largely outweighed its conservation goals, particularly amongst local communities roused by the prospect of socio-economic betterment, but generally lacking interest in biodiversity gains (Songorwa 1999; Kellert *et al.* 2000).

Irrespective of CBNRM's inherent bias to one side or the other, it remains the case that practitioners more often than not fall between these two stools. Environmental and social impacts have proved spatially heterogeneous, and examples of 'win-win' scenarios on the ground are few and far between (Torqebiau and Taylor 2009; Shackleton *et al.* 2010; Ferraro and Hanaeur 2011). Centred largely around ecotourism and hunting in southern Africa, CBNRM has limited capacity to address global structural inequities, and scholars caution against viewing the programme as a 'silver bullet' for conservation and poverty alleviation (Murphree 2009; Nielsen and Lund 2012; Silva and Motzer 2015). Inevitably, there will be trade-offs between these dual objectives in any CBNRM programme (Brockington and Schmidt-Soltau 2004; Adams *et al.* 2004; Adams 2006). Campbell *et al.* (2010) argue these trade-offs play out amongst diverse actors on multiple levels, supporting Upton *et al.*'s (2008) assertion that relationships between poverty and conservation action are dynamic and locally specific. Indeed, it is this local context specificity in CBNRM design and implementation which becomes a familiar theme in the CBNRM literature, discussed later.

As alluded to above, despite the existence of generally positive assessments of CBNRM and its contribution to economic development on a national level, the tangible economic benefits accruing to households have been meagre at best. Although Namibia's CBNRM programme has generated impressive revenues on the whole, then, Lapeyre (2015) argues these derive mainly from a small number of well-located conservancies that have partnered with reputable tourism and hunting operators. In most conservancies, studies have shown that household benefits fall short of community expectations, creating resentment towards the institution and wildlife (Mosimane and Silva 2015; Silva and Motzer 2015). Using multidimensional poverty indices to measure the impacts of CBNRM in Kwandu Conservancy, Suich (2013) found positive impacts on household

financial capital operated on a disappointingly narrow scale. This lack of wildlife value ‘trickle-down’ is hardly conducive to generating positive conservation ethics and outcomes. As Torquebiau and Taylor (2009: 2543) observe, such benefits ‘must reach not only the “community” but also the individual farmer as it is (s)he who bears the cost of living with wildlife when it tramples his or her crops or kills his or her livestock’.

Even where CBNRM can demonstrate high wildlife and tourism related income, numerous scholars are reticent to advocate the programme’s efficacy. This comes back to the ethos and unifying purpose of CBNRM, particularly in southern Africa, which Taylor (2009: 2564) refers to as ‘the devolution of rights to manage, use, dispose of, and benefit from natural resources’. Rights to resources are just as important as income, and rural communities must also be given a role in the management of wildlife which shares their land and affects their daily lives.

In attempting to open up the ‘black box’ of poorly understood relationships between wildlife benefits and conservation behaviours, Scanlon and Kull (2009) used a case study of Torra Conservancy in Namibia to argue that wildlife benefits will only foster conservation ethics when management is devolved to the community level. The findings resonate with those scholars who argue it is only through proper decentralisation that people will be empowered to see themselves as genuine partners in the custodianship of wildlife resources (Jones 1997; Barnes *et al.* 2001; Algotsson 2006; Murphree 2009). As Child and Barnes (2010: 292) put it, ‘the real value of the few dollars that a villager gets is that this money symbolises a new political economy in which people have the rights to choose how to manage and develop themselves’. Indeed, many would argue that the lack of economic and livelihood benefits at household level is symptomatic of the inadequate devolution of natural resource rights to the local level.

The reality is that, in most cases, this devolution has been inadequate. Despite espousing agendas of community-based conservation, more often than not international and state agencies retain a stranglehold over key decisions concerning natural resource management and use (Selfa and Endter-Wada 2008). Shackleton *et al.* (2010) share these concerns, arguing many programmes construe talking to communities in a participation phase as the equivalent of community-based management, even though actual physical management of resources remains largely in the hands of conservation officials. Others

argue that power is transferred to private sector actors and local elites, often utilising this ‘environmentalism of the poor’ discourse in order to capture wildlife benefits intended for the wider community (Dzingirai 2003; Vargas Del Rio 2014).

What these studies emphasise, then, is the importance of local context in CBNRM approaches. Murphree (2004: 214) makes the point that regardless of CBNRM’s conceptual conservation, economic, or institutional development aspirations, these objectives merge ‘on the ground’, their relative salience being determined by local community dynamics. Thus, in attempting to answer the question ‘Does CBNRM work?’ he argues ‘we could of course debate this for a long time in terms of when and for whom, but the short answer must be “Sometimes yes and sometimes no and always to be judged in specific contexts.” It is, like other aspects of governance, a general condition and not a technique, always relative in regard to its efficacy and legitimacy’ (Murphree 2009: 2553). As such, scholars have called for CBNRM practitioners to recognise the knowledge, needs and concerns of local people as well as paying greater attention to social structures at community and intra-community scales (Taylor 2009; Dressler *et al.* 2010; Gibbes and Keys 2010; Shackleton *et al.* 2010).

In that sense, Murphree (2004; 2009) has pointed to the uneven distribution of economically valuable natural resources, arguing that CBNRM in any specific place, at any particular time, must ‘march to the conservation values of the local regime’, which may not necessarily be economic. Yet ignorance of these local values remains one of the main reasons for the failure of conservation and development programmes, ‘one-size fits all’ models developed on larger scales being insensitive not only to the specific needs of different wildlife species, but also to the lives of people inhabiting diverse geographic areas (Child and Barnes 2010; Radcliffe *et al.* 2010). For that reason, the small-scale ‘local commonages’ Murphree (2004; 2009) speaks of, determined by both ecological and social criteria, are deemed to be the proper realm of communal approaches to natural resource management.

But that is not to say this consensus on local context and site specificity in CBNRM is attempting to maintain fixed, predictable states - be they ecological or social; nor is it ignorant of the wider conservation landscape. In that sense, scholars are wary of treating ‘community’ as some form of static, homogeneous entity based on generalised systems

of reciprocity, preferring to conceptualise it as a dynamic, constantly shifting spectrum of social actors (Agrawal and Gibson 1999; Mombeshora and Le Bel 2009; Gibbes and Keys 2010). According to Torquebiau and Taylor (2009: 2539), thinking in terms of ‘rural citizens’, as opposed to ‘insiders’ and ‘outsiders’ should help avoid situations where authority is based on social membership, leading not only to cases of elite capture but also to the sabotage of CBNRM programmes by non-members excluded from benefits (Dzingirai 2003).

There is thus an acknowledgement amongst scholars and practitioners alike that a general weakness of analytical approaches to natural resource management is their inadequate attention to the broader political and economic context, such as the power of Traditional Authorities or the limited legitimacy of central government institutions, and the way in which such factors may influence CBNRM spaces (Tventden 2002; Dressler *et al.* 2010; Nielsen and Lund 2012). At the same time, this academic focus on local context and site specificity in CBNRM is somewhat ill at ease with wider conservation policy discourse and practice focused on ‘ecosystem connectivity’. The rationale for these landscape approaches is now briefly discussed, before the chapter moves on to engage with literature critiquing these neoliberal governmentalities.

2.2.2 Ecosystem and Landscape Connectivity

Over a decade ago Adams *et al.* (2004: 1148) pointed out that although the policy need at the local scale is to reconcile the interests of different stakeholders in the management of natural resources, the larger challenge is ‘sustaining a biosphere that not only sustains full ecological functions but retains its living diversity’. Indeed, one of the key recommendations which followed the IUCN Vth World Parks Congress in 2003 was that, to be effective, conservation areas should be managed in the context of the broader landscape, a recommendation which not only supported the decision made in 2000 by the parties to the Convention on Biological Diversity (CBD) advocating an ‘ecosystem approach’, but also reflected an increasingly popular perception amongst policy makers that conservation planning cannot merely be site-specific (IUCN 2001).

As Lindenmayer *et al.* (2008) make clear, conservation strategies adopted at a single spatial scale will meet only a limited number of goals. Instead, they argue, ‘multiple management scales are needed because there are multiple ecological scales’ (2008: 88). This concept of ‘polycentricity’ (Schoon 2013) emphasises that decisions should be taken at a level matching the scale of the environmental issue, meaning although community-based institutions are suitable for managing local commonages (as discussed in the previous section), other issues which may permeate political boundaries, such as species migrations, need to be managed on (inter)national scales. As such, there has been a move towards conservation approaches founded on ‘connectivity’ at a range of geographic scales. Given its significance as a primary process influencing ecosystem function and the distribution of all biota (Lindenmayer *et al.* 2008), ‘connectivity’ has been forged through multiple-use areas within specific national parks, linkages between conservation areas on a national level, or on an international scale through the implementation of Transfrontier Conservation Areas (TFCAs).

Portrayed as the ultimate form of ‘tearing down the fences’ (Spierenburg and Wels 2006: 299) these conservation area networks and corridors, it is argued, can facilitate the much needed re-coupling of social-ecological systems, affording protection not only to a wide range of species and ecological processes but also to humans suffering as a result of strictly protected areas (Hoole and Berkes 2010; Epps *et al.* 2011). Yet these transboundary approaches - involving diverse global actors - run somewhat counter-intuitive to the arguments for local context specificity in CBNRM, discussed above. How might local values be transformed when caught up in the new interconnected networks of global biodiversity protection? What impact will these new governmental alliances have on local socio-natural relations? If the success of CBNRM ultimately depends on site-specific context and incorporating the conservation values of local communities, it becomes clear that exploring these situated knowledges and values is of crucial importance. To that end, the chapter now moves on to discuss the conceptual approach used to theorise these society-nature relations and interactions.

2.3 Theorising Socio-Natures: Political Ecology, the Production of Nature, and Neoliberal Conservation

2.3.1 Political Ecology – Challenging the Nature/Society Binary

This thesis adopts a political ecology approach to understanding the (trans)formation of ‘nature’ knowledges and values in Namibia and beyond. As such, it shares political ecology’s broad concern with uniting the social and natural sciences in a way that produces novel understandings concerning human relations with the biophysical earth. In this endeavour overcoming the pervasive nature/society binary is a fundamental objective. A product of what Latour (1991) calls the modern Constitution, this ontological dualism is representative of post-Enlightenment thought, enduring as a central component of Euro-American modernity. Indeed, the notion of a static ‘nature’ separate from human ‘culture’ is manifest in environmental policy and practice, illustrated in the prevalence of strictly protected areas such as Yellowstone National Park in the US. Since Yellowstone’s proclamation in 1872 ‘fortress conservation’ (Brockington 2002) approaches have been adopted on an international scale, particularly in the (post-)colonial world, founded largely upon iconographic and romantic representations of untouched ‘wilderness’ (Cosgrove and Daniels 1988; Denevan 1992; Uggla 2010).

Using diverse theoretical and methodological approaches to society-nature relations, political ecologists have attempted to liberate nature and culture from this categorical binary fix. Against a global backdrop characterised by environmental activism, anti-war and civil rights movements, the field of political ecology emerged in the early 1980s. Contrary to dominant neo-Malthusian explanations for environmental degradation that pointed to factors such as over-population, pioneering political ecologists such as Watts (1983) and Blaikie (1985) argued for situating resource depletion within the broader political economy. Drawing upon Marx’s critique of capitalism, these political economic studies combine a structuralist view of society with a positivist view of ecology, bringing structural and class analysis to bear on cases of ecological degradation in specific places (Bassett and Piemer 2015). This environmental/social dialectic approach illustrates the importance of viewing environmental change/harm and human behaviour alongside the social relations of production and exchange, showing how material power mediates socio-

natures, thus distinguishing political ecology from previous approaches to human-environment relations such as cultural ecology (Khan 2013; McCarthy *et al.* 2015).

The works of prominent Marxist geographers such as David Harvey and Neil Smith influence and are central to these materialist political ecology approaches. Harvey's (1974) critique of neo-Malthusian thinking laid the foundation for contemporary political ecology, showing that 'limits to growth', poverty and resource degradation reflected and were indicative of the maldistribution of material/social wealth. 'Denaturalising' the question of how the biophysical world affects the social one, Harvey (1974, 1982) made clear that the social relations of capitalism - such as private property, commodification, and class structures - cause environmental problems that are internal to capitalism (Castree 2015; Tetreault 2017). Inspired by Harvey's work, Smith (1984) argued that uneven global development is a constitutive feature of a capitalist system in which nature is not simply given, but increasingly materially 'produced' and transformed, either through manipulation for commodity production and accumulating surplus value, or through the ecological impacts of industry, for example (Ekers and Loftus 2013). Although he also recognised pre-capitalist forms of production, Smith was heavily critical of an ontologically external, non-social 'nature' which, he argued, cannot be understood in abstraction from the social relations of capitalism (Smith 2008; Castree 2011). This Marxist political economy approach asserts the primacy of the material world, focussing on the dialectical relationships between social processes and the natural environment that structure our capitalist world. At the same time, in repositioning nature as an outcome of social relations rather than an asocial input to the economy, Smith went beyond material production to emphasise that ideas about nature are also produced through capitalist social relations (Castree 2015).

As such, it can be argued that Smith pre-empted poststructuralist political ecologies that emerged in the early 1990s. For those associated with the 'cultural, interpretive and linguistic turn' in the social sciences and inspired by philosophers such as Gramsci, Derrida and Foucault, Marxist political economy approaches were deemed too rigid and deterministic, overlooking factors such as culture and politics in their fixation on economic processes. As such, poststructuralist thinkers assert the primacy of language and ideas in the social construction of reality and 'nature' (Castree 2011). This is not to deny the existence of a pre-discursive, pre-social biophysical reality, but rather to

emphasise how different societies give the world meaning through ‘representations’ that are reflexively linked to - and inseparable from - ‘material reality’. Such representations include all spoken and written media and messages that convey meaning, and political ecologists have sought to analyse their origins, contexts, and material effects. This endeavour is based on the assumption that these representations are contingent and contested, expressing relations of inequality and reflecting specific social identities of class, race, gender and sexuality, for example. Feminist and postcolonial theories and politics have thus become part of the core of political ecology, due to their shared connections with poststructuralism and its focus on the social construction of identity categories shaped by diverse power relations (McCarthy 2015). This approach demonstrates how historical accounts of environmental change often exclude local understandings of socioecological relations, legitimising the knowledge claims of powerful actors that simplify and stabilise uncertain biophysical processes (Fairhead and Leach 1996; Bassett and Piemer 2015).

Taken to their extremes there is a clash between what can be framed as two epistemologically distinct approaches to political ecology, with neo-Marxist rigid structural analysis at one end of the scale and the ontological relativism of hyper-constructionists at the other. Yet these theoretical approaches co-exist, merge, and can be held in tension through the adoption of myriad intermediate positions that transcend dualisms such as materialism/idealism, structure/agency, and objectivity/subjectivity (Tetreault 2017). As such, the approach taken in this study is a ‘moderate/soft’ constructionism that accepts we can never know reality or ‘nature’ exactly as it is (epistemological relativism), whilst rejecting ontological relativism and the notion that the biophysical world does not exist independently from human perception. For that reason, the thesis holds the constructedness and reality of nature in tension, adopting the term ‘socio-nature’ to acknowledge the material and discursive co-production of ‘nature’ and ‘culture’ (Jones 2009; Alkon 2013). This theoretically ‘eclectic’ and flexible approach is particularly suited to studying community-based conservation programmes that contain many multi-dimensionality and contradictory elements, involving diverse, differentially empowered actors operating on multiple scales (Khan 2013).

Ultimately, my approach shares the common commitments of all work in political ecology. These include a methodological commitment to in-depth qualitative research

based on intensive case studies, situated within their broader historical and social contexts (see chapter 3.0). These methodological preferences are informed by the field's theoretical perspectives and normative commitment to critical social theory, including a post-positivist understanding of nature (knowledges) and ontological framings as inseparable from structural power relations (McCarthy *et al.* 2015; Sullivan 2017b). Yet challenging the nature/society divide and explaining socio-natural processes is not merely a philosophical enterprise; rather, political ecology is founded upon a 'normative understanding that there are very likely better, less coercive, less exploitative, and more sustainable ways of doing things' (Robbins 2004: 12). For that reason, this thesis shares political ecology's commitment to social justice and radical politics, attempting to elucidate and promote alternative, non-capitalist socio-natures (Bridge *et al.* 2015). In this vein, the chapter now turns to the work of political ecologists who have sought to explicate and contest the increasing 'neoliberalisation' of nature/conservation and the value frames which underpin these governmentalities.

2.3.2 Neoliberal Conservation and the Value of Nature

Over the past decade political ecologists have focussed much of their attention on the way in which 'nature' - and biodiversity conservation more specifically - are increasingly subject to neoliberal policy approaches (Sullivan 2006; Brockington and Duffy 2010; Fletcher *et al.* 2015). By 'neoliberalism' they refer to a theory of political economic practices centred on individual liberty, privatisation of state enterprises, international trade liberalisation, and the abolition of regulations that reduce market growth and efficiency (Bakker 2015). Led by the Thatcher/Reagan administrations in the UK and US, these policy prescriptions were reinforced by the World Bank, International Monetary Fund and other international financial institutions in 1989, known as the 'Washington Consensus' (Sullivan 2006). Since the 1970s, then, neoliberalism has been rolled out on a global scale - from post-Soviet states to contemporary China - justifying its description as a 'hegemonic discourse [...] incorporated into the commonsense way we interpret, live in, and understand the world' (Harvey 2007: 23).

Policy-makers assert that environmental issues including biodiversity loss and climate breakdown can be tackled through market instruments within a ‘green economy’. As such, the pressing need amongst conservationists nowadays is to give nature its ‘true value’ through appropriation into the realm of commodities and pricing in monetary terms. According to WWF’s *Living Planet Report 2014*, for example, the cornerstone of conservation and development policy decisions should be ‘valuing natural capital’, a process dependent upon numerical representations of *in situ* natures that can be exchanged in global markets (Fletcher 2010; Sullivan 2017b).

This mantra helps explain how a project to render the environment as a set of economically valuable ‘ecosystem services’ (ES) has reached the highest levels of global environmental policy. Broadly defined as the benefits humans derive from ecosystems, the annual value of the world’s ES was estimated at US\$ 33 trillion by a team of ecological economists in 1997 (Constanza *et al.* 1997). A few years later, 1300 global experts gathered as part of the UN-led Millennium Ecosystem Assessment (MEA 2005), assessing the consequences of environmental change for human well-being and seeking to establish the required actions for ecosystem conservation. The list of ES drawn-up includes ‘provisioning services’ such as food, water, and timber; ‘regulating services’ that affect flood, drought, land degradation, and disease management; ‘supporting services’ such as soil formation and nutrient cycling; and ‘cultural services’ that provide recreational, spiritual, religious and other non-material benefits (IUCN 2008).

For those marginalised and impoverished communities heavily dependent on natural resources, ‘Payments for Ecosystem Services’ (PES) schemes have been implemented to ensure users of environmental benefits compensate those who often bear the costs of producing and conserving them, arguably incentivising biodiversity and habitat conservation. Naidoo *et al.* (2011) have gone as far as to argue Namibia’s CBNRM programme be recognised as a market-oriented PES scheme which ‘sells’ cultural services such as trophy hunting and photographic safaris as well as a multitude of provisioning services such as plant products used for food, fuel and pharmaceuticals. Advocates of these schemes thus portray PES as a ‘triple win’ solution for nature, private investors, and the poor (Jackson and Palmer 2014).

Yet political ecologists remain largely unconvinced of the synergistic relationship between privatisation and market exchange on the one hand, and improved livelihood and conservation benefits on the other. Critical social science engagement with neoliberalism has thus explored the way in which natures are used, transformed, and ‘saved’ in and through the expansion of capitalism. This market-led ideology rests upon the modern nature/culture dichotomy, natures being sold and revalued in capitalist terms so that both sides of the binary relationship may prosper (Sullivan 2006; Büscher *et al.* 2012). Drawing on Latour, Sullivan (2013) argues ‘natural capital’ is a fetishized object charged with objective power via institutionalised expert agreement and technical practices. This labour works to create abstract exchangeable commodities from material natures and ecologies, transforming use-values into exchange values and units for sale in ecosystem services markets.

Yet the process is beset with contradictions, and political ecologists are critical of efforts to reduce complex natures to exchangeable economic value. Influenced by Marx, scholars argue these market prices do not incorporate the whole range of values and (non)human labour included in the means of production (Bollier 2016; Huber 2018). Thus, although proponents of the ES paradigm argue schemes such as PES should not be seen as an attempt to reduce nature to a monetary value (Blignaut *et al.* 2008; WWF 2014), critics have focussed on the moral and ethical issues associated with pricing nature, and the way in which these programmes may crowd out non-economic, socio-cultural and intrinsic values (Vermeulen 2007; Redford and Adams 2009; Daniel *et al.* 2012; Barnaud and Antona 2014).

In extending the reach of global capitalism, such approaches are also said to exacerbate existing inequality and environmental degradation. This critique is based largely on Marxist geographer David Harvey’s (2005, 2007) political economic analysis of neoliberalism as a class project of ‘accumulation by dispossession’, whereby wealth is channelled from the masses to the elite, and from poorer to richer countries. The relations and labour of (non)humans are central to the capitalist accumulation of surplus value and profit, often reproducing unequal power relations in access to wealth and resources (Dempsey and Robertson 2012; Matulis 2014). As Igoe and Brockington (2007) make clear, neoliberal conservation needs not benefit the rural poor in order to prosper, and numerous studies have shown how nature’s commodification can create new kinds of

territorialisation that exclude local people and conceal the complex connections between their daily lives and environmental problems (Benjaminsen and Svarstad 2010; Brockington and Duffy 2010; Igoe 2010).

This problem is exacerbated due to the multifarious non-state actors involved in the global governance of natures, including international NGOs, multilateral organisations and private sector companies. As such, drawing upon earlier work by Ramutsindela (2004) on the ‘glocalisation’ of environmental governance, Duffy (2006) points to the inextricable linkages and complex interplay between the global, national and local scales. Political ecologists have sought to explore these relations, illustrating how global governance arrangements such as the Convention on International Trade in Endangered Species (CITES) are drawn up by powerful alliances of First World social actors, often perpetuating North-South inequalities (Duffy and Moore 2011; Duffy 2013).

(Inter)national environmental NGOs have thus come under particular scrutiny in the literature. Scholars demonstrate how their links to the corporate sector and transnational institutions render NGOs complicit in the ‘conservationist mode of production’, mediating and legitimising nature knowledges whilst promoting new commodities which facilitate capitalism’s growth (Brockington and Scholfield 2010; Fletcher 2010). Drawing upon ideas of hegemony and ‘sustainable development historic bloc’, Igoe (2010) argues these actors produce spectacular presentations of conservation interventions that work to overcome the mismatch between capitalism and conservation, promoting new types of value and capital that circulate in the global economy. These images and symbols - which focus global consumers’ attention on distant and exotic locales - are said to have become neoliberal conservation’s ‘real’ source of value, meaning natures and the poor increasingly become ‘underlying assets’ (Büscher 2010a).

As an increasingly popular form of transnational environmental management involving international bureaucracies such as the World Bank, bilateral aid donors and BINGOs, it is no surprise that Transfrontier Conservation approaches have figured heavily in this critique. As Büscher (2010b: 658) notes, the transfrontier movement has enabled its proponents to package conservation as an ‘all-embracing and unifying ideological model of meaning’ better aligned with contemporary ‘modes’ of neoliberal political conduct such as consensus, antipolitics, and marketing. As Petursson *et al.* (2013) note, there is a

risk that TFCAs alienate local community-based governance, and are instead more in tune with a 'back to the barriers' renaissance promoted by powerful international actors. Goldman's (2009) case study of the Tarangire Manyara Ecosystem of northern Tanzania points out that flexible concepts such as 'conservation corridors' may backfire once enmeshed in local politics and alternative knowledge constructions of connectivity. It seems that TFCAs have, as yet, failed to foster equitable conservation and real partnerships of mutual respect between governments, park agencies, (inter)national conservation NGOs, and local communities.

Yet political ecologists concerned with nature's neoliberalisation have not spared 'local' CBNRM approaches from this critique. Combining populist arguments for bottom-up development with neoliberal notions of capitalist markets and decentralisation, CBNRM is deemed a 'hybrid form of environmental governance' (Green and Adams 2014: 3). Its embrace of the 'sustainable development' framing and a neoliberal consensus on the need for environmentally sound economic growth strengthens CBNRM's appeal (Sullivan 2006). This is not only significant in terms of attracting international capital investment, but also in appealing to marginalised communities seeking social and economic betterment. As Silva and Motzer (2015) argue, neoliberal conservation and capitalist markets hold particular allure to post-colonial societies with limited employment opportunities, and are not simply top-down phenomena imposed upon vulnerable communities.

Nevertheless, scholars have drawn attention to CBNRM's socio-cultural impacts in transforming natures from untradeable units into marketable commodities. This commodification is largely centred on spectacular natures and charismatic species able to generate monetary value in international markets, but is often ignorant of other socio-natures and non-economic use-values of importance to local livelihoods (Sullivan 2006; Büscher 2010a; Lapeyre 2015). Yet CBNRM's 'blind faith in market mechanisms' (Levine and Whandesforde-Smith 2004: 142) has not abated, and practitioner attempts to give natures meaning through markets has often taken precedence over social empowerment objectives and collective action. Critics thus point to the increasing influence of corporations and international agencies in decentralised governance structures, within which local communities merely act as 'service-providers' for consumers largely from the 'global north' (Sullivan 2006; Fletcher 2010). Added to the

copious examples of elite capture in contexts of market liberalisation, then, case studies also point to ‘elite dominance’ and an inability for participants to use acquired financial capital to improve their economic position in CBNRM spaces (Silva and Motzer 2015).

Therefore, it can be argued that CBNRM enhances and sustains the value frame and structural inequalities underpinning contemporary environmental ills (Sullivan 2006). As with other market-based conservation concepts such as TFCAs, ‘ecosystem services’ and ‘natural capital’, CBNRM does little to challenge the modernist ontological positioning of nature as object, in need of saviour from/by human culture. This disconnected ontology fortifies neoliberal conservation, dependent upon abstraction, measurement and commodification of natures through which capital accumulation proceeds, regardless of the environmental or social impacts.

Alternative value practices, organisational structures and nature ontologies are displaced. As numerous scholars point out, neoliberal conservation has little to offer those with ontological dispositions toward animism and embodied, sentient natures, nor those societies based around commons and reciprocal distribution, for example (Sullivan 2006; Büscher *et al.* 2012). Despite the difficulties posed by existing power structures, then, development of radical ontological responses to this dominant nature-culture framing is ongoing. Building upon Neil Smith’s (1984) provocative thesis on the social production of nature, and inspired by Thrift (2000), scholars have urged us to attend to the practice and performance of embodied natures always in the making and unable to be brought into representation. In a time of neoliberal hegemony, these ‘more-than-human’ and relational ontologies centred on (non)human assemblages hold much promise for theorising and nurturing more ethical, ecologically healthy, non-capitalist socio-natures. These approaches attempt to surmount the perceived deadening effects of representational politics on what is an otherwise lively world, and will be discussed in the following section.

2.4 Relational and 'More-Than-Human' Socio-Natures

2.4.1 Non-Representation and Practice

With its attention to both life and thought as embodied and open-ended, non-representational theory (NRT) has increasingly informed the study of society-nature relations. Seeking to displace representation as the primary epistemological vehicle through which knowledge is extracted from the world, NRT emphasises the importance of 'practice' - including the historical and spatial specificity of everyday mundane activities. These specific ways of doing, working, or socialising reflect and are reflected in meanings and values attributed to places by individuals and groups (Everts and Wagner 2012; Gibbs 2014).

Influenced by Smith's (1984) work on the capitalist production of nature and Massey's (2005) conceptualisation of relational space as the product of practices and interrelations, scholars have attempted to illuminate the 'productive bricolage' and comingling of nature and society struggled over and in on a daily basis (Batterbury 2001). There is no holding nature still and looking at it; and it is crucial to investigate how nature is practiced and performed through *actions*. Yet these practices cannot easily be divorced from embodied emotions in landscapes Wylie (2007) argues mutually embed and connect self, body and land. Conceptualising nature only as a mental construct is untenable because, as Carolan (2008: 408, cited in Woods 2010: 837) argues, 'we cannot divorce mind from body when talking about knowledge/s, understanding/s and perception/s of the world'. For that reason, it is crucial to recognise the role of embodied affects and emotions in coming to know the world around us - emotions which are an intrinsic part of practice, yet which remain conspicuous by their absence in studies of community-based conservation (Jones 2005; Everts and Wagner 2012; Pratt 2012).

2.4.2 Emotional and Affectual Socio-Natures

The Cartesian preference for mind and conscious intellect over the body and matter has been increasingly challenged by those scholars foregrounding embodied emotions as the means through which the world is constructed and lived (Cadman 2009; Pile 2010). As

our ‘most immediate and intimately felt geography’ (Davidson and Milligan 2004: 523), the body has become the location for increased exploration into how we feel and think. This ‘emotional turn’ in the social sciences has produced a burgeoning literature which at its core seeks to displace knowledge as a disembodied, rational and objective construct, instead attending to emotions as ways of knowing, being and doing (Davidson and Milligan 2004; Jones 2005).

Although many would disagree with the contention that emotional geographies tend to locate dispositions like joy and anger in purely cognitive individual bodies, the notion of ‘affect’ has allowed scholars to re-conceptualise the body in terms of its capacity to be affected, and to affect others (Cadman 2009). Due to their shared focus on the body as the authentic location of knowledge and experience, then, ‘emotion’ and ‘affect’ have often been used interchangeably, even in non-representational geography; yet perhaps their fundamental difference is explained by Pile (2010: 8) who defines affect as ‘a quality of life that is beyond cognition [...] inexpressible [and] unable to be brought into representation.’

This dichotomy between ‘the thought’ and ‘affect’ - between the cognitive and non-cognitive - could help explain the lack of engagement with ‘emotion’ in CBNRM debates. As Pratt (2012) argues, these dualities in Western thought between heart and mind, reason and emotion, science and craft continue to plague the social sciences, even those approaches which are otherwise critical of entrenched dualities. This may indeed be the case, but perhaps by focussing on a shared relational ontology privileging the fluid over the fixed, we can begin to see how these thoughts and affects in motion help us understand both the representation and practice of socio-natures.

Hadi-Curti *et al.* (2010: 591) reject the idea of a severance between thought and affect, instead preferring to think of affect as ‘thought in motion’. In her work on community conservation in Latin America, Pratt (2012) adopted a similar approach to understanding the emotional currents that emerge from and generate ‘practices of togetherness’ amongst the community. Far from upholding the dichotomy between thought and affect, then, she points to the impossibility of separating the practices that constitute community life - such as laughing and eating - from the emotions which make this ‘doing-in-common’ intelligible (Pratt 2012: 182). In effect, these practices are necessarily interactive, inter-

subjective, social, and thoroughly intertwined with emotion (Everts and Wagner 2012). In order to collapse the distinction between ‘inner’ subjective emotions and ‘outer’ interpersonal affects, then, Simonsen (2013) posits that emotions are neither purely mental nor purely physical, but are instead ways of relating and interacting with the surrounding world. As Hadi-Curti *et al.* (2010: 591) would have it, ‘[e]motion is the most intense expression of [the] capture of affect.’

In order to uncover knowledges and values of ‘nature’, then, we need to attend to the practice of socio-natures in emotional landscapes. These socio-natures constitute both expressed emotions residing in subjective bodies and affective flows exceeding bodies, but which together constitute this emotional, lived spatiality (Simonsen 2013). In that sense, Davidson and Milligan (2004: 524) are correct to describe emotions as a form of ‘connective tissue’ linking experiential geographies of the human psyche to broader social geographies of place. Yet, as Kraftl (2013) and Madge (2014) make us aware, there are limits to what emotions can do, and to the connections they can forge in a relational landscape shaped not only by broader political and social conditions, but also by ‘more-than-human’ bodies.

It is on this point that ‘emotional’ and non-representational or ‘affectual’ geographies again appear to part ways. This is because of affect’s roots in Merleau Ponty’s (1962, 1968) non-dualistic ontology of body and environment and the notion that affect is distributed between - and can happen outside of - bodies which are not exclusively human (Lorimer 2008; Simonsen 2013). To that end, it is non-representational theory’s engagement with the neovitalist philosophies of Deleuze and Guattari (1987) that has enabled it to move beyond phenomenology’s largely human-centred understanding of (embodied) practice and connect with the transpersonal and nonhuman forces of the world (Cadman 2009; Pile 2010). This vital materialist ontology expands the notion of agency, emphasising the role of nonhuman bodies and things in the co-constitution of hybrid, networked socio-natures.

2.4.3 Re-materialising Socio-Natures: Actor-Network Theory and Hybridity

Seeking to circumvent dualistic approaches to society and nature, critical geographers have increasingly turned to ‘posthuman’ ontologies that blur the boundaries between human and nonhuman entities in the (re-)making of social worlds (Braun 2004). Central to this revalorisation of the socio-material is Latour’s (1987, 1993) ‘Actor-Network Theory’, centred on an understanding that worldly formations are produced by integrated networks of diverse ‘actants’, not all of which are human. As Oakes and Price (2008: 205) put it, ‘humans [are] just one of many actors involved in complex networks composed of animals, plants, and the earth’s life support systems of soil, water, and air.’ More than this, ANT ascribes agency to objects and technologies which, in combination with other (non)humans have the potential to ‘act’ in the world (Jones 2009).

Making no ontological distinction between ‘nature’, ‘humans’ or ‘technology’, then, ANT’s symmetrical approach works to dissolve the nature/culture dualism, but also destabilises established fixities between subject/object and agency/structure that have hitherto concealed the reality of ‘non-modern’ worlds (Latour 1991; Castree 2000; Buller 2015a). For proponents of ANT, multifarious (non)human things are mixed together in multi-scalar networks, and it is these relational connections that materially and symbolically produce given realities (Davis and Zanotti 2014). In that sense, there is a focus on the relational ‘practice’ that goes into maintaining and stabilising techno-scientific networks that generate dominant nature knowledges, for example. At the same time, there is an understanding that these networks are emergent, unstable, and susceptible to breakdown.

Yet ANT’s emphasis on technological networks also provokes criticism from those who argue the theory underrepresents organic, living things. In its adherence to ontological symmetry amongst entities as diverse as elephants and iPhones, ANT is said to deny the liveliness of sentient creatures (Jones 2009). Others argue that ANT fails to take nonhuman agency seriously enough, given that intentionality lies only with humans in these networked relationships (Alkon 2013).

In that sense, ANT’s ‘more-than-human’ ontology has been developed in postdualist writing on ‘hybridity’ by the likes of Sarah Whatmore (2002) and Donna Haraway (2008).

Like Latour, these scholars emphasise the cross-contamination of the material and societal, human and nonhuman - the latter of which should figure as political subjects (Castree 2003). Yet where ANT is often charged with constructing networks made from entities whose ontological status retains the modern bifurcation between 'nature' and 'culture', more recent relational approaches emphasise the open-ended and unruly character of networks containing hybrid actants with no essential features.

Not only have 'we never been modern' (Latour 1993), then, but according to Haraway (2008) 'we have never been human', illustrated in her example of the 'cyborg' - a hybrid bodily mix of machine, woman and animal in which nature and technology blur into each other (Jones 2009). Haraway's approach is also distinguished from ANT in granting positive ontological difference to 'animals' amongst other nonhumans. This concern for the significant otherness of humans and animals, it is argued, improves upon ANT by acknowledging the importance of specific human-animal relations and inter-species dependencies.

Despite their subtle differences, then, ANT and the notion of hybridity both seek to overcome entrenched dualities between human-nonhuman, mind-body, subject-object and self-other in world-making processes (Jones 2009). For that reason, these 'lively geographies' (Blaser 2014) emphasising affective intercorporeality between hybrid bodies are closely linked to Deleuze and Guattari's (1987) notion of 'assemblage'. Indeed, assemblage is often labelled an 'after-ANT' literature due to its shared concern for the more-than-human aspects of the socio-material world and orientation towards how things are put together whilst retaining their heterogeneity (Anderson and McFarlane 2011a; Muller and Schurr 2016). The following section introduces assemblage theory and its application in geography and other disciplines, before elaborating upon its use as a theoretical framework in this study.

2.4.4 Assemblages

Taken from Deleuze and Guattari's (1987) notion of *agencement* the term 'assemblage' refers to the relational coming together and spatial ordering of disparate entities through which actions occur (DeLanda 2006; Muller 2015). Importantly, these entities are heterogeneous and possess the same ontological status to begin with, thus eschewing divisions between nature/culture and social/material. As such, there are no prior assumptions as to what can and cannot be related in these assemblages, and the (non)human components that converge may operate on different spatial and temporal scales (Lejano 2017).

In attempting to construct an assemblage theory, DeLanda (2006) makes an important distinction between the 'properties' and 'capacities' of components. Properties are relatively finite and constitute the actualised features of an assemblage, such as the 'legitimacy' of an organisation. In contrast, a component's capacities are defined by infinite possible interactions with other entities. Unlike properties, then, capacities can be actual or virtual, and there are multiple contingent futures and 'possibility spaces' should components connect and relate differently (Dittmer 2014). As with Haraway's (2008) 'cyborg', Jones (2009) gives the example of a rider, horse, and riding technology coming together to form a hybrid entity with new power and space/life making potentials. Contingent upon interactions between diverse (non)humans, then, capacities do all of the relational work in assemblage. Yet their 'relations of exteriority' (Deleuze and Guattari 1987; DeLanda 2006) mean components also retain a certain autonomy; agentic both individually and as the sum of their parts, they can be detached and plugged into other assembled wholes (Anderson and McFarlane 2011b; Lorimer 2012).

At any given moment, then, components may be involved in processes that (de)territorialise and (de)code the assemblage. On the one hand, components may engage in arborescent practices that stabilise the assemblage by sharpening its borders or homogenising its composition. Conversely, the assemblage may be deterritorialised and its internal coherence undermined as multiplicities follow their own 'lines of flight', engaging in rhizomic practices with components from 'outside' (Deleuze and Guattari 1987; DeLanda 2006). Rather than reify entities such as the state, society, or capitalism,

then, assemblage focusses on the spatial and conceptual processes that produce these contingent ‘things’ (Li 2014; Harman 2014).

As such, an assemblage framing emphasises the emergent and topological nature of space, produced through networks of interacting bodies, materials and discourses. Efforts to control, organise and ‘striate’ space are ongoing, but other components combine to resist these measures and ‘smooth’ space (Deleuze and Guattari 1987; Horowitz 2016). Therefore, Euclidean notions of bounded space waiting to be filled are problematised, and assemblage renders ‘scale’ obsolete as a spatial ontology premised on hierarchy or ‘looking up’ (Marston *et al.* 2005). What counts is not metric distance but the topological connections that ‘fold’ space, and assemblage thinking foregrounds the ways social/political processes are generated through relations between sites (Dittmer 2014; Muller 2015).

Whilst recognising that there are structures and codes which stabilise our social worlds, then, assemblage thinking - and relational thought more broadly - is attentive to disconnects, fissures and ‘spaces-in-between’ relations (Massey 2005; Murdoch 2006; Li 2014). For relational thinkers, socio-natural spatialities are open-ended, weaving, and forever in a state of becoming (Della Dora 2009; Cresswell 2011a). This is what Braun (2006: 644) refers to as ‘the *making* of socio-natures’ (emphasis in original), consisting of ‘contingently obligatory rather than logically necessary’ relations (Speed-Rossiter *et al.* 2015).

Within geography, then, research adopting an assemblage framing has largely focussed on how things and groups emerge, cohere, and break up as never complete organic wholes (Anderson and McFarlane 2011a, 2011b). The concept has been used to understand and reframe geopolitical relations on multiple scales, drawing attention to the relational technological practices that territorialise state control over land, for example (Rosin *et al.* 2013; Li 2014). With its focus on emergence and components that exceed the ‘network’, assemblage has also helped reconfigure social relations. As such, McFarlane (2009) argues social movements are place-based but also exchange materials across sites, and others demonstrate the reformulation of political/indigenous identities and experiences through emergent (non)human relations (Davies 2012, 2013; Blaser 2014). Far from

residing organically in 'nature' or 'landscape', then, sociality and identity are produced through networks of people, ideas and things moving (Jazeel 2005; Cresswell 2011a).

Assemblage thus has distinct utility for analysing the interrelation between politics, power and space (Muller 2015). Mapping 'assemblages of geopower' (Depledge 2015), political geographers concerned with materiality have uncovered the complex interactions and hidden, unnamed practices that distribute power amongst components and produce emergent geopolitical effects (McCann and Ward 2012; Dittmer 2014). These political assemblages are inseparable from socio-economic and environmental assemblages, and the concept has generated particular fervour amongst those working on nature-society relations. For example, Murphy (2014) illustrates the role of hybrid nonhuman things - such as climate and weather - in the (re)territorialisation of neoliberal governmentalities. In its decentring of human agency, then, assemblage has allowed researchers to articulate a sensitivity to the material role of nonhumans in the constitution of politics and space (Whatmore 2006; Muller 2015). This is especially the case with regard to nonhuman animals, discussed in the following section.

Before then, it is important to indicate that assemblage is ideally suited to exploring socio-natures in CBNRM spaces, if not as a fully-fledged theory then certainly as a conceptual framework. As Duffy (2006) argues, the globalisation of environmental governance means interlinked 'scales' cannot be discussed in isolation, and assemblage's emphasis on 'contextual specificity and contemporaneous multiplicity' (Grove and Pugh 2015: 4) allows for an important theorisation of translocal (non)human relations. It highlights the (de)territorialising processes that produce diverse socio-natures, illuminating those spaces-between-relation that are absent on the surface, but which may become at any moment (Anderson and McFarlane 2011b; Büscher *et al.* 2012). Assemblage reveals the practices that sediment powerful (neoliberal) nature ontologies, producing unequal costs and benefits. Yet in its attention to the creative capacities of nonhuman matter and multiple realities, assemblage provides hopeful researchers a means of imagining novel, more equitable socio-natural futures (Dittmer 2014).

2.4.5 Animal(s) Geographies – Wildlife Topologies and Lively Biogeographies

In their seminal text on animal geography Wolch and Emel (1998: xv) argue nature had, up until then, ‘remained a largely undifferentiated concept, its constituent parts rarely theorised separately’. The same cannot be said today. Over the past couple of decades there has been a proliferation of literature within so-called ‘new’ animal geography that liberates animals from the ‘black box’ of nature (Wolch and Emel 1998), letting them ‘back in’ to accounts of spatial ordering between humans and nonhumans (Buller 2014a: 310). At the same time, this literature also acknowledges the individual affective agency of animals in our co-habited worlds (Philo and Wilbert 2000; Whatmore and Thorne 1998, 2000; Lorimer 2010; Barua 2013).

At one level, those interested in human-animal relations have focussed their attention on the representation of animals. Labelled as ‘pests’ or nurtured as a factor of production depending on whether they are ‘in’ or ‘out’ of place, Philo and Wilbert (2000) demonstrate how the proper place for a nonhuman animal is a culturally and historically specific construction (McLachlan 2002). To that end, animal geographers have employed traditional ethnographic methods to gain a glimpse into animal worlds as they are represented and sensed by the humans who interact with them (Hodgetts and Lorimer 2014).

But within this complex nexus of human-animal spatial relations the nonhumans are agentic too. As Philo and Wilbert (2000: 2, cited in Buller 2004: 131) put it, ‘humans are always, and have always been, enmeshed in social relations with animals to the extent that the latter, the animals, are undoubtedly constitutive of human societies in all sorts of ways.’ A critical task of the new animal geography has thus been to trace these networks of human-animal interactions. In their work on ‘spatial formations of wildlife exchange’ - the social networks in which African elephants are caught up - Whatmore and Thorne (2000) traced three simultaneous moments in the patterning of elephants in these networks: as virtual bodies, as bodies in place, and as living spaces. In doing so, they accounted for the elephant’s ‘diverse relational emergence’ (Lorimer and Whatmore 2009: 674) in a living space shared with other (non)humans. This notion of animals as ‘subjects’ as well as ‘objects’ in these networks has been elaborated upon by scholars

seeking to foreground a sense of recognisable human/animal vitality (Watson and Huntington 2008; Notzke 2013; Buller 2014a).

Cultural geographers have undertaken multi-species ethnographies to attune to the practiced, affectual and embodied relations between humans and animals. Lorimer (2006), for example, describes the 're-animation' of a social landscape in the Scottish highlands through reconstructing the entwined biographies of reindeers and their herders. Utilising historical archives, observation, and walking he shows how collective movements of herd and herder constitute 'knowledge in practice' through which individual animals and herders alike develop forms of reciprocity, trust and understanding (Braun 2006). Scholars have undertaken similar mimetic experiments - alongside more traditional text-based methods - in order to explore the embodied practice of hunting animals such as foxes (Marvin 2003), moose (Watson and Huntington 2008) and elephants (Lorimer and Whatmore 2009). Research of this nature demonstrates the animal's active agency in these performed encounters, often in 'control [of the] the hunt' (Watson and Huntington 2008: 262), and engaged in passionate modes of reciprocity and relational ethics with their human counterparts (Lorimer and Whatmore 2009).

This shift towards a vital ontology of animals - attending to their affective agency and lived experience both individually (Bear 2011; Keul 2013) and collectively (Lorimer 2006; Notzke 2013) - redistributes political agency beyond the human subject (Lorimer 2012). This has particularly been the case with research on the circulation and networked spatiality of elephants. No doubt inspired by Whatmore and Thorne's (1998, 2000) earlier writings on wildlife topologies, scholars have sought to illustrate the networked assemblages of (elephant) conservation. Lorimer (2010) prefers to think of these relational geographies as 'modes of companionship' between elephants and other species. He notes how their unfixed bodies 'bear traces of multimillennial histories and multinational geographies of movement, captivation and conflict' (2010: 492) which point to an ongoing 'becoming-with' elephants (Jepson *et al.* 2011). This notion of elephants moving through a complicated, folded, world is taken further by Barua (2013) who argues these 'cosmopolitan' creatures are social and spatial 'conduit[s] for connectivity', their material and affective agency knitting far-flung epistemic communities together in 'assemblages of conservation'.

No longer simply ‘out there’ in national parks, then, the geographies of these ‘cosmopolitan’ animals and the landscapes of conservation therein are hybrid, dynamic and dispersed (Lorimer 2010; Barua 2013). As the next section will show, this turn to relational and ‘multi-natural’ ontologies has important implications for understanding how we come to know and value nonhuman ‘natures’. At the same time, this ‘ontological turn’ has much to offer political ecologists seeking to challenge modernity’s great divide, providing a space for scholars to elucidate (indigenous) alternatives to the dominant neoliberal framing of socio-natural relations.

2.4.6 Relational Knowledge, Value and Culture/nature Ontologies

As discussed above, an assemblage framing elucidates the (de)territorialising practices and relations that spatialise and order the world. It is in the assembling of diverse (non)human components, then, that knowledge and value is (re)produced. Knowledge production is inherently spatial, and scholars have shown how assembled relations produce ‘epistemic spaces’ in which particular knowledges become possible (Watson and Huntington 2008). This more-than-human process disrupts the subject-object dichotomy, chiming with approaches seeking to overcome the encumbering polarisation of ‘traditional’ and ‘western/scientific’ knowledge (Goldman 2009). These scholars have shown that knowledge is not merely built from pre-existing facts waiting to be discovered, but that it is produced through (non)human relations contingent upon biophysical and socio-political environments (Agrawal 1995; Harding 2011; Ingold 2014). Assemblage thus provides a mechanism through which to understand the co-creation of knowledge, not merely in ‘local’ contexts but within and between multi-scalar networks of (non)human actors (Neumann 2009).

Similarly, in attempting to challenge the neoliberal consensus on economic value and market efficiency, scholars have proposed a ‘relational’ theory of value. Based upon an understanding that ‘nature’ and ‘value’ are both names for relationships, this alternative value arises from knowledges, practices and relationships as (non)humans interact (Gallacher and DiNovelli-Lang 2014). These trans-species relations generate ‘encounter value’ that is ephemeral and recalcitrant, contrary to a notion of ‘use-value’ only realised

through use or consumption by a human subject (Haraway 2008; Barua 2016a). Nonhuman labour is thus central to this process, constitutive of the very relations that mobilise animals as commodities, for example.

This aligns with Marx's labour theory of value and critique of commodity fetishism, based on the notion that value does not inhere in things/objects, but is instead generated through a productive metabolism between labour and the natural world (Robertson and Wainwright 2013). Value is not static, but a fluid process susceptible to change as (non)human components (dis)assemble (Carolan 2013). As numerous relational thinkers point out, value is a more-than-human event that must be continually (re)enacted (Barua 2016b; Bollier 2016). At the same time these relations are affective, spatially contingent, and impossible to abstract into fungible exchange value.

Neoliberal conservation's notion of nature as managed object thus suppresses relational culture/nature ontologies, and scholars associated with the 'ontological turn' emphasise the parallel existence of different ways of understanding how 'nature' and 'reality' are constructed and known (Blaser 2014). As such, Sian Sullivan (2013; 2017a; 2017b) insists we countenance animist 'amodern' onto-epistemologies - such as those shared by indigenous peoples in West Namibia - whereby agency is extended to entities beyond the human. These nonhuman natures include animals, plants, ancestors and other spirit-beings, all of which are active and creative participants in relational 'technologies of enchantment' (Sullivan 2017a). These practices include making and experiencing music, dance and stories, stimulating various embodied affects through which humans come to know 'natures' and the nature of being.

For political ecologists seeking to challenge the inequality and structural violence caused by modernity's great divide, there is much promise in elucidating and defending these relational nature ontologies, knowledges and values (Sullivan 2013, 2017a, 2017b; Blaser 2014). At the same time, these multi-natural ontologies generate new insight into the 'assemblages of conservation' through which 'nature' knowledge and value is produced (Barua 2016b). As the next section will show, a world of immanent, assembled socio-natures necessitates a rethinking of the way (community-based) conservation is practiced.

2.4.7 Multi-Natural Conservation

Faced with continued declines in biodiversity and the failure to achieve targets set by the Convention on Biological Diversity (CBD), conservationists are pausing for thought. The CBD's use of 'nature' or 'the natural' as a demarcation line for protecting biodiversity of intrinsic or instrumental value is deemed problematic, setting futile boundaries between humans and a pristine nature (Uggla 2010). In the so-called 'Anthropocene' there is little utility in environmentalisms that deny the irrevocable fusion of nature and society (Braverman 2014). This applies both to approaches seeking to preserve nature 'out there' and those proposing technological solutions based on nature's commodification and utilisation by humans; the former denigrating life forms dependent on human care, the latter denying nonhuman agency (Lorimer 2015).

These views are plainly at odds with critical understandings of relational and hybrid socio-natures (Whatmore 2006; Haraway 2008; Sullivan 2017a, 2017b). For that reason Lorimer (2012, 2015) suggests abandoning the notion of a singular, balanced 'nature' altogether, arguing conservation biology can no longer be guided and audited by numbers representing diversity of species, habitats and ecosystems. Rather, he offers 'wildlife' as an alternative ontology centred on hybrid, nonlinear 'ecologies of becomings' between (non)humans (Lorimer 2015: 7). Concerned less with the balance and diversity of current forms, this relational ontology emphasises the discordant, topological processes through which unruly 'natures' may become otherwise.

These multi-natural ontologies resonate with more recent conservation approaches that acknowledge the instability and complexity of ecosystems in which a whole host of (non)human agents interact. Examples of these include non-equilibrium ecology, adaptive management and - perhaps most significantly of all - 'rewilding' (Jones 2009; Brown 2011; Lorimer and Driessen 2014). Increasingly common in North America and Western Europe, rewilding projects aim to create diverse and resilient landscapes by (re)introducing keystone herbivores and their predators. As such, these programmes represent a dramatic shift away from a notion of conservation based on fragmented landscapes inhabited by rare species to one focussed on catalysing ecological processes. Based on research undertaken at the *Oostvaardersplassen* in the Netherlands, Lorimer and Driessen (2014) conceive of rewilding projects as a series of open-ended, uncertain

and embodied negotiations between people and wildlife, referred to as ‘wild experiments’ through which natures become known.

This work lends weight to studies within animal geography that challenge existing wildlife management frameworks. For example, based on work with UK water voles and redstarts Hinchliffe (2008) cautions against attempting to render the present eternal, favouring conservation practice which acknowledges uncertainties and looser forms of assembled natures. Similarly, in calling for an end to the *in situ/ex situ* divide, Braverman (2014) argues critical understandings of multi-natures override the rigid categories of habitat, site, or range that conservationists often deploy to conceive of their world.

In that sense, abandoning ‘nature’ and acknowledging hybrid naturecultures has important political implications. Multiple natures are not ‘tied to the soil’ in national parks (Jazeel 2005), but are political concepts negotiated and filled with meaning based on value-laden knowledges (Uggla 2010; Gombay 2014). As such, Li’s (2007) contention that CBNRM is an assemblage of things - animals, socially situated subjects, objectives, institutions, knowledges and discourses - remains true; conceiving of conservation as a processual (non)human assemblage thus allows for diverse knowledges and values of natures with multiple possible futures (Lorimer 2015). Ostensibly hegemonic, these assemblages may allow certain actors to commodify, govern, and speak for the nonhuman world; but they are always open to change. As such, the next section explores the benefits of combining these multi-natural ontologies with political ecology approaches to (neoliberal) natures. As part of a more than human ethnography, it considers how ‘following’ these (non)human relations might help us better understand the assembling of knowledge, value and socio-natural spatialities.

2.5 Towards 'More-Than-Representational' Socio-Natures: Following Assembled Things

Despite Bakker's (2010) call for scholarship on neoliberal natures to move beyond the narrow definition of 'nature as resource' and adopt a more expansive view of socio-natures, there still exists a schism between critical work in political ecology and the burgeoning literature on animal geographies and multi-natural conservation. Yet, as Lorimer (2012) observes, there is abundant potential for collaboration between the two, a sentiment which echoes calls for increased co-operation between political ecologists and human geographers more broadly on the issue of 'nature' (Neumann 2011).

Attending to the materiality and active participation of nonhumans, relational writers have rectified some of the problems associated with political ecology studies of socio-natures (Ekers and Loftus 2013). As Barua (2014b: 1473) puts it, these 'more-than-human' approaches have been integral to animating and 'ecologising political ecology'. At the same time, this work has been criticised, most obviously, for its neglect of representation and lack of attention to politics and power relations. Non-representational geographers are accused of side-stepping political questions, particularly by feminist writers disheartened by a lack of attention to gender and power issues (Merriman and Revill 2008). On that note, Cresswell (2012) points to the absence of collective political identity - such as class, race, or gender - in non-representational geographies where the 'subject' takes preference over representational or fixed identities.

In a hybrid world where important differences between humans and nonhumans are diminished, it becomes difficult for us to challenge injustice on behalf of nonhumans (Chagani 2014). There is a risk, then, of becoming too posthumanist, and Harman (2014: 129) urges us to attend to the 'robust internal character' of assemblages that deny any reality outside a web of interactions. Scholars have thus cautioned against an overly material approach to the study of socio-natures, or what Tolia-Kelly (2012) refers to as mere 'surface geographies' which map multi-natural, affective worlds but lack any form of theoretical underpinning or political engagement (Tolia-Kelly 2006; Kirsch 2013). Undoubtedly, then, an engagement with representation and politics can complement - if not correct - the perceived excesses of neovitalism (Lorimer 2012; Simonsen 2013).

Taking these criticisms into consideration, this study attempts to sustain a ‘productive tension’ between these two perspectives (Chagani 2014: 425), adopting a ‘follow the thing’ approach to explore assembled socio-natures. Centred largely on Ian Cook’s work on the globalisation of foods such as papaya, ‘following’ has traditionally been used to study the circulation and mobility of commodities from production to consumption (Cook *et al.* 2004; Cook *et al.* 2006; Cook and Harrison 2007). Sitting alongside work by the likes of Pfaff (2010) who followed a single mobile phone as it was passed from one owner to the next in Zanzibar, these scholars attempt to shed light on the economic, political and cultural practices of (non)human actors that produce these ‘things’ (Braun 2006; Cresswell 2011b).

The epistemological foundation and practicalities of ‘following’ as part of a ‘more-than-human ethnography’ will be discussed in the next chapter; but its conceptual utility lies in its focus on nonhuman materiality and potential to overcome the false antithesis between multi-natural approaches and political ecology studies on neoliberal conservation (Lorimer 2012). The same can be said for animal geographies, with their consideration of both ‘animal spaces’ and ‘bestly places’ which together constitute socio-natures (Whatmore and Thorne 1998, 2000; Buller 2004; Lorimer and Whatmore 2009). It is a combination of both, then, in an approach which follows African elephants that helps us explore situated knowledges and values within and beyond CBNRM spaces, as part of socio-natural assemblages composed of (non)human beings and things.

As commodities, elephants are what Duffy and Moore (2010: 762) refer to as ‘actually existing neoliberalisms’ with geographical lives of their own. In their case study of ship breaking in Bangladesh Gregson *et al.* (2010) draw attention to the ‘back end’ of the value chain, where commodities come apart, are recycled and readied for another round of consumption. For that reason, they urge us to pay attention to the material and symbolic instability of ‘things’ as they move through space (Kirsch 2013). Adopting an assemblage framing thus responds to Gregson *et al.*’s (2010) call to ‘rethink the thing’, acknowledging the ‘porosity of the imagined borders which mark ‘us’ off from ‘them’” (Whatmore 2002: 20, cited in Bridge 2003: 260), and recognising that elephants are not simply objects but unstable, relational and processual entities (Tolia-Kelly 2012).

The 'thing's' journey is not linear but networked and dispersed. Rather than there being discrete beginnings and endings to the value chain, then, Lepawsky and Mather (2011) prefer to think in terms of 'boundaries and edges' - the places where things become attached to other, emergent entities (Cresswell 2014). As such, following these transitional material natures can highlight the production and transfer of knowledge through immanent relational assemblages (Watson and Huntington 2008; Kirsch 2013; Cresswell 2014), highlighting the places where values, ideas and actions flow - where knowledge and policy is mobilised. Not only that, it can also help answer Dempsey and Robertson's (2012) call to broaden understandings about value circulation and the production of nature, identifying landscape connections and conflicts between diverse individual and collective values (Whitehead *et al.* 2014). In an ecologically 'connected' landscape, this involves exploring the elephant's role alongside other (non)humans in forging institutional, social and cultural connectivity within and beyond CBNRM spaces.

But this relational approach is not synonymous with a fully 'flow-friendly' socio-natural world. There remain plenty of immobilities and forms of stillness where things and ideas get stuck, and where knowledge and value cease to flow (Lorimer 2012; Cresswell 2014). Tracing the elephant's interactions with other (non)humans thus draws attention to the arborescent and rhizomatic practices that (dis)assemble these spaces (Deleuze and Guattari 1987). As Matless (2008) observes, this may involve the production of books and other textual/visual representations that are practices in their own right. 'Following' is thus a 'more-than-representational' approach, acknowledging the political nature of representations that structure relations between humans and nonhumans (Chagani 2014), but which are nonetheless lively and undetermined acts in a constantly becoming socio-natural world (Cadman 2009; Cresswell 2012). Combining Marxist 'production of nature' perspectives and relational ontologies brings into focus the assemblage of (non)human labour, representations and practices through which socio-natures and CBNRM spaces take shape and fall apart.

2.6 Conclusion

Based on its dual biodiversity conservation and rural development objectives, CBNRM remains a powerful ‘win-win’ discourse, particularly in post-colonial Africa. Donor agencies, governments, academics and practitioners remain dedicated to CBNRM’s ethos, and are committed to developing and improving the programme. This is despite much criticism of CBNRM, largely centred on its meagre contribution to biodiversity conservation (Algotson 2006; Epps *et al* 2011), rural development (Gibbes and Keys 2010; Van Amerom and Büscher 2005) and livelihood facilitation (Long 2004; Lapeyre 2010; Suich 2013). In the wake of this criticism there now appears to be consensus amongst scholars that CBNRM programmes must be site and context specific, and aligned to the local commonage (Adams *et al.* 2004; Murphree 2009; Gibbes and Keys 2010).

However, this academic focus on local context and site specificity in CBNRM seems somewhat at odds with wider conservation policy discourse and practice focused on ‘ecosystem’ and ‘landscape’ approaches. More to the point, there has been a proliferation of academic literature demonstrating how global forms of environmental regulation and the increasing commodification of nature - manifested in concepts such as ‘Transfrontier Conservation Areas’ (TFCAs) and ‘ecosystem services’ - may have highly variable impacts upon local CBNRM spaces and society-nature relations therein (Brockington and Scholfield 2010; Büscher 2010a, 2010b; Duffy and Moore 2011). Given Namibia’s commitment to CBNRM and the drive towards transfrontier conservation, it is important to explore the nexus between these ‘twin drivers’ - both in terms of the site specific knowledges and values crucial to CBNRM success, and with regard to the (dis)connectedness of these socio-natures in the wider conservation landscape.

In doing so, the conceptual approach responds to calls to embrace the collaborative potential between work in political ecology which has discussed the power to represent, construct, and create discourse about (neoliberal) nature and that of ‘more-than-human’ (and animals’) geographies which adopt a more expansive view of socio-natures (Bakker 2010; Lorimer 2012; Sullivan *et al.* 2013). This will be done by ‘following’ African elephants - tracing their networked topologies as they move into and out of assemblage with other (non)human things and beings. Attending to the political representations and

emotional, embodied practices which affect, and are affected by, these things we can come to understand how assembled CBNRM spaces form and hold together. Yet, by definition, these things move, and assemblages fall apart. Given the prominence of mobility and ecological connectivity in modern nature conservation, this ‘multi-site/more-than-human ethnography’ (Barua 2013) is geared towards a much needed exploration of institutional and social connectivity within and beyond CBNRM spaces. Tracing the landscape assemblages in which elephants are enmeshed draws attention to the connectedness of epistemic spaces, as well as the places where ‘things’ get stuck - or refuse to be connected - and knowledge and value cease to flow.

Chapter 3: Methodology

3.1 Conservation Contexts

3.1.1 Namibia

Namibia is a country spanning 824,000km² on the south-west coast of Africa (Figure 3.1). Despite its vast territory the country's population is below 2.5 million, more than half of whom live in rural areas. Since gaining independence from South Africa in 1990, Namibia has been ruled by the liberation party - South West Africa People's Organisation (SWAPO). Although the country is constitutionally a multi-party state, then, it is in reality a dominant single party political system (Guijarro 2013).

The land is divided into fourteen regions, consisting of diverse ethnic groups, and can be separated into three broad types of tenure: state, private, and communal. The country's colonial history has shaped this configuration, especially South Africa's attempt through the Odendaal Commission in 1963 to create (theoretically) autonomous black 'homelands' separate from 'white' areas (Figure 3.2). At independence these rural 'communal' areas were vested in the state, and since 2002 have been administered by Land Boards alongside Traditional Authorities (TAs). An important unit of local government, these TAs adjudicate on issues at community courts, led by a hereditary chief under whom the secretary and various village headmen serve.

While a black middle class established itself soon after independence, little has been done to redistribute wealth or land (Wallace and Kinahan 2011). Despite being ranked as a 'middle income' country, then, there is a vast gap between rich and poor and the majority of Namibians live in extreme poverty (GRN 2015a). Growth has been slow in an economy centred on agriculture and fishing, which together account for 31% of total employment (GRN 2014). Largely due to HIV/AIDS life expectancy and national human development are also declining (Suich 2013).

Generally an arid country, erratic rainfall can be as low as 10mm in the south-west, averaging around 600mm in the north-eastern areas (MET 2014). Natural biomes thus range from extremely arid desert in the west, through semi-arid savannah in the north-

centre, to sub-humid woodland in the north-east (Barnes *et al.* 2009). Very little land is suitable for arable agriculture, with natural vegetation being used to graze livestock and wildlife. As such, around 42% of the country's total land area is protected by parks, private reserves, or conservancies, more than double the target of 17% agreed under the Convention on Biological Diversity (MET 2014).



Figure 3.1: Map of Africa, highlighting location of Namibia (Wikimedia Commons)

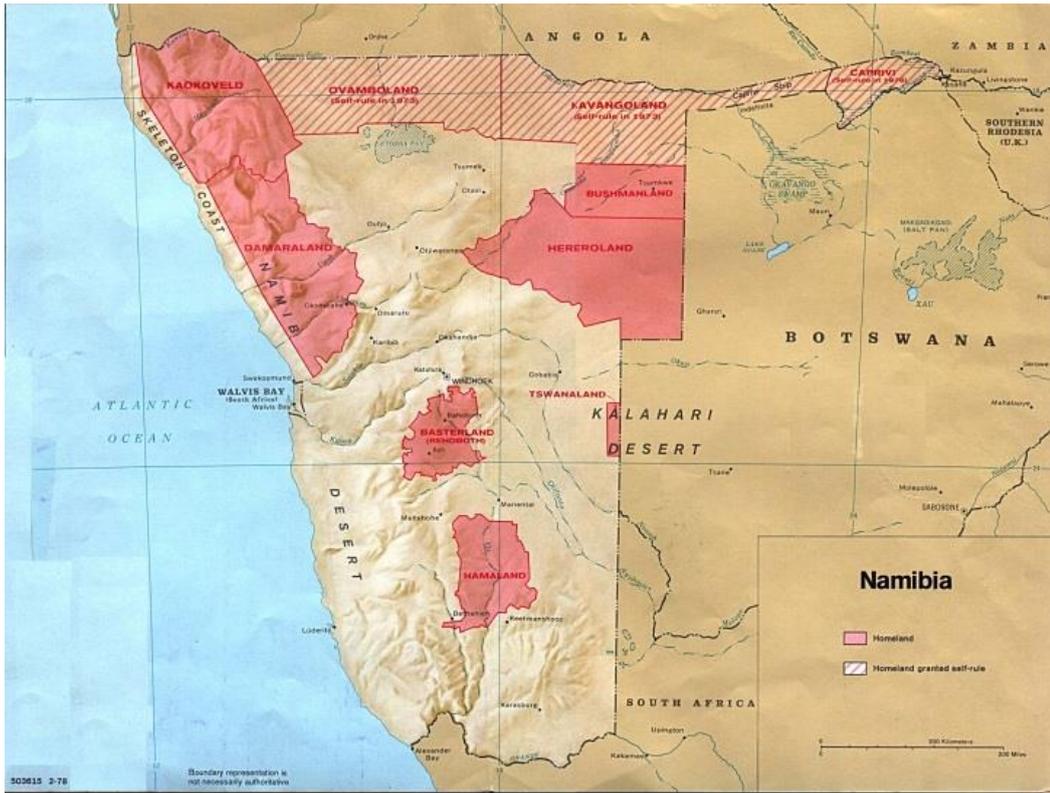


Figure 3.2: Map showing Namibian ‘Homelands’ in 1978 (Wikimedia Commons)

3.1.2 Zambezi Region: An Accident of Colonial Geography

Box 1: A Brief History of Zambezi Region

Present day Zambezi Region forms the eastern half of Namibia's 'Caprivi Strip', a thin panhandle extending into the African interior (Figure 3.3). This 'outrage to geography and all common sense' (Kruger 1984, in Martin 2005: 18) is a product of the region's colonial history. From the seventeenth century the territory was central to various Zambian empires, including the Lozi kingdom whose heartland was at Zambia's Barotse floodplain. As such, it is thought the region's population of agriculturalists, fishermen, cattle farmers and hunter gatherers moved in from present day Angola and Zambia (Tvedten 2002).

By the 1850s the first Europeans had arrived in the area, and in 1890 the German Empire traded territory with the British in return for a strip of land partitioned from the Lozi kingdom - known thereafter as 'Caprivi Strip'.¹ The Germans hoped to utilise this land for its human capital, mineral resources, and as an access corridor to their eastern colonies, but Victoria Falls proved a barrier to downstream navigation. Soon after the First World War begun, then, German South West Africa (Namibia), including Caprivi, was surrendered to the British (Zeller and Kangumu 2007).

Caprivi was governed by various British colonial administrations before being transferred to the South African government in Pretoria in 1939. Its low priority resulting from access difficulties continued, and provision of health and education services was largely left to missionaries. But this changed with the onset of apartheid and the idea of separate development for self-governing 'homelands' in Namibia (see above). In 1976 a Caprivi 'government' was formed consisting of chiefs and headmen from the region's two main tribes - Mafwe, based mainly in the west, and Masubiya, largely residing in the east - meaning Caprivi was effectively governed through a system of indirect rule up until 1980 (Tvedten 2002).

Box 1 Continued...

In the early 1960s prominent Mafwe activists formed the Caprivi African National Union (CANU), seeking independence for the region and ultimately merging with SWAPO in the war for Namibia's liberation (Harring and Odendaal 2012). Throughout the 1970s, then, Caprivi became a military launch pad for South Africa's cross-border raids into Zambia and Angola against SWAPO's guerrilla fighters (Melber 2009). Recruitment of local soldiers into the South African Defence Force (SADF) provided an economic boost, but this had dissipated by the time the war officially ended in 1990.

In the decade prior to independence Caprivi was administratively brought back to South West Africa, political control becoming more hands-on in the region. For CANU members devoted to a notion of independence centred on Caprivi's cultural and historical connections with pre-colonial Lozi kingdoms, the region's inclusion in the Namibian state formation project was unwelcome (Zeller and Kangumu 2007). Whereas SWAPO won easy victories in most of the former homelands during the 1990 elections, then, in Caprivi they lost out to the Democratic Turnhalle Alliance (DTA) - a party with strong ties to the old regime and generally supported by the Mafwe.

The political schism between Caprivi and the SWAPO government in Windhoek has continued post-independence, evidenced in events such as 1999s failed secession attempt when a group of (mainly Mafwe) 'Caprivi Liberation Army' fighters launched attacks on government infrastructure in the region's capital, Katima Mulilo. Government proclamation of the Mayeyi TA in 1995 and Mashi TA in 2004 are said to have undermined the existing Mafwe TA. The renaming of 'Caprivi' to 'Zambezi' Region in 2013 is also deemed an attempt to deny the Mafwe's history and legitimacy. As such, there remains an undercurrent of dissent amongst 'Caprivians' who do not feel part of Namibia. The government thus faces many challenges in the so-called 'nation-building' process, particularly in the remote Zambezi Region where its presence is weak and traditional social and political structures remain strong.

It is perhaps unsurprising, then, that Zambezi Region is the poorest in Namibia. Approximately 40% of its 90,596 population live in extreme poverty, and 69% reside in rural villages with little access to jobs (GRN 2015a). Livelihoods are based around cattle farming, subsistence cropping (mainly pearl millet, sorghum and maize), fishing and the use of other natural resources (Harring and Odendaal 2012). State pensions for people over sixty and those that served in the SADF also represent an important income source for families (Tvedten 2002). Daily life encompasses rigidly-defined gender roles, with men undertaking jobs such as house building, cattle herding and field clearing, whereas women's duties include cooking, cleaning, collecting water/firewood, and caring for children (Khumalo and Yung 2015). Due to the region's very high prevalence of HIV/AIDS (~40%) life expectancy is the lowest in the country - just forty years for men and fifty for women (GRN 2015a).

Due to its abundance of perennial rivers, floodplains and woodland, Zambezi is an important biodiversity 'hotspot' (NACSO 2014a). The region has the highest human-elephant ratio in Namibia (Moore 2009) and contains the greatest overall terrestrial species diversity including lion, leopard, buffalo, rhinoceros, hippopotamus and numerous antelope species (MET 2014). Although Mafwe and Masubiya chiefs designated large tracts of land as game reserves in the mid-1980s, much of the wildlife was killed during the Independence War. As such, Zambezi has been a focal area for CBNRM since the programme's inception, and there are now fifteen communal conservancies within which almost half of the region's rural population reside (Figure 3.4).

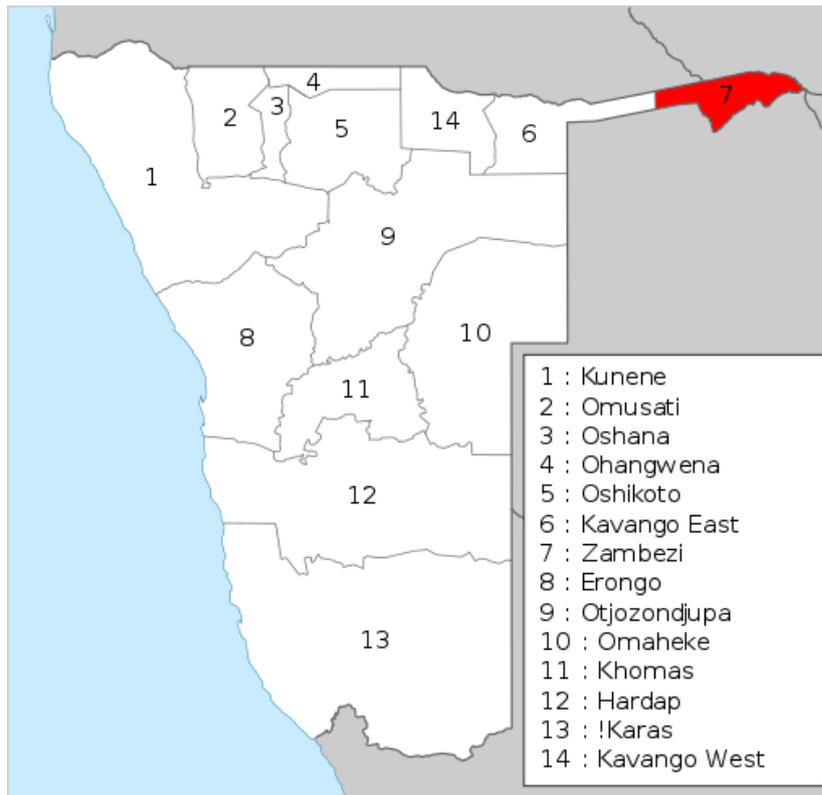


Figure 3.3: Map of Namibia’s administrative regions, highlighting Zambezi (Wikimedia Commons)

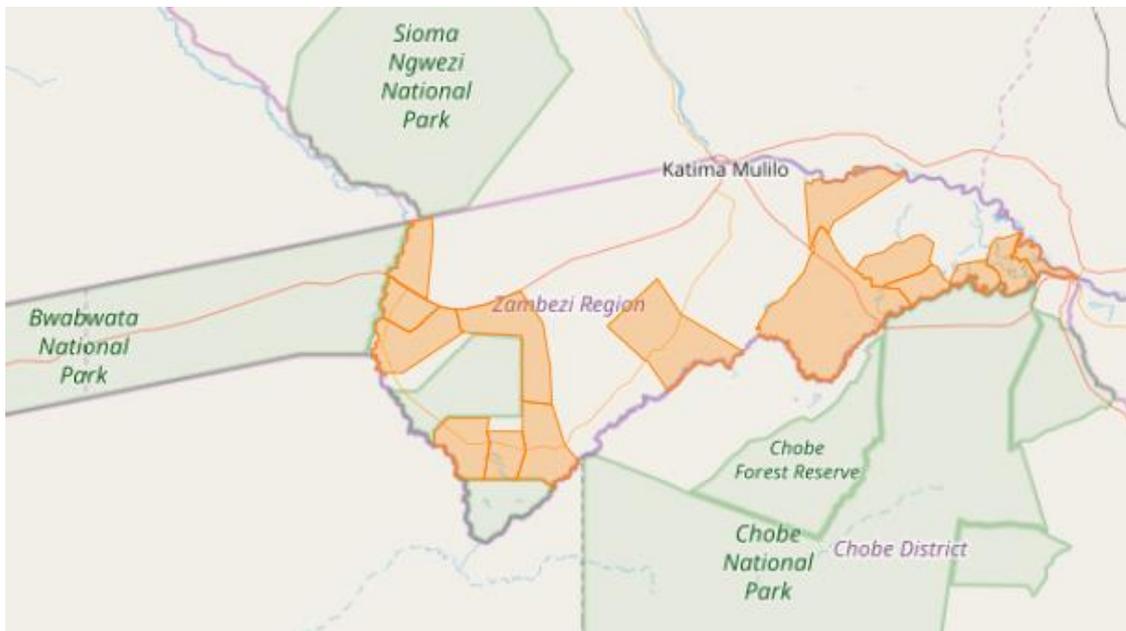


Figure 3.4: Communal conservancies (highlighted in orange) in Namibia’s Zambezi Region (www.nacso.org.na)

3.1.3 Kwandu Conservancy

Although CBNRM activities had been taking place there since 1996, Kwandu Conservancy (Figure 3.5) was not officially registered until 1999. Covering an area of 190km², the conservancy is home to 4,300 people, mainly belonging to the Mafwe (Sifwe-speaking) and Hambukushu (Simbukushu-speaking) ethnic groups. Situated within the poorest constituency in Zambezi (GRN 2015b), Kwandu's villages, crop fields, schools and clinics are largely sited adjacent to the main north–south gravel road. At present, subsistence agriculture makes up 84% of primary livelihood strategies (Khumalo and Yung 2015), yet Kwandu has the highest rates of wildlife-induced crop damage in the country, making it an important site to study.

The conservancy is named after the Kwando River that forms its western boundary, upon which both people and wildlife (notably elephants) rely for water in the dry season (May–October). The river is thus an important feature in terms of tourism potential and biodiversity. Local enterprises include a living museum, crafts, trophy hunting and thatching grass harvesting, yet Kwandu lacks a lucrative tourist lodge (NACSO 2014a). A management committee of twelve members oversees Conservancy operations and governance, and benefits are distributed through the six¹⁰ area sub-*khutas* of the Mafwe TA.

¹⁰ Kayuo, Kongola, Sesheke, Sikaunga, Mwanzi, and Singalamwe.



Legend

- Settlement
- ▲ Place of interest
- Border post
- Conservancy office
- School
- ✚ Health facility
- Joint Venture Lodge
- Lodge/Campsite
- ✈ Air field

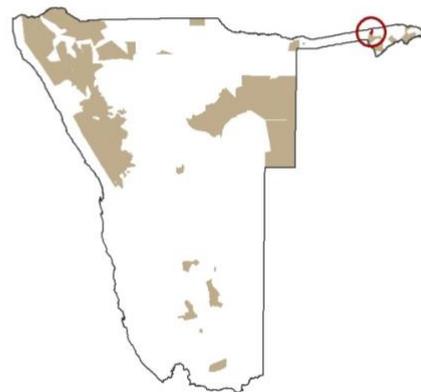


Figure 3.5: Map of Kwandu Conservancy (www.nacso.org.na)

3.2 Assemblage as Methodological Framework

In its attention to the more-than-representational (trans)formation of socio-natures, assemblage was used as a methodological framework in this study. That is not to say there are written rules around ‘doing assemblage’, and Allen (2011: 156) makes the point that ‘carving out assemblages from the plethora of stuff around us is a fallible business’. Nevertheless, in attempting to uncover the relational interactions between more-than-human things, this methodology is underpinned by assemblage thinking.

As such, the methods used chime with assemblage’s epistemological commitments to revealing multiplicity, process, labour and uncertainty (Baker and McGuirk 2016). Blurring divisions between social-material, human-nonhuman and structure-agency, the methodology establishes connections between multiplicities (Dittmer 2014). Its methods are thus concerned with highlighting the processes that assemble disparate components, and the labour that goes into maintaining these configurations. Yet the processual and situated nature of assemblage necessitates a commitment to uncertainty, and the methods adopted reflect this fragility whilst allowing for new connections and possibilities. The next section details the methods used to operationalise these epistemological commitments.

3.3 Data Collection

Fieldwork was undertaken in Namibia between December 2012 and December 2013, and included the following data collection methods.

3.3.1 Ethnography and Participant Observation

This study adopts an ethnographic approach seeking to understand the world as ‘seen through the eyes’ of participants (Kitchin and Tate 2000: 244). Without dismissing the problems associated with ‘representing’ others’ worldviews, the methodology extends Ingold’s (2014: 385) definition of ethnography as ‘writing about people’ to include more-than-human participants. The methods used deliver an in-depth qualitative understanding

of (non)human lifeworlds, in accordance with assemblage's epistemological commitments to multiplicity, process, and labour in situated contexts (Baker and McGuirk 2016).

As such, participant observation was undertaken in order to produce 'thick description' of local practices and nature ontologies (Geertz 1973; Sullivan 2017a). Kwandu Conservancy thus served as a specific case study in which situated society-nature relations and social dynamics were explored (Kitchin and Tate 2000). Whether camped at the conservancy office or on the elephant trail with hunters, this involved watching, listening and participating in activities alongside other (non)humans. These observations were described in close-to-the-moment field notes (Emerson *et al.* 1995) and synthesised in a personal diary that interpreted and reflected upon the data, including my own emotional experiences. This analysis served to focus further observation, bringing to light new questions as part of an iterative methodology.

Importantly, the notion of participant observation employed makes no distinction between being *in* the world (participating) and knowing *about* it (observing) (Ingold 2014). Rather, it attends to the emotional and affective practices of humans (including the researcher) and non-humans that together co-produce knowledge. Yet this 'practice of correspondence' (Ingold 2014: 390) with participants is both geographically contingent and open-ended. As such, the next section discusses 'following' as a method through which the researcher can participate in mobile, relational correspondence with more-than-human things.

3.3.2 Following the Thing

3.3.2.1 Why Follow?

Using a case study of Kwandu Conservancy, this methodology is attentive to the situated context of assemblages. The Conservancy thus serves as an entry point into 'the assemblage'; yet given the contingency and relational spatiality of these configurations, it is necessary to trace topological connections between 'sites and situations' (McCann and Ward 2012). There are no discrete communities or closed spaces; rather, the field is

a socio-political space articulated through relations. Moving away from ontological and epistemological sedentarism, then, this study ‘follows’ African elephants as part of a multi-site ethnography (Marcus 1995; Cresswell 2011a).

‘Follow the thing’ (FTT) methods have been used extensively throughout Ian Cook’s research into the globalisation of food and the uneven geographies of consumption (Cook *et al.* 2004; Cook *et al.* 2006; Cook and Harrison 2007). Whilst following a bottle of West Indian hot pepper sauce, Cook and Harrison (2007: 58) made the point that ‘an amazing array of complex connectivities and mobilities’ were enacted on multiple scales. FTT thus allows for an exploration of the assemblage’s emergent form as the researcher ‘becom[es] entangled in relations and objects’ (Vannini 2015: 320).

Tracing the elephant’s affective interactions with other (non)humans - including myself - the research is able to elucidate the multiple, material practices that assemble socio-natures. These human-nonhuman relations are place-binding rather than place-bound (Barua 2014a), (de)territorialising space through arborescent and rhizomatic interactions. As Head *et al.* (2015) make clear, nature ontologies and biopolitics are emergent from contingent relations, and FTT is a means by which to explore these processes empirically. Responding to calls for researchers to engage with immanent change from within the assemblage (Bear 2013), FTT reveals how the ‘thing’ is ‘always inexorably becoming something else, somewhere else’ (Gregson *et al.* 2010: 853).

As such, it is a method aligning with assemblage’s epistemological commitment to ‘uncertainty’ (Baker and McGuirk 2016). Compelling the researcher to ‘go with the flow’, the ethnographic routes travelled are dynamic and unpredictable, with no obvious boundaries or ends (Vannini 2015). The approach highlights knowledge and value (dis)connections and spaces-between-relations in the assembling of socio-natures. New socio-spatial formations may cohere at any time, and a willingness to follow these relational interactions helps us to imagine alternative political futures.

3.3.2.2 Why These Things?

As Lorimer (2010b: 252) notes, elephants are ‘living, sentient, terrestrial mammals, [whose] ecology, behaviour, subjectivity and plight is more easily grasped than those of microscopic viruses, inorganic molecules, or doorknobs.’ Their selection as a ‘thing’ to follow, then, is partly a practical choice. Yet as commodified, charismatic megafauna (Moore 2011) and as a ‘keystone species’ (Epps *et al.* 2011), elephants are the focal point around which ‘connected’ conservation landscapes are planned and implemented. Motion remains the ‘*sine qua non* in nature conservation’ (Spierenburg and Wels 2006: 305); yet as Cresswell (2014: 4) makes us aware, these mobilities are ‘achievements of hybrid people/thing assemblages [...] enabled and restrained by the prosthetic relations between human and world’. Elephants undoubtedly play a role in the assembling of embodied knowledge and value, meaning they are an ideal ‘thing’ to follow.

Applying this ‘mobile method’ to sentient beings as opposed to (arguably) inanimate objects is also a new direction for ‘thing following’. Relatedly, despite an abundance of literature on the elephant’s networked ecologies and spaces, little research has been conducted into their ‘beastly places’, or what Hodgetts and Lorimer (2014: 2) refer to as *animals’ geographies*. As such, following elephants is a way to work through the material specificities of their entangled worlds as they interact with other (non)human entities. It is a response to the ethical challenge of decentring human control, attempting to engage ‘across, through, with and as, more-than-humans’ (Dowling *et al.* 2017: 824). Exploring the elephant’s individual affective agency allows us to tease apart nonhuman difference, releasing this creature from the ‘black box of nature’ (Wolch and Emel 1998; Bear 2013).

3.3.2.3 Doing Following

Elephants were physically followed during observations alongside hunters in Kwandu. This performative activity involved attending to the elephants’ ethologies, tracking spoor, dung and evidence of vegetation disturbance. As these pachyderm tracks intertwined with those of humans, interviews were conducted with people that had seen, heard, or experienced these creatures. At the same time, interviews were undertaken with farmers

identified from HWC claim forms at the conservancy office, reconstructing past encounters between humans and elephants (Barua 2014a).

Matching incidents spatially and temporally, I was able to retrospectively track particular herds, creating stories and links within and between actors including farmers, hunters and conservancy staff. These embodied encounters and stories may be absent from quantitative data, and were combined with analysis of documents and other materials that attempt to ‘place’ elephants, opening up spaces-between in which these creatures resist representation. Weaving tracks between physical and perceptual ‘following’, then, the methodology countenances a vital and relational topography. Tracing these topological interactions and emergent ‘bio-geo-graphy’ demonstrates how elephants co-produce both space and knowledge alongside other (non)humans (Barua 2014a).

3.3.3 Interviews

A total of 64 semi-structured interviews were carried out with CBNRM stakeholders in Namibia, allowing participants to expand on issues they felt were important (Longhurst 2003) (Appendix 1). This includes humans impacted by - or interacting with - the ‘things’ followed, such as Game Guards, hunters and the owners of fields raided by elephants. A broader range of villagers were selected via ‘theoretical sampling’ whereby the ‘primary concern is to interview people who have distinct and important perspectives on the theme of our research question’ (Lindsay 1997: 59, in Few 2000: 91). Key informants such as MET or NGO staff were identified from documents and during discussions/interviews with other stakeholders.

‘Funnelling’ of topics from the general to the specific (Crang and Cook 2007) was used both to put the participant at ease and ensure the interview acquired value as it proceeded. Lasting from thirty minutes to two hours, all interviews were recorded, allowing the researcher to engage fully in the conversation and transcribe the interview at a later date. Integrated with ‘following’, interviews thus served to elucidate the ‘active processes of narration’ that work to describe and stabilise heterogeneous (non)human networks (Lejano 2017: 200).

3.3.4 Secondary Data

As ‘sedimentations of social practices’ (May 1997: 157, in Few 2000: 98), secondary data and grey literature fleshed out ethnographic and other primary qualitative data. Obtained from the Namibian national archives, MET and (inter)national NGOs, this secondary data included policy documents, institutional reports and media articles on CBNRM. As part of the study’s more-than-representational approach, these materials were treated as practices in their own right, produced through labours of assembling by diverse (non)human actors (Matless 2008; Chagani 2014). Saturated with layers of meaning, these ‘things’ helped explain and corroborate the cultural and historical logics behind non-representational ethnographic data.

3.4 Data Analysis

During the fieldwork period I generated a large amount of textual data, which first had to be cut and sorted, a process Crang and Cook (2007) describe as ‘open-coding’. Initially, I attempted to identify as wide a range of themes as possible. From here, analytical coding took place, further chopping up and categorising data into themes of greater importance. In order to investigate ‘what is going on’ in the data (Schiellerup 2008) a range of observational and scrutiny techniques were used to identify themes, namely: searching for repetitions of words or phrases; transitions and naturally occurring shifts in content; similarities and differences¹¹; missing data¹²; and theory-related material (Ryan and Bernhard 2003).

It is important to recognise that there is no single set of categories waiting to be discovered. Thus, data analysis and theme identification, no matter how one goes about it, or for how long, does not produce a unique solution. Acting as a ‘theme filter’ whilst writing field notes and a personal diary, I chose - perhaps subconsciously - data deemed important to record (see below discussion of positionality and situated knowledge). My analysis does not pretend to present an absolute truth, but a greater understanding of the

¹¹ Comparing answers and viewpoints across people, space and time.

¹² Attending to the parts of narratives and stories which people may leave out in assuming that everybody already knows.

interconnectivities between different truths - those of interviewees, the elephants I followed, and of my own.

Theory was built from empirical data gathered in the field, in an iterative, inductive approach. I believe such an approach is vital in a politically and culturally sensitive space such as Zambezi Region, where it is necessary to adopt what Herman (2011) refers to as a 'connected ethnography', continually tacking back and forth between subjectivity and representation in order to engage with everyday lives and the wider context (Jazeel 2005). In that sense, the diverse bricolage of cross-cutting methods used here (Table 3.1) is more sensitive to the complexity and richness of the field. This is an ethnography which acknowledges the organic nature of research design in practice, generating new questions as the fieldwork evolved and building theory both inductively and deductively. In that sense, it is an ethnography which is *essentially* methodologically innovative and creative (Wilson and Chaddha 2009; Moles *et al.* 2011).

Method	How?	What?	Analysis
Following the Thing	Material and perceptive following of African elephants.	Semi-structured interview transcripts; field notes; researcher photographs.	Coding; personal diary.
Participant Observation	Camped at Conservancy office and lived with families, documenting daily livelihood strategies and natural resource use. Observations in general study area.	Semi-structured interview transcripts; field notes; researcher photographs.	Coding; personal diary.
Field Notes	Recorded during ‘following’ and participant observation.	Field Notes.	Coding; personal diary.
Personal Diary	Reflective diary which synthesised and analysed field notes.	Personal Diary.	Coding.
Interviews	Interviews via following. Interviews with community members in each of the Conservancy’s six areas. Interviews with key CBNRM stakeholders.	Semi-structured interview transcripts.	Coding; personal diary.
Secondary and Grey Literature	Obtained from Namibian national archives, MET, IRDNC, NACSO and other (inter)national NGOs.	Namibian conservation and development plans; historical information from colonial era; (inter)national human development data.	Coding; personal diary.

Table 3.1: Data Collection/Analysis Methods

3.5 Assembling the Field: Research(er) Ethics, Challenges, and Positionality

This research project is a contingent assemblage shaped by the researcher's decisions, relations and negotiations with other (non)human components (McCann and Ward 2012). It is an ongoing act of assembling driven by my own interests, subject to contingencies and structured by bureaucratic mechanisms in both the UK and Namibia. Before leaving for 'the field' I first had to complete an in-depth University risk assessment, including a travel itinerary, hazard maps, and medical emergency response plan. In Windhoek I was required to obtain a research visa and permit from the Namibian government, both contingent upon existing links with - and support letters from - my home institution and IRDNC.

Adhering to local custom, I first sought 'collective consent' to reside and undertake research in Kwandu from the Traditional Authority and Conservancy committee. This was important to legitimise my general observations of community life and institutional practices in Kwandu. Informed consent forms were signed by individual interviewees after reading a Participant Information Sheet.¹³ These documents confirmed participant anonymity in subsequent published material, explaining that photographs of identifiable individuals would not be used without prior consent. Alongside hard copies of data, these forms were kept with the researcher at all times, and interview recordings/transcripts were saved electronically at the earliest opportunity.

As mentioned, informed consent was gained before capturing images of participants. Afterwards they were shown the photographs, given printed copies and offered the opportunity to raise concerns or ask for images to be deleted. Yet conducting photographic research ethically does not begin or end there, and I developed an appropriate understanding of the social context before taking photographs of individuals. As part of an ongoing process this improved the authenticity and honesty of images that portrayed life in Kwandu, empowering and maintaining the dignity of participants often living in extreme poverty (Langmann and Pick 2014). That is not to say that such images are self-evident objects, despite having an objective element. Rather, they are representational products of my own subjective perceptions and motivations, shaped by -

¹³ These documents were also provided in Silozi and/or read to participants by a translator.

and potentially reproducing - dominant discourses, social power relations and 'ways of seeing' people and places (Kitchin and Tate 2000; Rose 2008). As such, it was important to pay careful attention to the cultural meaning and representational nature of these images, as well as their effects as material objects put to use in the production of contested, relational space.

Assembling the field presented other practical challenges. My translator was initially rejected by the Conservancy committee because she did not live in the area. Other women were reluctant to work alongside a man for fear of upsetting their husbands - problems which had to be negotiated with respect and sensitivity. Unsurprisingly, I also encountered difficulties while attempting to physically 'follow' elephants. Having originally intended to track the animals in a vehicle, I soon realised that this was impractical in thick forest with few 'roads'. Lacking weapons, Game Guards were also reluctant to veer from their customary routes with me on foot. Resigned to waiting at a crop field for these illusive creatures, I felt frustrated and anxious that the farmer's interests did not necessarily align with my own (somewhat selfish) objectives.

Remaining open to new possibilities, however, I seized upon an 'ethnographic moment' to join hunters on the elephant trail. This opportunity was surprising given the exclusivity and contentious nature of the practice, and in order to participate and earn their trust I agreed to the hunters' request that I 'do not write "ban hunting"'. Having put aside my preconceptions, however, I felt guilty spending time at the relatively luxurious hunting camp, removed from the hardships of village life to which I had become accustomed.

'Following' thus involved renegotiating my identity and position in order to secure access to the next link in the chain. I made it clear to hunters that I was not a threat and simply wished to learn about their practice. Likewise, when interviewing farmers who had lost crops I felt it necessary to side with their viewpoints, distancing myself from the Conservancy and its perceived preference for elephants over people. Negotiating access also involved 'giving back', and I provided participants with food and other small gifts in return for their cooperation. Some interviewees even commented that my questions had reminded them of important issues and changed their opinions, and that the project helped to build links between Kwandu and the 'outside world'.

Clearly the fieldwork challenges posed were not simply practical, but also emotional. At times it was exhilarating to be on the elephant trail in Zambezi, far from home and its relative docility; on other occasions I felt guilty and ashamed, posing for photos with a hunted elephant and complicit in the animal's death. Whether positive or negative, however, these emotions affected my understanding and were integral to the production of knowledge contained within this thesis. Remaining 'emotionally present' and empathic, these feelings were generated relationally between myself and (non)human participants as we talked, listened, and lived (Bondi 2005; Bennett 2009). The knowledge produced through this embodied approach to listening is relational, intersubjective and fractured, evolving alongside emotional experiences as the research progressed (Bennett *et al.* 2015). Coming to know Kwandu Conservancy through the emotions provoked when tuning into its participants and dynamics, I hope to have generated a richer understanding of its socio-natural complexities. At the same time, these shifting emotional subjectivities helped me to understand the multiple repositionings of self that took place during the fieldwork (Brandt and Josefsson 2017).

In this assembled field, then, I was not merely a detached observer but an emotional, embedded translator with a powerful position (Baker and McGuirk 2016). Situated 'in the thick of things' (Head *et al.* 2014: 866) I was both constituted by, and an active agent in, the production of knowledge. These facts and observations did not drop from the air, but were contingent upon my 'positionality' vis-à-vis participants, meaning it was important to reflect upon the origin and motivation for opinions obtained. In attempting to produce knowledge of socio-natures and elephants, I could never be outside of these 'things'. As such, this thesis and its 'knowledge' are framed by my own cognitive categories, value judgements and emotional interactions as I assembled a complex field alongside other (non)humans.

3.6 Research Limitations

3.6.1 Situated Knowledge

Given the researcher's positionality and agentic role in assembling the field, it is important to recognise the situated nature of knowledge produced. Of course, this situatedness is valuable in terms of providing local context specificity within the case study, yet one should be wary about generalising across conservancies. In spite of the study's multi-site ethnography, then, the research findings should only be treated as a partial ethnographic perspective, emergent from situated interactions contingent upon my capacity to affect - and be affected by - other (non)humans (Barua 2014a).

My decisions over where to 'enter' the assemblage and begin 'following' frame this situated knowledge, and I recognise that the assembling would have been different had I followed other 'things' or started somewhere else. Given the open-ended nature and flat ontology of assemblages, deciding when and where to stop following connections presents conceptual difficulties (Dittmer 2014). Problematic notions of beginnings and endings are overcome somewhat by conceiving of 'boundaries and edges' (Lepawsky and Mather 2011), but in order to complete our studies lines must inevitably be drawn in the sand concerning what we do and do not write about (Carolan 2013). The 'becoming' nature of assemblages means they can only ever be followed partially; there are always hidden connections, virtual spaces 'between', and broader socio-economic issues which may be absent from the track when you are walking it, but most certainly impact upon its course.

3.6.2 Short-Term Ethnography?

I make no secret of the fact that, within the time constraints of my fieldwork, it would be impossible to obtain a complete ethnography of local community cultural practices and social relations. Of course, the most effective way to compensate for this limitation would be to spend longer in Namibia. Nevertheless, spending one year in the field negates some of the seasonality issues research undertaken within a shorter time-period would face.

3.6.3 Solely Qualitative

I feel that the employment of solely qualitative (and mainly ethnographic) methods in this study is ideally suited to the research aims. However, I acknowledge the contested concept that government officials are arguably more inclined to accept quantitative data that give an overview, and dismiss qualitative evidence as anecdotal (Hoggart *et al.* 2002). In that sense, some may view the exclusive reliance on qualitative data collection and analysis methods in this study as a constraint upon its overall policy effectiveness.

3.6.4 Translation Issues

A significant number of people in Zambezi speak good English, meaning language issues were not always a problem. Yet, such people are, of course, likely to be of a certain demographic - educated and most likely in positions of relative power. I cannot speak Zambezi's local languages, meaning problems may arise when participants' words become lost in translation. There is a risk that translators recite what they *thought* they heard, rather than what they actually heard. Yet this is only part of the problem; as Muller notes, 'translation as the transference of meaning can always only be partial' (2007: 207) due to the multiplicity of cultural meanings and understandings of particular words. Neither does this study attempt to produce or represent an absolute truth of 'the other'; rather it is concerned with recognising hybrid spaces in which new socio-natures may form.

3.7 Conclusion

Underpinned by assemblage thinking, this methodology maintains an epistemological commitment to revealing the multiple, processual, laborious and contingent relations that constitute socio-natures. Adopting an ethnographic sensibility, the study utilises participant observation to provide in-depth understandings of local practices and nature ontologies in Kwandu Conservancy. This case study approach attends to the situated context of socio-natures in a well-established conservancy suffering considerable human-elephant conflict, located in an isolated and impoverished region of Namibia.

Recognising the relational nature of space, ‘following the thing’ is used to trace emergent assemblages as part of a multi-site ethnography. Given their agentic role in mobilising knowledge and value, and in an attempt to decentre human agency, African elephants were chosen as ‘things’ to follow. This was done both physically and perceptively/retrospectively, using interviews and secondary data to illustrate the labours and active processes of narration that (de)stabilise assemblages.

This process of assembling is fragile and contingent, involving practical and emotional challenges, and the researcher had to constantly renegotiate their position in order to ‘do’ following. The embodied researcher is thus an active agent in the production of situated knowledge, and it is necessary to reflect upon this in any writing in/of this assembled ‘field’. Nevertheless, used creatively as part of a more-than-human methodology, the researcher’s embodied positionality was central to exploring the elephant’s topological interactions with other (non)humans that produce space, knowledge and value.

Chapter 4: Co-producing Elephant Knowledge – Spatial and Conceptual Territorialisation

4.1 Introduction

Given the academic consensus on the importance of local context and knowledge in CBNRM programmes, this chapter explores situated knowledge of African elephants amongst stakeholders in Kwandu. In that sense, it goes some way towards answering the first research question. Specifically, the chapter is concerned with the co-production and representation of knowledge, generated through practices that seek to put elephants ‘in place’, both spatially and conceptually. Each section therefore focusses on specific arborescent practices undertaken by diverse CBNRM stakeholders which, taken together, work to territorialise human-elephant relations and stabilise dominant (neoliberal) nature ontologies in Kwandu Conservancy and beyond.

Many of these practices attempt to reduce the negative impact of elephants upon local livelihoods in Kwandu, a Conservancy suffering the highest incidence of crop-raiding in Namibia. This ‘human-elephant conflict’ (HEC) is discussed in section 4.2, first exploring stakeholder knowledge of this ‘destructive’ animal and its capacity to raid crop fields, before considering what people know about preventing this conflict and keeping elephants at distance. Largely due to the futility of these practical prevention strategies, the government has implemented a scheme to ‘offset’ the economic damage caused to farmers by elephants. The chapter therefore traces the experiences of individual farmers who, having had their crops destroyed by elephants, attempt to negotiate this system. In so doing, it highlights their role alongside other stakeholders such as ‘Community Game Guards’ (CGGs) in the co-production of knowledge about these ‘destroyers’, whilst illuminating some critical flaws with the scheme itself.

Section 4.3 focusses upon efforts at mitigating HEC through improved land-use planning and zonation. It considers how knowledge about elephant movements, and the animal’s labelling as a ‘landscape’ species, are operationalised by conservationists to imagine elephant spaces set aside from agricultural settlement. The chapter discusses the creation of ‘zones’ and ‘corridors’ in Kwandu, before going on to explore spatial imaginaries

stretching beyond the Conservancy's borders, in which elephants are deployed to construct corridors connecting (inter)national protected areas.

Section 4.4 explores the co-production of knowledge in producing an elephant for 'consumptive use'. The chapter moves alongside Conservancy staff as they participate in practices of counting elephants and codifying knowledge in 'Event Books'. This codified knowledge makes elephants 'present' in the Conservancy, and the section moves on to consider the importance of these representations in producing a 'trophy' elephant for hunting. In that sense, the role of these inscriptions in constructing the Namibian elephant's identity on an international level is a central theme. The chapter concludes in section 4.5 with an overview of the territorialising practices which have produced an elephant for 'conservation hunting'.

4.2 Crop-Raiding and 'Human-Elephant Conflict'

4.2.1 Knowing the Destructive Elephant

Julia sits in the shade of a tree just outside her courtyard. She has recently returned to the village from her crop field deep in the forest where her maize, pumpkins and watermelons have been eaten by elephants. "Everything was destroyed in my field; that is why I just decided to come back home", she tells me (R13). It is early March, and Julia is one of the first farmers in Kwandu to suffer crop-raiding by elephants this year. Like many others living in the Conservancy, she thinks the impact of these "destroyers" (R11), which "eat crops from people's fields on a large scale" (R12), is worsening due to their increasing number. "Here there are a lot of elephants, and they are coming closer to people because of the Conservancy", she states. This is a view shared by an elderly woman named Susan (Plate 4.1) who has spent her entire life in Kongola village, and had lost her maize crop to elephants in March:

"During those years when I was still young the elephants were few. In a year it is just one time you will see them until next year. But nowadays there are many elephants [...] just around in the bush." (R55)



Plate 4.1: Susan at her homestead in Kongola Area, Kwandu Conservancy

Another elder woman mentioned how all of the elephants “ran out from [Zambezi]” during the long conflict between Namibia’s liberation movement (South West Africa People’s Organisation (SWAPO)) and the South African Army, and have only started returning in recent years (R5). These assertions were supported by a local man employed with Integrated Rural Development and Nature Conservation (IRDNC), and involved with the formation of conservancies in the region since independence, who told me:

“Those animals [that] were at neighbouring countries are returning back to their forefathers’ land.”

“Back to Namibia?”

“Yes. Because as you know, Namibia was a warzone. That means all those noises of bullets or guns scattered [the elephants] all over the countries. So now as we are not fighting [...] animals have seen that the area is now quiet, so ‘why can’t we go back to our land?’” (R53)

But that is not to say local people believe elephants are constantly present in Kwandu, let alone in and around their villages. In that sense, there is a general understanding amongst

CBNRM stakeholders of the transitory nature of elephant presence in the Conservancy, which is but a small part of much greater migratory routes. Villagers referred to elephants coming from Angola, Zambia and Botswana, and the Conservancy Manager was eager to point out that they “do not have permanent elephants in Kwandu”, a view supported by a local Community Game Guard (CGG) who asserted:

“Here in Kwandu the elephants are not best. They are just moving from one place to another. They do not stay [in] one place.” (R14)

In that sense, interviewees generally agreed that Singalamwe suffered more than most, due to its ‘thick bush where elephants need to stand’ (R25) and its plentiful water resources. Added to that, its location bordering Sioma-Ngweze National Park in Zambia means it is a “route for elephants” to pass through the Conservancy (R23).

Irrespective of these spatial differences in crop-raiding incidents and contestation over the direction of elephant movement, it seems the availability of ripe crops is a major reason for elephant presence in Kwandu. Indeed, temporal patterns of elephant presence and crop damage are widely recognised in the literature on human-elephant conflict (HEC) (Roever *et al.* 2013; Von Gerhardt *et al.* 2014), with cultivation cycles and rainfall patterns said to define a ‘window of vulnerability to crop-raiding by elephants’ (Graham *et al.* 2010: 436). These links are understood by farmers in Kwandu, including a Conservancy employee who told me “there are more, more elephants in February and March, but [the rest of the year] there are few” (R23). In that sense, having come across a dry pan during a routine patrol in May (Plate 4.2), CGGs told me that elephants could not be seen at this time of year. However, they also assured me that “in January or February the elephants are coming here” when the pans are full of water (R21). Some also attributed these seasonal differences in elephant numbers to fruiting trees which attract elephants to the Conservancy (Von Gerhardt *et al.* 2014), yet most stated that crop fields were the only reason for elephant presence in Kwandu. As one interviewee put it: “We cultivate our fields; that is why the elephants come” (R30).



Plate 4.2: Dry pan in Kwandu Conservancy, 21/05/2013

Of all the farmers I spoke to who had suffered crop damage by elephants in 2013, each described the incident taking place at night. This is unsurprising given the results of Von Gerhardt *et al.*'s (2014) study of HEC in Kwandu, which showed that all 168 recorded incidents occurred after dark. As one interviewee in Singalamwe told me: “[Elephants] only destroy during the night; we see them especially [at] night time” (R4). Farmers and Conservancy employees alike pointed to Kwandu’s proximity to Bwabwata National Park, a ‘base’ from which elephants can easily carry out night-time raids in the Conservancy. Although Von Gerhardt *et al.* (2014) found that distance to protected area was insignificant as a spatial variable in explaining field-raiding position in Kwandu, others such as Graham *et al.* (2010: 441) argue these ‘daytime elephant refuges’ - which provide permanent water and minimal human disturbance - can be significant spatial indicators of crop-raiding.

Interviewees also made reference to the “type of elephants” (R2) perceived to exist (albeit temporarily) in Kwandu. Far from believing elephants behave in a uniform manner regardless of their location, there is an understanding amongst Conservancy residents that the elephants they encounter are more aggressive and destructive than those one would expect to come across in neighbouring Bwabwata National Park, for example. This spatial differentiation in elephant behaviour was pointed out during an interview with a local man in Sesheke area:

“[T]hose elephants which come during [the] rainy season - especially in March and April - they find that crops are there in the fields, and they are *ready* to be spoiled. Of course, they are the wrong ... (*pause*) ... they are the bad elephants.” (R31)

Similarly, a female interviewee explained the behavioural differences between elephants at their villages, and those she likes to watch at Bumhill, the site of Kwandu’s derelict riverside campsite:

“It is like animals at Bumhill are taught to be close to people. You can be sitting here while watching the elephant crossing; it will not harm or fight with you. But when the elephants come [to the village], it is going to be rude to people because it is used to staying in the forest, not close to people.” (R10)

Nevertheless, interviewees did not go as far as defining these aggressive, crop-raiding elephants with reference to a particular sex, which is surprising given the findings of HEC studies. Research suggests that younger bull elephants are more often responsible for crop-raiding, and that male elephants in general are more likely to enter fields than females (DeMotts and Hoon 2012; Selier *et al.* 2014). Crop-raiding is thus part of an elephant’s ‘optimal foraging strategy’, whereby sexually mature bulls take advantage of the increased nutritive content of crops at the end of the wet season when they come into *musth*¹⁴ and females are in oestrus (Munster 2016). In their case study of HEC in Kwandu, Von Gerhardt *et al.* (2014) found that groups of 2-7 bulls of varying ages were responsible for 100% of reported incidents.

What is clear, then, is that elephants can impact negatively on local livelihoods in Kwandu - particularly during the cropping season - and perhaps moreso since the end of hostilities in the region and the roll-out of CBNRM in the mid-1990s. Elephants are moving in and

¹⁴ *Musth* is a periodic condition in bull elephants, characterized by highly aggressive behaviour and accompanied by a large rise in reproductive hormones. During this time, the elephant’s temporal glands, located behind the eyes, swell and secrete the *musth* fluid. The pungent smell released is an olfactory signal of the bull’s dominance and his urge to procreate (Munster 2016: 436).

through Zambezi from bordering countries (particularly Botswana), re-populating their former ranges and coming into contact with increasing human populations. As one female farmer put it: “Elephants are the destroyer of the crops in our fields [and] that is why we do not like them” (R55). That is not to say these individual understandings are universal, nor that they cannot be traded off alongside other (non-)economic values (discussed in chapter 7). Undoubtedly, however, elephants can aggravate pre-existing poverty in their interactions with people’s crops in Kwandu (Barua 2014a). As such, CBNRM stakeholders including government and NGOs have in recent years come together to frame these human-elephant interactions in particular ways, focusing their efforts on mitigating this ‘conflict’ either through practical prevention or financial measures. It is to these conflict mitigation strategies that the chapter now turns.

4.2.2 Practical Prevention Strategies: Keeping Elephants at Distance

In 2009 the Namibian Ministry of Environment and Tourism (MET) established a ‘National Policy on Human-Wildlife Conflict Management’ (MET 2009). Defined by the World Conservation Union (IUCN) as occurring ‘when wildlife requirements encroach on those of human populations, with costs both to residents and wild animals’ (IIED 2012a: 5), human-wildlife conflict (HWC) is recognised as a major impediment to Namibia’s conservation objectives, including CBNRM (Mosimane *et al.* 2013). In that sense, the country’s National Biodiversity Strategy and Action Plan (NBSAP2), covering the period 2013-2022, lists HWC as one of the main threats to biodiversity (MET 2014). This is especially true for the survival of large mammals such as elephants (Graham *et al.* 2010), and the Namibian government understands the critical need to ‘reduce conflict between elephants and people’ (MET 2007: 11). To that end, despite acknowledging the inevitability of conflict when humans and free-roaming wildlife share space, MET’s most recent policy encourages conservancies to develop ‘Human-Wildlife Conflict Management Plans’ (HWCMPs) which, amongst other things, incorporate practical steps for keeping elephants away from crops (MET 2009; MET 2014).

Kwandu’s HWCMP was developed in collaboration with NACSO partners and MET staff, and states ‘a variety of methods will be combined to prevent damage by elephants

including noise (whips, drums, *vuvuzelas*¹⁵), chilli bombs and fences, and flashing lights’ (Kwandu Conservancy 2012b: 6). The Conservancy’s constitution also demonstrates a commitment to ‘promoting development, testing and improving human-wildlife conflict mitigation methodologies and techniques’ (Kwandu Conservancy 2011). Yet, for farmers, these practical measures vary both in their feasibility and efficacy when it comes to protecting their crops from elephants.

One such farmer is a woman named Dorothy (Plate 4.2) who in mid-April had lost her sorghum crop to elephants. Like many others, she had fenced her field using local timber and vegetation, which despite deterring bush pugs and impala had not stopped the elephants. “There was a fence, but not a strong one”, she admitted (R28). Indeed, the futility of traditional fences in mitigating HEC was made abundantly clear by interviewees, such as during a conversation with Susan in Kongola, when she asked her daughter to buy some wire from town:

“What do you want the wire for?” I asked.

“I want to take it to the field to make a fence.”

“To protect your field from elephants?”

“The elephants can pass through no matter how big the wire is! The only aim of the fence is to protect [the field] from cattle.” (R55)



Plate 4.3: Dorothy sits with her son inside their courtyard in Sesheke Area

¹⁵ A *vuvuzela* is a modern plastic horn which produces a loud monotone note when blown.

Others admitted to leaving their fields unfenced, believing it serves little purpose in protecting their crops from rampaging elephants that are “not scared of a fence” (R13; R24). Although electric fences have proven to be effective in protecting large-scale farms from elephants (O’Connell-Rodwell *et al.* 2000; Hanks 2006), construction and maintenance costs mean they have little relevance to Kwandu’s small-scale farmers (IIED 2012b). Added to that, governments are reluctant to erect expensive fences which interfere with elephant migratory routes, and which elephants have been known to destroy at great cost (Graham *et al.* 2010; Gupta 2013).

Yet, despite the futility of traditional fences, some farmers argued they could be more effective when used alongside a substance elephants are believed to dislike - chilli. In 2008 Conservation International implemented a project alongside IRDNC in Kwandu and neighbouring Imusho Ward in Sioma Ngweze National Park, Zambia, to train farmers in the use of ‘chilli bombs’ and ‘chilli fences’. A female farmer explained how to make a chilli bomb and its efficacy in keeping elephants away from her crops:

“You take the chilli and the elephant dung, put together and burn them. Go put in the field and when the elephant comes it will not come near the field; it will just run away, far from the field. [The chilli bomb] will burn the whole night.” (R30)

Others were equally enthusiastic about ‘chilli fences’, whereby cloths are dipped in a mixture of dried chilli and used engine oil before being hung on fences (IIED 2012b). As one man at Mwanzi area explained, elephants “cannot use that way anymore” once they have smelled the chilli (R40). There is clearly a belief amongst those that use chilli that it works as a deterrent. Added to that, of the thirty farmers who took part in Conservation International’s initiative in 2008, not one of their fields was raided, and all believed that chilli was effective in keeping elephants away from crops (Murphy 2008). To that end, NGOs such as IRDNC have continued to support the use of chilli as an elephant deterrent, sourcing the product from Zimbabwe and encouraging MET to purchase it, as well as assisting communities in developing their own chilli gardens (IRDNC 2012; MCA-N 2014a).

Nevertheless, despite the Conservancy's attempts to 'encourage farmers to use chilli deterrents at village level' (Kwandu Conservancy, 2012: 11), not everyone was so enthusiastic about its capacity to protect their crops. As Khumalo and Yung (2015) point out, chilli bombs are susceptible to wind direction and may be of no use during rainfall. Given the increased elephant activity during the rainy season, this is often a problem for farmers attempting to protect their crops. One female interviewee noted: "If I use chilli bombs while [it] is raining they will be no use" (R37), while others lamented spending time on chilli fences which had no discernible impact on elephants (R55).

Regardless of its efficacy, Hanks (2006) estimated the cost of the cloth, chilli peppers and grease required to fence a one hectare maize field at US\$18, a figure beyond the reach of communal farmers earning less than US\$1 per day. Without the continued financial support of NGOs, small-scale farmers are mostly unwilling and/or unable to adopt such high-input strategies (Gupta 2013). Indeed, the Conservancy's reliance on external support for these practices was emphasised during a visit to an MCA-N funded chilli farm at Singalamwe area. The farmer was in need of a tank and pipes to transport water from the nearby river to his field, but the funding had apparently dried up. "Chilli is very important for [HEC] mitigation, but nobody is helping him", the Conservancy's Field Officer told me.

It is unsurprising, then, that people like Dorothy struggle to obtain the dried chilli required to carry out this mitigation measure, despite it being effective in previous years. "Last year I used the chilli bombs and the elephants did not attack the field", she tells me. "The Conservancy should keep on distributing those chilli bombs to farmers, but this year [they] were not there." It is a similar story with 'tin fences', whereby the rattling of used cans attached to wire is understood to scare elephants from crop fields (IRDNC 2012; MCA-N 2013). Unfortunately for most farmers, the cost of metal wire prohibits them from adopting this strategy, including a man who had lost his maize crop to elephants in March: "If I could have money, what I could do is just have a wire fence and put around my field and put some tins around it", he lamented (R41).

Most of Kwandu's farmers have little choice but to sleep at their fields and make as much noise as possible should elephants approach. In February I was staying with the Conservancy's Field Officer, Kebby, and his family who had temporarily relocated from

the village to their field. “Elephants cannot be controlled by a fence; they can just be controlled if you are there”, he told me (R32). One night whilst we shone torches into his crop field at Singalamwe area, I noted:

‘The farmer in the field behind us began banging drums and cracking whips just after sunset, continuing through the night. Added to the *vuvuzelas* which can be heard from fields to the east, it feels like a festival celebrating the arrival of the elephants, timed to coincide with the ‘big rains’.’¹⁶

Despite farmers being encouraged by government and Conservancy staff to sleep at their fields during the main cropping season, creating “big sounds so that elephants run away” (R24), there are obvious dangers involved. Studies have shown that elephants quickly habituate to traditional scare tactics such as drumming, fires, and even shooting in the air (O’Connell-Rodwell *et al.* 2000; Hanks 2006; Gupta 2013), of which farmers in Kwandu are well aware. Merinah, a woman who had lost her maize crop to elephants in March, told me that “elephants are more aggressive because [in previous] years if you beat drums they will run away; but now they will just come and destroy your field” (R37). Sentiments such as these were supported by the village headman - or *induna* - at Kayuwo area, who told me: “There is nothing that you can do, because if you try to shout it is just like you are calling the elephant. If you hit the drum, it is like calling it again!” (R43). Indeed, the threat to human life posed by elephants was relayed in many local stories, such as this one about a young boy killed by elephants in 2007:

“At Kongola, I think...(pause)...it was 2007. There were some schoolchildren. When the elephants were passing through Kongola corridor - that corridor named ‘Kalongola’ - they tried to throw some stones, tried to shout. The female elephant came, [and] just broke the branch of a tree, throw, beat the child. The child [fell] away. The elephants followed and trampled the child to death.” (R32)

¹⁶ Field diary, 11/02/2013

It is understandable that many do not feel safe sleeping at their fields, fearing also for the security of their belongings back home. Women lacking the support of a spouse suffer particular hardship, as explained by a female farmer in Mwanzi area:

“I do not have [a fence] and it is very difficult to go and sleep at my field because I am alone. No one can help me.” (R45)

In the absence of weather-proof mitigation strategies, then, and alongside a lack of access to - or belief in - other mitigation measures, farmers in Kwandu often have no choice but to face elephants head-on during the rainy season. Not only is this a dangerous tactic, but one which many local people believe is ultimately futile. There appears a sense of resignation amongst the vast majority of farmers when it comes to the possibility of preventing crop destruction by elephants. CBNRM stakeholders acknowledge the inevitability of conflict between agricultural communities and elephants, whilst recognising that there are no silver bullets or ‘fool-proof’ solutions (CITES 2010; IRDNC 2011). This is the context in which the Namibian government has implemented a scheme to help farmers with the economic impact of crop losses. In narrating and ‘following’ this process through the experiences of individual farmers, I now attempt to shed light upon the co-production of elephant knowledge in Kwandu.

4.2.3 The Human-Wildlife Self Reliance Scheme: Co-producing Elephant Knowledge

As part of the national policy on HWC management, the Namibian government rolled-out its ‘Human-Wildlife Self Reliance Scheme’ (HWSRS) in 2011, giving each conservancy N\$60,000 in start-up funds from the GPTF¹⁷ to help mitigate the costs of livestock predation and crop damage caused by wildlife (IRDNC 2012; MET 2014). This scheme incorporated and built-upon the Human-Animal Conflict Self-Insurance Scheme (HAC SIS), a programme belonging to the conservancies and implemented alongside IRDNC and MET, which ran from 2003-2010 (IIED 2012b). The specific objectives of the strategy are ‘to promote the equitable distribution of benefits so that individuals who suffer losses can benefit from wildlife income’, and ‘to directly offset the losses of communities and individual farmers caused to livestock and crops’ (MET 2009: 9). The word ‘offset’ is salient here, and MET makes clear it is ‘not Government policy to provide compensation to farmers for losses due to wild animals’ (MET 2009: 9), which is, instead, the responsibility of conservancies (Kahler and Gore 2015).

These payments are also contingent upon various government-imposed conditions and processes being adhered to. The day after Dorothy’s sorghum crop had been eaten by elephants, George - one of the Conservancy’s Game Guards - went with her to investigate the incident at her field. “When the elephants destroyed my field I decided to go to the Conservancy so that they should come and check”, says Dorothy. This is the first stage of the HWSRS process, with farmers obliged to report the incident to the Conservancy office, and CGGs being required to investigate within twenty-four hours (MET 2009). “If somebody’s field is raided on a Saturday, you cannot say ‘I will go and look on Monday’. Being a Game Guard is a twenty-four hour job!” George explained. Undoubtedly, it is challenging for CGGs to investigate fields within this timeframe, particularly during the peak rainy season. For farmers, too, it is difficult to notify the Conservancy of HWC incidents soon enough. Living close to the Conservancy office in Sesheke, this is perhaps less of a problem for Dorothy than it might be for others situated further afield.

¹⁷ The Namibian government established the Game Products Trust Fund (GPTF) in 1997 as a means of capturing conservation revenue from the CITES-approved sale of ivory and from the use of state wildlife resources, such as the sale of live game.

Nevertheless, once at the site George must verify the extent of crop damage. As a means of encouraging people to cultivate fields large enough to prevent total loss in the event of HWC, Kwandu only pays those farming fields of 1 ha and above, and who have had at least one quarter of their field damaged (Khumalo and Yung 2015). In that sense, those with small fields were better-off under HACSIS which paid farmers set amounts according to the ratio of damage, irrespective of field size. This meant poorer people with smaller fields received proportionally more, helping to promote equity over equality (IIED 2012b). Thankfully for Dorothy, George deems her field to be larger than 1 ha, and after assessing the extent of damage measures the sorghum loss at $\frac{1}{4}$ ha.

Under HWSRS rules, George must also ‘verify that the damage occurred and has been caused by elephants’, noting their number and discontinuing the claim should there be insufficient or dubious evidence (MET 2009: 23). Of course, the elephants have since disappeared, but he satisfies this criterion by identifying elephant spoor, dung and urine at the site. Yet George’s knowledge of elephant numbers and direction of movement is co-produced alongside other people, few of whom have actually seen the animal(s) in question. “I didn’t see the elephants, I just saw the footprints”, admits Dorothy, before going on to state that “the elephants were many” (R28). She believes the animals were coming from the forest, making their way to the river on the Conservancy’s western border, contradicting George’s view that they were “coming from the river side” (R29). He has spoken to Dorothy’s brothers who had been watching her field that night, but had “run back home” and reported that “elephants are a lot there” (R29). Added to that, he has heard stories from other farmers in the area who also had their crops damaged by elephants that night. Perhaps they were the same elephants; perhaps not. For now, George takes the claim form and writes: ‘Nine elephants [...] entered the crop field on the 14th April 2013 during the night [and] $\frac{1}{4}$ ha of damaged sorghum was observed. The field is subject to be compensated.’ (Plate 4.4)

Annex 1: Claim Form for crop damage

B: Details of Incident

Type of crop damaged	
Size of the damage (ha)	500kg
Species (PA) responsible for damage	2 of 1/ha
Description of incident	9 elephants were coming from the river-side and entered into the sorghum field crop on the side of the road during the night time of which get reported on the date of reporting 15/02/2013 as a land complaint in the conservancy. According to the investigation done on the date of investigation 15/02/2013
Area of incident	
Constituency	MAKALA
Region	Karigela
Amount claimed	GBP 100
Certification of Traditional Authority or Headman (where applicable)	NS of 201/00 Mr. Mphahlele Mphahlele

Plate 4.4: Dorothy's HWSRS Claim Form

Ultimately, though, George will not have the final say on whether Dorothy receives reparation for her loss. Instead, the information on her claim form will be assessed by Kwandu's 'HWC Committee' (Plate 4.5), consisting of representatives from MET, IRDNC, the Traditional Authority (TA) and Conservancy committee (MET 2009; IIED 2012b). Sitting in on Kwandu's HWC committee meeting, many of the data flaws DeMotts and Hoon (2012) flag-up in their study of HWC compensation schemes in Botswana were evident. For example, one particular CGG's forms all showed the same investigation date, and a dubious amount of forms identified 'four hippos' as crop-raiders.¹⁸ Although Conservancy members and the area headman - or *silalo induna* - were largely willing to overlook these anomalies, it was clear the MET (and to a lesser extent the NGO) representative was more reticent to approve claims.

¹⁸ Field notes, 25/02/2013

This is understandable given the fact payments would derive entirely from government funds, with no contribution from the Conservancy itself. In that sense, whereas under HACSYS conservancies were required to supplement donor-funding by paying 50% of claims from their own income, this ‘matched-funding’ requirement is missing from the new scheme. Conservation NGOs are sceptical of the government’s motives for announcing such a policy just before the 2010 election, concerned about an escalation in fraudulent claims if rights and benefits are not linked to responsibilities (IRDNC 2011). One informant who had been heavily involved in the original development of HACSYS explained his reservations about the new policy:

“I hear that the number of claims has started to escalate out of proportion to what one would expect. And one wonders whether it is because the conservancies are not going to start fighting the claimants over government money, whereas they would have if it was their own money. [Matched funding] was a critical component, I believe, to the success of HACSYS, and so I think the self-reliance scheme is quite vulnerable to being abused.” (R16)

Conservancy employees I spoke to in Kwandu seemed to support these assertions. As one informant put it: “Farmers are now thinking ‘OK elephants, just come; just come and record the damage’” (R23). Even MET’s Chief Control Warden for CBNRM acknowledged these problems during a presentation on HWSRS, noting, “If somebody loses [their crops], you pay. They go away and then lose [more crops]. You pay. It is just a cycle.”¹⁹ Of course, breaking this ‘cycle’ is difficult when it comes to elephants, given the futility of practical mitigation techniques.

¹⁹ Field notes, 30/04/2013



Plate 4.5: HWC Committee meeting, Kwandu Conservancy Office, 25/02/2013

Yet the lack of Conservancy contribution also has an impact on payment efficiency, and ultimately farmer satisfaction. The literature on these kinds of schemes emphasises that they must be perceived as fair, transparent, and fast, in addition to being as decentralised as possible (IIED 2012a; Khumalo and Yung 2015). Yet Kwandu struggles to find funds in its budget for HWSRS payments, mainly relying on external funding. At Kwandu's AGM in December 2013 the Conservancy presented its 2014 budget to members and stakeholders, but the MET representative was not impressed with the N\$20,000 allocated for HWSRS payments.²⁰ It is a valid concern given the information I collated from claim forms in 2013. Admittedly, I was unable to access all forms, but those that I did assess amounted to N\$15,200, and that is excluding livestock and crop loss costs caused by species other than elephants. In this context it is unsurprising that the Conservancy was eagerly awaiting a N\$60,000 cash injection from the KaZa Secretariat to cover these costs (KaZa Secretariat 2013).²¹ In all, this has meant HWSRS and its predecessor, HACSYS, have suffered from funding gaps and, in turn, delayed payments.

Four months after losing her sorghum crop to elephants, I asked Dorothy what was happening with her claim, and whether she had received any money. "The Conservancy

²⁰ Field notes, 10/12/2013

²¹ In March 2013 Germany provided KaZa with EUR 15.5 million, to be used for human-wildlife conflict mitigation measures and other projects such as improving park infrastructure (KaZa Secretariat 2013).

said that it is not them who are going to give the money; it is the Ministry. I really do not know if I will receive assistance from them”, she told me (R28). Another farmer complained that he was “still waiting on the government for the money”, and that his field was “still having a question mark” (R47). George later told me that although the money for these claims was available, the Conservancy was waiting on the MET representative to convene with the rest of the HWC committee to authorise payments. As Khumalo and Yung (2015) make clear, these payment delays and communication failures can lead to mistrust of the Conservancy and a negative attitude towards wildlife. One woman even labelled the Game Guards “thieves”, having failed to receive compensation for crops lost to elephants earlier in the year (R37).

Indeed, interviews support the idea that many farmers now hold the Conservancy responsible for crop damage caused by elephants, rather than the MET. A man in Kongola recounted asking Kwandu’s CGGs: “Are you not going to pay for my crops which your animals have eaten in my field?” (R57). Of course, the CGGs are not personally responsible for crop damage caused by elephants, but the fact they are the ‘face’ of the Conservancy in the community means they shoulder responsibility, not only on behalf of the Conservancy, but also government. The antagonism towards Conservancy staff in MET’s absence was alluded to during an interview with a woman in Mwanzi, who had recently had her field destroyed by elephants:

“I think the Conservancy is responsible for the elephants which attacked my field.”

“What about the government, are they not responsible?”

“I am saying that the Conservancy are responsible for the elephants because if elephants attack somebody’s farm, [the CGGs] are the ones who come; we do not see the government.” (R37)

Even for those who eventually receive payment, there is a consensus that the money is insufficient. Under the government’s policy, farmers are paid N\$200 per ¼ ha of crop damage²², a figure which MET ‘shall adjust from time to time as deemed appropriate’

²² Under the scheme, farmers are also paid for the loss of livestock over six months of age (Cow = N\$1,500; Goat = N\$200; Sheep = N\$250; Horse = N\$500; Donkey = N\$250; Pig = N\$250) and N\$5,000 to cover funeral expenses in the case of loss of human life (MET 2009)

(MET 2009: 23). “The Conservancy people will just give me 200 dollars; that will not contain me and my family”, Dorothy protested. Even the Conservancy Chairman admitted the N\$60,000 from KaZa might be better spent on mitigation techniques.²³

Despite these issues, MET and NGOs point to Event Book (EB) data (Table 4.1) collated by conservancies that indicates a national levelling-off of HWC in general. In that sense, NACSO (2015a) notes that the overall increase in HWC incidents is due to the upsurge in the number of conservancies, whereas the average number of incidents per conservancy remains stable, in spite of growing wildlife populations.

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total conflict incidents from all conservancies	3,019	2,936	4,282	5,713	5,640	7,095	7,659	7,772	7,298	7,279	9,228	7,774
Number of conservancies	29	31	44	50	50	53	59	59	66	77	79	82
Average no. of human attacks per conservancy	0.6	0.5	0.3	0.2	0.3	0.5	0.4	0.4	0.1	0.3	0.6	0.2
Average no. of livestock attacks per conservancy	59.8	54.3	60.4	63.5	63.2	82.7	82.6	83.7	74.7	66.0	94.7	69.7
Average no. of crop damage incidents per cons.	37.9	35.0	33.4	47.0	43.4	46.7	44.4	45.1	34.4	26.1	18.9	23.6
Average no. of other damage incidents per cons.	5.9	5.0	3.2	3.6	5.8	3.9	2.4	2.5	1.3	2.1	2.5	1.3
Average total incidents per conservancy	104	95	97	114	113	134	130	132	111	95	117	95

Table 4.1: HWC incidents across all registered conservancies (NACSO 2015a: 45)

Of course, this plateauing could be partly a result of reporting problems within HWSRS itself. Yet these data also indicate that Zambezi Region (particularly the Kwandu River frontage) suffers more HWC incidents than any other region (Table 4.2), whilst validating community perceptions that elephants are the biggest threat to their crops. In 2013 there were close to 600 reported incidents of crop damage by elephants in Zambezi, around 50% more than the number of incidents involving hippopotamus, which was the second biggest offender (Figure 4.1). As for Kwandu specifically, monitoring data for 2013 indicates that elephants were responsible for 95 of 200 crop damage incidents in total. Although this figure has been greater in the past (Figure 4.2) and is a significant decrease on the 165 incidents in 2012 (MCA 2013), it is still the highest in the country, justifying the Conservancy’s long-running label as a ‘hotspot’ area for human-elephant conflict (Martin 2005; Hanks 2006). The data also corroborates local understandings of seasonality, with almost 80% of crop-raiding incidents taking place in March and April.

²³ Field diary, 08/08/2013

	2010	2011	2012
N Kunene	741	963	551
S Kunene	749	471	527
N Central	509	188	425
Kavango	41	36	74
Nyae Nyae	43	37	39
Zambezi	1680	1436	1519

Table 4.2: HWC incidents by region (MCA-N 2013: 32)

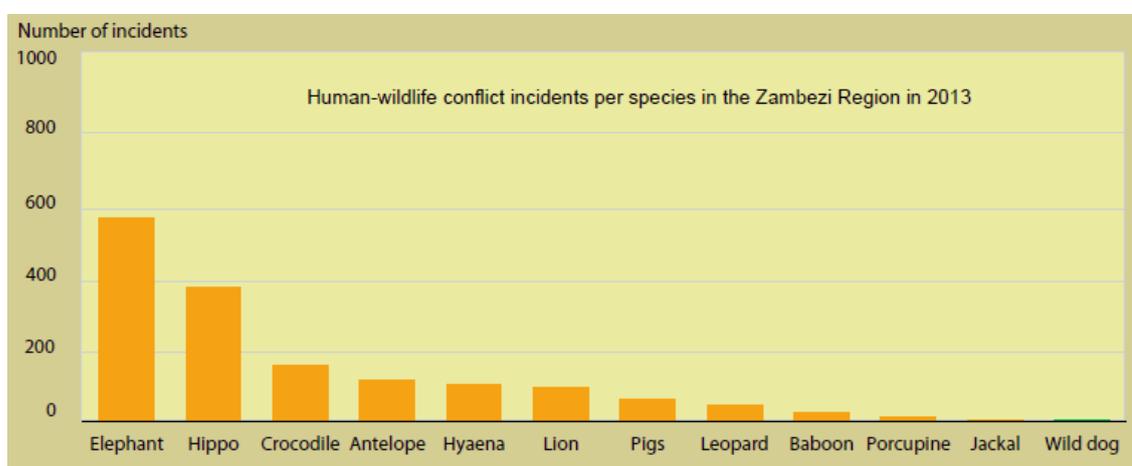


Figure 4.1: Human-wildlife conflict incidents per species in Zambezi Region in 2013 (NACSO 2014a: 48)

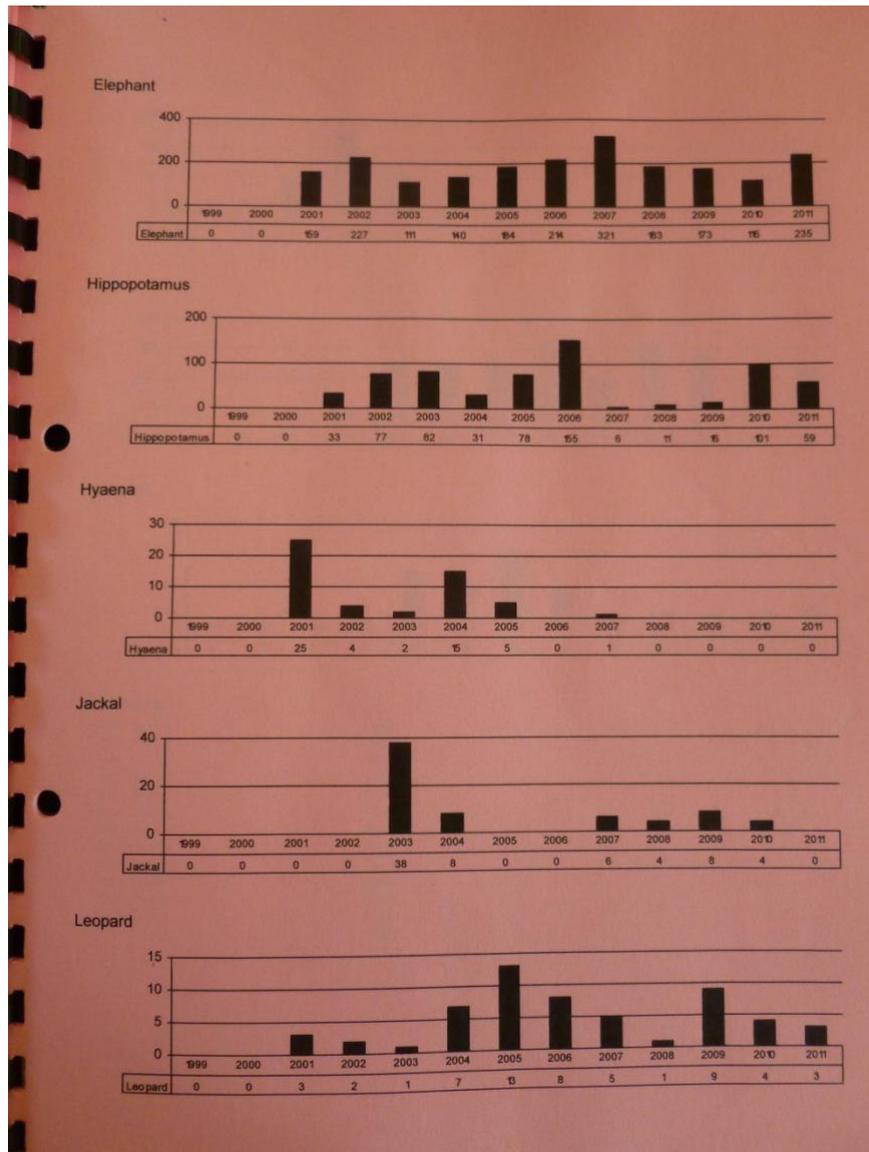


Figure 4.2: Number of human-elephant conflict incidents per year in Kwandu, up to 2011 (Kwandu Conservancy’s ‘Red’ long-term monitoring Event Book)

Despite being difficult to measure, CBNRM NGOs and practitioners also attempt to calculate the economic cost of these events. Based on average values, Jones and Barnes (2006, in IIED 2012b) calculated the combined costs of all HWC in Namibian communal areas at around US\$ 1 million annually. This equates to US\$ 78 per household, around 7% of total household cash income in Zambezi. The most recent large-scale economic analysis of HWC in Namibia was undertaken by Brown (2011), who analysed HWC data between 2006-2010 from all conservancies supported under MCA-Namibia’s

‘Conservancy Development Support Services’ (CDSS) Project.²⁴ Again based on average values,²⁵ he calculated the cost of crop damage in Kwandu at N\$193,800 per year, the vast majority of which is caused by elephants, equating to N\$45 per person (see Table 4.3). This is the highest in the country, followed by other conservancies in Zambezi, with losses in the next worst affected region - Kavango - being much lower at around N\$4 per person (Brown 2011: 4). Silva and Khatiwada’s (2014) case study of Mayuni Conservancy (bordering Kwandu) found that 22% of households reported conflict with elephants, suffering average crop losses of US\$ 112 per year, supporting the idea that this area of the country suffers more than most.

²⁴ The Conservancy Development Support Services (CDSS) Project is funded by the Millennium Challenge Account-Namibia (MCA-N) to the sum of US\$9.1 million, operating from November 2010 to August 2014. The CDSS Project is being implemented by a Consortium of Namibian NGOs, headed by the World Wildlife Fund (WWF), including Integrated Rural Development and Nature Conservation (IRDNC) and Namibia Nature Foundation (NNF). The CDSS Project is one of three major MCA-N inter-related investments that are designed to take advantage of Namibia’s key tourism sector (MCA-N 2013).

²⁵ Brown’s (2011: 34) calculation of average crop damage costs is based on 40% crop loss in fields of 1ha, at a yield of 250 kg/ha with a market price of about N\$3.8/kg (these being averages for maize, millet and sorghum).

Average annual garden and crop damage per conservancy		Average annual garden and crop damage per 1,000 sq km per conservancy		Average annual garden and crop damage per 1,000 people per conservancy	
Conservancy	Cost (N\$)	Conservancy	Cost (N\$)	Conservancy	Cost (N\$)
Orupembe	-	Orupembe	-	Orupembe	-
Sanitatas	-	Sanitatas	-	Sanitatas	-
Puros	-	Puros	-	Puros	-
Uibasen Twyfelfontein	-	Uibasen Twyfelfontein	-	Uibasen Twyfelfontein	-
Marienfluss	50	Marienfluss	16	Sesfontein	40
Sesfontein	100	Sesfontein	41	King Nehale	72
Sorris Sorris	750	N=/a Jaqna	233	Marienfluss	167
Anabeb	900	Nyae Nyae	237	Uukolonkadhi/Ruacana	240
Torra	1,200	Doro !Nawas	302	Sheya Uushona	271
Doro !Nawas	1,200	Sorris Sorris	328	N=/a Jaqna	304
#Khoadi//hoas	1,300	Torra	344	#Khoadi//hoas	406
King Nehale	1,444	#Khoadi//hoas	386	Anabeb	450
Nyae Nyae	2,128	Anabeb	573	Sorris Sorris	577
N=/a Jaqna	2,128	Ehrovipuka	1,313	Doro !Nawas	800
Sikunga	2,470	Sheya Uushona	1,890	Uukwaluudhi	876
Ehrovipuka	2,600	Uukolonkadhi/Ruacana	2,006	Nyae Nyae	925
Omatendeka	4,375	Omatendeka	2,702	Torra	1,000
Uukolonkadhi/Ruacana	6,004	King Nehale	2,843	Ehrovipuka	1,040
Muduva Nyangana	8,018	Sikunga	8,606	Sikunga	1,235
George Mukoya	8,588	Muduva Nyangana	13,037	Omatendeka	1,750
Sheya Uushona	9,576	Uukwaluudhi	15,232	Muduva Nyangana	4,009
Uukwaluudhi	21,888	George Mukoya	17,671	George Mukoya	4,294
Wuparo	24,396	Salambala	65,376	Salambala	7,896
Impalila	41,040	Wuparo	164,838	Wuparo	11,617
Mayuni	59,660	Balyerwa	276,054	Mayuni	24,858
Salambala	60,800	Mayuni	395,099	Impalila	27,360
Balyerwa	61,560	Mashi	397,912	Mashi	30,303
Mashi	118,180	Impalila	562,192	Balyerwa	41,040
Kwandu	193,800	Kwandu	1,020,000	Kwandu	45,070

Table 4.3: Garden and crop damage costs (N\$) per Conservancy, per 1000sq km, and per 1000 people in Namibian conservancies (Brown 2011: 4)

Despite NGO assertions that HEC is stabilising, then, it is clear from Conservancy monitoring data that elephants continue to have a significant impact on cropping in Kwandu. Not only does the data help explain the sense of resignation amongst farmers when it comes to preventing crop-destruction by elephants, but it also evidences the extent of the problem, used by Kwandu to leverage donor funding for HWC mitigation (IRDNC 2012). For example, Brown (2011) recommends those conservancies identified in his study as suffering most from HWC be prioritised for MCA-N and GPTF grants. As noted above, there is suspicion that conservancies may exaggerate the extent of HWC in order to access this support (MET 2009). However, having witnessed the problems with HWSRS first-hand, such as the logistical difficulties of investigating all incidents within

the timeframe, I agree with DeMotts and Hoon (2012) who argue that the problem is likely worse than officially reported.

More than this, HEC is not simply an economic problem, but also inflicts a range of emotional impacts and hidden costs upon individuals. Attempting to protect ones crops from elephants is an arduous task, whether it be the additional labour required to make chilli fences/bombs, or the sleepless nights spent guarding fields in fear. “I protect the field from six in the afternoon until midnight, then wake up at six [which] is difficult because you cannot sleep well”, one female farmer told me (R15). Others explained having to undertake extra ‘piecework’²⁶ in order to feed their families after losing crops to elephants (R41). For some, living alongside pachyderms that eat your crops every year feels like being “locked in prison” (R4).

These psychological and hidden opportunity costs cannot be financially compensated for under HWSRS. Added to that, these burdens are generally borne by the weakest socio-economic sections of society (Barua 2016a). In that sense, it is clear that the (non-)economic and emotional impacts of crop-raiding differ from one individual to the next. In particular, women and female-headed households experience disproportionate HEC impacts, but other factors such as age, wealth, and farm size/location also influence individual and collective abilities to withstand crop-raiding (DeMotts and Hoon 2012; Khumalo and Yung 2015).

These differential impacts will be discussed more fully in Chapter 7; but for now it is important to note that such varied experiences are overlooked under HWSRS. It is a system that homogenises individual experiences of crop-raiding, claim forms being concerned solely with direct, quantifiable loss, but disregarding ongoing impacts and temporal lags. The social and emotional nuances so important to understanding human-elephant relations in particular contexts are erased, and state control is strengthened through this standardisation of social reality (DeMotts and Hoon 2012). More than this, these direct ‘payments for ecosystem services’ - financial incentives to co-exist alongside elephants - do not necessarily improve attitudes towards wildlife or foster a sense of ‘ownership’ amongst communities (IIED 2012a, 2012b). This is particularly the case in

²⁶ ‘Piecework’ typically refers to tasks of manual labour carried out for other members of the community in exchange for a small fee.

Kwandu, where the Conservancy's lack of financial contribution means HWSRS resembles a 'compensation' scheme, as opposed to a 'self-insurance' scheme. As such, offset payments derived from MET only serve to reinforce the notion that elephants are 'government's cattle', grazing in communal areas. As Kahler and Gore (2015) make clear, these token contributions are unlikely to offset the combined economic and emotional impacts of HEC, perhaps making farmers more permissive of activities such as elephant poaching.

4.2.4 Summary

This discussion of the diverse knowledges about 'human-elephant conflict' in Kwandu has shown that the majority of farmers feel powerless when it comes to protecting their crops from elephants. Even for those who find utility in practical mitigation measures like 'chilli bombs', such strategies are too often inaccessible, as well as being time and labour intensive. For many, including the Conservancy's Field Officer, HEC seems an insurmountable problem that "has just a beginning but not an end" (R32). In a place like Kwandu, where agricultural communities exist on the periphery of the largest elephant population in Africa, there is much truth to this statement. The government's HWSRS is, in itself, an admission that crop destruction by elephants is largely unavoidable. That is because the scheme only covers damages caused by elephants and hippopotamus, based on the understanding that 'damages by other animals can be controlled by farmers' (MET 2009: 9).

Despite being held up in the literature as a good example of a HWC insurance scheme (IIED 2012a; 2012b), tracing the actual experiences of farmers as they negotiated this system has illuminated some critical flaws. Chief amongst these is the standardisation of emotional, contextually specific human-elephant interactions, as well as a lack of 'matched-funding' from the Conservancy itself, negating a sense of 'ownership' over wildlife that is central to the ethos of CBNRM. The inadequacy and deferment of payments also contribute to a situation in which 'HWSRS is operational but not working in reducing conflict incidents' (NACSO 2012b). In this context, CBNRM practitioners are putting increased emphasis on land-use planning and zonation as HEC mitigation

strategies. Stakeholders acting on multiple scales are coming together to imagine spaces set aside from agricultural settlement, including wildlife ‘corridors’ in which elephants can move freely. The next section discusses the placing of elephants in these territorialised spaces.



Plate 4.6: Elephant approaching a village (MET 2009)

4.3 Spatial Territorialisation: Constructing Elephant Spaces

4.3.1 Spatial Striation in Kwandu Conservancy

“It is important to have elephants *only* in the forest, not in the villages. Because elephants live in the forest; they were made to be in the forest.” (R30)

The above quote reflects the general perception of Conservancy residents that elephants are ‘wild’ animals which belong in the forest, and not in their villages. Often these ideas were communicated in a manner tantamount to ‘fortress conservation’ (Brockington 2002). One farmer argued the Conservancy needs to find “a better way to separate animals from people [and] from farming places”, going on to note that “those who want to watch animals could just move to the parks to see animals, and the fields should be safe” (R31). Such sentiments are understandable given the extent of crop damage in Kwandu, reinforcing a clear distinction between the ‘village’ and ‘forest’ - the latter deemed to be

an elephant's rightful place in the landscape. Local people construct the forest as both 'nature' and a place for nature - where wild animals live, including elephants. In this dualistic ontology of nature-culture relations, the forest is everything the village is not (Castree 2003; Ugglá 2010). Interviewees spoke of nature and the forest interchangeably, as "the place where animals and plants are" (R15); elephants "belong[ing] to nature because they stay in the forest" (R13).

The 'forest' is a specific cultural construction in which these animals are said to be 'in place' (Philo and Wilbert 2000). Yet there is no discrete boundary between 'village' and 'forest' in Kwandu, particularly when it comes to farming practices. For example, Dorothy's field - destroyed by elephants in April - was located 'on the forest side', many kilometres east of her village. "We saw that at other places there are many animals which disturb the crops, because at the river side there are hippos", she told me (R28). Given that most farmers cultivate new fields each year - leading to a paucity of productive farmland close to the village - many choose to crop deep in the forest for similar reasons, despite the threat of elephants. Given that fields located far from settlements tend to be raided more frequently (Von Gerhardt *et al.* 2014), it is unsurprising that the Conservancy manager has urged members to resist intruding upon the elephants' space by farming deep in the forest - a place where elephants "need to stay", and in which they will gladly eat people's crops (R22).

Government and NGOs are thus keen to improve land-use planning and zonation in conservancies as a means towards reducing conflict between people and wildlife (NACSO 2014a). MET's (2013a) 'Standard Operating Procedures' (SOPs) for Conservancies state that they should devise 'zonation plans' mapping activities permitted and restricted in each zone. Alongside NACSO, MCA-N has standardised the nomenclature for these zones to avoid confusion, including 'farming and livestock', 'wildlife breeding', 'wildlife migration and tourism', and 'cultural tourism' zones (MCA-N 2013; MET 2013a). These zonation maps should then be incorporated into a conservancy's Wildlife Management and Utilisation Plan (WMUP), Human-Wildlife Conflict Management Plan (HWCMP), and any hunting or tourism contracts.

Zonation is deemed particularly important in Kwandu, where the random 'shotgun blast' (Martin 2006: 14) of unevenly dispersed fields running north-south along the main road

creates a barrier to wildlife movement between the river and the state forest. During my fieldwork the Conservancy was in the process of finalising its zonation plan, which had been developed amongst diverse stakeholders over a number of years, as the Conservancy Chairman told me:

“Kwandu was one of the *first* that started initiating this [land-use planning and zonation] programme. We had a meeting in Katima way back - 15 years ago if I am not mistaken. We called a lot of stakeholders - agriculture, forestry, NACSO, MET, WWF - and we were trying to work out how [to] zone our area. And then when we were in the meeting we felt ‘Yes, this is a good thing that we have done’ because the *indunas* were also involved.”
(R56)

Despite being developed by the management committee alongside the TA, then, the plan had yet to be formally reviewed by Conservancy members and other stakeholders (including MET), which had caused delays in finalising both the WMUP and HWCMP (MCA-N 2013). Nevertheless, in its draft HWCMP Kwandu emphasises the need to ‘reduce HWC through improved zonation of the Conservancy’ and includes a draft zonation map (Figure 4.3) (Kwandu Conservancy 2012b). The map splits the Conservancy into three management zones: ‘Settlement, cropping and livestock’; ‘tourism and wildlife’; and ‘wildlife corridor’. Farming is only permitted in the ‘settlement, cropping and livestock’ zone, whereas trophy hunting, for example, is limited to the ‘wildlife corridor’ zone (Kwandu Conservancy 2012a).

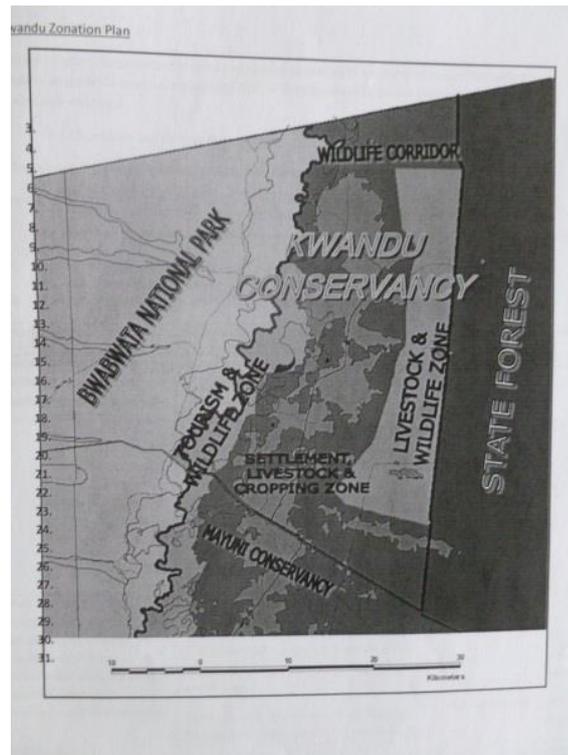


Figure 4.3: Kwandu Conservancy’s Draft Zonation Plan (Kwandu Conservancy, 2012b)

Despite not corresponding with MCA-N’s naming system, Kwandu’s ‘wildlife corridor’ zone is deemed crucial to the safe movement of elephants away from villages, in turn reducing HEC. Understandably, it was mainly Conservancy employees who spoke of this corridor north of Izwi (Figure 4.4), as well as less significant ones at ‘Kalubi’ in the centre of the Conservancy and ‘Kalongola’ in the south, close to the tar road. Each of these corridors runs horizontally across the Conservancy between the Caprivi State Forest and the Kwandu River, allowing elephants to “move from the upper land in the forest [and come] to drink at the river side”, as the Conservancy Manager explained (R22).

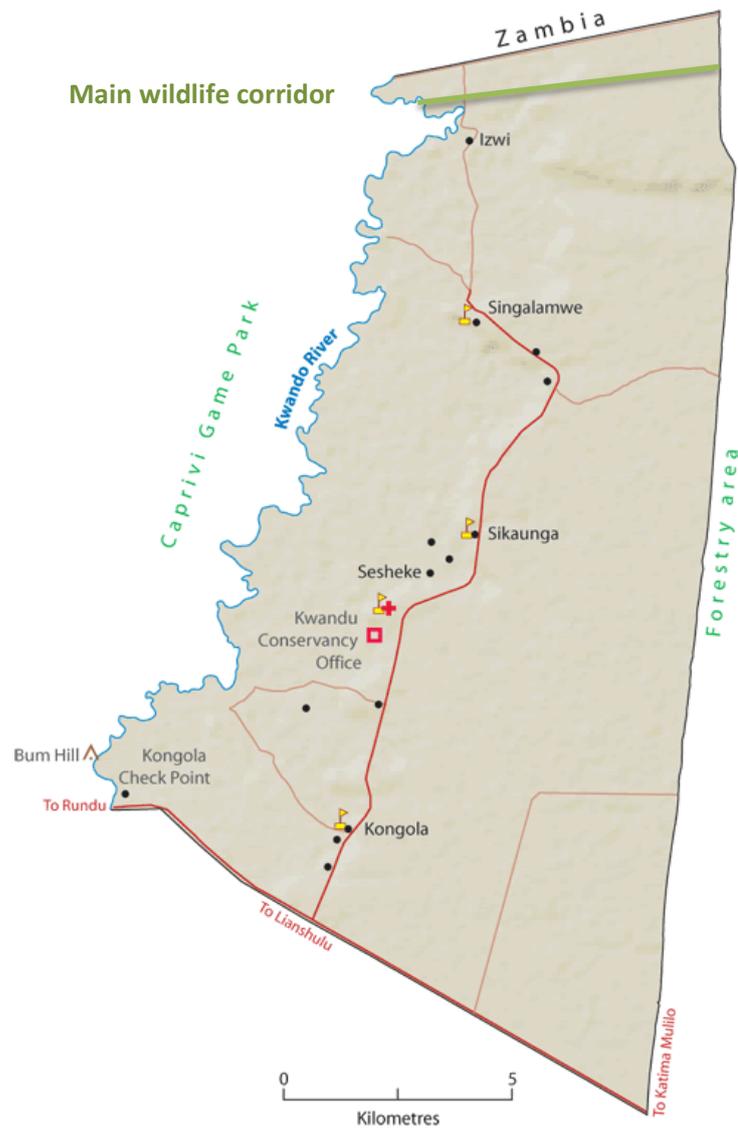


Figure 4.4: Map of Kwandu Conservancy showing location of Kwando River corridor and the wildlife corridor north of Izwi, running from the State Forest (east) to Bwabwata National Park (west). (Adapted from www.nacso.org.na)

Von Gerhardt *et al.* (2014) corroborate these perceptions with reference to Kwandu’s ‘pathways’ (most notably in the north), used by elephants throughout the year to move through the Conservancy. They argue that fields close to pathways are visited by elephants more frequently and raided significantly more often than fields situated further away. In this context, and despite opposition from local people (discussed in Chapter 5) Kwandu is attempting to map these ‘corridors’ in order to prevent people from cropping in and near them (Kwandu Conservancy 2012b). One morning I went with the Chairman

and Manager to record the GPS coordinates of the northern corridor, and made the following observations:

‘Off we went, up towards the Zambian border past Izwi village. The northern corridor could have only been some two kilometres wide, perhaps as little as one kilometre running from the border to the first village at Izwi. The bush is thick, and it looks like a place elephants could pass without encountering villages, but is one or two kilometres really wide enough for an elephant corridor?’²⁷

If the legibility of conservancy-scale corridors can be questioned, then, perhaps those planned on regional and international scales are more viable. For that reason, NGOs are keen to emphasise Kwandu’s (and other Zambezi conservancies’) role in providing ‘critical passageways for movements of elephant and other wildlife between Botswana’s Okavango Delta system and Angola and Zambia to the north’ (IRDNC 2015: 16). In line with international trends toward managing elephants on a ‘landscape’ scale, CBNRM stakeholders including the Namibian government have begun to imagine connected elephant spaces far beyond the Conservancy’s borders, as I will now discuss.

4.3.2 Constructing Landscape Corridors

MET’s Elephant Management Plan notes ‘large areas co-managed by the relevant landholders and occupiers will be necessary to provide viable ranges, to distribute the pressure of elephants on habitats and to allow population increase and expansion’ (MET 2007: 7). Government also maintains the most effective means of addressing HWC is through proper land-use planning and zonation at landscape level (MET 2012). As such, MET recognises the interdependency of parks and conservancies, championing integrated management approaches across these areas in order to enhance connectivity and broaden wildlife corridors for highly mobile species like elephants (MET 2013b, 2013c, 2014).

²⁷ Field Diary, 22/05/2013

It is in this context that MET - in collaboration with the United Nations Development Programme (UNDP) - has set about establishing Protected Landscape Conservation Areas (PLCAs) under its NAM-PLACE project. Funded with US\$4.5 million from the Global Environmental Facility (GEF), five PLCAs have been initiated in Namibia, each with a State Protected Area at their core as well as adjacent communal conservancies (MET 2014). Kwandu is thus embedded within the Mudumu PLCA (Figure 4.5), which has been split into two management 'complexes' - Mudumu South Complex (MSC) and Mudumu North Complex (MNC). Kwandu is part of the latter, and has representatives on MNC's Management Committee as well as the broader Mudumu Landscape Management Committee which coordinates land-use zonation and natural resource management activities across the landscape (IRDNC 2012; MET 2013d).

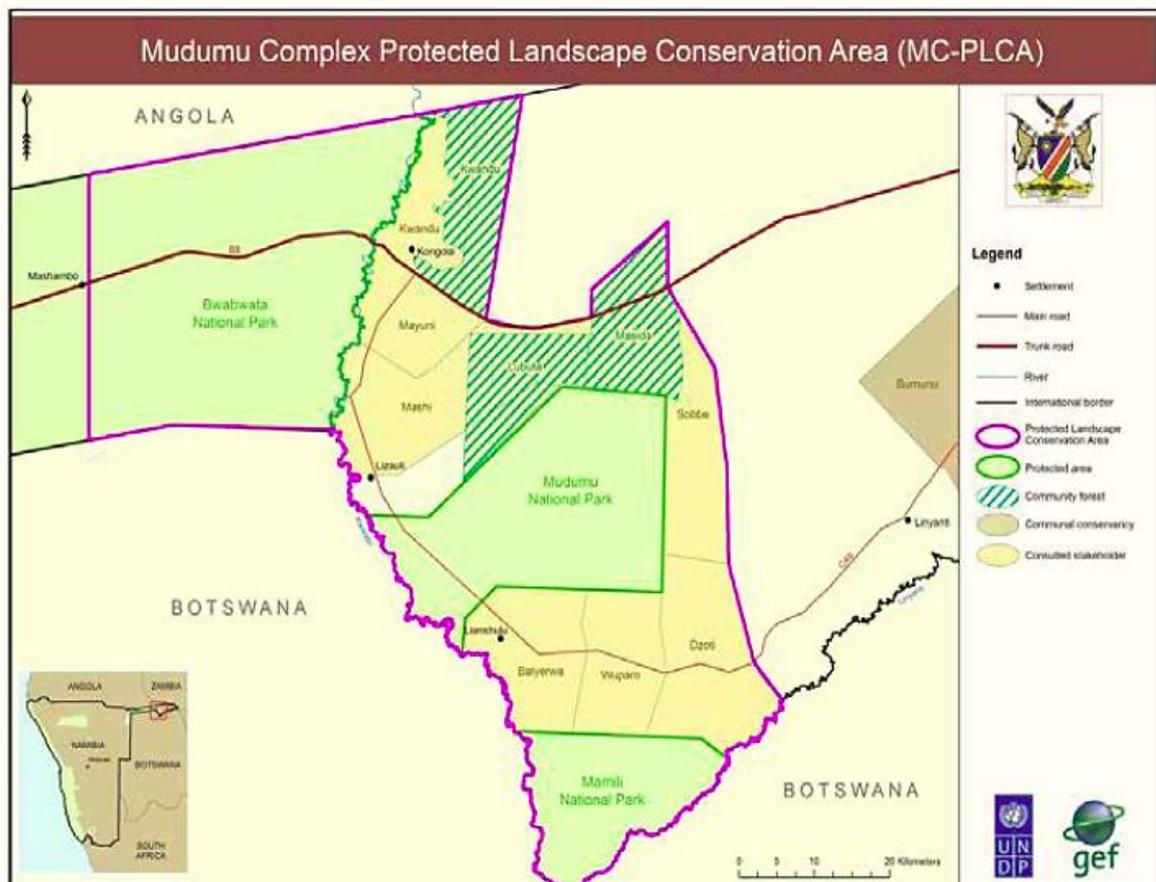


Figure 4.5: Map of the Mudumu Protected Landscape Conservation Area (MET 2012)

MET emphasises the critical importance of elephant corridors in Mudumu PLCA, including east-west corridors between Namibian national parks and conservancies, as

well as the north-south migration from Botswana to Zambia and Angola through Bwabwata NP and along the Kwandu River (MET 2013b). Murphy (2008) describes the Kwandu River corridor as a major route for elephants moving between northern Botswana to Angola and Zambia through Namibia's Zambezi region (and thus Kwandu Conservancy). These corridors, it is argued, provide valuable ecosystem services in terms of wildlife movement, yet are under threat due to human settlement in these areas, causing increased HEC (MET 2013d; Juffe-Bignoli *et al.* 2014). To that end, MET's Strategic Management Plan for the Mudumu PLCA emphasises the importance of integrating 'local', 'complex', and 'landscape' level land-use planning and management in order to 'formalise' corridors and avoid conflicts between different land-uses (MET 2012, 2013d). This 'formalisation' of existing and planned corridors is achieved through mapping, evidenced in MET's (2012) 'conceptual vision' for the Mudumu PLCA (Figure 4.6). The map proposes 'clustering' settlements in order to open-up corridors for wildlife movement (broadly indicated with arrows), allowing for the 'co-existence of people and wildlife through appropriate planning and zonation' (MET 2012: 12).



Figure 4.6: Conceptual vision for the Mudumu Landscape (MET 2012)

Yet elephants are caught up in spatial imaginaries stretching far beyond Namibia's borders. The Mudumu PLCA - and the Zambezi Region more broadly - are central to the

Kavango-Zambezi Transfrontier Conservation Area (KaZa). As Roever *et al.* (2013) note, KaZa is part of an increasing international trend toward transboundary approaches aimed at increasing ecological connectivity and promoting wildlife dispersal and migration. For the African elephant, then, KaZa is an attempt to ‘maintain extensive landscapes for elephants and restore connectivity [...] within and among range states’, strategies deemed crucial to the species’ survival (CITES 2010: 8).

The KaZa Secretariat is not only involved in corridor planning in Mudumu PLCA, but alongside MET and other stakeholders it also promotes the establishment of wildlife corridors on a much larger regional level (NACSO 2014a). Cumming (2010) notes that identification and consolidation of transfrontier wildlife corridors has been central to the KaZa project since its inception, whilst the Secretariat’s latest strategic plan urges stakeholders to ‘identify and secure [...] dispersal areas and corridors’ (KaZa Secretariat 2011: 17). In that sense, what is now the Mudumu PLCA has been identified as a critical corridor linking Chobe National Park in Botswana with parks in Angola and Zambia (Figure 4.7) (Cumming 2010), allowing the estimated 160,000 elephants from Botswana to “gradually filter out into Zambezi” in search of fresh forage, as one CBNRM professional put it (R39). More recently, the Kwandu River has been formalised as one of six ‘wildlife dispersal areas’²⁸ linking protected area clusters in KaZa (Peace Parks Foundation 2016) (Figure 4.8). What becomes clear is that the management of elephants in conservancies like Kwandu - an integral part of Mudumu PLCA - is deemed critical to the successful ecological functioning of the KaZa landscape (GRN 2012a; MET 2012, 2013d).

²⁸ The other five ‘wildlife dispersal areas’ are the Zambezi-Chobe floodplain; Zambezi-Mosi Oa Tunya; Hwange-Kazuma–Chobe; Hwange-Makgadikgadi-Nxai; and Khaudum-Ngamiland (Peace Parks Foundation, 2016).

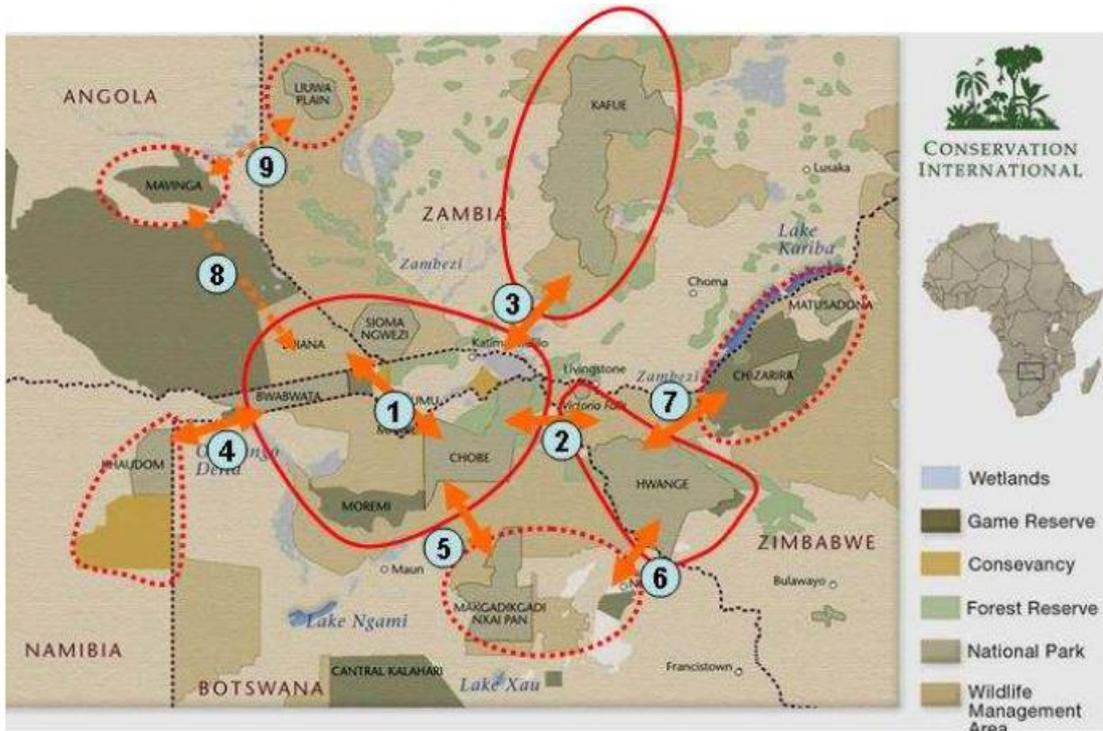


Figure 4.7: An early map of potential wildlife corridor areas in KaZa-TFCA. The numbering can be considered as an order of priority, number 1 being the Mudumu PLCA corridor (Cumming 2010)



Figure 4.8: Wildlife movement/dispersal areas in KaZa (Peace Parks Foundation, 2016)



Plate 4.7: An elephant at the Ngoma border between Botswana and Namibia. Around 160,000 elephants are believed to be filtering out of Botswana through Namibia’s Zambezi Region. (www.greatelephantcensus.com)

4.3.3 Summary

On multiple scales elephants are integral to the definition and reinforcement of spatial boundaries. To use a Deleuzian language of assemblage, communities, NGOs and government engage in practices of ‘territorialisation’ (DeLanda 2006) that seek to put elephants ‘in place’ (Philo and Wilbert 2000). In Kwandu, a fundamental part of this is the creation of ‘zones’ and wildlife ‘corridors’, represented on maps as spaces for elephants in which people are prohibited from settling and clearing new fields. Indeed, these hegemonic maps represent space as a ‘completed horizontality’ (Anderson 2008: 228), through which the livelihood requirements of rural farmers are often overridden. On the surface, it is a classic case of ‘management-by-striation’ (Bear 2013: 35), attempting to reduce HEC and encourage the safe passage of elephants through the Conservancy and beyond.

Yet these ‘corridors’ are social constructions, and rely upon the elephant’s identity as a ‘focal’ or ‘umbrella’ species in order to gain traction (Goldman 2009; Epps *et al.* 2011;

Roever *et al.* 2013). It is the elephant's landscape requirements and its ability to introduce a sense of tangibility on corridor maps, then, that make fragmented landscapes such as Mudumu PLCA and KaZa legible and connectable (Jepson *et al.* 2011). Epps *et al.* (2011) note how the elephant's labelling as a landscape species allows conservationists to plan corridor networks without complete knowledge of actual elephant movements, which is evidently the case in KaZa. Studies based on the movements of GPS-collared elephants (Figures 4.9 and 4.10) are believed to provide evidence that the animals are moving through Zambezi and 're-colonising' parts of Zambia and Angola (Chase and Griffin 2008, Chase and Griffin 2009; Hanks 2010). However, despite such studies claiming to support the 'functionality' of KaZa (Roever *et al.* 2013), it can be argued that these corridors largely attempt to 're-establish mythical migration routes' (Cumming 2010: 146).

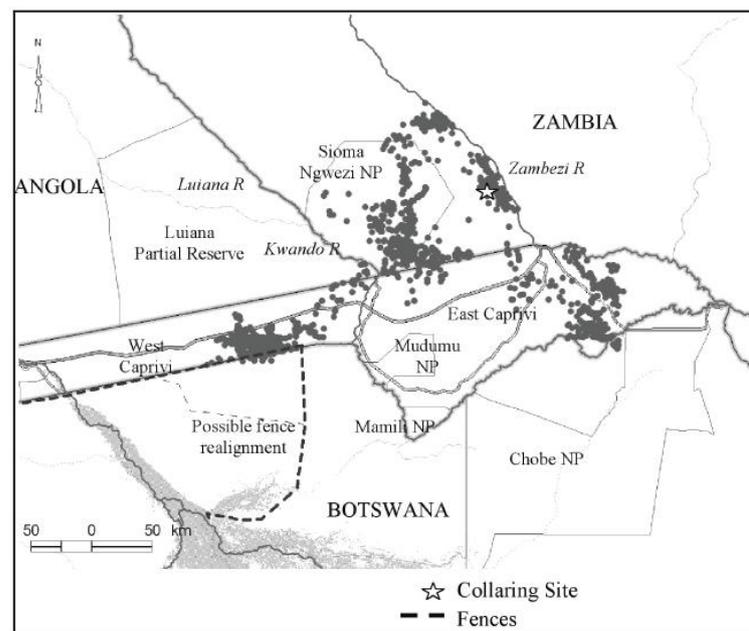


Figure 4.9: Movements of one adult bull elephant collared in Sioma Ngwezi National Park, southwest Zambia, Aug 2006-Jun 2008 (Chase and Griffin 2008)

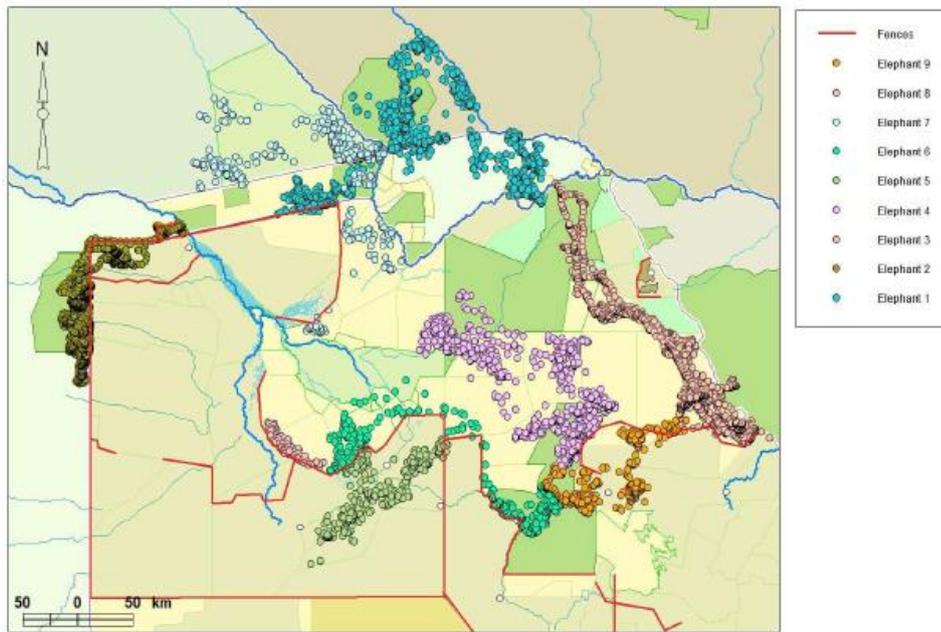


Figure 4.10: The movements of nine elephants in relation to fences in part of KaZa (Ferguson and Chase 2010)

These ‘corridors’ and ‘dispersal areas’ are spatial imaginaries devised by conservation planners. Through GPS tracking and corridor mapping, elephants are inserted into what Cresswell (2014: 7) refers to as a ‘logistical epistemology’ that produces space and scale. As McFarlane (2009: 564) makes clear, this ‘politics of scale’ is an epistemological fact, in which elephants are a critical component. In Zambezi, the construction of ‘local’, ‘complex’ and ‘landscape’ scales are territorialising practices undertaken by government and NGOs seeking to manage dispersed human-elephant relations. As the next section will discuss, this territorialisation is dependent upon the co-production and legitimisation of elephant knowledge and values. In that sense, Goldman (2009: 338) notes that corridors are part of a ‘standardised conservation package’ that makes connected conservation legible, including other methods such as wildlife monitoring techniques. In Kwandu these monitoring practices are integral to the co-production of elephant knowledge and value, and will be explored in the following section.

4.4 Producing an Elephant for Consumptive Use

4.4.1 Counting Elephants and Codifying Knowledge

“When it’s hot we have to start early; now we start”, said Vincent, as we left his village and headed east into the forest. It was 7am on a crisp August morning in Kwandu Conservancy, in the middle of the dry season. I was undertaking the monthly ‘fixed-route patrol’ in Mwanzi and Singalamwe alongside three of the Conservancy’s Community Game Guards (CGGs) - Vincent, Makoka, and Amos. They walk this 10km route every month, in addition to their daily patrols, each carrying a yellow ‘Event Book’ (EB) in which they record tracks and sightings of wildlife. Tracing discernible paths through the forest, the men pointed out various plant species - sand-veld acacia, Zambezi teak, wild syringa, sour plum and sickle bush - and recorded the spoor of leopard, hyena, kudu, and bushpig.

Yet, it was not until we reached the Conservancy’s border with the State Forest - one hour and a half into the patrol - that we came across evidence of elephant presence. “*Njovu!*”²⁹ called Vincent from up ahead, as we walked north along the ‘cut-line’³⁰ (Plate 4.8). “It must be from two days ago”, he said, looking down at the pachyderm’s footprint (Plate 4.9). Amos pointed to the location of these tracks on his Conservancy map (Plate 4.10), clear evidence, they believed, that elephants were moving between the State Forest and Conservancy, or even using the cut-line as a path north into Zambia. However, being old tracks, they would not be recorded in the EB on this particular occasion, as Vincent explained: “On a fixed patrol we only record the fresh tracks from last night, [this] morning, or a sighting”, he told me.

²⁹ *Njovu* is the Sifwe word for ‘elephant’.

³⁰ The cut-line refers to a strip of cleared vegetation marking the boundary between Kwandu Conservancy and the State Forest, which also acts as a fire break.



Plate 4.8: Walking north along the cut-line, Kwandu Conservancy



Plate 4.9: Elephant spoor on the cut-line, Kwandu Conservancy



Plate 4.10: Amos points to approximate location of elephant spoor on the map in his Event Book

Another two hours elapsed before we came across more elephant spoor, close to some camel-thorn³¹ trees a few kilometres further north along the forest boundary (Plate 4.11). “These acacia [are] where the elephants are feeding”, said Amos. “They were here almost two days ago”, deduced Vincent, inspecting the tracks. “But these are the breeding ones - the females and the juveniles”, he continued, an air of disappointment in his voice. Tracks from a big bull would have been better news to take to the Conservancy’s Professional Hunter. “Now [the elephants] are just few”, he told me. “But you will see after September, October, November there will be a lot of elephants because they are just chasing the water.”

³¹ *Acacia erioloba*.



Plate 4.11: Juvenile elephant tracks, Kwandu Conservancy

That is partly the reason why MET and NACSO choose to carry out ‘Annual Game Counts’ at the height of the dry season in September and October. Each year during these months, CGGs from all conservancies converge alongside government and NGO staff to undertake foot patrols and vehicle-based counts in the region’s national parks and conservancies. “In Kwandu we just count for one day, and then we go to Mayuni, Sobbe, Mashi [conservancies] and others. You can walk almost 25 kilometres in one day”, Vincent told me (R27). In 2013, annual game count routes in east Zambezi³² totalled 805 kilometres, 61 of which made up Kwandu’s ten routes.

Together with daily patrols, these annual game counts are fundamental to monitoring natural resources - and making elephants present - in conservancies. First of all, data from individual CGG Event Books is collated in a monthly ‘Blue’ Event Book (Plate 4.12). NACSO (2014a: 37) refer to this practice as ‘the first step in the conservancy information cycle’, enabling data gathered by CGGs to be used for effective and adaptive management. In that sense, despite being designed to monitor events that occur

³² Including Mudumu National Park and twelve conservancies (Kwandu, Mashi, Balyerwa, Wuparo, Dzoti, Mayuni, Sobbe, Salambala, Sikunga, Kabulabula, Kasika and Impalila)

stochastically, such as HWC incidents and wildlife mortalities, the EB system is integral to the long-term monitoring of wildlife populations (Stuart-Hill *et al.* 2005). Sitting in on one of these monthly meetings in Kwandu, I made the following observations:

‘Vincent read out various categories such as ‘Elephant sightings in November’, after which the other Game Guards called out their individual totals. Sometimes the others were not listening, and there were often problems adding the large numbers, which I helped with. It was quite disorganised; my pencil being used to shade in the bar graph totals. Apparently, this is done on the 17th of every month, but the last few months’ data was missing.’³³



Plate 4.12: Game Guards transfer their individual ‘yellow’ Event Book data into the Conservancy’s monthly ‘blue’ Event Book. Kwandu Conservancy office, 05/08/2013

Technical issues such as these have been encountered since the EB’s inception in 2000, leading the system’s designers to devise a number of rules guiding its implementation (Figure 4.11). Yet, in spite of these issues, CBNRM stakeholders stress the importance of undertaking data analysis locally in order to encourage ownership over the process (Stuart-Hill *et al.* 2005).

³³ Field notes, 17/12/2012

-
1. Always with its master
 2. Never sleeps
 3. Always neat
 4. Never lies
 5. Always reports monthly
 6. Never works in another conservancy
 7. Always change's its forms once a year
 8. Never shares incidents (“*To avoid double reporting*”)
 9. Always lives in its bag
 10. Never works without a smile
-

Figure 4.11: The field rules devised for successful implementation of the Event Book, termed the ‘Ten Commandments’ by Community Game Guards (Stuart-Hill *et al.* 2005: 2627)

Nevertheless, NACSO’s ‘Natural Resources Working Group’ provides an important service to the Conservancy at this point, helping to collate and present the information. The number of sightings are recorded in the Conservancy’s ‘Red’ long-term monitoring Event Book (Figure 4.12) and annual game count sightings are collated and presented in bar graphs illustrating trends in wildlife abundance. Thus, despite being appropriately paper-based for use by rural people, EB data is also analysed and presented digitally by NACSO, stored within a national monitoring and evaluation database belonging to MET (Stuart-Hill *et al.* 2005). This information is presented in publications such as NACSO’s annual ‘State of Community Conservation’ report (Figure 4.13) and Annual Natural Resource Reports which serve as important management tools for individual conservancies (NACSO 2014a, 2014c).

But these reports are also produced to illustrate wildlife recoveries in Kwandu and the Zambezi Region more broadly. CBNRM stakeholders admit that annual fluctuations in elephant sightings are caused by environmental factors such as good rains and transboundary movements from neighbouring countries, especially Botswana (Jones and Barnes 2009; Weaver *et al.* 2011). Further, elephant sightings on fixed-route patrols in Kwandu have decreased in recent years (Figure 4.14), which combined with the lack of sightings during annual game counts³⁴ means NACSO is reluctant to estimate elephant numbers at Conservancy-level. Nevertheless, whilst urging caution due to the expansion in number and spatial distribution of transects, at the regional scale NACSO is able to

³⁴ 0 in 2013; 10 in 2014; 0 in 2015.

produce graphs illustrating a steady increase in elephant numbers per 100 kilometres over the past decade (Figure 4.15). Despite the methodological difficulties of counting highly mobile animals across extensive ranges (Fowler and Mikota 2006; t'Sas-Rolfes *et al.* 2014), elephant populations in Zambezi are understood to have increased from around 6,000 in the mid-1990s to an estimated 10,000 today.³⁵ On a national level, the country's elephant population is estimated at 20,000, up from 7,500 in 1995 (MET 2007; IRDNC 2015; NACSO 2015a). Notwithstanding the reservations of those who put Zambezi's wildlife recoveries down to increased rainfall since the mid-1990s (Bakkes 2015), these knowledge representations reinforce the success of CBNRM and strengthen the case for sustainable utilisation. In that respect, they are integral to producing an elephant for consumption both in Namibia and beyond, as I will now show.

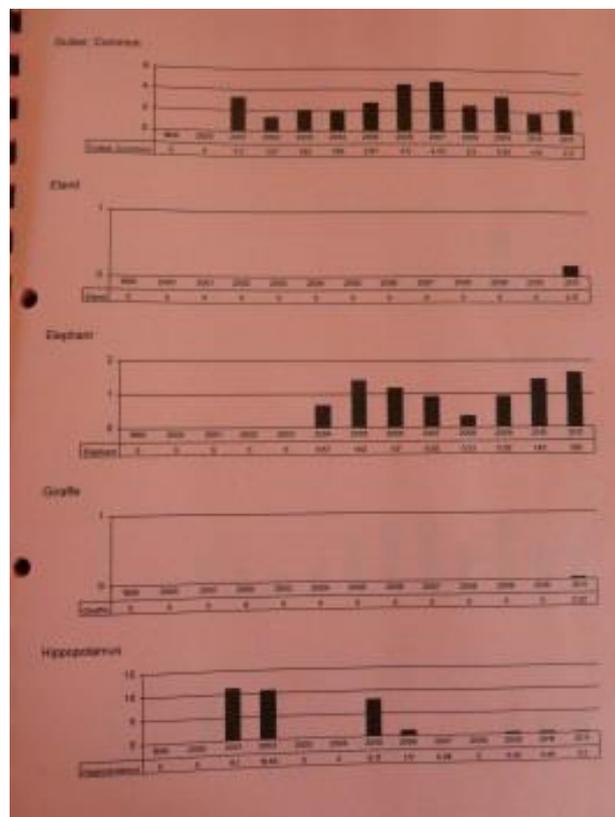


Figure 4.12: Fixed patrol sightings of elephant and other species in Kwandu Conservancy up to 2011 (Reproduced from the Conservancy's 'Red' Annual event book)

³⁵ These numbers are based on figures obtained from the Elephant Database: www.elephantdatabase.org; and personal communication with conservation professionals.

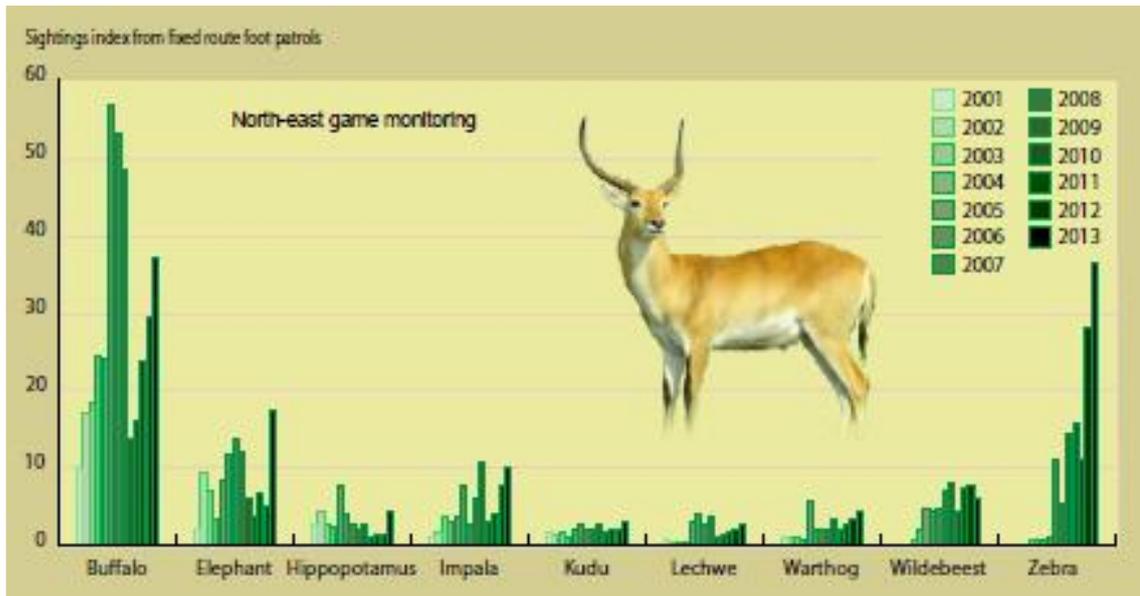


Figure 4.13: Number of sightings of elephant and other species on fixed route patrols in north-east conservancies 2001-2013 (NACSO 2014a)

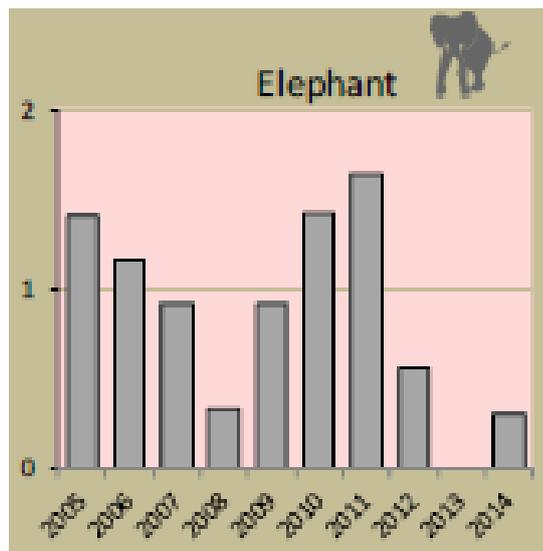


Figure 4.14: Number of elephant seen per fixed-route patrol in Kwandu Conservancy (NACSO 2014c)

Trends – Numbers per 100km

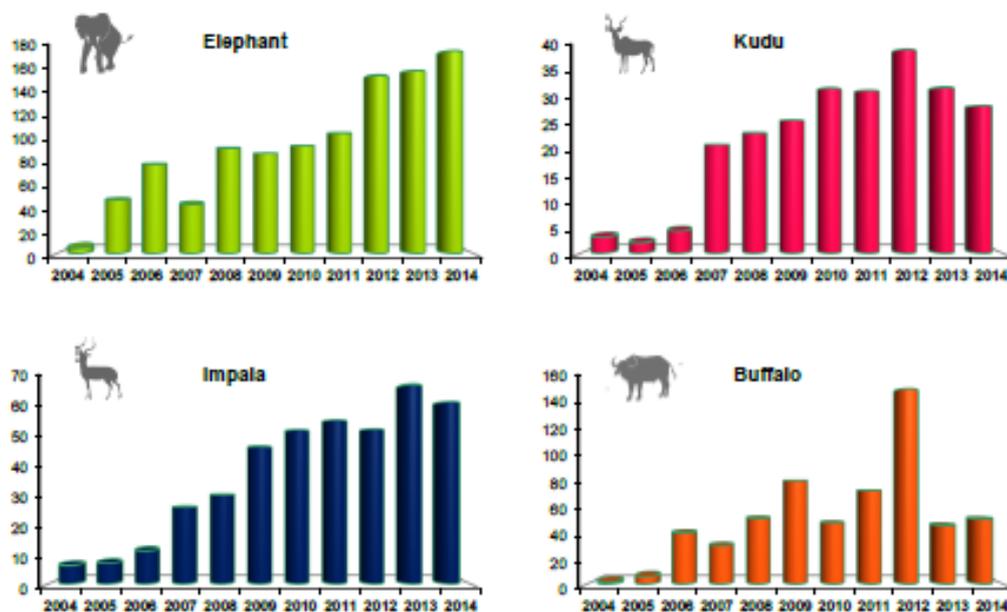


Figure 4.15: Trends in wildlife sightings per 100km on annual game counts in Zambezi Region (NACSO 2014b)

4.4.2 Producing Elephants for ‘Conservation Hunting’

Defined as the ‘utilisation of individual game by its permanent removal, or removal of its parts, from or within an area’ (GRN 1996: 1(b)), the Namibian government is committed to the sustainable ‘consumptive use’ of its natural resources. As a central tenet of international conservation agreements such as the Convention on Biological Diversity (CBD) and the Convention on International Trade in Endangered Species (CITES), the principle of sustainable use is anchored in the country’s Constitution³⁶, and Namibia’s development framework - ‘Vision 2030’ - has a dedicated chapter on the sustainable utilisation of natural resources (GRN 2004; MET 2014). More than this, Namibia’s recently updated National Biodiversity Strategy and Action Plan (NBSAP2), covering the period 2013-2022, promotes the sustainable use of biodiversity as a ‘key driver of poverty alleviation and equitable economic growth, particularly in rural areas’ (MET 2014: 23).

³⁶ Article 95 of Namibia’s constitution declares: ‘The State shall actively promote and maintain the welfare of the people by adopting, *inter alia*, policies aimed at [...] maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future’ (GRN 1990).

This is, of course, the essence of the country's CBNRM programme, and Namibia's most recent national development plan stresses the importance of CBNRM as a means of capitalising on the country's charismatic wildlife through tourism and hunting (GRN 2012b; NACSO 2014a). The Conservancy legislation itself gives communities 'rights and duties with regard to the consumptive and non-consumptive use and sustainable management of game [...] in order to enable [...] members of such community to derive benefits'³⁷ (GRN 1996: 24A (4)). As for Kwandu, the need to 'generate benefits from the sustainable management, consumptive and non-consumptive use of wildlife' is a fundamental aim written into its constitution (Kwandu Conservancy 2011).

It comes as no surprise, then, that the government's 'Elephant Management Plan' places strong emphasis on realising the full economic potential of elephants (MET 2007). This 'use it or lose it' approach is supported by NGOs involved in the CBNRM programme, and the economic benefits from consumptive use - notably the hunting of elephants for trophies - is deemed crucial both to elephant conservation and socio-economic development (Owen-Smith 2008; Weaver *et al.* 2011; NACSO 2014). This is particularly the case in places like Kwandu, where, as I have shown, elephants are impacting negatively on livelihoods. The government is thus committed to offsetting these costs with revenue generated through the hunting of elephants (MET 2009).

Nevertheless, before conservancies like Kwandu can realise this economic value, the government must satisfy certain trade conditions imposed by CITES. Having demonstrated healthy elephant numbers and a relative lack of poaching, Namibia was able to get its national elephant population transferred from CITES Appendix I³⁸ to Appendix II³⁹ in 1997 (CITES 2014a).⁴⁰ This means the country's elephants are not considered at risk of extinction, and the state is permitted to trade in limited amounts of sustainably harvested ivory and elephant products, including the sale of elephants as

³⁷ Nature Conservation Amendment Act 1996: 24A, (4).

³⁸ CITES Appendix I includes 'all species threatened with extinction which are or may be affected by trade. Trade in specimens of these species must be subject to particularly strict regulation in order not to endanger further their survival and must only be authorized in exceptional circumstances.' (CITES 1973, Art II: 1)

³⁹ CITES Appendix II includes 'all species which although not necessarily now threatened with extinction may become so unless trade in specimens of such species is subject to strict regulation in order to avoid utilization incompatible with their survival.' (CITES 1973, Art II: 2)

⁴⁰ Botswana and Zimbabwe also had their national elephant populations transferred to Appendix II in 1997, and South Africa followed suit in 2000.

trophies to (foreign) hunters. Yet before it can do so, Namibia must first establish annual export quotas⁴¹ for elephant ivory, deemed by CITES to be ‘important tools [...] in regulating and monitoring wildlife trade to ensure that the use of natural resources remains sustainable’ (CITES 2007: 1). Further, under CITES rules, elephant trophies must be accompanied by an export permit which will only be granted if scientific authorities⁴² in Namibia deem such trade ‘not detrimental to the survival of [the] species’ (CITES 1973, Art IV: 2(a)). In making their assessment, CITES recommends Namibia’s Scientific Authority consider species distribution and population trends, as well as any monitoring and adaptive management measures being implemented.

Monitoring data produced through annual game counts and the EB system is crucial here. As such, CITES (2016d: 8) commends Namibia on its in-depth monitoring of all conservancies, part of ‘the largest road count monitoring system in the world.’ The data generated from these game counts are not only used by MET to set elephant ivory quotas, but in demonstrating increasing elephant numbers they also support Namibia’s case for consumptive use. CITES Secretariat reviews these data alongside information from the IUCN’s African Elephant Specialist Group (AfESG)⁴³, which estimates a population of 250,000 elephants in southern Africa - around 64% of Africa’s total elephant population (CITES 2016a). Added to the African elephant’s classification as ‘vulnerable’, but not ‘threatened’ on IUCN’s Red List, MET is able to make its case for managing the country’s growing elephant population partly through trophy hunting (MET 2007).

With the support of Namibian NGOs involved in CBNRM, MET points to the need for sustainable ‘offtake’ from elephant populations. Current elephant densities in Zambezi

⁴¹ This export quota must be expressed as a maximum number of tusks, and be communicated in writing to the CITES Secretariat by 1st December for the following calendar year. Failure to submit an export quota for raw ivory by the deadline will result in a zero quota until one is communicated to the Secretariat (CITES Conf. 10.10 (Rev. CoP16) 1997b).

⁴² Article IX of the Convention requires each party to designate one or more Scientific Authorities, and recommends that they be independent from Management Authorities. CITES has struggled to identify Scientific Authorities in all member countries, and its website refers to Namibia’s Scientific Authority as a ‘committee of scientists’, contactable through Namibia’s CITES Management Authority, the Ministry of Environment and Tourism (CITES 1997a).

⁴³ The IUCN African Elephant Specialist Group (AfESG) maintains the African Elephant Database (AED), available online at www.elephantdatabase.org, and publishes the African Elephant Status Report. Status reports were published in 1995, 1998, 2002 and 2007, and provisional updates were released online in 2013 and 2015, containing data through 2012 and 2013, respectively. The AfESG also provides technical expertise on elephant conservation and management, collaborating with governments, NGOs, academic institutions and individuals (CITES 2016: 11).

are understood to be around 1/km², double the level at which more than half of the tree canopy can be retained (Martin 2005). For that reason, utilisation advocates - including CBNRM stakeholders - point to the role of trophy hunting offtake in minimising habitat destruction caused by these ‘ecosystem engineers’ (Roever *et al.* 2013). According to one NGO Director, the consumptive use of elephants through trophy hunting is “critical to the long-term existence of elephants outside of protected areas” (R39) which - in the absence of hunting - would otherwise be restricted to tiny pockets in national parks. Referring to a recent Namibian rhino hunt for which a US citizen paid US\$350,000, the executive director of the Dallas Safari Club⁴⁴ made the point that the hunt was “based on a fundamental premise of modern wildlife management: populations matter; individuals don’t” (Gressier 2014; Cruise 2015). Unsurprisingly, this view is prevalent amongst the hunting community, one hunter I interviewed describing it as “a Polyanna mindset to think that hunting is a bad thing”, noting that elephants must be hunted “for the good of the species, not the individual animal” (R34).

MET thus calculates that 0.5% of an area’s total elephant population can be hunted for trophies (usually males over 30 years old) without negatively affecting numbers (MET 2007; Selier *et al.* 2014). Accordingly, Namibia has set a trophy quota of 180 tusks (90 elephants) each year since 2011 (Table 4.4). As one NGO made clear, this equates to around one trophy bull for every 200 animals in Namibia, a figure deemed to have little impact on populations growing by 5% each year on natural rebirth alone (R38). In basing these export quotas upon elephant numbers from actual sightings on game counts - considered ‘underestimates’ (NACSO 2015a: 50) - the Namibian government effectively meets CITES’ ‘non-detriment finding’ requirement, paving the way for trade in elephant sport-hunted trophies. This is crucial for trade with hunters from the US, a country that considers the African elephant ‘threatened’ under its Endangered Species Act yet allows the importation of elephant trophies when the exporting country has set an annual ivory quota (US Fish and Wildlife Service 2014). As CBNRM stakeholders are keen to point out, ‘Namibia has a solid track record in meeting its CITES obligations’ (Weaver *et al.* 2011: 68), employing a ‘rigorous scientific approach to monitoring stocks as a basis for conservative quota and permit allocations’ (MET 2014: 36).

⁴⁴ Dallas Safari Club is an international hunting and conservation advocacy organisation, formed in 1972, and formally admitted as a member of IUCN in May 2015.

Exporter	2011	2012	2013	2014	2015
Botswana*	800	800	800	800	-
Cameroon	160	160	160	160	-
Gabon	-	-	-	-	-
Mozambique	200	200	200	200	200
Namibia	180	180	180	180	180
South Africa	300	300	300	300	300
United Republic of Tanzania	400	400	400	200	200
Zambia*	160	160	-	-	160
Zimbabwe	1000	1000	1000	1000	1000

*Export quotas for Botswana in 2011 and 2012 and Zambia in 2011, 2012 and 2015 were published for "tusks and other trophies" of a specified number of animals.

Source: Species+, UNEP World Conservation Monitoring Centre, Cambridge, United Kingdom.

Table 4.4: Export quotas for African elephant tusks as sport-hunted trophies, 2011-2015
(CITES 2016a)

This national quota must then be distributed amongst the country's hunting concessions. It is a process led by MET, which 'hold[s] the right to set sustained-yield quotas for the use of game animals' (MET 1995: 14). In its original CBNRM policy document the government foresees delegating this function to conservancies capable of setting their own quotas, but this has yet to happen anywhere in the country, let alone Kwandu. Nevertheless, conservancies have become more involved in this process since CBNRM inception, participating in annual quota review meetings alongside MET, NGOs, and Traditional Authorities. NGOs identify the need to 'develop quota setting [...] systems to ensure natural resource utilisation is sustainable and maximises socio-economic returns to communities' (NACSO 2011: 13). But they also recognise that the knowledge and skill transfer required to produce consistently reliable quotas takes time (Weaver *et al.* 2010). For that reason, NACSO partners, including MET, have conducted quota setting training programmes through MCA-Namibia's CDSS project. These trainings help conservancy committees understand the factors MET consider when negotiating elephant hunting quotas with conservancies, including the previous year's harvest data, trophy quality, safari operator reports and the number of HEC incidents (NACSO 2013c; MCA-N 2014b).

Again, inscriptions based on practices of counting elephants feed into this process, quotas being 'based on game count estimates [and] data from the Event Book system' (MET 2013b: 10). The significance of these inscriptions was made clear during an information sharing meeting between Kwandu and representatives from Nepal, facilitated by WWF

(Plate 4.13). While Game Guards explained the EB system, a member of staff from IRDNC noted that “this information has helped communities convince government that there are some problems.” “It also helps us to set the quota”, noted the Conservancy’s Enterprise Officer,⁴⁵ a point NACSO were eager to get across during Kwandu’s annual feedback meeting:

‘We then went through a sheet summarising Kwandu’s Event Book data. The link between species recorded and quota setting was brought up again by [name of WWF staff member], stating “If you are not recording elephants and you want six elephants on your quota from MET, then it will be difficult for them to know what to give you.”’ [Field notes, 08/08/2013]



Plate 4.13: Senior Ranger Vincent Kakuwe explains the Event Book monitoring system to a visiting party from Nepal. Kwandu Conservancy office, 31/07/2013

Elephant population estimates and desired stocking rates contained in the Conservancy’s Wildlife Management and Utilisation Plan (WMUP) are also an important factor here. MET’s recently released ‘Standard Operating Procedures’ for conservancies state quotas ‘must form part of, and be compatible with [these plans]’ (MET 2013a). According to Kwandu’s WMUP, the Conservancy aims to keep its estimated 250 ‘resident’ elephants at current levels, although MET and NACSO are sceptical about these numbers (Kwandu

⁴⁵ Field notes, 31/07/2013.

Conservancy 2012a). The Conservancy also goes on to contradict this objective later in the report when outlining its plan to request elephant translocations from the government.

Despite these anomalies Kwandu's implementation of the EB monitoring system and participation in quota setting activities are commended by government and CBNRM NGOs. MET has reduced quotas for those conservancies not engaging fully with the process, yet the results of Kwandu's EB and quota setting audit - undertaken by NACSO - show a marked improvement in recent years (Table 4.5) (MCA-N 2013). Thus, in spite of ambiguity over the amount of elephants in Kwandu, the Conservancy has received five elephants on its quota in each of the past three years (NACSO 2013a, 2014c).⁴⁶ Based on MET's baseline of 0.5% offtake, Zambezi's current estimated elephant population of 10,000 would allow for an annual trophy quota of fifty animals, to be allocated amongst Zambezi's fifteen communal conservancies. Shared equally, this would amount to around three trophy elephants per Conservancy. Based on these figures Kwandu's allocation of four trophies in 2013 looks generous on behalf of MET, but is probably offset by lower quotas in smaller conservancies and those with fewer elephants and HEC incidents. That is not to say the Conservancy is satisfied, having had its request for seven elephants rejected in 2014. But what it does mean is that Kwandu can begin the next stage in producing an elephant for consumptive use - marketing the animals to prospective hunting outfitters.

⁴⁶ Kwandu received an elephant quota of 5 'trophies', 0 'own-use' in 2012; 4 'trophies', 1 'own-use' in 2013; and 3 'trophies', 2 'own-use' in 2014.

	2010	2011	2012
Orupembe	32	34	40
Sanitatas	30	36	41
Ehrovipuka	38	44	47
Omatendeka	36	42	23
Sesfontein	44	49	34
Torra	45	42	52
Puros	42	39	49
Anabeb	37	45	40
Marienfluss	36	32	43
Uukolonkadhi/Ruacana	32	40	41
Doro Inawas	36	24	42
Twyfelfontein-Uibasen	38	29	44
#Khoadi -//Hôas	46	46	50
Sorris Sorris	33	35	41
Uukwaluudhi	26	34	29
Sheya Shuushona	35	44	35
King Nehale	42	42	39
Muduva Nyangana	38	37	40
George Mukoya	38	37	37
Nyae Nyae	44	42	43
N#a-Jaqna	45	41	49
Kwandu	49	38	48
Mayuni	48	46	54
Mashi	47	45	49
Wuparo	45	42	48
Balyerwa	46	47	40
Sikunga	27	41	36
Impalila	36	42	35
Salambala	46	42	47
TOTALS	1137	1157	1216

Table 4.5: CDSS Event Book Audit scores for each conservancy, including monitoring and quota setting compliance (MCA-N 2013: 30)

4.4.3 Summary

As I have shown, multiple stakeholders are involved in producing an elephant for consumption. The ‘trophy’ elephant is produced through social practices of counting elephants and codifying knowledge (Gallacher and DiNovelli-Lang 2014). Game Guards make elephants present in Kwandu and Zambezi, not necessarily through physical sightings, but by recording their tracks. These material representations of elephants move between ‘Event Books’ acting as conduits for knowledge transfer between stakeholders (Anderson and McFarlane 2011). Despite the statistical insignificance of conservancy-

scale surveys and the methodological difficulties of counting elephants in large, open systems (Fowler and Mikota 2006), stakeholders are able to use these inscriptions to illustrate increases in regional elephant numbers. Alongside MET, institutional networks of NGOs produce documents, reports and plans - or what Li (2014: 593) refers to as 'extraordinary feats of assembly work' - supporting the 'sustainable consumptive use' of Namibia's elephants (MET 2007; NACSO 2014a, 2015a). Such 'statistical picturing' (Demeritt 2001, in Li 2014: 592) is integral to constructing a Namibian elephant's identity on an international level - namely that it is 'vulnerable' but not 'endangered', inserted into CITES Appendix II.

Despite the continent-wide poaching crisis and calls to list all elephant populations under Appendix I, Namibia's elephants remain on Appendix II. This is largely a result of MET's ability to demonstrate healthy populations through the monitoring processes described above, presented to CITES in annual reports and the country's 'Elephant Management Plan' (MET 2007). Codified knowledge formed in these documents merges with knowledge produced through counts carried out by other actors such as IUCN's African Elephant Specialist Group, producing ninety 'trophy' elephants, abstracted for circulation in commodity markets before being hunted in Namibia (Sullivan 2013). The next chapter follows elephants through these hunting spaces, which, as this chapter has shown, are created through territorialising practices that put elephants 'in place'. In doing so, it sheds light upon the active production and transformation of elephants through their 'conservation hunting' (NACSO 2015a; Büscher 2013).

4.5 Conclusion

In Kwandu Conservancy, and the Zambezi Region more broadly, elephants continue to impact negatively on local farming practices and livelihoods. The sense of resignation experienced by farmers corresponds with government and NGO perceptions that crop destruction is inevitable in Zambezi, a region where agricultural communities exist on the periphery of the largest elephant population in Africa. Yet in attempting to mitigate the economic impact of these human-elephant-crop interactions, all engage in practices that seek to put elephants ‘in place’, both spatially and conceptually (Philo and Wilbert 2000; DeLanda 2006; Bear 2013).

Local farmers build fences attempting to demarcate boundaries between cropping spaces and the ‘forest’. Within this dualistic nature-culture ontology, the latter is deemed an elephant’s rightful place in the landscape (Castree 2003). Responding to calls from Conservancy members to ‘find better ways to separate animals from people and farming places’, MET encourages conservancies to take practical steps for keeping elephants away from crops (MET 2009; MET 2014). CBNRM practitioners also put increased emphasis on land-use planning and zonation as HEC mitigation strategies. In Kwandu, stakeholders exercise ‘management-by-striation’ (Bear 2013: 35), representing ‘zones’ and ‘wildlife corridors’ on maps that delineate people-free, elephant spaces. Yet these spatial imaginaries stretch far beyond the Conservancy’s borders, and the elephant’s identity as a ‘landscape’ species is deployed to construct corridors connecting (inter)national protected areas (Goldman 2009; Roever *et al.* 2013).

The elephant is therefore integral to the social construction of conservation scale and space (McFarlane 2009), including spaces in which elephants can be hunted. The ‘trophy’ elephant is co-produced through practices of counting elephants and codifying knowledge. CBNRM stakeholders - most notably Game Guards - make elephants present in Kwandu and Zambezi by recording evidence of the pachyderm’s presence: spoor, dung, and urine. This knowledge is codified in Event Books and HWSRS claim forms, individual elephants homogenised in representations lacking any distinction between male/female, adult/juvenile. This standardisation of social reality also masks the psychological and hidden impacts of HEC, which differ from one farmer to the next (DeMotts and Hoon 2012; Khumalo and Yung 2015). Nevertheless, these material

representations act as conduits for multi-scalar knowledge transfer (Anderson and McFarlane 2011), utilised by CBNRM stakeholders in support of the elephant's 'sustainable consumptive use' (NACSO 2015a). Undoubtedly, this codified elephant knowledge is an 'effect of practice', but also has 'effects in practice' (Weisser 2014: 47). Crucially, it goes on to play a performative role in the formation of (inter)national policy and action, most notably the setting of quotas for trade in elephant 'trophies'.

To use a Deleuzian language of assemblage, these trophy elephants are produced through arborescent practices undertaken by CBNRM stakeholders seeking to 'territorialise' - or stabilise - particular knowledges and values of elephants (DeLanda 2006; Ranganathan 2015). As Davies (2013: 26) argues, arborescent practices attempt to define (non)humans as 'specific things that can be counted, placed and limited to a particular space or place.' In that sense, GPS tracking, fencing, counting, mapping and codifying are all efforts at inserting elephants into what Cresswell (2014: 7) refers to as a 'logistical epistemology'. As we have seen, these territorialising practices serve to produce elephants for consumptive use and hunting, an activity central to Namibia's CBNRM programme. For that reason, in 'following' elephants and those that hunt them, the aim of the next chapter is to explore the production and transformation of 'more-than-human' knowledges and values within these assembled hunting spaces.

Chapter 5: Hunting Elephants – Assembling Knowledge and Value

5.1 Introduction

On a small island in the middle of the Kwandu River I sit under a tree alongside Leo Pfadt, a big game hunter from Pennsylvania. “Today I shot an elephant, and right now I’m having mixed feelings about it” he tells me. We watch on as a large group of villagers busy themselves butchering the elephant carcass, while others tend to fires upon which some of the meat will be cooked. Leo’s lifelong dream of hunting an African elephant has been fulfilled, and both the money and meat generated from his quarry will benefit local people. But how did we get to this point? What kinds of (non)human things were involved in the assembling of this elephant hunt? How did the affective interactions between these things result in a hunted elephant?

In order to answer these questions this chapter moves alongside the commodified elephant and those attempting to hunt it in Zambezi Region. Drawing upon two elephant hunting vignettes in Kwandu and Mayuni conservancies, the chapter moves beyond the representational knowledges discussed in the previous chapter to explore ‘more-than-human’ knowledge and values produced through practices of tracking, watching, and killing elephants. As such, it attempts to decentre human control and engage ‘across, through, with and as, more-than-humans’ (Dowling *et al.* 2017: 824), exploring the significance of the elephant’s ethology and affective agency in co-producing these socio-natures. Engaging with the emergent form of the hunt and the spatial transformation of knowledge and value therein, the chapter begins to address the second research question. By tracking elephants on the trail alongside hunters and villagers, the (non)human (dis)connections, ‘outside’ actors and ‘spaces between’ that assemble these hunting spaces come to light.

5.2 Hunting Elephants: Assembling More-Than-Human Knowledge and Value

5.2.1 Assembling Human Components of an Elephant Hunt

As discussed in the previous chapter, Kwandu received a quota of four ‘trophy’ elephants and one ‘own-use’⁴⁷ elephant in 2013. In order to ensure a ‘competitive market and optimal value’ for this quota (Weaver *et al.* 2010: 10) Kwandu puts it out to tender, safari operators then submitting proposals from which the Conservancy chooses its preferred company. In effect, Kwandu’s five ‘capital assets’ (Barnes *et al.* 2009: 4) go to the highest bidder. In 2011 ‘Jamy Traut Hunting Safaris’ (JTHS) won this tender, renegotiating its contract with Kwandu in 2014 for the following two hunting seasons up until 2017.

JTHS is owned and run by a Namibian citizen named Jamy Traut. Having grown up on a game farm, he is a man inspired by childhood memories of holidays taken in Caprivi, as Zambezi was then known. “When I was six or seven years old we used to come here”, he tells me. “My parents used to drive through Caprivi on the way to Victoria Falls and we would camp where Nambwa [Campsite]⁴⁸ is today, under the tree camps, probably two or three times a year.” (R54) This early exposure to wildlife stoked an interest in studying marine biology, before turning to professional hunting. “Some of my lecturers were keen hunters so I took them to the farm and just realised that it was something I liked doing better than office work,” he says. Having previously worked for another Safari Operator, Jamy started his own company five years ago and began looking for hunting concessions in the region. “It was a trial and error type of thing, and honestly, [Kwandu] was the only [concession] available”, he admits.

In that sense, Jamy chooses to be in Zambezi; a decision borne of past experience. Yet his relationship with Kwandu is also dependent upon connections he makes with other individuals and institutions. As MET makes clear, trophy hunting ‘must be done under the supervision of a Professional Hunter registered with the Ministry’ (MET 2013a: 41), meaning Jamy could only bid for Kwandu’s concession after undergoing training and registering as a ‘Professional Hunter’ (PH) with the Namibia Professional Hunting

⁴⁷ ‘Own-use’ elephants - also referred to as ‘meat elephants’ - are hunted for a considerably lower price, and their parts cannot be exported by the hunting client.

⁴⁸ Nambwa Campsite is a tourism concession in Bwabwata National Park, and is a joint enterprise between Mayuni Conservancy and a private company.

Association (NAPHA).⁴⁹ As Weaver (2014: 73) argues in *Hunt in Namibia* magazine - a NAPHA publication supported by MET - the training standards NAPHA puts in place ensure that 'Professional Hunters who are members are generally of a higher quality than [those] from elsewhere in Africa.' Jamy is also one of the few PHs licensed to hunt 'big' or 'dangerous'⁵⁰ game anywhere in Namibia, a crucial prerequisite to hunting elephants in Kwandu.

As a result, Jamy's affiliation with NAPHA and the MET undoubtedly strengthens his position both with the Conservancy and vis-à-vis other competing PHs wishing to operate in Kwandu. But his labelling as an 'ethical' PH as a result of his registration with NAPHA is also crucial to attracting hunting clients to Kwandu from outside Namibia. Leo - the US client who took an own-use bull in one of Jamy's neighbouring concessions - admitted to knowing little about the specific area before arriving in Namibia, having based his decision largely on the hunting outfitter's reputation (R36). Testimonials from well-known and respected hunters on JTHS's website describe Jamy as a PH that can be trusted. One of these was provided by Dwight - another US client who was hunting for an elephant in Kwandu - who says: "I have hunted with Jamy Traut at least ten times, each being even better than the last. Together we have taken some outstanding trophies and had wonderful adventures. I will continue to hunt with Jamy for years to come, for in my mind he has no equal" (JTHS website, 2016). During one of our interviews Dwight expressed similar sentiments, noting how he feels "at home" in Africa, the main reason for returning to Namibia being his relationship with Jamy and his associates who have "become second family" to him (R34). These opinions resonate with previous research on trophy hunting that shows clients prefer to hunt in 'conservation-friendly' countries that enforce strong controls and management of the industry (Lindsey *et al.* 2006; Gressier 2014).

Jamy is thus a crucial actor in attracting new clients and maintaining connections with existing ones. He is a component part of institutional organisations such as MET, NAPHA

⁴⁹ The South West Africa Professional Hunters & Guides Association was founded in March 1974. In 1990, after Independence, its name was changed to Namibia Professional Hunting Association (NAPHA) (Hunt in Namibia Magazine 2014: 15)

⁵⁰ The term 'Big game' refers to Africa's 'big five': lion, elephant, Cape buffalo, leopard, and white/black rhinoceros. These species are also referred to as 'dangerous game', which also includes crocodile and hippopotamus.

and Kwandu Conservancy which both stabilise his place, and direct his actions, in the hunting assemblage. In that sense, he is required to obtain a trophy hunting permit from MET for every elephant on the quota, and must notify MET and Kwandu of any hunt fourteen days in advance. The Conservancy also request that he ‘recruit all camp, hunting and other relevant support staff from the communities within the respective conservancy areas’ wherever possible (Kwandu Conservancy, 2012: 16). As a result, JTHS employs four hunting camp staff, six skimmers and two trackers from the community.⁵¹ Under government and Conservancy rules, all trophy hunting activities ‘must take place in the company of a Conservancy appointed member and/or Ministry official’ (Kwandu Conservancy 2012c: 23), meaning local Community Game Guards (CGGs) also participate in the hunt. As the official Conservancy presence, CGGs liaise between the hunters and community during the hunt, as well as assisting with any game meat distribution.

As far as human components go, then, so far this elephant hunt consists of the Professional Hunter, Jamy, his hunting clients, Dwight and Leo, as well as local Game Guards and trackers which vary from day to day, depending on the hunting location. It is an assemblage stabilised by institutional organisations such as NAPHA, MET, and the Conservancy itself which govern relations between individual human components. The next section moves alongside these people as they follow, track - and ultimately kill - elephants. In doing so, it brings to the fore the role of both humans and nonhumans in the spatial (trans)formation of knowledge and value. These interactions allow the hunting assemblage to operate in its current form. At the same time, they contain gaps and spaces ‘between’ in which relations may be reassembled.

⁵¹ The four camp staff are employed for eight months at N\$ 450 (US\$ 45) per month; the six skimmers (2 days per elephant) earn N\$ 50 (US\$ 5) each per day; and the two trackers (12 days per elephant hunt) earn N\$ 50 (US\$ 5) each per day (Kwandu Conservancy 2012c: 10).

5.2.2 Hunting Vignette A: Dwight's Search for a Trophy Bull

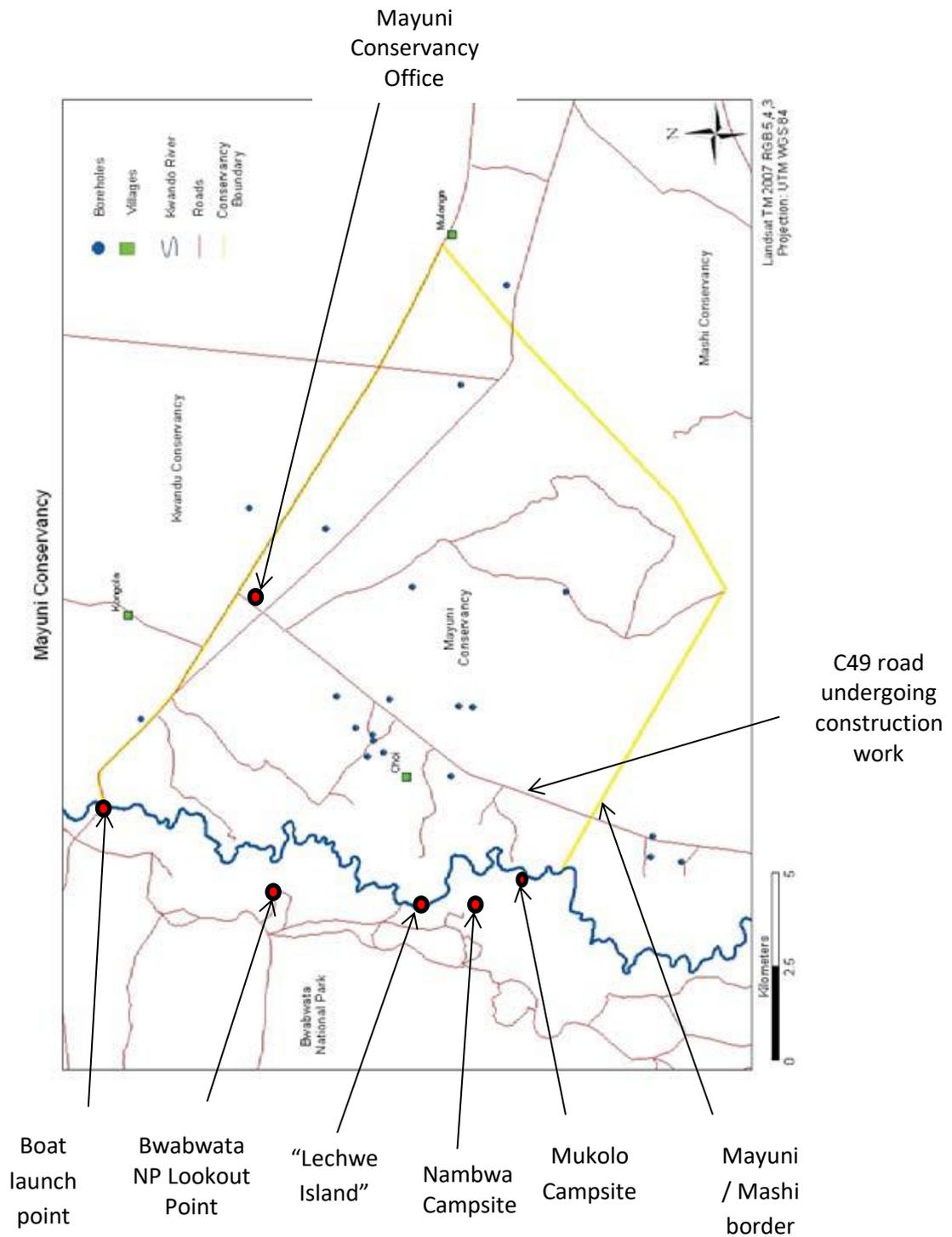


Figure 5.1: Map of Mayuni Conservancy (Adapted from Pricope, Gaughan and Caplow 2014)

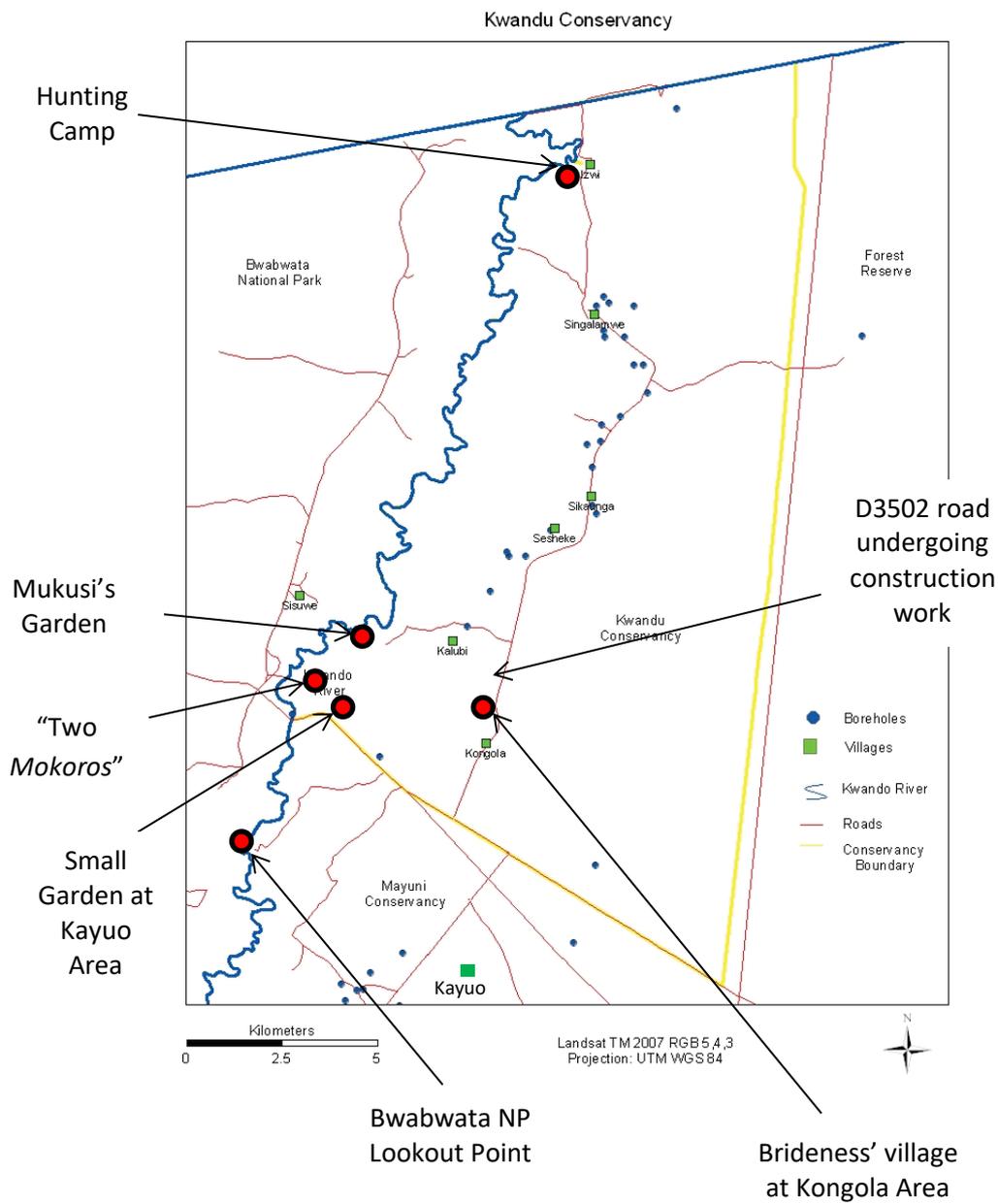


Figure 5.2: Map of Kwandu Conservancy (Adapted from Pricope, Gaughan and Caplow 2014)

Looking out onto the Kwandu River floodplain from an elevated point in Bwabwata National Park (Figure 5.1) I could see red lechwe⁵² aplenty. Stood alongside me were three men – Jamy Traut, his hunting client from the U.S., Dwight Van Brunt, and another PH from South Africa called Dries.⁵³ They were here looking for elephants. More specifically, they were looking for a certain kind of elephant: an old bull, post-breeding, with large tusks and deemed by Dwight to be a ‘trophy’ worth shooting. This was Dwight’s second day on the elephant trail in Kwandu and Mayuni conservancies, having already spent a few days looking for a trophy bull in Kasika Conservancy, one of Jamy’s other hunting concessions in Zambezi Region. However, despite having spent an hour at the lookout point - a place Jamy thought gave us our best chance of seeing elephants moving across the floodplain towards Kwandu or Mayuni - the animals remained elusive. “Those road construction works (Figure 5.1) must be affecting elephant movement” said Jamy. “Come on, let’s go.”

Having returned to the van we retraced our route back along a sandy track known to tour guides as ‘the elephant run’, and onto the main B8 road running the length of Namibia’s ‘Caprivi Strip’. Entering Kwandu we collected one of the Conservancy’s Game Guards - Susan - at Kayuo area in accordance with Conservancy rules and headed to a small garden on the floodplain (Figure 5.2). “Get comfortable, we could be here for a while” said Dries. We sat on the back of the truck, our view obscured by an insurmountable wall of swaying reeds, listening for any sign of elephant presence. The hours passed and night began to draw in. Then Jamy received a phone call from Brideness - the Conservancy’s Enterprise Officer - informing him that elephants had been seen near her village. This was the kind of lead the group had been hoping for. We made a hasty retreat to Brideness’ village at Kongola Area, a few kilometres north along the gravel road in Kwandu (Figure 5.2). Pulling up at the village it was clear word had spread of the hunter’s imminent arrival. From a large crowd of people Brideness emerged, introducing us to two young men who had earlier seen the elephants. Wasting no time, the hunters checked their rifles and we followed the men into the bush (Plate 5.1).

⁵² The lechwe (*Kobus leche*), or southern lechwe, is a species of antelope found in the wetlands of south central Africa.

⁵³ Dries does not have hunting rights in the concessions, but is a friend of Jamy’s and was accompanying the party during a holiday in Namibia.



Plate 5.1: On the trail from Brideness' village in Kongola

It was not long before we picked up elephant tracks in the deep sand (Plate 5.2). “What we’re doing is looking for tracks that indicate they belong to an elephant large enough to carry big tusks” Dwight told me. “Their feet grow their whole lives, and we’re looking for a track that is at least twenty-two inches from front to back. Then we’ll examine the back of the track to see if it’s rounded, and if there are deep cracks in the pad it indicates old age.” It seemed we were on the trail of an old bull. After about thirty minutes, however, and on the advice of the two young men who had seen the elephants, Jamy decided to divert from the tracks. Veering right, we continued to walk for another half mile. Then the group stopped. Ahead, the two villagers looked confused, pointing vaguely into the distance. The trail had gone cold. “We need these guys to tell us the times that the elephants passed, to be realistic” said Jamy, evidently frustrated. Doubling back to the place we had left the original tracks, we reached the floodplain and a garden belonging to an elderly man named Mukusi (Plate 5.3). “The elephants are going back to the park across the tar road from here”, he told us. “We must come back early in the morning; it’s too late now”, Jamy conceded.



Plate 5.2: Elephant spoor in the forest at Kongola area



Plate 5.3: Mukusi's farm on the floodplain at Kongola Area

“There were more elephants here earlier, around six o’clock; now they have gone onto the islands,” said Susan, as we stood in Mukusi’s field the following morning. Word had spread overnight that elephants had been here, evidence of which was clear to see in the tracks which dotted the area. “This elephant appears to have the size of track that we’re after”, Dwight told me, as we inspected the spoor. “But we’re not sure that it’s an *old* enough bull to have the size of ivory that we’re after.” Heeding Susan’s advice that the

elephants had crossed the river onto the islands, Jamy decided it best to continue the search by boat.

Launching the boat from Kongola (Figure 5.1), I asked Dwight why they had changed approach. “We’re here now at the end of winter, and because it’s a drought year it’s safe to say that the elephants are concentrated along the riverine areas” he explained. “That’s where we’ve seen the activity.” We travelled upriver for fifteen minutes before pulling up at the bank. The men strapped on their rifles and set off on foot, but our path was soon blocked by a river tributary. Risco, a local tracker, waded in first. The rest followed, laughing and taking photos as each trudged through the chest-high water (Plate 5.4). On the other side we made our way through the bush and to higher ground. Reaching the top of a hill we stood still and listened. An elephant could be heard trumpeting from a densely wooded area near the river. Training their binoculars in that direction, the men could see the heads of a few elephants poking above the forest canopy (Plate 5.5). In order to make a valid judgment they would need a better view.



Plate 5.4: Risco and Jamy cross a river tributary



Plate 5.5: Jamy, Dwight and Dries look out over the forest canopy

In single file, we walked back out onto the open plain towards the elephants. Stopping near a tree, perhaps two-hundred yards from the forest cover in which they were feeding, we watched on as fourteen bull elephants made their way from the bush into the reeds, one by one, from left to right. A nervous blacksmith plover called loudly, perhaps warning the elephants - if they did not already know - that something was amiss. We moved closer still, back into the bush and to another high vantage point from which to judge the quarry. Peering through the branches, the hunters were now close enough to see that none of these bulls were quite what Dwight was looking for (Plate 5.6). Another dead end.



Plate 5.6: Assessing elephants as they enter the reed bed

Six-thirty the following morning, and we were at a spot on the Kwandu floodplain known to the group as ‘Two *Mokoros*’, deemed a good location to assess elephant activity in Kwandu (Figure 5.2) (Plate 5.7). “We’ve been giving this place a bit of a beating, but we don’t have much else to go on”, admitted Jamy. We watched as a breeding herd splashed through the water vociferously in the distance, heading back to the national park. But the bulls remained elusive.



Plate 5.7: Jamy scans the horizon at ‘Two *Mokoros*’ in Kwandu Conservancy

The group decided to try Mayuni Conservancy instead, south along the river, and on the opposite side of the tar road (Figure 5.1). After collecting Frank, a local CGG, we drove south as far as Mayuni’s border with Mashi Conservancy. Road resurfacing work had been going on here for a few months, and looking at it now, Jamy was not too optimistic. “If I was an elephant I wouldn’t cross here”, he said. Frank agreed. It was decided we should take the boat to the islands again, but on route to the launch point a police officer - recognising Jamy’s vehicle - pulled us over. “There are plenty of elephants here”, he said, pointing to the place where he had seen them the previous evening (Plate 5.8). A local villager confirmed the officer’s story. “The elephants were here last night, around nine. We are suffering here every day!” he said. “Don’t worry, we’ll get one for you” said Jamy, defiantly.



Plate 5.8: A Police Officer points to where he saw elephants last night

Having taken the boat upriver to an island, we set off on foot. The men soon hit upon promising tracks. Creeping silently through the bush in single file, we made sure not to snap any twigs underfoot. These discarded branches were the work of foraging elephants, which alongside the profusion of dung scattered over the forest floor pointed to a strong elephant presence here - its freshness indicating the elephants' relative proximity. We continued to follow the tracks. Suddenly, we heard the crashing sound of trees being felled ahead. We slowed, edging cautiously through the thick forest. Jamy raised his arm, and everybody stopped. Ahead, perhaps one-hundred yards away, a herd of elephants stood feeding. This was the closest we had been to the animals yet. But they were not bulls; rather, they were cows, with young. The matriarch raised her trunk in our direction, sensing danger. Then she screamed. A clear warning. We backed away, slowly, and made our way to the safety of the boat.

Back on dry land, the hunters made one final call at Mukusi's farm. We sat there until nightfall, waiting for the elephants. But nothing happened. "At least we protected his garden for a bit", joked Jamy, as we retired to the van and headed back to camp. Although the men would try again tomorrow, ultimately, Dwight would not succeed in his attempt to hunt a trophy bull. The following night, sat by the fire after another long day on the elephant trail, the men reflected on the experience of the past few days. "I love elephants.

I'm completely enamoured with them, and that's why I'm ok if my hunt concludes without firing a shot", said Dwight. "That's why an elephant hunt is fourteen days", said Jamy, "and often you go home empty-handed."

5.2.3 Hunting Vignette B: Leo and an 'Own-Use' Bull

"Where have they all gone?" asked JG, as he steered the boat downstream. The previous evening we had been surrounded by elephants here on the Kwandu River; but today, the only evidence of their presence was the mass of trampled reeds adorning the water's edge (Plate 5.9). On the boat with me was Leo, his wife Jackie, Frank, Risco, and two PHs called JG and Schalk who were employed by Jamy. Pulling into shore, we began walking on what was known as 'Lechwe Island', in Mayuni Conservancy, in search of elephants (Figure 5.1). This time we were not looking for a 'trophy' bull, but what is termed an 'own-use' elephant as part of the Conservancy's wildlife quota from MET. Theoretically, the task is simpler, but having walked for an hour we had yet to see one elephant. There was dung, spoor, and ravaged vegetation aplenty, but the pachyderms were no longer on the island. The hunters surmised the elephants may have since crossed back into Bwabwata National Park, or were feeding on a different island. We would return that evening, and so too would the elephants, the group hoped.



Plate 5.9: Trampled reeds on the Kwandu River

As day turned to night on Lechwe Island we had still not seen elephants. Covering much of the same ground as earlier, the results had been no different. Hoping to catch a glimpse of elephants from the water, the hunters decided to board the boat again. Travelling upriver, it was not long before Schalk caught sight of something moving in the reeds ahead. JG turned off the engine and we floated a little further upstream. To our left was an elephant feeding amongst the reeds, unperturbed by the boat-full of people that had pulled up alongside it (Plate 5.10). Further along the channel, yet more elephants gorged themselves on the reeds. We sat and watched, transfixed, cameras clicking. “They feel safe in the water” said JG. On land, the elephants would have been far more anxious, and we could never have approached so closely. “They are crossing from the park” said Schalk. “We’ll get them in the morning.”



Plate 5.10: An elephant in amongst the reeds in Mayuni Conservancy

“What a majestic animal”, said Jackie, standing next to the elephant that lay lifeless in the sweltering sun. That morning the hunters had travelled downriver to Lechwe Island. “I wasn’t super confident but on the way in, *golly*, we saw a lot of elephants”, Leo told me. “And it was pretty obvious that they were not crossing the river as early as they could have, so there was a good chance we were going to find elephants here on this island.” On land, the group had come across a herd yet to make their way back to the park. Amongst them, the hunters had targeted a bull elephant with a broken tusk (Plate 5.11). “Picking a bull out of a mixed herd like that is something people try to avoid, because the

cows can be downright miserable”, explained Leo. “I started to get anxious; you’re getting down to making final decisions and it becomes very serious, almost business-like” he confessed.



Plate 5.11: Leo, Jackie, and the elephant bull.

We walked to a pile of tree stumps fifty yards away, from where Leo had taken the shot. “One of them mock-charged us!” said Schalk, “and Risco and Frank ran away into the bush!” They all laughed. “It got really exciting”, said Leo. JG recovered the ammunition shells from the sand, close to the spot where Leo had fired his rifle. Standing there again now, Leo re-enacted the shot, arms outstretched, pointed in the direction of the carcass (Plate 5.12). He thought about the final moments of the elephant’s life, confessing: “I’m not super proud of the shooting I did today, but it resulted in a dead elephant within a minute.” He continued: “Honestly, sometimes hunting is ugly. Any time you have a successful hunt and there’s no prolonged chasing a wounded animal and none of the hunters get hurt, that’s a good day; so today is a good day.”



Plate 5.12: Leo describes how he took the shot

A little later, as we watched local people butchering the elephant, I asked how Leo was feeling, and whether he would be back here to hunt in the future. “I feel bad about killing an elephant,” he admitted. “A few years back I killed a leopard - the first dangerous game animal I ever killed. To me, that was the best hunt I’ve ever been on. And it’s so tempting to say ‘Boy, let’s go hunt leopard again!’ But the leopard I killed was a real trophy; it was a beautiful animal. I just find it hard to justify going and killing another one.” He paused. “It kind of makes it like, you know, maybe this is just something you shouldn’t do.” “What about another elephant?” I asked. “My thought was that I would only ever hunt elephant once” he said. “But right now, I’m thinking maybe I would do it again, maybe do a trophy hunt.”

5.2.4 Assembling the Hunt: Creating Relational Hunting Spaces

What becomes evident from the two vignettes is that multifarious knowledges and values are formed and shared through the practice of elephant hunting. This section and the next trace the (trans)formation of these emotional knowledges and values as individuals come together to hunt elephants in Zambezi. Throughout this process, the elephant is not merely a passive actor, but is, instead, an agentic component. For that reason, the elephant's material properties and capacities to affect other (non)humans are crucial to the assembly of socio-natures in Kwandu and beyond, as I will now discuss.

Firstly, it suffices to say that the elephant is an unmistakable animal. It is the largest land mammal on earth and moves huge distances, often in close proximity to humans. It also has a significant material impact on its environment, pulling-up trees, raiding crops, and leaving a trail of destruction in its wake. These factors are important because, taken together, they contribute to what Lorimer (2007) would refer to as an elephant's 'ecological charisma'. Lorimer links this ecological charisma to what natural historians call an organism's 'jizz'⁵⁴ - 'the unique combination of properties that allows its ready identification and differentiation from others' (Lorimer 2007: 917). These physical properties make it easier for humans to interact with elephants and tune into their behaviour. For those involved in elephant hunting, this interaction is achieved through 'tracking'.

As my account of elephant hunting shows, attempting to tune into and track elephant presence is an integral part of hunting. As Dwight put it: "Each hunt, whether you break it up into morning or afternoon, you're really doing the same thing; you're searching for something that will lead you to [the elephant] that you're looking for" (R34). These indicators could be visual, such as spoor, trampled vegetation, and dung, or they may be auditory, such as a deep rumbling call or the sound of branches being ripped from trees. Alternatively, the hunters may respond to sightings made by other people in the Conservancy, such as those at Brideness' village.

⁵⁴ Lorimer (2007: 917) notes that the etymology of 'jizz' is contested, but that a popular attribution links the word to the corruption of an acronym borrowed from Second World War aircraft spotters that referred to the General Impression of Shape and Size (GISS) of a plane.

In all cases, it is important to note that it is the elephant's physical movements and affective capacity that draws other (non)humans into relation (Lorimer and Whatmore 2009; Cadman 2009). Tuned into the animal's 'ecological rhythms' (Lorimer 2007: 917), the hunters are led to Mukusi's floodplain garden and other 'nodes' (Figures 5.1 and 5.2) which become known as 'elephant places'. In that sense, it is the elephant's capacity to affect hunters and villagers alike that is integral to the production of knowledge about its movement and behaviour. Mukusi told me how the animals are 'always passing' his field between November and February (R57), for example, and Jamy noted that hunting is easier earlier in the year when elephants are attracted to people's crops in the Conservancy. These situated knowledges are located in embodied, 'epistemic spaces' (Watson and Huntington 2008: 274), formed when hunters and other humans move into relation with elephants (Thrift 2003; Murdoch 2006; Braun 2008).

Yet for hunters especially, ways of knowing elephants are not restricted to the animal's physical properties and ecological rhythms. Rather, hunters also know and value elephants through embodied, emotional practice - following, watching, and ultimately killing elephants. Through practical interactions in the field, the elephant exercises what Lorimer (2007) describes as an affective 'corporeal charisma' that triggers particular emotions in humans. Such emotional understandings are evident during the course of the hunt, through which the hunter performs their own, multiple identities, such as that of the 'big game hunter', 'nature lover' and 'conservationist'. In that respect, having grown up stalking deer and elk with his father in Montana, Dwight claims to have been "born a hunter". He has since forged a career in the firearms trade, and is currently Vice President of trade relations at 'Kimber'.⁵⁵ "I guess I'm the typical American gun guy", he admits. "But I figured out a way to make [hunting] a career; it's a lifestyle for me, absolutely" (R35). Hunting is also a way of life for Leo, who told me "[Hunting] has been a big part of my life since I was very young. My father was sport hunting into his late seventies, and I would like to emulate that if I can" (R36).

As 'big game hunters', then, both men are drawn to Namibia - a country Weaver *et al.* (2010: 13) justifiably refer to as an 'internationally recognized big game hunting destination'. Specifically, Zambezi's conservancies appeal to them because of the

⁵⁵ Kimber is an American manufacturer of classic rifles and pistols.

opportunity to hunt dangerous, free-roaming wildlife like elephants. At the annual Chairperson's Forum meeting in Windhoek, a WWF employee put it like this: "People are attracted to hunting in the wilderness, which is why most hunters come to conservancies rather than commercial farms."⁵⁶ It is an assertion supported by Jamy who noted that "People who have hunted on commercial farms now realise that they've done step 'A'; now step 'B' would be the larger free-roaming game, the tougher hunt, the *old Africa*" (R54). This certainly seems the case for many foreign hunters, including Dwight, who argued that "the greatest game animals in the world live in Africa and they are simply more challenging, more dangerous, and more rewarding to hunt than anywhere else" (R34).

Yet that is not to say that elephant hunting is simply about killing or the collection of trophies. For the likes of Dwight and Leo, it is also - more importantly - a means by which to reconnect with nature more broadly. As we tracked elephants the hunters took great interest in watching and learning about other animal and plant species. Eager to make clear that he is "not just a shooter", Dwight emphasised that, for him, "the most exciting thing about Africa is simply *watching* the wildlife." He also noted that "the interaction with wildlife - whether a bird or a minor species or something as grand as an elephant - is all very special." In that respect, there was no bitterness amongst the party when the track came to a dead end, or when we sailed by a group of bulls out of reach in the National Park, for example. When it comes to 'trophy' bulls in particular, elephant hunters do not expect to be successful, yet this does not necessarily detract from the experience. As Jamy put it, "it's not about the killing; it's the quest" that matters. Wading through river tributaries, sleeping in the bush, and "walking your butt off for about four hours" (R36) are all central to this performed practice (Szerszynski *et al.* 2003) through which the hunters "play and escape from the things [they] have to deal with in everyday life" (R35).

As Gressier (2014) argues in her anthropological study of trophy hunting in Botswana's Okavango Delta, the practice offers its human participants a physically challenging journey out of the mundane. She also notes that the hunter 'thrills in a sense of daily dangers faced' (2014: 199), which was evident in the actions of Jamy and the others. For

⁵⁶ Field notes, 30/04/2013

them, the challenge is to get “as near as possible” to this dangerous animal before the shot is taken. As Dwight explained, “A long shot at a trophy bull elephant would be thirty metres; I’d prefer to be inside of five metres.” Of course, this is a risky tactic, but that is also part of the appeal for big game hunters, as Jamy explained: “The bull is probably going to see you before you shoot it; he’s going to turn around and challenge you. That is all part of why people hunt elephant.” In that sense, the adrenalin rush Leo experiences before pulling the trigger, the matriarchal scream as we approached the breeding herd, and the mock-charge on Lechwe Island are the kinds of corporeal elephant interaction that are so integral to the hunt. It is the elephant’s capacity to affect the hunter emotionally - to instil fear, awe, and excitement - that they so value.

These emotional understandings are even more prominent after the kill. The immediate reaction is one of joy and relief that the elephant is down without major incident, but the high-fiving does not last long. The atmosphere soon turns sombre. As Jamy explained, “I always have to walk away a little bit and spend some time by myself to take it in.” Alone with his thoughts in the aftermath, Leo also admits to “feel[ing] bad about killing an elephant.” As the animal lay before him he reaches out to touch the hairs on the elephant’s skin, strokes its tusks, and marvels at its sheer size. In this closest of contact spaces the elephant’s ethology and affective capacity is heightened, the hunter expressing grief for the death of an intelligent animal that he ‘loves’ (Barua 2016a). As Jamy put it, “you should have remorse for any animal, but especially the elephant because it is such an old, big animal that you have actually taken the life of.”

Gressier (2014: 199) refers to this embodied reflection in the aftermath as a ‘transcendental moment’ crucial to the trophy hunting experience. In this space, the relational ethics between hunter and prey are strong (Lorimer and Whatmore 2009), Leo taking the subjectivity of this individual elephant deadly seriously. Lorimer (2007) refers to these relational affects as a process of ‘becoming-animal’, during which the hunter ‘enters into a ‘haecceity’ - a moment of awe-full or enchanting proximity’ to the elephant. For big game hunters like Leo and Dwight, these ‘intensities of affect’ (Speed-Rossiter *et al.* 2015: 147) are configured in relation to ‘Caprivi’, a place of encounter that figures heavily in old books they have read about elephant hunting in Africa (R36). In that sense, Dwight speaks for both men - and many others no doubt - when describing feeling as though he is “going back in time when [he] hunts elephant, back into the late 1800s when

it was possible to make a living from ivory and experience that lifestyle” (R34). For that reason, those in favour of consumptive use argue hunting is a ‘cultural ecosystem service’ sold by the Conservancy, providing clients with ‘spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experience’ (Naidoo *et al.* 2011: 477). For the likes of Leo and Dwight, then, trophy hunting is the ultimate ecotourism experience.

Faced with increasing anti-hunting sentiment, hunters may deploy these emotional knowledges and values - formed through corporeal interactions with elephants in the field - in order to justify the practice. They point to the significance of hunting throughout history, and define their necessary role as active agents within nature (Gressier 2014). As Leo put it, “Hunting is as old as mankind, and people killed elephants probably on this very island for a long time.” In that sense, hunters represent their own identities as “stewards of wildlife” in opposition to a modern society increasingly disconnected from nature. These “armchair conservationists”, as Jamy referred to them, watch wildlife on *National Geographic* but lack an understanding of practical conservation realities gained through embodied interaction with elephants. As discussed in the previous chapter, hunters make the case for consumptive use based on the need for ‘sustainable offtake’ from expanding elephant populations. At the same time, they highlight the significant financial contribution of trophy hunting to elephant conservation and habitat preservation. Watching on as the flesh of his elephant was cooked by local people, Leo put it this way:

“To me, hunting is the only salvation these animals have. Without the sport hunter coming over here and spending sometimes silly amounts of money to do this, the animal has no *value* to these people...[...]...The only way they have value for the community is through sport hunting. Otherwise they are a nuisance - a delicious nuisance.”

Yet despite these individual identity constructions and representations of trophy hunting’s value, it is clear having participated in the hunt that such factors are ‘more than representational’ (Cadman 2009; Cresswell 2012). These knowledges and values are patently non-cognitive and emotional, co-produced through affective relations with (individual) elephants. Once this is acknowledged, the hunter’s protestations that they are

‘not going to get emotional’ (unlike those who condemn their actions from an animal welfare perspective) begin to unravel somewhat.

In that respect, sat by the campfire one night after a long day on the elephant trail, Dwight admitted that he hunts not because he is making a contribution, but because he loves to do it. “I am driven to hunt; it is very visceral and I am not even able to understand it”, he confessed. Neither could Leo make sense of his conflicting emotions in the aftermath, and having originally thought he would hunt elephant only once, began to contemplate the idea of taking a trophy elephant in the future. Here, we see how corporeal interactions with dead elephant bodies affect an individual hunter’s subjectivity. This is also true for Jamy, who believes there will come a day when he no longer wants to pull the trigger. “With elephants being more emotional than any other animal I will probably get to the point where I do not want to see that actual hunt anymore”, he told me. The hunters’ subjectivity and identity are not static, but are, instead, decentred and constantly ‘becoming’ in relation with elephants (Murdoch 2006: Nilan and Wibawanto 2015). In this way, the knowledges and values co-produced in these relational spaces have the potential to change, too. The next section attends more fully to these ‘spaces between relation’ (Massey 2005) and the transformation of knowledge and value amongst components. As part of a ‘looser mapping of relationality’ (Ginn 2014), I will show how disconnects and detachments between (non)humans are integral both to the composition of an elephant hunt and the formation of more-than-human ethics in Kwandu.

5.2.5 Assembling the Hunt: Detachment and Spaces Between Relations

5.2.5.1 Spatial and Conceptual Detachment from the Hunt

As discussed in the previous chapter, NGOs and Conservancy staff implement land-use planning and zonation in Kwandu and the wider Zambezi landscape. Fundamentally, this ‘management by striation’ (Bear 2013: 35) is an attempt to keep a certain distance between agricultural communities and wildlife (particularly elephants), in order to protect people’s crops and promote the area’s (non-)consumptive tourism value. Yet the vast majority of tourists visiting Zambezi to see elephants and other wildlife do not wish to interact with trophy hunters, much less witness the killing of wild animals. In that respect,

trophy hunting is not a practice that is permitted anywhere, but is, instead, subject to strict spatial restrictions imposed by MET and the Conservancy.

Thus, Kwandu's 'Wildlife Management and Utilisation Plan' (WMUP) stipulates that trophy hunting is permitted only in the 'wildlife corridor' zone, and the Conservancy's hunting contract with Jamy prevents him from hunting 'within 500 metres of any area zoned for photographic tourism [and] within one kilometre of an international boundary' (Kwandu Conservancy 2012c: 24). Jamy must also ensure that hunted game is hidden from view when transporting it around the Conservancy. Not only do these restrictions ensure that potentially wounded animals cannot escape the confines of Kwandu's territory, but they also keep a certain distance between the (non)human components of an elephant hunt and other actors such as game-viewing tourists.

But other individuals and institutions more heavily involved in CBNRM also distance themselves from trophy hunting. The Conservancy Chairman, for example, was surprised at my interest in accompanying the hunters, and seemed squeamish when warning me that "you have to have a strong heart"⁵⁷ to witness the killing of an elephant. It is these moral and emotional issues which also cause CBNRM NGOs to downplay the significance of hunting, if indeed they acknowledge it at all. Stakeholders involved in the programme admit that public relations focus on the 'softer' aspects of CBNRM - particularly photographic tourism - which is less challenging but also misleading (MCA-N 2013: 38). One NGO Director told me that WWF, for example, are reluctant to clearly state their position on trophy hunting for fear of losing their western, animal welfare-centred funding base.⁵⁸ Paulson (2012: 59) makes a similar case in his study of hunting advocacy, quoting one WWF employee who likened the organisation to 'a snail pulling into its shell and hiding a bit' when it comes to discussing the importance of hunting. Indeed, it is a tenuous alignment between conservation organisations heavily involved in CBNRM and their donor communities, the latter largely distanced - both spatially and conceptually - from the realities of conservation practice in places like Kwandu Conservancy.

⁵⁷ Field diary, 02/09/2013

⁵⁸ Personal communication with NGO Director.

In all cases, one might refer to this spatial and conceptual distancing as ‘practices of detachment’ (Ginn 2014), undertaken by CBNRM stakeholders in order to stabilise the assemblage. In that sense, these detachments can be considered a necessary outside that is constitutive of relation, thus enabling the wider CBNRM assemblage to operate in its current form. But these practices of detachment are also carried out by those (non)humans intimately involved in the act of hunting elephants. These more-than-human detachments during the course of the hunt are crucial to the assembly of socio-natures in Kwandu and beyond, and will now be explored.

5.2.5.2 More-than-Human Detachment During the Hunt

As discussed above, much of the appeal of elephant hunting lies in the challenge of getting as close as possible to these charismatic creatures. For those hunters who succeed in their endeavour - and even for those who do not - moments of enchanting proximity and relation are possible. Yet, for the most part, there is some form of physical and/or conceptual detachment between hunter and elephant, or what Massey (2005) refers to as a ‘space between relation’. Both human and elephant are agentic in this ‘pulling apart’, and in forging the open-ended space through which the hunt is assembled.

The hunter undertakes various practices of detachment whilst on the elephant trail. Firstly, they stress the importance of keeping a certain distance from these dangerous animals in order to stay safe. “You should stay far enough away so that you don’t entice the elephants or make them charge you”, Jamy explained. Apart from the rare occasion when an elephant is killed, then, there is always a physical space between the hunter and prey; a space necessary in order to relate properly and avoid angering the elephant or risking human life. Even the taking of a bull involves the exclusion of other elephants. The hunter values individual elephants as ‘trophy’ quality based on their specific material properties and ‘aesthetic charisma’ (Lorimer 2007), namely its tusk size. As Dwight explained:

“I am hunting for an elephant with at least sixty pounds of ivory on one side, and without a broken tusk on the other side. That would be a magnificent, very old bull for this area and would be the pinnacle of my hunting

experiences. And probably most hunters - or most true big game hunters - would acknowledge that a hundred pound elephant would be the world's greatest trophy.”

As Jamy confirmed, Dwight was looking for the kind of bull 19th century ivory hunters would have sought in Africa, noting that his client “would not shoot an elephant in his life if it was not that specific old bull that is close to death.” Similarly, Leo's ‘own-use’ bull was chosen because of its broken tusk, which meant it would never develop into a trophy. In that sense, hunting is a practice which brings individual elephants into relation based on their material properties and - with regard to ‘trophy’ bulls - their affective capacity. Yet, as Ginn (2014: 533) makes us aware, any practice of relation has a ‘constitutive violence’ - it is also an exclusion that prioritises one possible connection over another. I would hesitate to say any elephants are ‘excluded’ from the hunt, given the importance participants put on all wildlife sightings and interaction; yet, those elephants lacking the affective capacities of Dwight's (illusory) ‘trophy’ or Leo's ‘own-use’ bull are certainly detached somewhat, and are free to exercise capacities in relation with other (non)humans, such as crop-raiding.

As discussed, Dwight was unsuccessful in his attempt at hunting the third trophy bull on Kwandu's quota. In fact, this elephant remained unutilised in the 2013 hunting season. This ‘inherent self-regulation’ (Lindsey *et al.* 2006: 881) of Kwandu's hunting resulted from the lack of trophy bulls in the Conservancy, as well as the stringent requirements imposed by hunters like Dwight. However, Jamy's anxieties about offtake levels also played a role in this refusal. Despite continuing to look for a trophy with other clients, Jamy expressed reservations to me about utilising the final bull on Kwandu's quota.⁵⁹ “I have a hunter for it, but I don't think we should shoot any more”, he confided. This did not sit well with the majority of Conservancy staff and members eager for increased revenue through full utilisation of their allocated quota. One CGG complained that Jamy was spending too much time in other concessions, noting that “we have five elephants [on the quota] but he is only hunting three because he is somewhere else.”⁶⁰ Another protested that “not enough elephants are hunted” (R29).

⁵⁹ Field notes, 23/11/2013

⁶⁰ Field diary, 08/08/2013

Yet Jamy remained defiant. “I would like to take the Conservancy staff to our farm and show them that you will see fifty kudu bulls a day, but we only shoot six or seven a year because you want them to feel *comfortable* around you”, he noted. “And that is the same with elephants; you have got to make sure they stay around.” Some community members agreed with him, and not all thought more elephants should be hunted, despite the short-term financial benefits which would accrue. Local people were often keen to stress the importance of hunting in a way which ensures “those things [do] not get finished” (R3). As one CGG from Singalamwe area put it:

“We as the Conservancy staff and community members should try to think in half when we are given quotas from the Ministry. Sometimes we should say ‘No’ to seven elephants as a quota and say ‘Yes’ to three so that we do not destroy the generation of our elephant population” (R25)

In that sense, Jamy’s reluctance to hunt the final trophy on quota is another practice of detachment aimed at ensuring the long-term sustainability of Kwandu’s (trophy) elephant population. As Ginn (2014: 541) argues, these spaces between relation do not equate to ‘a gulf of separation, indifference or a cold retreat from the other’, but are, instead, means of ensuring continued relations between humans and elephants in the Conservancy.

Yet these detachments are more-than-human phenomena; they are performed by the elephant, too. Resisting the hunters’ arborescent tracking practices that seek to put it ‘in place’ (Philo and Wilbert 2000), the elephant remains elusive. The animal is not completely disconnected, but its presence is provisional and fluctuating, opening up a space between relation. As the vignettes demonstrate, connections between hunter and elephant are ephemeral and by no means guaranteed. Yet, as with the hunter keeping a safe distance upon approach, such detachment is fundamental to the formation of this more-than-human composition. That is because the animal’s capacity to evade hunters contributes to its affective charisma (Lorimer 2007). The elephant is resistant and illusive, meaning the hunters value it as ‘worthy quarry’ (Gressier 2014). Indeed, this is what Barua (2016a, 2016b) refers to as ‘encounter value’, produced in the interstices between humans and lively, recalcitrant commodities like elephants. At the same time, it is these elephant affections and human-like qualities that make hunters uncomfortable about killing them. Leo feels bad in the aftermath of his hunt, and he cannot know what the

elephant was thinking as it took its final breath. Even in this most intimate space, then, there is a ‘multitude of life the hunter cannot sense’, the elephant retaining its ‘certain darkness as a creature apart’ (Ginn 2014: 540).

This inevitable detachment between hunter and elephant is crucial to the assembly of an elephant hunt. Whether maintaining physical distance between hunter and quarry, choosing/refusing to kill individual elephants, or being unable to find these elusive creatures, these detachments make relational practices between hunter and elephant possible. These spaces between relation are therefore crucial to the holding together of an elephant hunt, and to the (trans)formation of knowledge and value therein. But they are also open-ended, interactional spaces (Massey 2005) in which new connections can be made between existing components and things from ‘outside’ the assemblage. These (dis)connections and ‘possibility spaces’ (DeLanda 2006) have the potential to reassemble relations between (non)humans, which was evident as I moved through space alongside actors involved in the hunt.

5.2.5.3 Things ‘Outside’ the Hunting Assemblage

Local people played an important role in the hunt, their knowledge being incorporated from beginning to end. As Dwight made clear, the use of this “intelligence network” is “essential to the success and enjoyment of the hunt” (R34). As discussed above, large bull elephants bring these individuals into relation through their movements, and the hunters follow; but at the same time there are many local people who are left on the ‘outside’. Some were unaware of the hunter’s presence altogether (which even included Conservancy staff), and had little opportunity to lend their knowledge. Those detached from these interactions may, in turn, claim to have seen bull elephants and call the hunter to their village. Yet, these individuals are unlikely to know or value elephants as ‘trophies’ in the same way hunters do. Although the individual elephant(s) may appear worthy quarry to a villager, for the likes of Dwight it is unlikely to possess the required aesthetic or corporeal value. As Jamy noted, “very often local people will see or hear elephants and tell you there’s a big trophy there, *hoping* they are right because they know that there are

potential benefits from it.” I witnessed such behaviour on many occasions, noting in my field diary:

‘This amalgamation of knowledge is generally beneficial, but as we continued to follow the elephants I got the impression villages were competing with one another for the hunter’s attention, hoping the quarry would eventually be taken in their area meaning they received a lion’s share of the meat.’⁶¹

As happened at Brideness’ village in Kongola, these knowledge and value disconnects can lead to the trail going cold. More significantly, villagers see elephants causing destruction in their fields and wonder why one has not yet been killed. This breakdown in understanding can cause resentment towards hunters and elephants alike.

But there are more significant ways in which local people can affect and destabilise the hunt. Zambezi’s human population density is nearly 2.5 times the national average, and with around twenty-two people per square kilometre Kwandu has the highest population density of all the region’s conservancies (MET 2013b). This means many farmers struggle to find fertile agricultural land, and unproductive fields are being abandoned on an increasingly regular basis (Plate 5.13). As such, many see no option but to cultivate new fields far from settlements, often in floodplain areas deemed important as wildlife habitat. One female interviewee explained the benefits of farming close to the river at a place called ‘Babalela’, despite the increased risk of crop-raiding:

“Babalela is nice because the soil [has] enough nutrients. There was this other person who used to plough there – they used to grow a lot of things like tomatoes, onions and all those veggies. It is far, somewhere down Singalamwe side. If you start going there [in the morning] then you can arrive there in the evening.” (R12)

⁶¹ Field diary, 08/09/2013



Plate 5.13: A crop field at Sikaunga area in May, abandoned after the harvesting season

Despite ongoing efforts by staff and NGOs to create people-free spaces via land-use planning and zonation, then, there has been resistance amongst residents. In particular, farmers are refusing to move from these lowland floodplain sites to upland areas lacking perennial water (NACSO 2014c; Khumalo and Yung 2015). As the Conservancy Chairman explained:

“When we came to the communities [with the proposed zonation plan] they said ‘No, if you want to move us will we have water there, or are there any good cropping areas with good soil?’ and so forth. So that is the main challenge.” (R56)

One Conservancy employee told me this zonation problem could be resolved with the provision of water pumps at the forest side, but that at present “there are a lot of disturbances at the river side where elephants need to stay” (R25). As MET point out, these biophysical constraints are a problem throughout the Mudumu PLCA, with people unable to move away from the Kwandu floodplain in order to avoid HEC and free-up elephant habitat (MET 2012).

Added to that, infrastructure improvements such as resurfacing of the roads running through Kwandu and Mayuni (Figures 5.1 and 5.2) attract yet more people and

development to the area. Construction work has restricted elephant movement through Kwandu, and despite the increase in elephant numbers in Zambezi more broadly, Jamy argues their population is actually falling in the Conservancy due to growing human presence. Portraying conservancies as increasingly isolated islands of people surrounded by wildlife, he noted “there is a lot less [elephant] activity in the conservancies now because of people, so a lot of the activity has shifted to areas where there are fewer people.” This is a view supported in some of the secondary data obtained which states ‘human densities [in Kwandu] are at a level above which [elephants] would settle in the area.’⁶²

At the same time, human settlement impacts upon the hunter’s experience, too. It no doubt increases the challenge, which has a certain appeal, but also detracts from the image of a fetishized African ‘wilderness’ sold to foreign hunters (Butt 2012). For that reason, MET is not only concerned about the effect of increased development upon elephant movements, but also its impact upon the ‘wilderness value and aesthetic appeal of the landscape’ (MET 2013d: 25). Indeed, Leo seemed a little disappointed that there were “people everywhere” in Kwandu, and that the vegetation was being “de-nuded and burned”. “What does that do for the wildlife? Where does the wildlife go?” he asked. In this shifting assemblage the elephant’s place - and by association that of the hunters - is far from secure.

But that is not only due to the actions of humans and elephants. Rather, other nonhumans from ‘outside’ Kwandu also play a role in the hunt. Despite Dwight’s commitment to hunting a trophy elephant, conversation at the safari camp often turned to a potential lion hunt outside Etosha National Park, in one of Jamy’s other concessions. The men would have to leave Kwandu quickly if the feline was spotted by Jamy’s contacts there. Yet I wondered why Dwight would consider abandoning his quest if, as he put it, hunting a trophy elephant was “the end of the rainbow” for him. “You will be able to hunt elephant for the next ten years” he told me, “but that’s not necessarily the case with lion.” This is because lions are considered at greater risk of extinction, meaning potential hunting bans would probably begin with them before species like elephants. Should the opportunity to hunt a lion present itself on this trip, then, Dwight was eager to seize it.

⁶² Anonymous key stakeholder comments on Kwandu Conservancy’s Wildlife Management and Utilisation Plan.

In that sense, we can say this individual lion constitutes the ‘eruption of something outside an assemblage that disrupts the holding together’ (Anderson and McFarlane 2011b: 163) The creature’s ‘nonhuman charisma’ (Lorimer 2007) affects Dwight, in turn destabilising the elephant hunt. But the episode also raises some fundamental questions with implications for human-elephant relations in Kwandu. What would happen if other valuable ‘big game’ species (such as lion) were to become present in the Conservancy? On the one hand, this may increase the economic value of Kwandu’s elephants in terms of trophy hunting revenue, given that concessions with a greater diversity of wildlife are generally more sought after by hunting outfitters. As an NGO employee explained during a meeting of Zambezi conservancies: “Some conservancies are rich, but others, it is only elephants; even if they try to lower their prices hunters will not be interested.”⁶³ Conversely, if given a quota to hunt lion, for example, the community may become less reliant on elephants as an income generator, and more intolerant of their destructive behaviour. These virtual ‘possibility spaces’ are inherent to any moment, as this discussion of an elephant hunt has shown. If these ‘lines of flight’ (Deleuze and Guattari 1987) are actualised - if villagers settle in riverine corridor areas, or the Etosha lion enters Jamy’s other concession, for example - then relations between components may be substantially reconfigured (Dittmer 2014).

5.3 Conclusion

This chapter has followed African elephants and those that attempt to hunt them in Kwandu Conservancy. In doing so, it has shed light upon the multifarious knowledges and values formed and shared through the practice of elephant hunting. For trophy hunters like Dwight and Leo, these knowledges and values are clearly non-cognitive and emotional, produced through corporeal interactions with ‘charismatic’ elephants. In that sense, the value of the hunt is not only derived from making a successful kill and bagging a ‘trophy’ or ‘own-use’ bull. Rather, the value is in learning to be affected by the elephant’s capacity to instil fear, awe and excitement, tuning into and tracking its movements whilst attempting to get as close as possible to the animal.

⁶³ Field diary, 25/07/2013.

At the same time, we have seen how ‘spaces-between-relations’ (Massey 2005) are integral to the composition of an elephant hunt, and to the (trans)formation of knowledge and value therein. As such, spatial and conceptual ‘practices of detachment’ (Ginn 2014) are undertaken by humans and nonhumans alike, and involve both the refusal and absence of individual elephants. This pulling apart - or ‘looser mapping of relationality’ - allows the assemblage to operate in its current form, ensuring continued relations between humans and elephants in Kwandu.

By definition, however, this open-ended conceptualisation of space means that new connections can be made between existing components and things from ‘outside’. Farmers settle in ‘elephant spaces’ and lions wander into distant concessions. Local people call Jamy to their village in hope rather than expectation, and the hunt comes to a premature end. Indeed, tensions can stir when the ephemeral romantic hunt is caught up in perennial local realities. Following these ‘lines of flight’ (Deleuze and Guattari 1987) during an elephant hunt has demonstrated that these virtual ‘possibility spaces’ (DeLanda 2006) are inherent to any moment, and can significantly reconfigure relations between (non)human components.

Yet exploring the relational interactions of (non)humans involved in hunting can only tell us so much about the spatial (trans)formation of elephant knowledge and value. In order to more fully understand how this transitory configuration maintains its spatial and conceptual stability - or, conversely, how it might fall apart - one needs to trace the after-life of this charismatic commodity. What happens to the animal after death? As such, the next chapter follows the movement of the elephant’s constituent parts - particularly its ivory - in order to illuminate the places where the animal’s economic value may get ‘stuck’, and where the existence of alternative values threaten the holding together of CBNRM in its current form.

Chapter 6: Following the (Dis)assembly of an Elephant: Value Transformation

6.1 Introduction

Moving beyond the in-depth ethnography of situated socio-natures in Kwandu, this chapter traces the multi-scalar disassembling, material transformation, and circulation of elephant commodities post-hunt. In the context of globalised environmental governance, it does so through a ‘multi-site ethnography’ that follows the international movement of the animal’s tusks, flesh, hair, skin and bones, as well as the money derived from the elephant’s consumptive use. In part, then, it is a response to calls to pay greater attention to ‘the unmaking of a resource and its afterlife’ (Li 2014: 601). At the same time, the chapter engages with research question two by attempting to illuminate the places where ideas, actions and the elephant’s economic value flows - where knowledge and policy is mobilised. Conversely, it draws attention to value disconnects, stasis and refusal amongst diverse assemblages of (inter)national actors. Importantly, tracing these topological connections brings a new perspective on the assembled relations that constitute and (de)stabilise CBNRM spaces.

6.2 Hides, Hairs and Bones

As discussed earlier, Namibia’s elephants are listed on CITES Appendix II, meaning commercial trade in their parts is permitted subject to obtaining the necessary permits (CITES 2016e). This includes the animal’s hide (Plate 6.1), which can subsequently be made into leather goods. In the past, conservancies did not always recover the hides from hunted elephants due to a lack of storage facilities and access to markets (TNN 2012). However, having improved its control methods over these products, the government was permitted to increase its international trade in elephant leather at the CITES CoP meeting in 2013 (ADI 2013). MET now routinely collects elephant hides after hunts, and the proceeds from their sale is reinvested in elephant conservation via the Game Products Trust Fund (see below) (CITES 2016d).



Plate 6.1: Elephant hide being dried at Kwandu Conservancy office

At the same CITES meeting Namibia received approval to increase its trade in products made from elephant hair. Again, these may only be sold as a by-product of legal hunting, and are subject to regulation (CITES 2016f). In that sense, despite lacking the relevant permits to export any elephant specimens back home to the US, Leo was given the bull's tail. Although somewhat surprised at this, he explained how it had been a common cultural practice since the late 1800s when commercial ivory hunting was prevalent. "Way before the white man was here, if the natives managed to kill an elephant the first thing they did was cut off the tail to claim ownership of that carcass", Leo told me (R36). Despite the confusion over whether he could legally export the tail hair, Leo paid a local person to weave numerous bracelets from it (Plate 6.2). According to Dwight, these bracelets not only honour the elephant, but also identify the wearer as the individual who hunted the elephant (R34). For Leo and Jackie, they would also make great gifts for family and friends back home.



Plate 6.2: Tail hair bracelets made from Leo's bull elephant

With regard to the elephant's bones, these can only be exported when derived from animals sold as 'trophies'. As for Leo's own-use elephant, then, its skull would likely go on to adorn Mayuni Conservancy's office or hunting camp - a powerful representation of the area's elephant population and conservation success. Coming across one such skull at an abandoned camp during Leo's hunt, the group inspected it, fascinated by its biology (Plate 6.3). Looking at the remains of the animal, I remembered what Dwight had told me about an elephant's molars deteriorating until it can no longer chew its food, meaning it eventually dies of starvation. If successful in his quest for a trophy, Dwight also said he would take the entire skull back to the US so that he could use it to educate local schoolchildren about elephants. In that sense, whether remaining in Namibia or transported as a trophy to foreign lands, the elephant's bones have an educational value. More than this, Dwight also considers them 'fine art' (R34), noting how he would have the elephant's skull cleaned and mounted for display in his home. The elephant's bones clearly have an aesthetic value to western hunters. At the same time, its tusks have a much broader aesthetic appeal to global consumers, which will now be discussed.



Plate 6.3: Leo, JG and Jackie inspect an elephant skull at an old hunting camp

6.3 Following the Tusks from Leo's Bull

Given the importance of the elephant's tusk size in identifying it as a 'trophy', it is unsurprising that Dwight would also have taken the ivory back to the US. This would be perfectly legal under CITES rules as a result of quotas set by MET. In that sense, whereas the tusks from 'trophy' bulls belong to the client (for which they have paid a vast sum, of course - see below), the ivory from 'own-use' elephants remains government property. For that reason, after being cleaned by JTHS staff, the tusks from Leo's bull were marked with a unique code and transported to MET offices in the regional capital (Plate 6.4). From here, they would be added to the government's raw ivory stockpile in Windhoek, alongside tusks from elephants that had died naturally. Those from elephants killed illegally are stored separately. The government maintains a detailed computer database of these specimens (Table 6.1), providing the CITES Secretariat with a complete inventory of all raw ivory stocks each year (CITES 2016d).



Plate 6.4: The tusks from Leo’s elephant, marked with unique code, on route to MET offices in Katima Mulilo

Origin	Description	Total number	Total weight (kg)	Mean weight (kg)
Natural and Management	Whole tusks	2 638	18 703.15	7.08
	Ivory pieces	1 745	3 222.02	1.85
Sub-total			21 925.17	
Seized	Whole tusks	5 459	34 552.73	6.34
	Ivory pieces	322	985.32	3.06
Unknown	Whole tusks	215	1 348.68	6.27
	Ivory pieces	62	70.72	1.14
Total	Whole tusks	8 312	54 604.56	
	Ivory pieces	2 129	4 272.74	
GRAND TOTAL			58 877.30	

Table 6.1: Namibian ivory stocks, as of April 2016 (CITES 2016d: 6)

Despite high storage and security costs, the government amasses these tusks in expectation that their economic value will one day be realised. The world's largest market for this ivory is China, a country with a long history of producing artistic carvings from the product (Plate 6.5). Although domestic sales of these pieces remained relatively stagnant during the twentieth century, the country's economic boom in the twenty-first century has seen demand soar. Perceived as a traditional symbol of wealth and status, these elaborate carvings are now much sought after amongst China's burgeoning middle class (Vandegrift 2013). Similar to other luxury items like diamonds, then, ivory's cultural value is linked to its prestige in public display (Douglas and Alie 2014).

Yet despite growing demand for the product, Namibia is currently unable to sell its stockpiled ivory to China and other Asian markets due to CITES trade restrictions. In that sense, despite Namibia's elephant population being listed on Appendix II, allowing for commercial trade in trophies and other elephant specimens, a legally binding annotation added to this listing deems elephant ivory from this population as being on Appendix I. Conditions contained in the annotation include CITES verification of domestic trade controls in importing countries such as China, which are seldom satisfactory. As the Namibian government makes clear, these prescriptions effectively ban all commercial trade in ivory (MET 2007; CITES 2016d).



Plate 6.5: Chinese ivory sculpture of the Chengdu-Cunming railway, carved from eight elephant tusks. This was given as a gift from China to the United Nations in 1974 (Wikimedia commons)

But that has not always been the case, Namibia twice having successfully petitioned CITES for the legal sale of its stockpiled ivory. These ‘one-off’ sales were intended to satiate Asian demand for the product, whilst generating funds for reinvestment in elephant conservation. In the first of these events 50 tonnes - some 5,446 tusks - from Namibia, Botswana and Zimbabwe were sold to Japan in 1999, generating US\$ 5 million. Then in 2008, alongside South Africa, the same countries sold 102 tonnes of stockpiled ivory to accredited traders in Japan and China, raising over US\$ 15 million (CITES 2008). Interestingly, this second auction was contingent upon a nine year moratorium on future stockpile sales until 2017, giving parties time to assess its effect on illegal trade (Wasser *et al.* 2010; Kenya Elephant Forum 2013). This means the fate of Namibia’s current ivory stockpile is once again up for debate at CITES Conference of the Parties (CoP) meetings, while the impact of these one-off sales on ivory demand and poaching levels remains disputed.

These debates will be considered in more detail, below; yet one thing parties on both sides can agree on is the existential threat posed to elephants by this illegal trade. Poaching is a continent-wide problem, demonstrated through CITES’ ‘Monitoring the Illegal Killing of Elephants’ (MIKE) programme⁶⁴ which tracks poaching trends at 58 sites spread across 31 African elephant range states. Combined data from these sites shows a steady increase in the ‘Proportion of Illegally Killed Elephants’ (PIKE)⁶⁵ from around 2006, peaking in 2011 before slightly declining and levelling off thereafter (Figure 6.1).⁶⁶ In 2013, for example, nearly two thirds of deceased elephants found at MIKE sites - some 14,000 animals - were killed illegally (CITES 2014a). When extrapolated, this means upwards of 20,000 elephants are likely poached on the continent each year, amounting to 55 per day. Despite the relative decline in poaching since its 2011 peak, then, overall levels remain unsustainably high and above the 0.5⁶⁷ threshold. Ivory seizure figures also show a similar pattern on a global scale (Figure 6.2). As made clear in an inter-agency

⁶⁴ The Monitoring the Illegal Killing of Elephants (MIKE) Programme was established in 1997 following CITES CoP-10, and is tasked with collecting and disseminating information on trends in elephant poaching across African and Asian range states. Together, MIKE sites in Africa hold an estimated 30- 40% of the African elephant population. MIKE data are collected by ranger patrols in the field and other means (e.g. reports from local community members and researchers) and is recorded in standardized carcass forms, which are then submitted to the MIKE Programme (CITES 2016c).

⁶⁵ PIKE is calculated as the number of illegally killed elephants found divided by the total number of elephant carcasses encountered by patrols or other means, aggregated by year for each site (CITES 2016c).

⁶⁶ Data for 2016 will only be available in early 2017 (CITES 2016c)

⁶⁷ A PIKE level of 0.5 signifies that half of the deceased elephants were deemed to have been killed illegally.

report produced by UNEP, CITES, IUCN, and TRAFFIC⁶⁸ titled '*Elephants in the Dust*', illegal offtake levels are currently higher than annual population growth rates of 5%, meaning elephants are being killed faster than they can breed (UNEP *et al.* 2013). It is slaughter fuelled by growing demand for ivory in China, where the price of raw ivory has increased from £437 per kilogram in 2010 to £1225 per kilogram in 2014 (The Guardian 2014b; 't Sas-Rolfes *et al.* 2014).

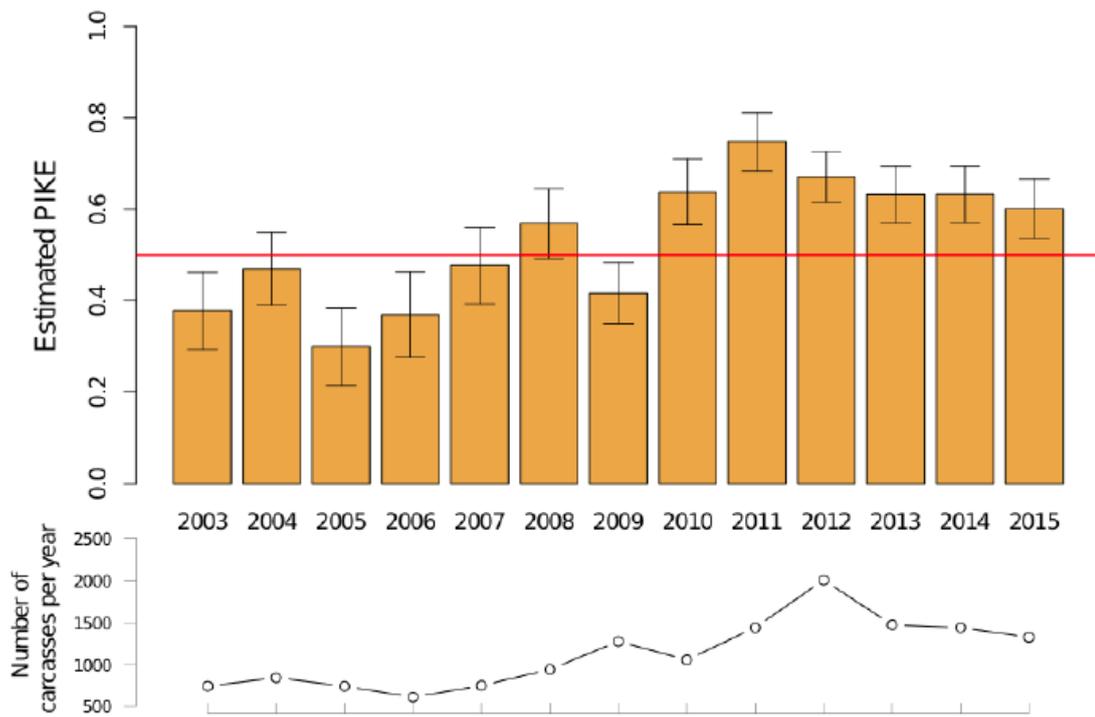


Figure 6.1: PIKE trend in Africa with 90% confidence intervals, based on 14,604 elephant carcasses (illegally killed or otherwise) for the period 2003-2015. PIKE levels above the horizontal line at 0.5 (i.e. where half of dead elephants found are deemed to have been illegally killed) are cause for concern. The lower graph shows the total number of carcasses reported by year, irrespective of cause of death (CITES 2016c: 3)

⁶⁸ TRAFFIC is a joint programme of the World Wide Fund for Nature (WWF) and the International Union for Conservation of Nature (IUCN) which serves as a monitoring network for the illegal wildlife trade.

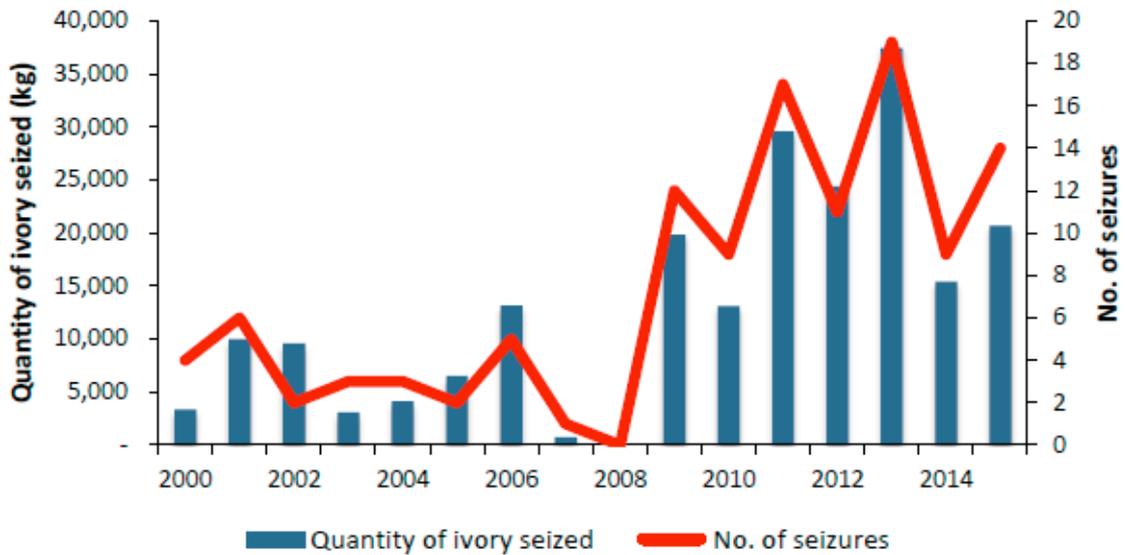


Figure 6.2: Estimated weight of ivory and number of seizure cases by year, 1989 –2015
(CITES 2016f: 12)

Those against a legal trade in ivory claim this increased demand and poaching is, to a large extent, the result of 2008’s ‘one-off’ sale. As happened after the legal auction in 1999, anti-trade conservationists and governments argue this latest event was ill-conceived, and has undermined elephant conservation internationally (Douglas and Alie 2014). Not only do they claim this sale stimulated Asian demand, but also that it confused consumers as to what is legal and illegal ivory, whilst offering a loophole for laundering the product (Vandegrift 2013; Brandford 2014; Travers 2014). As such, the ‘African Elephant Coalition’ (AEC) - made up of 26 African countries as well as animal welfare NGOs - has recently called for an end to all legal trade in elephant ivory, both within and between nations (AEC 2016). Citing a ‘marked decline in population size in the wild’ (CITES 2016f: 1), thirteen countries - including Kenya - have submitted a proposal for consideration at CITES CoP-17 in September 2016 calling for the transfer of all African elephant populations to Appendix I. This, they say, would end the confusing ‘split-listing’ of the continent’s elephants between Appendix I and the few populations (including Namibia’s) on Appendix II, which has fed expectations that trade in ivory could be legalised in the near future (CITES 2016f).

Those against legal sales are also critical of Namibia’s controls over (inter)national ivory trading. Under CITES rules for trade in elephant specimens, countries must ‘put in place

comprehensive internal legislative, regulatory, enforcement and other measures to regulate the domestic trade in raw and worked ivory’ as well as registering all importers, exporters, manufacturers and retailers dealing in these products (CITES 1997b: 2). To that end, the Namibian government enacted the Controlled Wildlife Products and Trade Act in 2008, which specifies the requirement for permits in order to possess or sell ivory (CITES 2016f). The Act prohibits possession of and trade in ‘any tusk, horn, head, ear, trunk, skin, tail or foot or any part thereof, of any elephant’, but does allow for the possession of ‘up to five items of worked ivory with a total weight of less than 1kg for personal use’, as well as the possession of ivory *ekipas* (GRN 2008: 11). Indeed, it is Namibia’s non-commercial tourist trade in *ekipas* - traditional Namibian jewellery made from worked ivory (Plate 6.6) - and its domestic trade in other worked ivory products that has generated international criticism. Despite MET (2004) claiming to ‘register all participating carvers and jewellers [in the] industry’, there are claims this system has not been implemented effectively (CITES 2016f). Those calling for a complete trade ban argue this lack of monitoring provides another loophole through which illegal ivory can be trafficked to end consumers.



Plate 6.6: Elephant ivory *ekipa*, mounted in silver, on a necklace made of ostrich shells (MET 2004)

In addition to lobbying for the closure of all domestic ivory markets, then, countries part of the AEC have also destroyed their ivory stocks in recent years in order to reinforce their position. The largest of these public events occurred in April 2016 when Kenya set

fire to more than 100 tonnes of ivory from around 6,000 elephants (Plate 6.7). Such measures are supported by western governments, and have been endorsed at intergovernmental conferences on the illegal wildlife trade (UK Government 2014, 2015a). In that sense, Namibia and other pro-trade nations such as South Africa are coming under increased pressure to destroy not only their contraband ivory, but all existing stockpiles.

Nevertheless, the CITES Secretariat does not actually recommend stockpile destruction, and the Namibian government is also opposed to the strategy. Reacting to recent events in Kenya, Namibia's Minister of Environment and Tourism is quoted as saying "Why don't we do the same with diamonds when we confiscate them from thieves? Do we destroy them, throw them away or burn them?" (New Era 2015c). Namibia does not believe stockpile destruction is in the economic interests of its people, and also questions the logic of burning ivory to deter poaching. Therefore, the government's position aligns with that of economists who argue stockpile destruction risks exacerbating the poaching problem by reducing potential future supply, simultaneously driving up black market prices by increasing ivory's scarcity value (t'Sas Rolfes *et al.* 2014). A more effective deterrent to poaching and illegal speculation, then, would be to retain stockpiles with the possibility of dumping them on the market.



Plate 6.7: Piles of ivory are set on fire in Nairobi National Park, Kenya, in April 2016
(www.guardian.co.uk)

The Namibian government also rejects suggestions that 2008's legal sales caused the current poaching epidemic. They point to reports produced by the MIKE programme

which fail to establish clear links between controlled ivory sales and increased illegal killing of elephants (CITES 2016c). Even members of the IUCN’s African Elephant Specialist Group argue increasing Chinese demand for worked ivory coincided with rising demand for all luxury products such as gold and jade, and therefore cannot be blamed on legal ivory sales alone (‘t Sas-Rolfes *et al.* 2014). In that sense, the Namibian government points to regional differences in levels of illegal killing in Africa (Figure 6.3), making the case that poaching is more closely related to poverty and political instability in certain parts of the continent. Such assertions are supported in CITES analysis of MIKE data, higher poaching levels being recorded in and around sites where extreme poverty is prevalent, suggesting poaching is more likely to be adopted as an economic strategy where livelihoods are insecure (CITES 2014a).

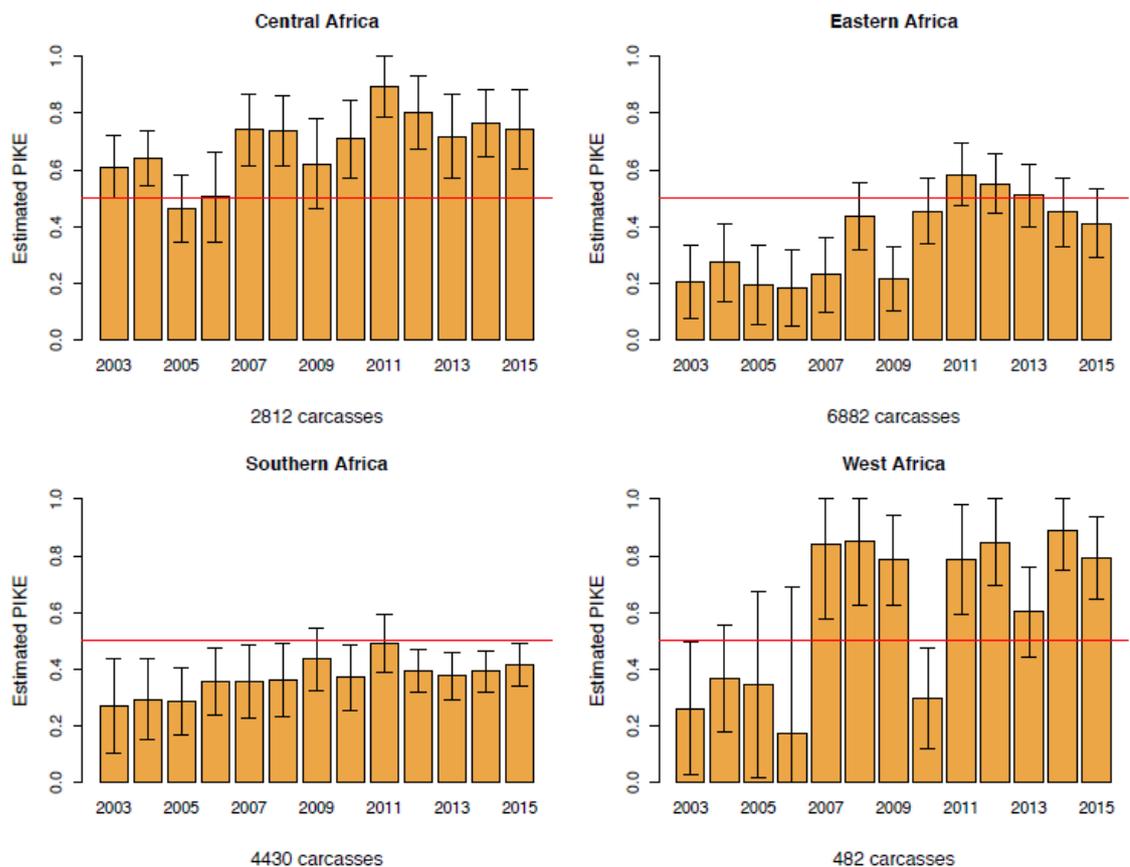


Figure 6.3: Sub-regional PIKE trends with 90% confidence intervals. The numbers of carcasses on which the trends are based are shown at the bottom of each chart (CITES 2016c: 4)

But that is not to say these issues are absent in Namibia, nor that the country is ignorant of its own poaching problems. Despite southern Africa having the lowest sub-regional PIKE, then, Namibia has not been immune to the recent spate of illegal killing. Poaching incidents increased significantly in 2012 when 78 elephants were killed. Since then, a further 165 elephants have been poached for their ivory up until the end of 2015 (Figure 6.4). Ivory seizures have also spiked in recent years (Figure 6.5), although the government puts this down to improved law enforcement and community awareness campaigns (Figure 6.6) (CITES 2016d).

In Zambezi, poaching incidents are monitored as part of CITES' MIKE programme in an area covering 2274 square kilometres, incorporating most of the region's National Parks and conservancies (including Kwandu). At this site, PIKE levels breached the 0.5 threshold in consecutive years from 2011-2012, and despite falling since then (Figure 6.7), actual incidents of illegal killing have increased in the region (Figure 6.8). In Kwandu specifically, two elephant carcasses were found in the Conservancy during my fieldwork period, although most poaching occurs in the region's national parks.

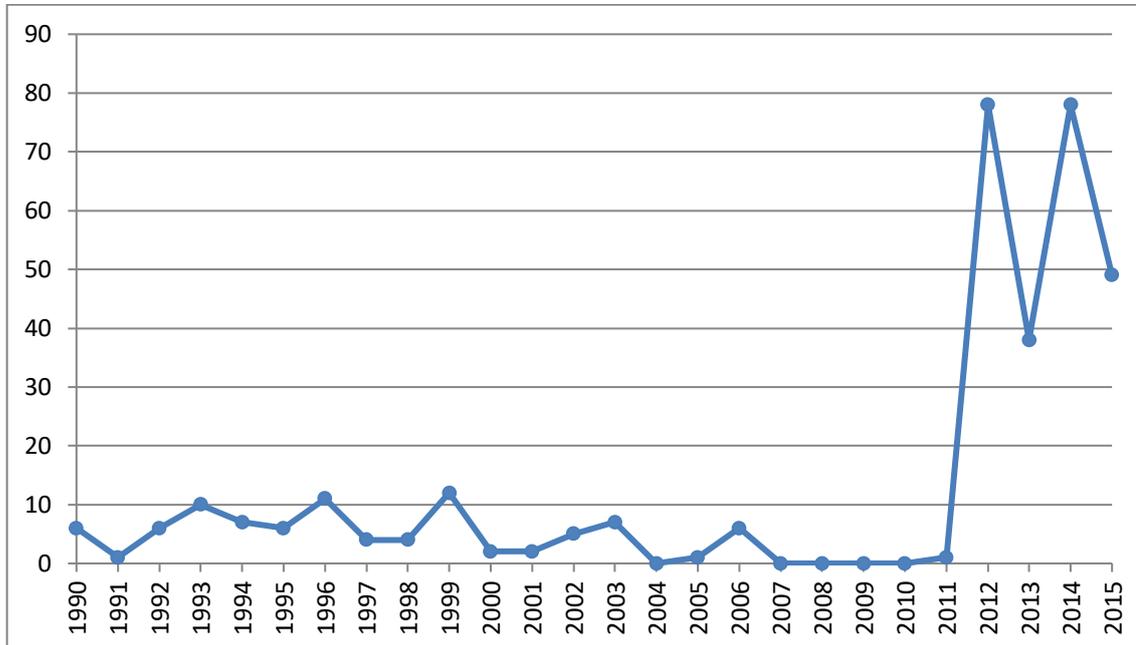


Figure 6.4: Number of elephants killed illegally in Namibia, 1990-2016 (Adapted from CITES 2016d: 13)

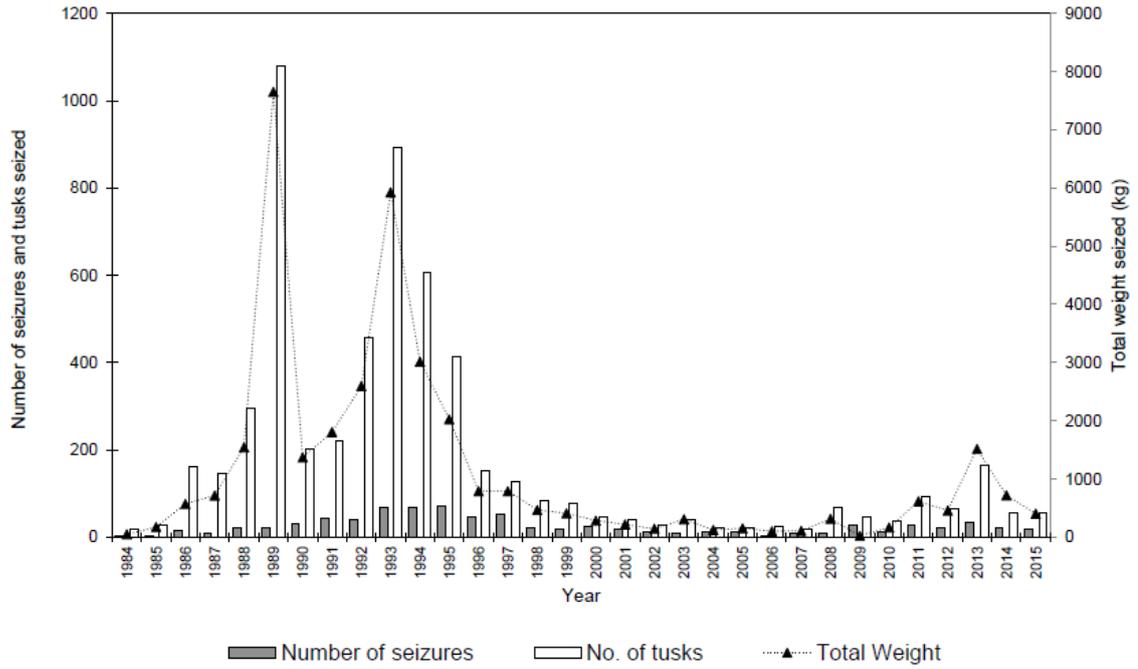


Figure 6.5: Summary of ivory seizures in Namibia, 1984-2015 (CITES 2016d: 14)



Figure 6.6: Poster urging Namibians to report suspected elephant poaching (www.nacso.org.na)

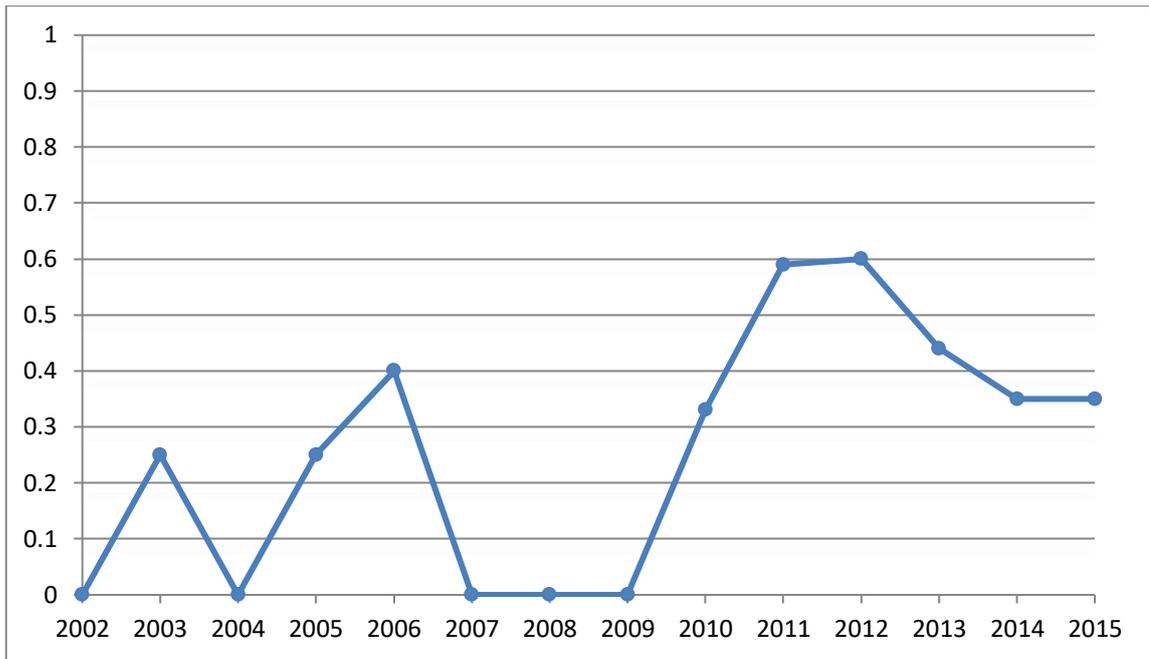


Figure 6.7: PIKE trend in 'Zambezi' MIKE site, 2002-2015. Data is missing for 2008. PIKE levels above 0.5 (in 2011 and 2012) are deemed unsustainable based on current birth rates (Adapted from CITES MIKE data obtained at www.cites.org)

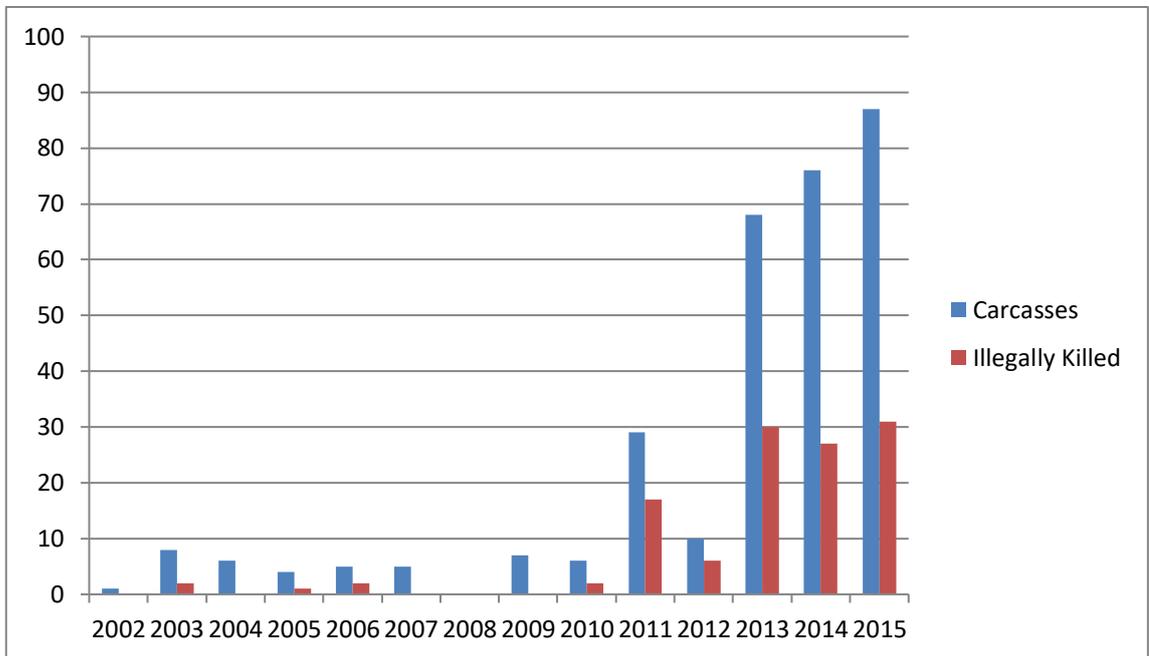


Figure 6.8: Number of elephant carcasses found and number illegally killed in 'Zambezi' MIKE site, 2002-2015. Data is missing for 2008. (Adapted from CITES MIKE data obtained at www.cites.org)

According to Namibian CBNRM stakeholders, these issues are largely a result of Zambezi's geographic location. The region borders both Angola and Zambia to the north, countries in which poaching levels are particularly high. According to the recent 'Great Elephant Census', 85% of carcasses found in Zambia's Sioma-Ngweze National Park (directly north of Kwandu) were the result of illegal killing, south-western Zambia as a whole experiencing the worst poaching levels of any major savanna elephant population (Chase *et al.* 2016; CITES 2016f). This is the work of local Zambians paid by Chinese ivory trafficking syndicates to kill elephants for their ivory (Taylor 2013). Having decimated elephant populations on their side of the border, then, there are numerous reports of people crossing the Zambezi River in canoes in order to carry out raids in both Namibia and Botswana (Nkala 2016). On that point, a Namibian NGO Director lamented "the ease with which people can move across borders into Namibia and then back across with ivory" (R38). Others said there are simply more opportunities to poach now because of Zambezi's high elephant population, a result of the transference of animals from Botswana and a growing conservation ethic amongst communities since CBNRM's inception (R39). As one NGO employee put it:

"I think poaching has increased simply because people are taking care of the wildlife. Let me give you an example: the more you take care of your livestock, the more thieves will steal from your livestock because they are increasing in number. [...] But now because we are taking care of these resources they are easily found in conservancies." (R53)

But on both sides of the border Namibians are also involved in the killing, Kwandu's inaugural Chairman describing how criminal gangs from other countries "have found ways to move around and get our people" (R59). In that sense, many link poaching in Zambezi with increased Chinese business investment in the region's capital, Katima Mulilo, a border town that has grown exponentially since a road-bridge was built in 2004 connecting Namibia with the southern African interior (Zeller and Kangumu 2007). The *silalo induna* at Mwanzi told me that these "visitors" coming to Namibia are "making deals with poachers who sell them the ivory" (R52). MET also claims Chinese companies contracted to upgrade the main road running through Kwandu are complicit in these trafficking networks (MET 2013d). Although the evidence is anecdotal, their assertions are supported in studies showing spatial relationships between poaching and Chinese

construction projects in countries such as Kenya and Zimbabwe (Vandegrift 2013; Vira and Ewing 2014).

These organised criminal syndicates offer local people the opportunity to ‘get rich quick’ by poaching elephants. As one informant put it, those higher up the chain are willing to pay local people “more than they have ever received” to kill elephants and help smuggle ivory out of Zambezi (R38). Thus, the link between poverty and poaching at the local scale is clear (CITES 2014a), and interviewees in Kwandu often blamed poaching on a lack of employment opportunities in the area. One interviewee said those who do not work for MET or the Conservancy “must kill to make a living” (R40), while an MET informant told me young people see poaching as “the only way to live” (R61). Another local person pointed to the number of guns amongst the community, left over from the Independence War and now in the hands of poor people who are “turning those guns on wildlife” (R59). As Douglas and Alie (2014) make clear, this broad lack of economic opportunities available to rural populations feeds illicit activities such as elephant poaching which, in turn, exacerbates rural poverty.

For that reason, the Namibian government and other CBNRM stakeholders are committed to trading in ivory as a means towards tackling both poverty and poaching. WWF’s Director in Namibia told me a legal trade in ivory from natural mortalities “would help people benefit from elephants” as well as countering illegal trading that “will just happen no matter what” (R38). Their position aligns with conservationists who believe current ivory demand is a result of shutting off supply, stating that a limited, sustainable trade is needed to quell demand in a controlled manner. At the same time, Namibia’s argument - and that of other southern African nations committed to sustainable use - is that the trade ban undervalues elephants at both the local and national level, hindering conservation by preventing elephants from ‘paying their way’ alongside competing land-uses such as agriculture (MET 2007; Moore 2011). CITES’ failure to develop a decision-making mechanism for future trade in ivory has only added to Namibia’s frustration, MET arguing that the ban ‘significantly undermines the needs and interests of the country’s conservation objectives and programmes’ (CITES 2016d: 2).

In opposition to CoP-17 proposals put forward by other elephant range states, then, Namibia has requested that the *ultra vires* annotation restricting ivory trade be removed

from its elephant population listing (CITES 2016e). This would transfer Namibian elephant ivory from Appendix I to Appendix II, allowing for commercial trade alongside other elephant specimens, subject to the necessary permits. In its proposal, Namibia makes clear that proceeds from this regulated trade will be deposited in the Game Products Trust Fund (GPTF) to be used exclusively for elephant conservation and CBNRM (CITES 2016d). On that point, Namibia emphasises the importance of 1999's legal sale, which generated N\$ 3.9 million to initially capitalise the GPTF. Since then, over N\$ 11 million was added to the fund after Namibia sold 12.6 tonnes of its stockpiled ivory in 2008 (CITES 2008). As Weaver *et al.* (2011) make clear, these funds have made a significant contribution to CBNRM activities, including a N\$ 1,000,000 payment to MET's Human-Wildlife Conflict Self-Reliance Scheme to offset crop damage losses caused by elephants.

Nevertheless, it is almost certain that Namibia's proposal will be rejected at the forthcoming CITES meeting. Two-thirds of CITES' 182 member states would need to approve the proposal, yet the southern African nations in favour of trade will be heavily outnumbered by the European Union, US, and other African countries opposed to it. In that sense, the proposal made by a coalition of nations to list all African elephants under Appendix I - thus preventing all trade in ivory, including as hunting trophies - is more likely to succeed. This 'battleground of ideology' (Weaver *et al.* 2011: 67) between countries at opposite ends of the consumptive use spectrum is now commonplace at CITES meetings, leading to complaints that the treaty is fundamentally at odds with the Convention on Biological Diversity and its principles of sustainable use. When it comes to flagship species like elephants, western governments are heavily influenced by powerful animal welfare NGOs funded by urban populations inspired to 'save the last', yet detached from the realities of living alongside these animals (Abensperg-Traun *et al.* 2011; NACSO 2015a). Africa's poaching crisis feeds this narrative, and the decisions these governments take at CITES meetings can undoubtedly impede CBNRM. Nowhere is this more apparent than Namibia, a country that deems poaching levels 'biologically insignificant' within its borders (CITES 2016d: 7), yet is prevented from trading its ivory to fund elephant conservation and rural development.

As such, Namibia has considered withdrawing from CITES in order to 're-establish its sovereignty over elephants' (MET 2007: 20). Doing so, however, would risk reprisal from

the international community, including the possible termination of financial aid to the country. For now, Namibia continues to fight its corner at CITES meetings, knowing that member states are highly unlikely to approve ivory sales in the current climate. For the foreseeable future, the tusks from Leo's 'own-use' bull will remain in the government stockpile alongside ivory from naturally deceased elephants. From a Namibian perspective this, in itself, reduces the elephant's economic value and hinders CBNRM. Yet CITES decisions are not the only factor impacting upon Namibian conservation and the elephant's economic value. Where anti-utilisation sentiment affects the movement of tusks from 'trophy' elephants, the threat to Namibia's CBNRM programme and the elephant's place within it may be even greater.

6.4 The Elephant's Non-Consumptive Use-Value and Opposition to Hunting

Given the current poaching problems in Africa, then, Namibia's trophy hunting industry is coming under increased global scrutiny. The recent deaths of high-profile animals in Zimbabwe, such as the hunting of 'Cecil' the lion by a Minnesota dentist, and the killing of one of Africa's biggest bull elephants by a German hunter have increased opposition to the practice. Conservation and animal welfare organisations circulate photographs of these individual animals in global (social) media (Figure 6.9 and Plate 6.8), emphasising their majesty and charisma. Interestingly, they are the same kind of images that adorn the websites of hunting outfitters like JTHS (Plate 6.9), used to advertise Zambezi's 'big game' abundance and sell more trophies. In that sense, the affective properties which appeal to the trophy hunter (discussed earlier) are used as reasons why these individual animals should not be killed. Conservationists claim the hunter 'should have thought twice' before shooting the elephant bull in Zimbabwe, for example, the largest seen in the country in one-hundred years and with tusks 'so large they almost touched the floor' (BBC News 2015).

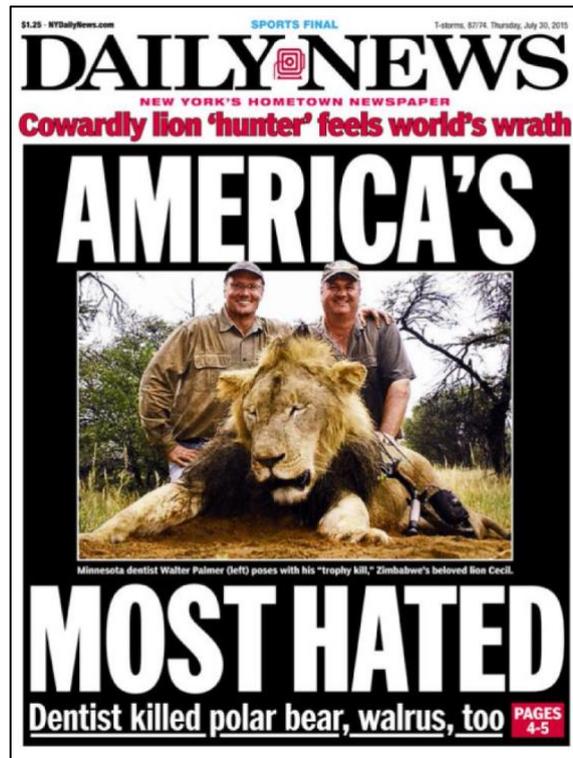


Figure 6.9: Front page of Daily News, New York, 30/07/2015 (www.nydailynews.com)



Plate 6.8: Sixty year-old elephant bull with tusks weighing 55kg, killed in Gonarezhou National Park, Zimbabwe, by a German trophy hunter, 08/10/2015 (www.africageographic.com)



Plate 6.9: Photograph of an elephant bull hunted in Kwandu Conservancy in 2015, on Jamy Traut Hunting Safaris' website (www.jamyhunts.com)

These images of the vulnerable elephant are displayed on the websites of animal welfare and conservation organisations alongside photographs of elephants poached for their ivory (Plate 6.10) - thus conflating legal and illegal killing - and are juxtaposed with visual representations emphasising the animal's human-like qualities and nomadic nature (Plate 6.11). In that sense, both photographs of dead elephants and fetishized images which 'amplify [their] charisma making them desirable for the voyeuristic gaze' (Barua 2016a: 12) have an affective influence on Western consumers (Cresswell 2014). In both cases these images move people emotionally and compel them to action (Nilan and Wibawanto 2015: 65), inspiring them to protest against trophy hunting, for example (Plate 6.12). They are what Moore (2011) refers to as 'elephant commodities', in direct competition with the animal's tusks and other body parts, and consumed by individuals in the West who make charitable donations towards elephant preservation or purchase ecotourism packages in Africa.



Plate 6.10: An elephant killed for its ivory in Gabon (Getty Images)



Plate 6.11: African elephants at sunset (www.wwf.org.uk)



Plate 6.12: People protest against the killing of ‘Cecil’ the lion outside Walter Palmer’s workplace in Minnesota (Daily Mail, 29/07/2015)

In that sense, those against consumptive use maintain an elephant’s non-consumptive use⁶⁹ value far outweighs the financial benefits from hunting and/or ivory sales. Brandford (2014) argues over the course of its life a single elephant can contribute around US\$ 1.6 million (US\$ 23,000 per year) to national and local economies through the tourist industry. This figure is based on income generated from photographic tourism, and is seventy-six times higher than the estimated US\$ 21,000⁷⁰ generated from the sale of an elephant’s raw ivory. Namibia’s critics also point to thriving ecotourism industries in countries like Botswana and Kenya, worth US\$ 1.5 billion and US\$ 800 million respectively, easily surpassing the estimated US \$200 million generated from trophy hunting across Africa each year (Figure 6.10) (Travers 2014; Cornell 2015). Yet even these figures pale in comparison to potential revenues gained through charitable contributions and donor funding for elephant conservation. According to Blignaut *et al.* (2008) the potential Euro-North American ‘willingness to pay’ (WTP) for elephant conservation is four times higher than the animal’s tourism value.

⁶⁹ ‘Non-consumptive use’ is defined in Namibia’s Nature Conservation Amendment Act (1996) as ‘use not entailing the permanent removal of individual game, but use for recreational, educational, research, cultural, or aesthetic purposes.’ (NCA Act 1996, 1(f))

⁷⁰ This figure is based on the conservative estimate that each tusk weighs 5kg.

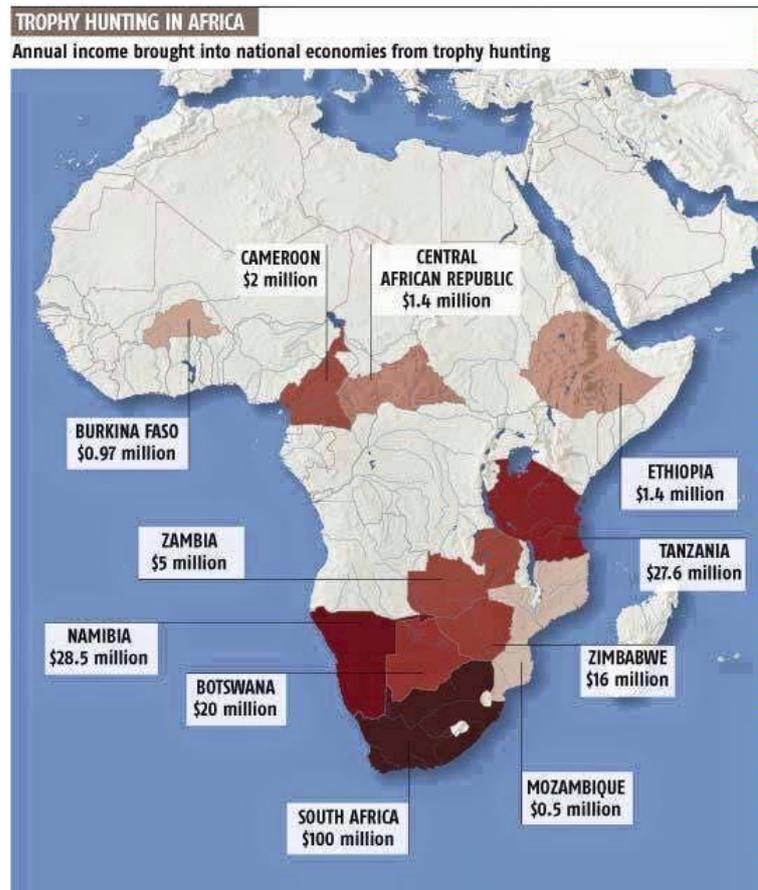


Figure 6.10: Annual income brought into African economies from trophy hunting (www.napha-namibia.com)

These are vast sums that Western conservation NGOs and animal welfare charities can use to lobby against hunting and trade in trophies. Organisations such as Born Free and International Fund for Animal Welfare (IFAW) produce reports and advertising campaigns geared towards increasing public support and influencing (inter)national policy (Plate 6.13). Their argument stems from a moral opposition to any form of consumptive use. In articles condemning trophy hunting, IFAW employees argue that killing any animal for conservation is unethical, there being ‘no good reason why anyone needs ivory except elephants’ (Russo 2014b). They also refute claims that hunting reduces HEC, pointing to scientific research suggesting that the removal of older bulls can negatively affect cohesion in elephant societies, leading to increased aggression amongst groups of ‘rogue’ young males (Selier *et al.* 2014; Cornell 2015). This is not to deny that pro-hunting organisations such as the National Rifle Association (NRA) also influence government policy in the US, for example; yet, as evidenced in CITES member

states decisions concerning commercial ivory trading, pressure from the anti-hunting lobby appears to be bearing fruit.



Plate 6.13: IFAW poster depicting hunting trophies on a luggage carousel (www.ifaw.org)

To that end, although elephant trophies from Namibia do not require an import permit under CITES rules, numerous countries have recently imposed stricter domestic restrictions. The EU now requires member states to issue import permits for all African elephant trophies in order to ‘check [these] trophies are sustainable’ and ‘guarantee against illegal transactions’ (UK Government 2015b: 17). In the US, the administration has suspended importation of all elephant trophies from Tanzania and Zimbabwe. In making their decision, the country’s Fish and Wildlife Service (USFWS) stated it had been ‘unable, in accordance with the U.S. Endangered Species Act special rule for the African elephant, to make a determination that “the killing of the animal whose trophy is intended for import would enhance survival of the species”’ (CITES 2014b). Certain US states including New York, California, and New Jersey have taken this a step further, implementing complete bans on all ivory imports and trading (Russo 2014b; Denyer 2015). In addition, numerous international airlines - including British Airways, Delta, and American Airlines - have announced embargoes on transporting elephant and other big game trophies such as rhino and lion (Cruise 2015). As Namibian conservation NGOs

correctly point out, the country will be ‘powerless’ if international bans prohibit hunting clients from taking home their trophies (NACSO 2015a: 50). Undoubtedly, then, these domestic trade restrictions and private sector policy changes pose a grave threat to Namibia’s CBNRM programme (MCA-N 2013a; IUCN *et al.* 2015).

At the same time, Botswana’s decision to ban hunting in 2014 has ramped up the international pressure on Namibia to follow suit. According to Botswana’s Department of Wildlife and National Parks (DWNP) trophy hunting is ‘no longer compatible with [the country’s] commitment to preserve local fauna’, lost income seen as inconsequential given its small contribution to overall tourism revenue (BBC News 2012). The ban is likely to push up the price of Namibia’s elephants as professional hunters and their clients leave Botswana in search of new opportunities. In the short term, then, this increased demand will probably mean the likes of Kwandu receive more money for their limited supply of trophy elephants. As Jamy admitted, he too will be able to command higher prices from clients, but warned that the long-term outlook for hunting and conservation was bleaker as a result of Botswana’s policy change (R54).

His view is shared by the vast majority of conservationists in Namibia who argue the possibility of a hunting ban - alongside trade restrictions discussed above - jeopardises the country’s CBNRM programme. The seriousness of this threat was made clear during a NACSO meeting I attended, one individual from WWF warning: “We need to be very clear that there are forces outside [of Namibia] working against sustainable use.” Another pointed to the “whole euphoria that has arisen from increased poaching that says trade is crime”, lamenting that “people cannot distinguish between trade, illegal trade, and hunting.” “If [a hunting ban] happens, the CBNRM programme is dead”, surmised another attendee.⁷¹ Indeed, this international pressure may already be telling, with growth in national hunting revenue falling by 8% between 2013 and 2014. Namibian conservationists speculate that this is a result of international pressure to ban the practice, causing hunters to ‘steer away from hunting trips to Africa to avoid controversy and social media witch hunts’ (NACSO 2015a: 55). As the next section will discuss, Namibian CBNRM stakeholders attempt to combat these threats by emphasising the elephant’s economic value through ‘conservation hunting’ which, alongside the animal’s non-

⁷¹ Field notes, 01/10/2013

consumptive use-value, is essential to the country's conservation and development efforts.

6.5 (Re)territorialising CBNRM: The Economic Value of 'Conservation Hunting'

Having been caught somewhat off-guard by the intensity of international opposition to its hunting industry, Namibia has in recent years stepped-up its defence of consumptive use (IUCN *et al.* 2015). CBNRM stakeholders are now vigilant in referring to the practice as 'conservation hunting', eager to distinguish the practice from 'sport hunting' and, of course, illegal killing. Whereas the latter practices are concerned solely with collecting rare and exotic trophies or valuable ivory, then, 'conservation hunting' produces 'clear, measurable conservation and human development outcomes' (NACSO 2015a: 16). In order to provide evidence of these benefits CBNRM NGOs produce numerous documents, such as NACSO's annual 'State of Community Conservation in Namibia' report, detailing the financial importance of hunting to the country's CBNRM programme.

By the end of 2014 there were 48 hunting concessions in Namibian conservancies (Figure 6.11), a big increase from 5 in 1997 and an indication of the widespread recovery in the nation's wildlife base (NACSO 2015a). This has coincided with an incremental increase in both cash and in-kind (game meat) benefits generated from hunting (Figures 6.12 and 6.13). According to NACSO's annual CBNRM report, these benefits amounted to N\$ 36.4 million in 2014, including N\$ 21.8 million in fees paid by hunting operators to conservancies, as well as the distribution of 522,104kg of game meat worth N\$ 10.5 million. Particularly when it comes to a Conservancy's direct cash income, then, hunting revenue surpasses that of ecotourism. In that sense, from 2011-2014 cash income from hunting made up around 70% of total fees paid to conservancies (Naidoo *et al.* 2016).

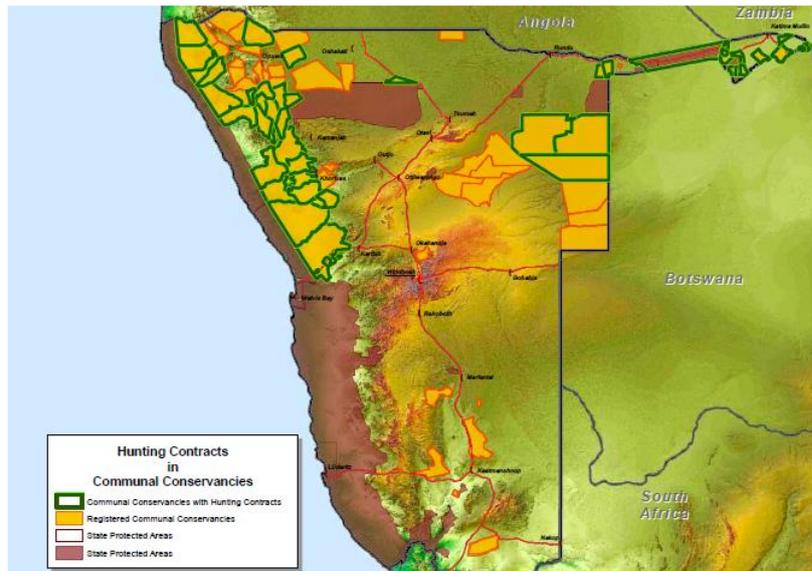


Figure 6.11: Hunting contracts in Namibian conservancies. (*Hunt in Namibia Magazine*, 2014)

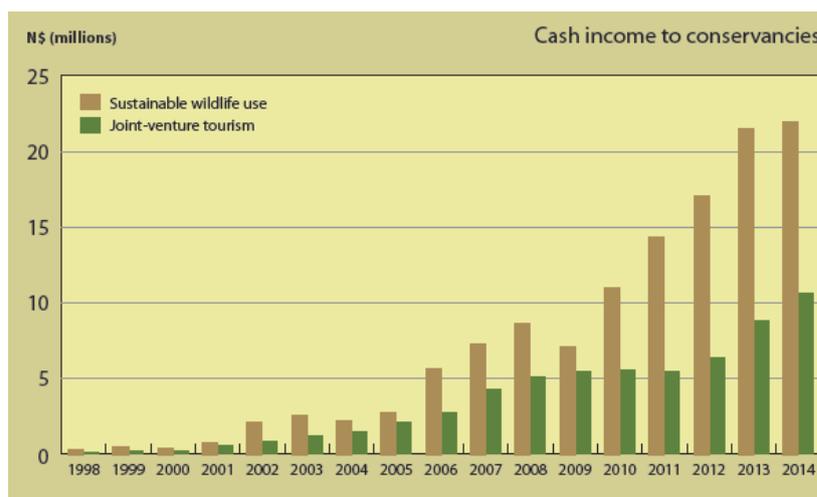


Figure 6.12: Incremental rise in cash income to conservancies from hunting, compared with ecotourism (Reproduced from NACSO's (2015: 59) 'State of Community Conservation' report for 2014)

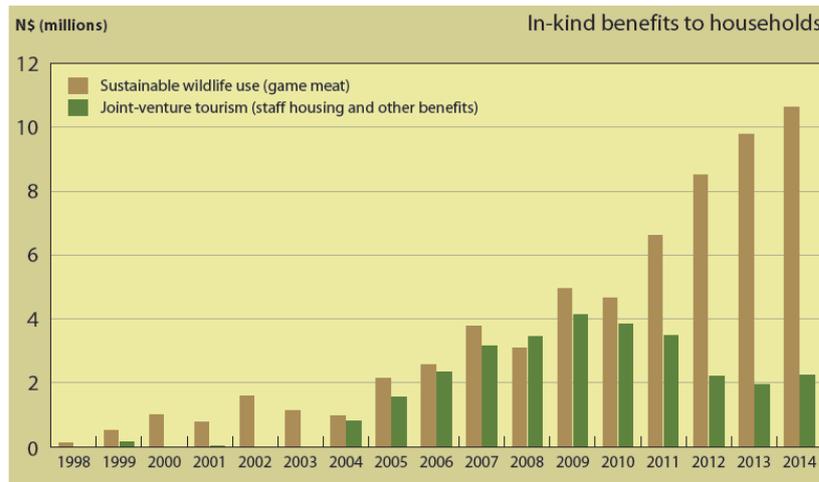


Figure 6.13: Incremental rise in ‘in-kind’ benefits (game meat) to conservancies from hunting, compared with ecotourism (Reproduced from NACSO’s (2015: 59) ‘State of Community Conservation’ report for 2014)

Much of this income derives from the hunting of elephants, said to contribute over 50% of all Conservancy hunting revenue on a national scale (Table 6.2) (Naidoo *et al.* 2016). In the absence of unrestricted trade in ivory, then, hunting forms an integral part of the government’s ‘Species Management Plan’ for elephants (MET 2007). Based on an estimate of 16,000 elephants in the country’s north-eastern sub-population⁷², MET proposes a maximum trophy quota of 80 animals (males over 30 years of age) per year.⁷³ According to MET figures, a high quality trophy hunting regime contributes US\$ 120,000 for every 1000 elephants, earnings which can make a significant contribution to park management costs. In Zambezi Region the MET calculates that revenue from elephant hunting equates to around N\$ 8.71 per hectare of land, covering 88% of the conservation budget for the region’s national parks (MET 2007: 21). Although actual elephant trophy exports have largely remained well below these figures (Figure 6.14) the animal’s economic importance in Zambezi is profound, with 68% of total Conservancy income coming from the hunting of elephants (IRDNC 2015). Based on his experience with three

⁷² The MET’s 2007 Elephant Management Plan separates Namibia’s elephants into two main sub-populations - one in the north-west, believed to contain around 3,700 animals, and the other in the north-east estimated at around 15,900 animals. The plan also acknowledges an ‘occasional’ range in the central area of northern Namibia linking the two main sub-populations, meaning they are not genetically isolated (MET 2007: 3-4).

⁷³ 50 of which would come from National Parks and Conservancies in Zambezi Region, and 30 from the Khaudum NP (Kavango West Region) and Nyae Nyae Conservancy (Otjozondjupa Region) (MET 2007: 15).

of the region's conservancies, Jamy supported these assertions noting that “elephants are really the animal that gives the community an income” (R54).

Species	Animals hunted	Payment-per-animal	Revenue	% of total
Baboon	17	25.62	435.58	0.03
Black-backed Jackal	6	23.65	141.91	0.01
Black-faced Impala	8	723.55	5,788.38	0.3
Blue Wildebeest	12	382.26	4,587.14	0.3
Buffalo	71	5,497.93	390,352.70	23.4
Burchell's Zebra	22	388.69	8,550.10	0.5
Bushbuck	1	746.89	746.89	0.04
Common Impala	22	180.91	3,980.08	0.2
Crocodile	22	1,321.06	29,063.28	1.7
Common Duiker	5	116.18	580.91	0.03
Elephant	69	13,296.47	917,458.09	54.9
Gemsbok	60	274.79	16,490.46	1
Giraffe	7	677.80	4,744.50	0.3
Hartmann's Mountain Zebra	67	356.54	23,887.76	1.4
Hippopotamus	31	2,068.26	64,117.43	3.8
Klipspringer	9	282.88	2,546.27	0.2
Kudu	55	449.38	24,718.57	1.5
Red Lechwe	13	1,190.35	15,474.59	0.9
Leopard	11	2,210.79	24,318.88	1.5
Lion	2	11,371.89	22,743.78	1.4
Ostrich	14	102.49	1,435.17	0.1
Reedbuck	3	591.29	1,773.86	0.1
Roan Antelope	9	4,385.68	39,470.95	2.4
Sable Antelope	9	5,290.46	47,614.11	2.8
Spotted Hyena	5	297.30	1,486.41	0.1
Springbok	89	154.56	13,756.85	0.8
Steenbok	10	89.73	897.61	0.1
Warthog	17	187.03	3,179.46	0.2
Waterbuck	1	1,037.34	1,037.34	0.1
TOTALS	667	-	1,671,379.05	100

Table 6.2: Number of animals harvested in 2013, by species, along with the average payment made per animal and the estimated overall contribution of each species to trophy hunting income (in 2013 USD\$) on communal conservancies in Namibia (Naidoo *et al.* 2016: 25)

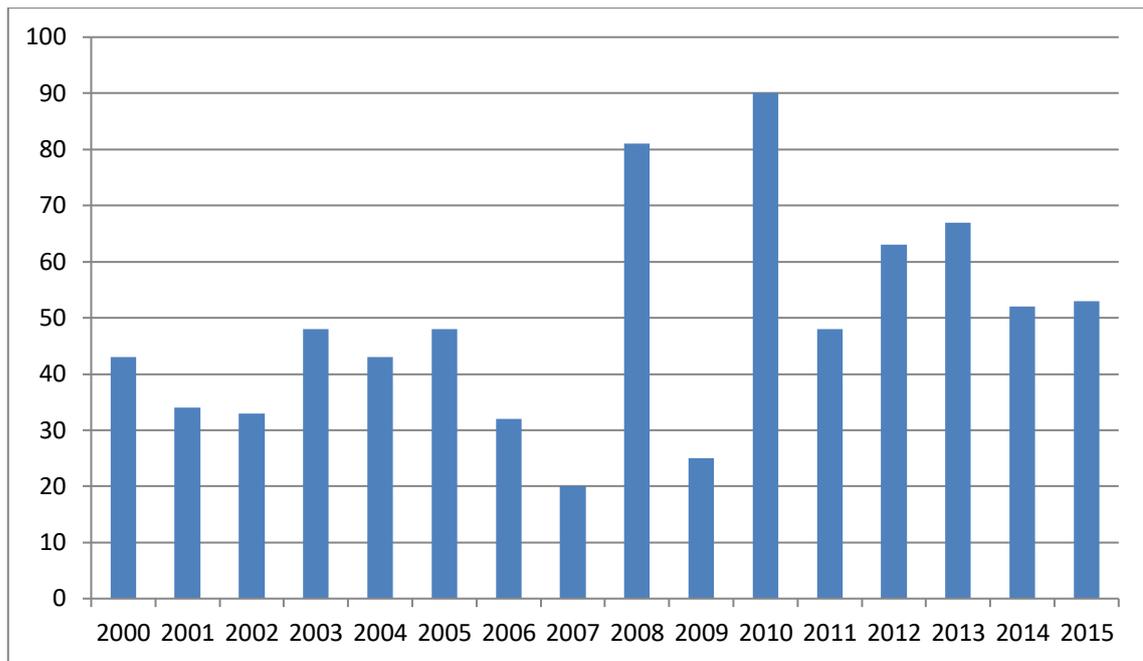


Figure 6.14: Number of elephant trophies exported from Namibia, 2000-2015. This figure can be multiplied by two to give the number of tusks exported (i.e. Number of elephant trophies exported in 2015 = 53; number of tusks exported in 2015 = 106). (Adapted from CITES trade database: <http://trade.cites.org>)

Were conservancies to lose this income through (inter)national trade restrictions or a domestic hunting ban, the economic impact would be severe. To prove this, CBNRM stakeholders recently simulated a hunting ban using financial data from 2013 for fifty conservancies across the country. Results showed that the number of conservancies with income exceeding their operating costs declined from 74% (37 conservancies) to 16% (8 conservancies) when hunting revenue was eliminated (Figure 6.15) (MET 2014; Naidoo *et al.* 2016). Given their financial reliance on income from elephant hunting, Zambezi conservancies are particularly vulnerable to these threats. As Namibian conservation NGOs point out, this could undermine local incentives to support conservation, with critical implications for KaZa’s wider transboundary ambitions (IRDNC 2015). What cannot be in doubt, however, is that losing N\$ 19.5 million per year in hunting revenue would leave many conservancies financially unviable under the current model (IIED 2015). As one NGO Director put it:

“I think [a potential hunting ban] poses one of the biggest challenges to CBNRM at the moment in Namibia. If hunting is abolished in this country

right now then it will have major, major implications on people's livelihoods in this region. In terms of potential income from hunting...[...]...it really has the potential to turn these areas around and to unlock opportunities." (R39)

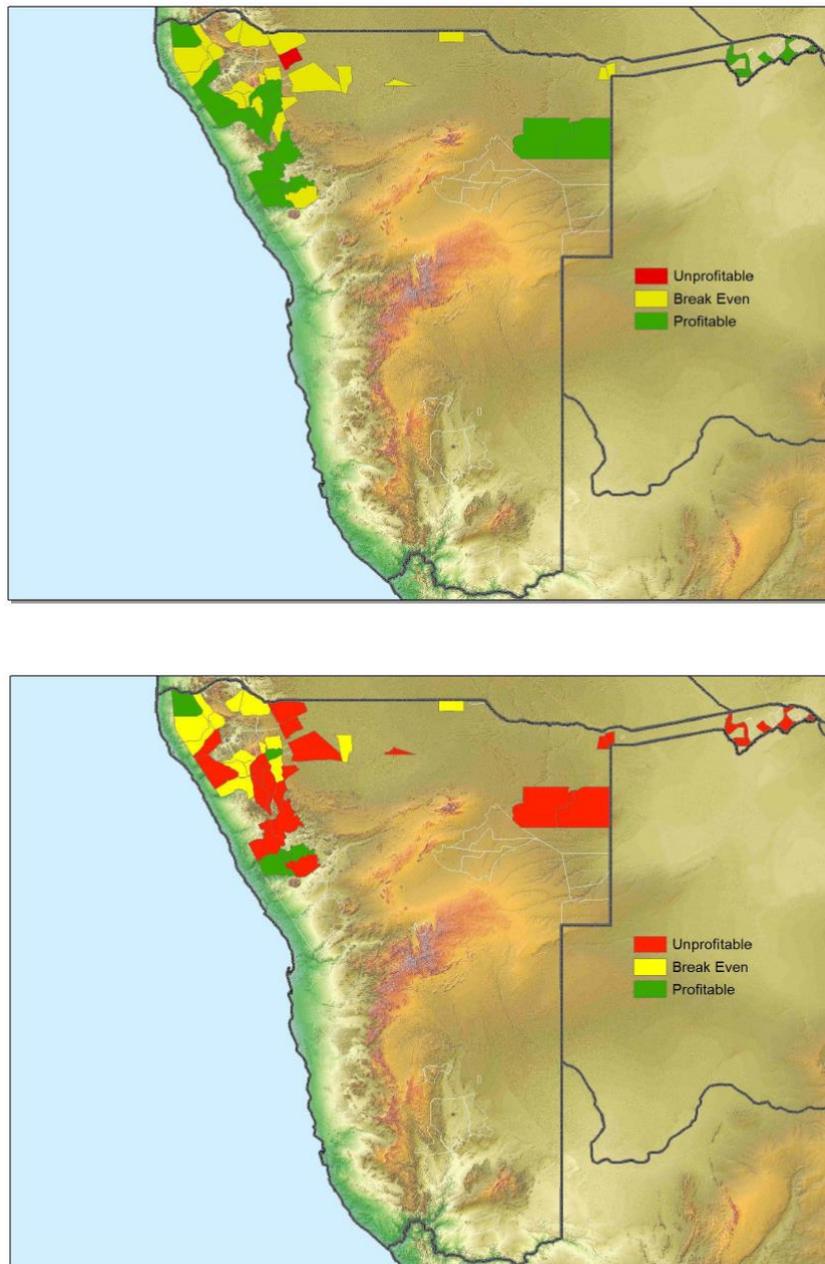


Figure 6.15: Revenues minus operating costs for 50 conservancies for which detailed management cost data were available in 2013 under: (a) the status quo; and (b) a simulated trophy hunting ban. "Break-even" conservancies indicate those for which revenues and operating costs are within \$5000 of one another (Naidoo *et al.* 2016: 29)

It is unsurprising, then, that CBNRM stakeholders are resolute in their condemnation of Botswana's hunting ban. "It is a huge mistake", a WWF employee told me, stating that "it will create a lot of resentment within communities; a lot of frustrated people [because] you have increasing elephant populations, increasing human-wildlife conflict and no benefits from them" (R38). Recent reports from Botswana would appear to confirm his prediction, with increases in poaching and human-elephant conflict leading to calls for the return of trophy hunting (Onishi 2015). This is particularly the case in peripheral or degraded areas attractive to hunters, yet lacking appeal to tourists in search of wildlife-rich, people-free landscapes. As Jamy put it, "tourists do not want to go to those areas [outside of the Okavango Delta in Botswana] because all you see are elephants and mopane⁷⁴; it is miles and miles of monotony" (R54). Nevertheless, he told me that hunting outfitters will spend money to pump water in those places - something which the government does not do - in turn benefitting both people and wildlife.

This is particularly important for the elephant, a species requiring vast areas of land in which to forage, yet finding its habitat increasingly constricted and fragmented as human populations expand. In densely populated areas like Kwandu, then, hunting revenue is deemed imperative to prevent the further spread of agriculture. As CBNRM practitioners are keen to point out, conservancies receive this cash injection soon after registration, providing vital funds to kick-start conservation activities including hiring Game Guards (Weaver *et al.* 2011; IUCN *et al.* 2015). Amongst a more conservation-minded populace elephant numbers may indeed increase, perhaps on a scale that makes the area attractive to wildlife-viewing tourists, but that is not always possible; nor is it desirable. Ecotourism's high levels of footfall, infrastructure development, and fossil fuel use mean its per capita environmental impact is far greater than hunting (Lindsey *et al.* 2006). As such, categorising ecotourism as 'non-consumptive' is not only inaccurate, but also masks broader environmental impacts beyond those that occur 'on site' at Namibian safari lodges (Büscher and Fletcher 2017). At the same time, ecotourism revenue is highly susceptible to exogenous shocks such as political instability and economic decline, whereas income from foreign hunters has proven more resilient (Weaver *et al.* 2011; Haring and Odendaal 2012).

⁷⁴ 'Mopane' is the common name for *Colophospermum mopane*, a tree which occurs only in southern Africa and is an important source of firewood for local people.

It is understandable, then, that the notion of replacing hunting with tourism holds little appeal amongst Namibian CBNRM stakeholders. They argue that hunting occupies a ‘spatial niche’ (Blignaut *et al.* 2008) that is complementary to and does not displace wildlife viewing tourism. As Namibia’s long-term development framework - ‘Vision 2030’ - makes clear, both activities are central to the country’s wildlife-based tourism product, set amongst ‘spectacular scenery and wide-open spaces’ (GRN 2004: 151). More importantly, Conservancy figures show that many local jobs are often created through joint-venture tourism enterprises, providing greater economic benefits at household level when compared with hunting (Figures 6.16 and 6.17).

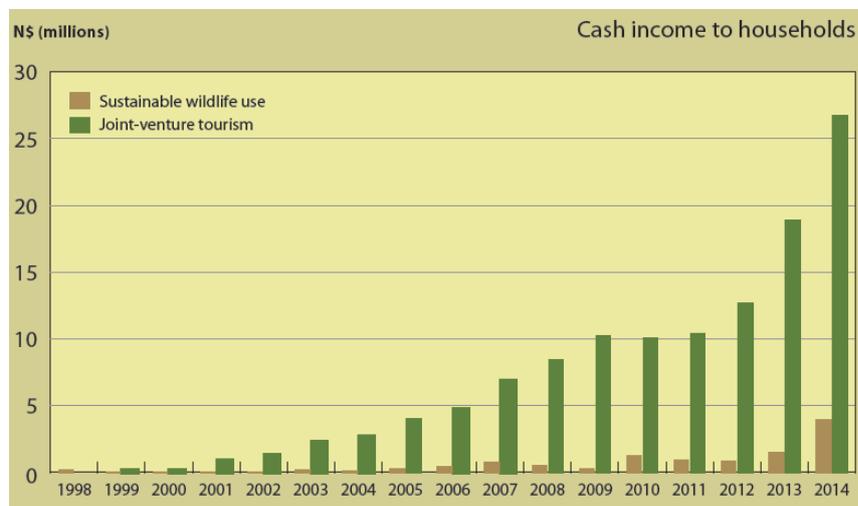


Figure 6.16: Cash income generated at household level from hunting and ecotourism (Reproduced from NACSO’s (2015: 59) ‘State of Community Conservation’ report for 2014)

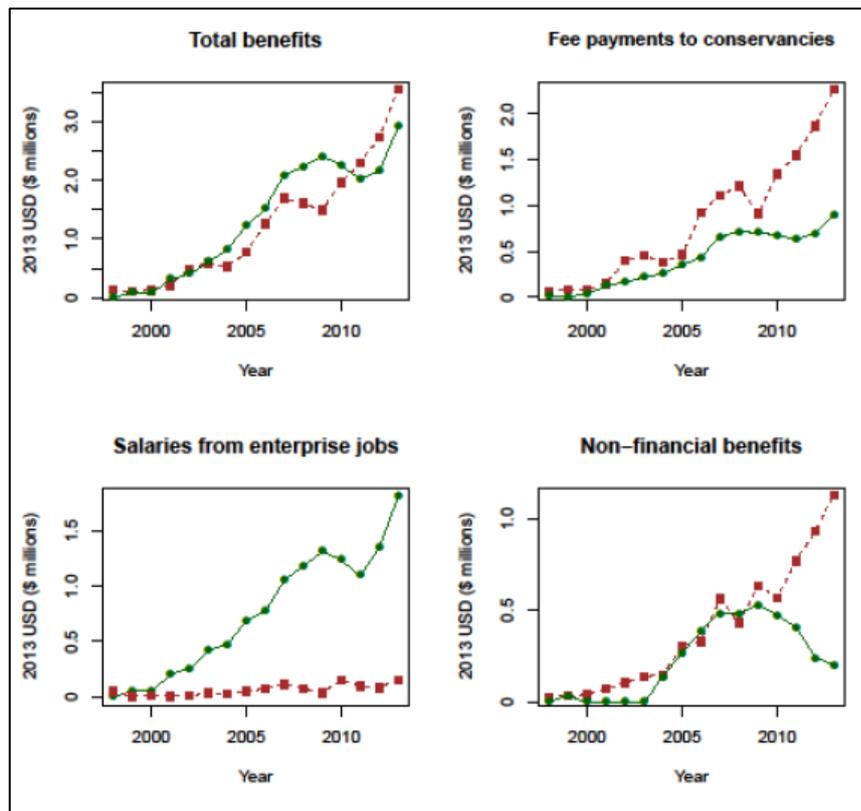


Figure 6.17: Benefits generation across all conservancies in Namibia's CBNRM programme, 1998-2013, from hunting (squares) and tourism (circles) (Naidoo *et al.* 2016: 26)

For that reason, Namibian conservationists emphasise the importance of harnessing both revenue streams in order to maximise economic benefits. Doing so has allowed the country's CBNRM programme to generate impressive revenues on a national scale (Figure 6.18). From less than N\$ 1 million in 1998, the total cash and in-kind benefits generated by conservancies has grown to over N\$ 91 million in 2014 (NACSO 2015a). When figures such as tourist spend in other sectors of the economy are factored in, CBNRM is said to contribute N\$ 530 million to Net National Income (NNI)⁷⁵, amounting to N\$ 4.15 billion since 1990 (Figure 6.19) (NACSO 2015a: 68). As this section has shown, the economic benefits generated from hunting elephants make a significant contribution to these sums on a national scale. However, Humavindu and Stage (2015) make the criticism that Namibian CBNRM reporting focusses on total revenues generated

⁷⁵ In this case, Net National Income (NNI) contributions are defined as the value of goods and services that CBNRM activities make available each year to the nation, including all income earned by communities, government, and the private sector. For example, hunting outfitter company profits, (hunting) tourists spending in the wider economy, tourism's use of products from other sectors, and re-spending which generates further income (NACSO 2014a, 2015a).

nationally rather than individual Conservancy income. This is largely true (as evidenced in many of the above graphs), yet NACSO also admits that around one quarter of the country’s conservancies fail to make a profit (NACSO 2015a). As the next section will show, Kwandu is one such Conservancy often struggling to generate benefits or returns for its members. In order to trace the spatial transformation of this socio-economic value at a local scale, then, the chapter now follows the money and meat (financial and in-kind benefits) from elephants hunted in Zambezi.

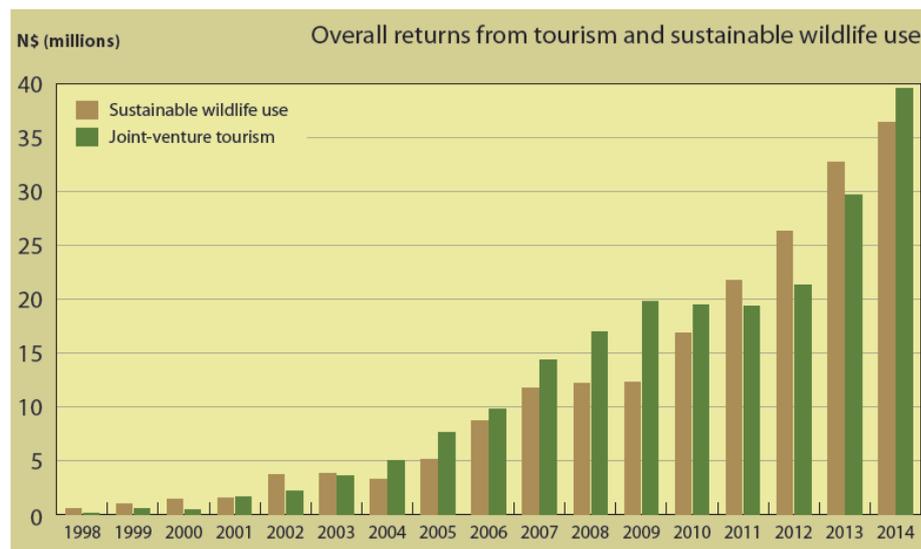


Figure 6.18: Overall returns from hunting and ecotourism (NACSO’s (2015: 59) ‘State of Community Conservation’ report for 2014)

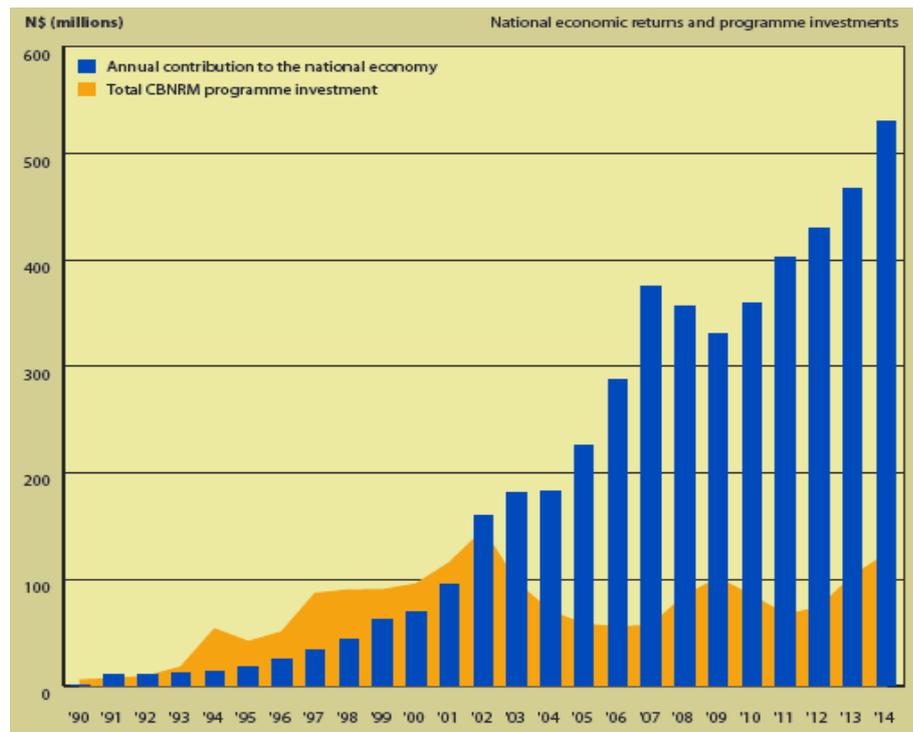


Figure 6.19: Graph showing CBNRM’s annual contribution to net national income, versus programme investment (NACSO 2015a: 68)

6.6 Following the Money and Meat from a Hunted Elephant

6.6.1 Following the Money

In order to hunt a trophy elephant in Kwandu, the client must pay Jamy a N\$ 222,000 (US\$ 22,000) trophy fee.⁷⁶ On top of a hunting license⁷⁷ and ‘Conservancy Fee’⁷⁸, the client must also pay a minimum of N\$ 261,590 (US\$ 25,900) in daily rates⁷⁹ for fourteen days spent on the elephant trail (JTHS website, 2016). Altogether, anyone wishing to hunt a trophy elephant in Kwandu can expect to pay JTHS upwards of N\$ 493,385 (US\$ 48,850) to do so. Whereas the daily rates largely cover Jamy’s operational costs such as accommodation upkeep and staff salaries, the trophy fee is to be shared with the Conservancy. Naidoo *et al.* (2016: 7) note conservancies typically receive ‘anywhere

⁷⁶ The exchange rate used is N\$ 10.1 / US\$ 1, and has been calculated from 30/12/2013 which is when the hunting season and the 2012-2013 contract ended.

⁷⁷ The hunting license costs N\$ 1,010 (US\$ 100)

⁷⁸ The ‘Conservancy Fee’ costs N\$ 8,585 (US\$ 850)

⁷⁹ This ‘daily rate’ includes hunting permits for any plains game taken; the services of a hunting guide, trackers and skinner; use of a hunting vehicle; field preparation of trophies; accommodation at any of the operator’s lodges and/or tented camps; and all refreshments.

from 30-75% of the trophy price' paid by the client to the PH. In this case, Jamy pays Kwandu N\$120,000 (US\$11,881) for each trophy elephant hunted with a tusk weight above 40lbs, or N\$85,000 (US\$8,415) for those with tusks weighing less than that.⁸⁰ More recently, JTHS has offered N\$125,000 (US\$12,376) per trophy bull hunted from 2014-2016 (JTHS, 2013). At present, then, the Conservancy receives just over 50% of the trophy fee.

Although Kwandu's percentage could be higher, the significance of these funds is highlighted in the Conservancy's annual income and expenditure data. In 2012⁸¹ Kwandu generated a total revenue of N\$488,188, N\$360,540 (74%) of which was produced directly from trophy hunting of game species, including elephant. Indeed, the money received from the sale of three trophy elephants made up a vast proportion of this sum. As of November 2013 93% of the Conservancy's income that year had come from hunting, including the utilisation of two trophy elephants. Unlike many other conservancies, Kwandu lacks a lucrative tourist lodge⁸² and it is no secret that most of its income derives from the hunting of elephants, a hugely important animal in the absence of other valuable big game species such as lion or buffalo. To that end, the economic value of elephants was made clear during multiple interviews with Conservancy staff, not least the treasurer who explained:

“The most valuable or important animals they are...[pause]...firstly it is the elephant, because they give much *income* in the Conservancy. Because if it is a good trophy, a quality trophy, just one it can get 120,000 [Namibian Dollars] from there.” (R23)

⁸⁰ According to Kwandu's contract with JTHS for the two hunting seasons spanning February 2012-November 2013, the prices for different 'classes' of elephant are as follows: Trophy elephant (single tusk weight more than 40lbs) on main quota = N\$120,000; Trophy elephant (single tusk weight less than 40lbs) on main quota = N\$85,000; 'Problem animal' elephant cow = N\$25,000; 'Problem animal' non-trophy elephant = N\$25,000; 'Problem animal' trophy elephant (single tusk weight more than 40lbs) = N\$100,000; 'Problem animal' trophy elephant (single tusk weight less than 40lbs) = N\$80,000 (Kwandu Conservancy, 2012).

⁸¹ Kwandu Conservancy's full income and expenditure data for 2013 is not yet available due to a time lag in the production of NACSOs annual natural resource reports.

⁸² Kwandu did have a campsite, but it was accidentally destroyed by fire in 2011. The Conservancy was recently awarded the head contract for a tourism concession in Bwabwata National Park, and is in the process of tendering this concession to private investors.

Yet this revenue barely covers Kwandu's operational costs. The salaries of its twenty-four staff members amount to around N\$ 326,400, and it is not unusual for the Conservancy to spend another N\$ 100,000 or more on expenses like 'sitting allowances' for the twelve management committee members and 'field allowances' for CGGs.⁸³ Presenting the Conservancy's mid-year financial statement at a meeting of Zambezi conservancies, the secretary noted that they were struggling with one income source and many expenses, and were currently running at a loss of N\$ 53,139.⁸⁴ This was in spite of hunting a trophy elephant in March. By the end of year AGM the Conservancy was reporting a deficit of around N\$ 17,000, despite failing to pay CGG salaries for the past few months and hunting a second trophy elephant in the meantime. Given Kwandu's dependence on the unpredictable nature of elephant hunting for its income, the Conservancy often goes months without funds whilst staff eagerly await the next big game hunter to try their luck in the Conservancy (MCA-N 2014c: 24).

These issues are exacerbated by Kwandu overestimating its potential earnings from (elephant) hunting. In 2013 the Conservancy expected to generate around N\$ 576,000 from hunting, yet received only N\$ 220,300.⁸⁵ Again, in its budget for 2014 Kwandu based its annual spending on a hunting income of N\$ 678,000, far above actual hunting revenues in previous years. When the viability of this budget was questioned by an NGO employee at the Conservancy's AGM, Kwandu's Chairman pointed out that JTHS had increased their 'guaranteed payment' from 2014.⁸⁶ This means that Kwandu is paid fees for two trophy elephants irrespective of whether the bulls are hunted. Yet this 'guarantee' is not reciprocated, Kwandu's hunting contract stating: 'Although the game sold to the Hunting Safari Operator is to be found in the concession area, no guarantee is made by the conservancy of finding and securing the animals on the quota and no refunds are offered' (Kwandu Conservancy, 2012: 4). Despite the increase in 'guaranteed payments' for elephants, then, it is unlikely the Conservancy will generate much extra income.

Given these budget discrepancies and the Conservancy's financial reliance on elephant hunting, it is unsurprising that Kwandu struggles to allocate much of its income to the

⁸³ These figures are based on secondary data obtained including Kwandu's financial statement for Jan-Oct 2013, and its budget plan for 2014.

⁸⁴ Field notes, 25/07/2013.

⁸⁵ As of November 2013, after which no significant trophies were taken in the Conservancy.

⁸⁶ Field notes, 10/12/2013.

local community (Table 6.3). In its constitution Kwandu emphasises the need to generate economic benefits for its members, stating that 50% of its revenue should be disbursed to the Conservancy’s six areas (KC Constitution 2011). Yet in the year its constitution was revised, the Conservancy distributed a meagre N\$ 500 (0.1%) of its income. This improved somewhat the following year when N\$ 69,000 (14% of total income) was disbursed to the wider community, largely in the form of N\$ 10,000 payments to each of the Conservancy’s six Traditional Authority (TA) sub-*khutas*⁸⁷ at the end of the year (MCA-N 2013). Running at a loss by the end of 2013, Kwandu’s benefit distribution had been put on hold, having made a small payment to a local school earlier in the year.

These figures are well below Kwandu’s own benefit distribution targets, but they are also below average for a multi-village conservancy in Namibia, which typically disburse around 20% of their income as cash dividends (Child and Barnes 2010). One CBNRM professional described these benefits as “miniscule” when compared with community trusts in neighbouring Botswana, for example, which distribute 50-70% of their earnings to members (R44). The Conservancy’s financial situation was summed up by an NGO director who told me:

“Kwandu is similar to many other conservancies; it is kind of the norm where they generate barely enough revenue to meet their operational costs, but do not have enough income to provide the kind of rate of return to members that you would really want.” (R39)

	2010	2011	2012	2013
Income (N\$)	277,124	352,086	488,188	234,992*
Money distributed (N\$)	0	500	69,000	2,000
Money distributed (as % of income)	0%	0.1%	14%	0.9%

Table 6.3: Kwandu Conservancy annual income and benefit distribution (Adapted from MCA-N 2013)

* This is Kwandu’s revenue from Jan-Oct 2013, after which there were no significant incomings.

⁸⁷ The *khuta* is the highest traditional legislative, administrative and judicial body in the tribal area. The main *khuta* of the Mafwe TA is outside of Kwandu at Chinchimani, but each of Kwandu’s six areas has its own sub-*khuta* (traditional court/council) where *indunas* meet to discuss issues and resolve community disputes.

Given this economic landscape and Kwandu's large population, any funds available for the community are normally used for social projects rather than dividing the money amongst individuals (NACSO 2014a; Mosimane and Silva 2015). As one *induna* in Mwanzi area told me:

“In Mwanzi [the N\$ 10,000] benefitted us a lot because we renovated our *khuta* which was too expensive for us as a community to donate. [...] And because our youth are drinking too much local alcohol, because they are doing nothing, we decided to buy a football and a sports uniform. Now you find they are busy at the ground; they like exercising. Without elephants we could not get those things.” (R40)

Yet for the majority of those not employed by the TA or Conservancy, a lack of individual ‘benefits in pockets’ can cause resentment towards both of these institutions and elephants alike (Silva and Khatiwada 2014). Interviewees often spoke in a manner detached from the Conservancy, such as a village elder in Kayuo who told me “the Conservancy wants elephants to be here because if a hunter kills one they will receive a lot of money from that.” He continued: “There is nothing that I receive from elephants [and] in my opinion they should just be chased away” (R43). Another elder woman acknowledged the economic value of elephants to the Conservancy so that staff can “get their salaries”, before asking “what about us whose fields are being trampled?” (R5) Even those heavily involved in the hunt, such as Mukusi, complained that “all the money will go to the Conservancy, but *we* the community gets nothing” (R57).

Similar criticism was directed towards the TA and its use of funds from the Conservancy. Under the rules in Kwandu's constitution the TA receives the entire hunting concession fee (N\$ 15,000) paid by JTHS. Additionally, as ‘patron’ and ‘vice patrons’ of the Conservancy, Chief Mamili and each of the six *silalo indunas* receive a combined honorarium of 5% of Kwandu's income (Kwandu Conservancy, 2011: 21). This is in addition to any general benefit distribution payments, which also go through the TA. Despite the meagre amounts that would be obtained should the TA distribute this cash to individuals, villagers complained that the *silalo indunas* hoard the money without passing any of it down to village level. “There is money which comes to the [*silalo*] *indunas* but they do not give it to us”, claimed one woman (R37). For that reason, an interviewee in

Singalamwe told me the Conservancy should instead “give that money [...] to the *induna* found *in the village*” (R11). One such village *induna* at Kayuwo supported this view, arguing that “the senior person who is above [him] eats that money by himself” (R43).

As Torquebiau and Taylor (2009) argue, financial benefits must reach not only the ‘community’ - whether that be the Conservancy committee or TA - but also the individual farmer who bears the direct costs of living alongside elephants. Yet, following the money from a hunted elephant has shown that very little accrues to individual villagers, apart from those lucky enough to be employed by the Conservancy or JTHS. It is clear that the money Kwandu generates from elephant hunting has little impact at household level. Much of it stays in the Conservancy, and that which does find its way to the wider populace is used for specific community projects, largely chosen by the TA. This study therefore supports previous research in Kwandu that found fewer than 3% of households were directly benefitting from revenue generated by the Conservancy (Suich 2013). For these reasons, government and NGOs are eager to point to the importance of elephant meat as an ‘in-kind’ benefit which impacts at household level (Naidoo *et al.* 2016). The next section follows the flesh from a hunted elephant in order to map its value transformation amongst stakeholders in Kwandu.

6.6.2 Following the Elephant’s Flesh

Despite being classed as a non-financial benefit, NGOs quantify the meat’s economic value before adding it to the Conservancy’s income and expenditure figures. As such, elephant and other game meat distributed in Kwandu in 2012 was estimated to be worth N\$ 186,728, bumping the Conservancy’s benefit distribution up from 14% to 38% as a proportion of income (MCA-N 2013) (Table 6.4). Undoubtedly the picture looks much more positive when these ‘in-kind’ benefits are factored in. However, following the movement of an elephant’s flesh after death illustrates how its materiality brings some into relation, whilst also excluding many others.

	2010	2011	2012
Cash Income (N\$)	277,124	352,086	488,188
Meat Value (N\$)	14,895	127,636	186,728
Money + Meat (N\$)	292,019	479,722	674,916
Money distributed (N\$)	0	500	69,000
Money distributed (as % of cash income)	0%	0.1%	14%
Total benefits distributed (as % of total income)	5%	27%	38%

Table 6.4: Kwandu Conservancy annual income and benefit distribution, including economic and ‘in-kind’ benefits (Adapted from MCA-N 2013)

Interviewees often stressed the importance of receiving game meat, particularly from large animals like elephants that provide much needed protein.⁸⁸ A young man in Mwanzi area went as far as to argue that “the only advantage for having elephants here is when they are killed [and we] get some meat” (R47). Some farmers that had suffered crop losses in 2013 also seemed content with receiving small amounts of elephant meat which “tastes good” (R41). In that respect, the elephant is known and valued as a ‘back-up’ to subsistence agriculture - as a kind of fall-back coping strategy in years of poor rainfall. Local people value it as a resilient animal and food source which can survive even in drought years. Somewhat counter-intuitively given the elephant’s troubled relationship with farmers and their crops, one interviewee legitimised elephant presence by contrasting their ability to withstand years of poor rainfall with that of crops which will likely perish:

“Even if there is a drought, elephants cannot die. [...]...The elephant cannot die due to hunger because the rain has not fallen. But the millet, if there is no rain, we cannot produce. That is how it is. So that is why we should have the elephant.” (R57)

⁸⁸ Field notes, 12/05/2013

Regardless of the animal's resilience, others claimed the meat from elephants was not enough to offset the cost of crop losses. Having received some elephant meat the previous year, Julia told me:

“Compared to the small meat which we were given and the field which has been destroyed it is really not good, because that meat is not even enough for all what you have lost. So there is nothing you can do; you just have to accept what you will get because we are in the Conservancy.” (R13)

The hunting of ‘own-use’ elephants is often at the request of the TA, in order to provide meat for traditional festivals and other cultural events. Prior to Kwandu's inception these ceremonial animals would have been provided by government, but MET now states it is the Conservancy's responsibility to satisfy these requests, and that hunting quotas make provision for this purpose (MET 2013a). However, it is not uncommon for the TA to request more than one elephant for these occasions (Plate 6.14), numbers which are often above Kwandu's own-use quota. In that respect, CBNRM professionals stressed the need for limiting game meat requests to important ceremonies, and “not for every time the TA wants to throw a party, regardless of whether it is for the community” (R19).

Nevertheless, one *ngambela*⁸⁹ told me all households are welcome to participate in these cultural events, noting “if there is an elephant which has been killed they bring the meat to the *khuta* and divide it to the people in the area” (R50). However, other individuals I spoke to complained that “the [*silalo*] *indunas* just keep [the meat] to themselves and enjoy, forgetting others” (R37). Of course, as large as an elephant is, it cannot feed everyone in the Conservancy, and complaints about the TA's distribution of meat are perhaps inevitable. Nevertheless, this research would appear to support case studies undertaken in other Zambezi conservancies which found that TAs received 70% of the meat from hunted game, whereas it went to households only 26% of the time (Kahler and Gore 2015). In that sense, Mosimane and Silva (2015) are correct to point out that Conservancy committees and NGOs provide little information on the percentage of people that receive these in-kind benefits, nor how they decide upon their allocation. Having been present in the aftermath of Leo's hunt in Mayuni, and having also witnessed

⁸⁹ The *ngambela* (or prime minister) is second in command to the chief of the Traditional Authority. (S)he communicates the wishes of the chief to the *indunas* (headmen) and vice versa (Jones and Barnes 2009)

the meat distribution process after a hippo hunt in Kwandu, it is clear that these ‘in-kind’ benefits vary spatially.

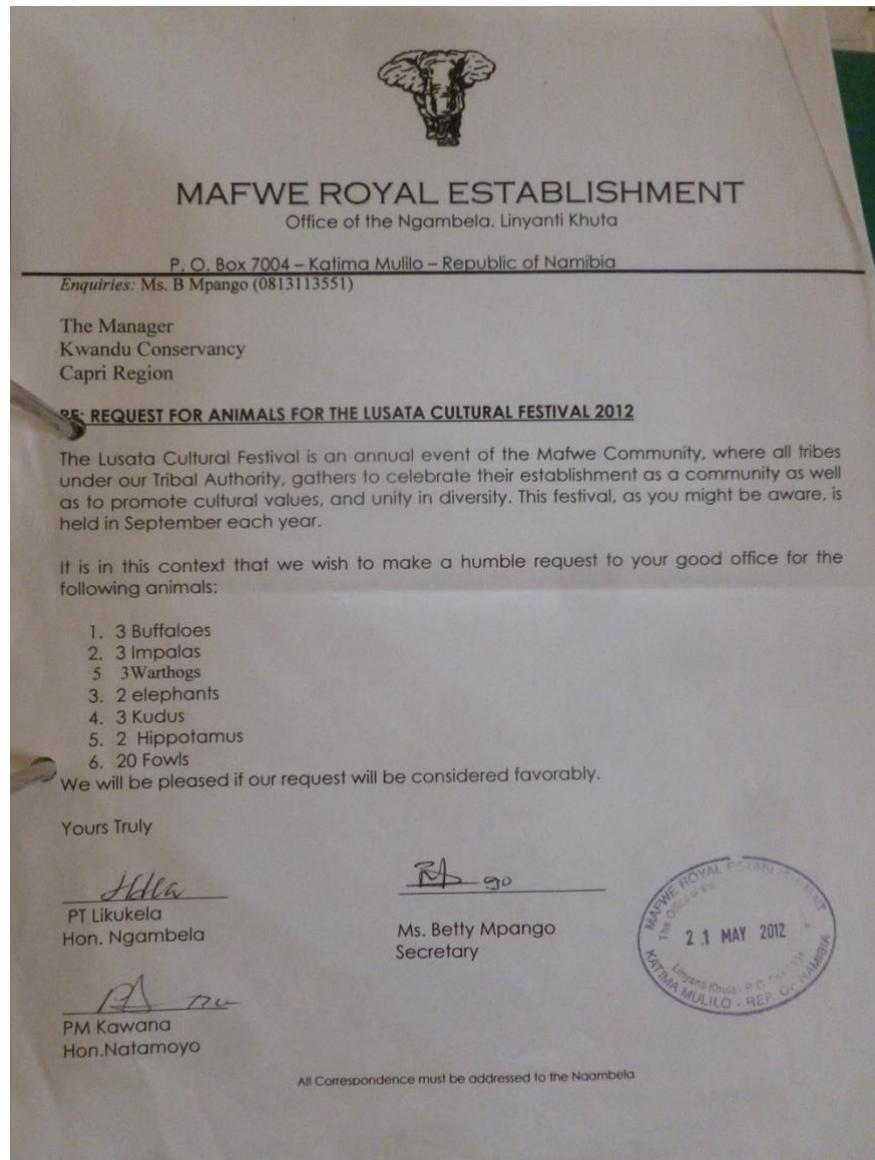


Plate 6.14: Mafwe Traditional Authority letter requesting game meat, including two elephants, May 2012

More often than not, the individuals who receive the most meat from hunted elephants are those nearest to the place it was killed. In Kwandu, the majority of hunting is done in the ‘corridor’ zone, close to the Zambian border at Singalamwe. As one interviewee in Sesheke told me: “At our area they do not hunt elephants; they just hunt at the border side where there are big elephants” (R30). This has caused resentment amongst individuals

residing in the other five areas who receive no meat from elephants hunted in and around Singalamwe. Villagers told me of an elephant hunted near the border in June, complaining that “they just distributed the meat amongst themselves that side” (R30), and “only the people at Singalamwe enjoyed the meat” (R28). Even Conservancy employees acknowledged this spatial bias, referring to Singalamwe as a “host scene” (R25) for elephant hunts, noting how those living there “get more benefits than other areas from meat [because] the elephants are more to their side” (R23). The perceived inequity of meat distribution between Kwandu’s six areas even caused friction amongst Conservancy staff. To that end, frustrations were often directed at the CGG who accompanied the hunters, one employee based in Sesheke telling me that “[Name of CGG] is having a problem, always taking the meat that side to Singalamwe.”⁹⁰

Yet even amongst those close to the place an elephant was killed, some individuals benefit more than others. Leo’s bull was hunted on an uninhabited island, and only those with access to a *mokoro*⁹¹ or willing to wade through crocodile-infested waters would make it to the carcass. Those first to arrive were largely young men, some of whom were paid to skin and dismember the elephant (Plate 6.15). Later, young women also started to show up at the scene. All received a healthy portion of meat, and even started cooking it on site (Plate 6.16). Although Frank (Mayuni CGG) directed operations, ensuring the majority of meat found its way to the wider community on the mainland, interviews with those in Kwandu suggest certain groups - in particular the elderly and vulnerable - become disconnected from this process. One such person was Susan, an elderly woman who had her crops destroyed by elephants earlier in the year, who told me:

“If an elephant has been killed, my side I get nothing because I cannot walk to go and take the meat at the place where it has been killed. [...] If there is someone who went there to go and collect meat, they are not going to give it to us for free; they are going to sell it to us.” (R55)

⁹⁰ Field diary, 29/08/2013

⁹¹ A *mokoro* is a wooden canoe used to navigate shallow waters by standing in the stern and pushing with a pole.



Plate 6.15: Frank (left) and villagers watch on as the elephant is butchered



Plate 6.16: Local people cook some elephant meat on Lechwe Island

Another interviewee told me “if you are weak [and] cannot stand up for yourself, you cannot get anything” (R3). In that sense, not everyone agreed that *indunas* and village elders are benefitting more than most from elephants. “People [at the carcass] cannot wait for the old man who is running behind”, one elder man told me. “You will find that this young boy - maybe this big (*gestures that the boy is small*) - he is the one who will be having the [elephant’s] head! They cannot think about the old men these days”, he

lamented.⁹² “There is no rule there”, another man told me, going on to note how “people are attacking themselves with knives” in order to obtain some meat (R3). Although the post-hunt scene on Lechwe Island was relatively calm, my observations in the aftermath of a hippo hunt at Singalamwe support these assertions:

‘I could no longer see the hippo (or what remained of it), just a mass of bodies hacking away with knives, or scooping with bare hands. Some worked in pairs, one cutting the meat before throwing it to an ally so as not to lose prime position at the carcass. Other more solitary workers ran back and forth, stuffing the intestines that remained into straw bags. By now, the eight original skinners had long disappeared with a lion’s share. When all that remained was a pile of bones for the lurking dogs, I was left thinking there must be a more equitable way of distributing the benefits from hunted game. What about people from villages up to fifteen kilometres away, who would likely not know a hippo had been killed, and even if they did, would be unable to get here on foot?’⁹³

At the same time, there are other individuals who actively distance or detach themselves from these ‘in-kind’ benefits due to religious values. More than 90% of people in Namibia identify as Christian, and those living in Kwandu typically attend the Seventh Day Adventist (SDA) Church⁹⁴ on Saturdays or the Apostolic Faith Church⁹⁵ on Sundays (Plate 6.17). Amongst both denominations there is a belief that elephants are ‘unclean’ animals, meaning individual members of both churches decline to eat its meat. Interviewees referred to passages in *Leviticus* - the third book of the Hebrew bible - which

⁹² Field notes, 15/08/2013

⁹³ Field diary, 23/05/2013

⁹⁴ The Seventh-Day Adventist Church is a Protestant Christian denomination distinguished by its observance of Saturday, the original seventh day of the Judeo-Christian week, as the Sabbath, and by its emphasis on the imminent second coming (advent) of Jesus Christ (http://en.wikipedia.org/wiki/Seventh-day_Adventist_Church). The SDA mission was the first to arrive in east Caprivi in 1924 (Wallace and Kinahan 2011:94)

⁹⁵ The Apostolic Faith Church, formerly the Apostolic Faith Mission, is a Pentecostal Christian denomination which has a presence in the United States, Canada, Africa, Asia, Europe, Central and South America, and Australia (http://en.wikipedia.org/wiki/Apostolic_Faith_Church). A prominent pastor at the church, who also worked at the Conservancy, noted that the first Pentecostal church in the UK was in Bournemouth, which became the headquarters of a network of Pentecostal churches known as the Apostolic Faith Church.

forbids human consumption of any non-ruminant⁹⁶ animal or those without cloven hooved feet. A prominent figure within the Apostolic Faith Church explained the problems which may arise should a pastor eat non-kosher meat, such as that of an elephant:

“That pastor will have no brakes or a bumper to stop him approaching his family’s belongings. The elephant can just come and go through the field of a farmer, without any notice. Then that pastor can behave poorly against his fellow church members’ belongings. You know, that spirit of ‘no control’ will just rule upon his body. If the church members make him annoyed - the way you see the elephants when they are angry, breaking the branches - he can even take the bible, throw the bible and say ‘I’m no more preaching; I’m going out now.’ It is not ok.” (R32)



Plate 6.17: Sign indicating location of Apostolic Faith Church at Singalamwe area

Yet many see no difference between elephant meat and that of other animals, valuing it as an important food source. To that end, one respondent in Mwanzi area alluded to the

⁹⁶ Ruminants (such as cattle, goats, sheep and antelope) are mammals able to acquire nutrients from plant-based food by fermenting it in a specialized stomach prior to digestion, principally through bacterial actions. The process typically requires the fermented ingesta (known as cud) to be regurgitated and chewed again.

hypocrisy of Conservancy staff who refuse to eat or touch the pachyderms, yet have no problem ‘eating’ the substantial income from elephant trophies:

“Those who are saying they are just waiting for the kingdom of heaven to come, like the Adventists, they do not eat [elephant meat]. Us, we eat! It is *food!* I used to ask them - especially [name of CGG] - he is an Adventist: ‘You are working in the Conservancy; you are getting money from the elephant - why do you *eat* that money from the elephant?’ [He replies] ‘Ah, the money is holy; the meat is dirty!’” (R40)

To those who consider elephant meat ‘dirty’, then, it can hardly be deemed remuneration for any hardships suffered living alongside these animals. For many, the elephant’s potential socio-economic value as protein is outweighed by its place within the individual’s religious belief system. This includes the likes of Mukusi, who having had his crops raided on numerous occasions told me he “cannot eat elephants [despite] feeding them” (R57).

For the majority of people not employed by the TA or Conservancy, then, a lack of individual ‘benefits in pockets’ can cause resentment towards both of these institutions and elephants alike (Mosimane and Silva 2015). In death the elephant can consolidate relations between individuals and institutions (including MET, Kwandu and the TA). At the same time, the perceived unequal distribution of money and meat from hunted elephants can destabilise the assemblage by pushing other individuals to the margins. In situations such as that in Kwandu, local people may seek new connections through which to obtain economic value from the elephant - principally by becoming involved in illegal killing. Alongside international hunting and trade bans, then, it is these ‘possibility spaces’ which pose the greatest threat not only to elephants, but to the existence of communal conservancies in Namibia.

6.7 Conclusion

Having traced the disassembling of the elephant post-hunt, this chapter has attended to the animal's material transformation. These assembled relations stretch far beyond Namibia's borders: the movement of an elephant's tusks and the circulation of its commodity value being contingent upon the flow of knowledge on an international level. However, fuelled by the current poaching crisis, anti-utilisation sentiment amongst western governments and animal welfare NGOs continues to grow. International hunting bans, trade restrictions and private sector policy changes hamper the movement of elephant ivory, thus decreasing the animal's economic value and posing a grave threat to the country's CBNRM programme (MCA-N 2013a; IUCN *et al.* 2015).

Faced with these problems, Namibian stakeholders emphasise the economic importance of 'conservation hunting' to conservancies. Indeed, the elephant's financial value in Zambezi is undisputed, with almost three quarters of total Conservancy income derived from the hunting of elephants (IRDNC 2015). Combined with the animal's non-consumptive tourism value, conservancies have been able to generate impressive revenues on a national scale. Nevertheless, having followed the money from a hunted elephant in Kwandu, it is evident that very little finds its way to people on the ground. Most is used to cover the Conservancy's operational costs, and any surplus is invested in community projects of the Traditional Authority's choosing. Further, although the movement of an elephant's flesh brings some into relation, many others are excluded from these 'in-kind' benefits. Some actively distance themselves from 'unclean' meat, whereas others are omitted due to their age, vulnerability, or location in the Conservancy.

These issues are by no means unique to Kwandu, yet they cut to the heart of the entire communal ethos upon which CBNRM is based, threatening the long-term sustainability of conservancies (IRDNC 2015: 14). As one community member heavily involved with Zambezi's conservancies warned:

“The biggest challenge I see for the CBNRM programme in the near future is [that] we are giving less to members. At the end of the day there is little benefit that they are getting. They will say ‘No, we are sick and tired of a

hundred dollars per year - I think it's better if we give up this CBNRM programme.'” (R53)

To that end, the next chapter considers how Kwandu Conservancy and the wider CBNRM programme retain their conceptual stability in the absence of economic benefits at household level. What other (non-)economic values do humans and elephants produce together, which help stabilise relations? And what kinds of individual and institutional alignments are forged in the production of an elephant's economic value? Tracing the transformation of knowledge and value within and between relational assemblages, the following chapter explores the coming together of individual (non)human components in ways that (de)stabilise CBNRM spaces. In these processes, the elephant is not merely a passive actor. Rather, in its arborescent and rhizomatic interactions with other 'things', the elephant is integral to the assembling of relational conservation spaces in Namibia.

Chapter 7: Assembling Conservation Spaces

7.1 Introduction

Building upon the previous empirical chapters that have ‘followed’ the elephant within and beyond Kwandu Conservancy, this final analysis chapter combines this ‘more-than-human’ ethnography with a political ecology framing in order to elucidate and critique the workings of neoliberal CBNRM. To that end, it attempts to illustrate the dynamic configurations of humans and lively nonhumans that (de)territorialise these neoliberal governmentalities. Importantly, the chapter attempts to explore the elephant’s agentic role alongside other (non)humans in (de)stabilising and forging connections between networks of local and (inter)national institutions involved in CBNRM. In doing so, it endeavours to generate an improved empirical understanding both of neoliberal conservation’s structuring effects and its contingent vulnerabilities. As a means towards challenging these dominant nature-culture ontologies, the chapter attempts to elucidate alternative socio-natures and relational values, produced through encounters between humans and lively things. In light of these insights, the chapter directly addresses the third research question by considering how CBNRM policy and practice can embrace these multinatural futures.

Section 7.2 is thus concerned with the assembly and (de)stabilisation of socio-natures in Kwandu. It explores the multiple, transitory, and often conflicting values that frame relations between people and elephants in the Conservancy (7.2.1). The section also considers spatial divergences in the elephant’s economic and emotional impacts, and the extent to which these costs are traded-off on a personal level. This is often contingent upon an individual’s place in emergent organisational assemblages, and the (de)stabilising impact of these institutional relations is discussed in 7.2.2. The chapter therefore explores the power relations between Kwandu and the Traditional Authority, and the capacity of both to enable and/or constrain individuals. The section finishes with a discussion of the powerful institutional networks that forge and stabilise neoliberal governmentalities in Kwandu.

However, these neoliberal CBNRM spaces are destabilised by institutions in Namibia and beyond, and section 7.3 explores these (inter)national knowledge and value disconnects. The section shows how a lack of sectoral collaboration can reduce the elephant's commodity value and the viability of conservancies (7.3.1). It also demonstrates how the elephant's place in this assemblage is threatened by the dispersed spatialities brought about through Namibia's market-based conservation approach (7.3.2).

Section 7.4 thus considers how Namibian stakeholders attempt to reterritorialise CBNRM in response to these knowledge and value fractures. This reassembling of relations involves making new connections with 'outside' actors in order to safeguard the institutional and economic sustainability of conservancies (7.4.1). For the same reason, stakeholders attempt to widen the scope of CBNRM and link conservancies with transboundary projects that appeal to funding agencies. This 'scaling-up' is discussed in 7.4.2, before the chapter moves on to consider the impact of this neoliberal (re)assembling on local socio-natures and the very identity of Namibia's CBNRM programme (7.5).

The final two sections of the chapter focus on the elephant's agentic role - alongside other (non)humans - in the production of relational values and space. Section 7.6 demonstrates how the elephant (co)produces its own commodity value, territorialising neoliberal conservation spaces in the process (7.6.1). At the same time, these contingent relations between lively nonhumans can affect the implementation of CBNRM. As such, the section considers how elephant ethologies deterritorialise space, opening up gaps in which some people can re-work CBNRM for their own benefit (7.6.2). Therefore, section 7.7 discusses these topologic spatialities in more detail, before considering the implications of these assembled socio-natures for CBNRM practice and policy.

7.2 Assembling Socio-Natures in Kwandu Conservancy

7.2.1 Individual (Dis)connects and Transformations

As the previous chapter illustrated, financial benefits from hunting have largely failed to translate at an individual scale. For those whose religious beliefs do not prevent them from eating ‘unclean’ animals, the receipt of elephant meat can allay the cost of crop losses, but these benefits are also spatially divergent. In that sense, although attitudes towards elephants may be impacted by the extent to which people receive socio-economic returns from hunting, they are far from solely dependent upon this. Rather, individual understandings and values of elephants are mobile, fluid, and often conflicting. These values are traded-off on a personal level and are influenced by individual relations with other (non)human actors, which may be temporally present or absent.

Given the meagre household returns from hunting, as well as the problems discussed in Chapter 4.2 concerning human-elephant conflict and the HWSRS, it is unsurprising that elephants are often vilified as ‘destroyers’. However, these understandings coexist - and often contradict - other knowledges and values at an individual level. Elephants are not only known as a threat to life and livelihoods, but also as intelligent and ‘human-like’ animals (Moore 2010). Villagers pointed to the elephant’s ability to ‘observe danger’ (R31) and its inclination to avoid conflict whenever possible. In that respect, elephants were often referred to as ‘good animals’, juxtaposed with carnivorous predators such as lion and crocodile. “An elephant can see somebody [but] if that person does not disturb it the person will just pass [and] the elephant will just watch”, one interviewee told me (R32).

Such sentiments speak to the elephant’s ‘existence’ value amongst villagers (Moore 2011). Although somewhat linked to the animal’s economic value as a tourist spectacle and the need for foreign visitors “to see some of the big animals we have here in Namibia” (R22), this existence value does not derive solely from economic motives. As noted in the previous chapter, elephants occupy an important place in religious belief systems, and interviewees were often keen to point out that these animals “belong to God” (R43). There is thus an understanding amongst many of the need for humans to co-exist peacefully alongside a creature that occupied the land before them (Moore 2010). Individuals see it

as their duty to protect elephants, bestowed upon them by God, irrespective of the hardships endured living alongside these pachyderms.

At the same time there is an emotional, intrinsic desire amongst villagers to interact with elephants. Indeed, it would be incorrect to presume that elephants are only of visual and experiential value to foreign tourists. A local resident may not need to travel long distances and pay vast sums to witness these charismatic creatures first-hand, but this does not necessarily mean they value the elephant's existence any less. Interviewees often spoke of a desire to feel close to elephants - animals which are an integral part of the landscape. Respondent's spoke of feeling "proud" that elephants could now be seen locally, even though "they are scary" (R11; R24). Such views might be expected amongst males with greater livelihood security, yet female farmers who had recently suffered crop damage also expressed a fondness for watching elephants and other wildlife in the area. Julia explained how she often goes to the site of Kwandu's derelict riverside campsite - Bumhill - a "quiet place where it is easy to see wild animals close by" (R13). She is one of many villagers that value elephants and other wildlife in and of itself. Partly as a result of the threat they pose, it is clear elephants provide abundant 'entertainment' value for individuals. Local people either flee from or are drawn to watch an animal which, for some, embodies a form of companionship, as explained by a local man in Sesheke area:

"[Elephants] are our friends; because whenever they are nearby the loneliness is not there. Some people go and watch what it is doing. Some people are running away from it. It is doing its job there." (R31)

Many of the farmers that had suffered crop losses earlier that year also legitimised elephant presence in terms of its educational value to the younger generation. Dorothy, for example, told me "it is good to have elephants in a country because the children need to see them", and that "if there are no animals it is not a good country" (R28). Similarly, a farmer named Jack lamented historic overhunting that had caused elephants "just to go in the bush or very far", but was happy that the animals were now "coming near the villages [meaning] we can see animals and children can know what an elephant is" (R41). Others emphasised the importance of children seeing elephants so that they learn how to read and understand their behaviour and mood in order to avoid conflict. "Children should learn how elephants react to situations; like if they are angry, if they are ready to attack

or if they are ready to destroy crops,” explained Merinah (R37). What becomes clear is that an elephant’s ‘corporeal charisma’ (Lorimer 2007) is not limited to white, western trophy hunters. Amongst villagers, the elephant’s affective capacity to excite and enchant are integral to the formation of ethical inter-species relations. As such, these emotional knowledges and values are fundamental to the assembly of socio-natures in Kwandu.

Yet these relational interactions with elephants take place at a certain distance. Conversely, after a successful hunt, these relations can become more proximate. For some, the value of elephant hunting is not so much the meat they may receive, but the opportunity to become physically and emotionally closer to the animal. They can look carefully at and touch this charismatic, elusive creature that is usually a mere shadow in their fields at night. The childhood stories told to one interviewee by his father, as well as his lifelong interactions with elephants are indicative of the animal’s combined educational and emotional value to certain individuals:

“My late father used to tell us stories about how an elephant has one hand; it takes with that hand and eats, then it takes water with that hand and drinks. So I could not understand how everything can be done with that one hand! Then the first time I saw an elephant I wanted to go closer [but the elders] warned us not to go closer [because] it can kill us. I did not get close to it until now when I am a big man and we have the Conservancy. When the trophy hunter killed it was my first time to see it lying [on the ground]. I came and saw that this is an elephant.” (R40)

Alongside these intrinsic values, individuals also pointed to the beneficial role elephants play in the environment. Respondents referred to the animal’s important ecological functions, opening up the forest through its movements and foraging (Moore 2010, 2011). This bush clearing assists people in the creation of new farms and settlements, as well as allowing for the growth of new grass upon which cattle can feed. Although these values are not purely economic, one interviewee claimed “a farmer could spend two thousand [Namibian Dollars] trying to open those areas” (R25). Others referred to the importance of easily accessible firewood - the result of elephants feeding in the forest and breaking large branches. Such ‘pruning’, as various respondents called it, encourages new growth thus benefitting the tree itself (R23; R25). In doing all of this, elephants create vegetation-

free pathways which, in turn, makes the forest more easily navigable for local people attempting to harvest veld foods or collect timber. As such, rather than hunting elephants, one respondent claimed that “it is better to leave the elephant there, working for you” (R31).

For individuals living alongside these ecosystem engineers, the (emotional) socio-cultural values discussed above are no less significant than economic values (Seddon *et al.* 2016). Each plays a role and is traded-off during the cognitive and emotional becoming of individuals. These individuals are coalitions of heterogeneous values and processes, emphasised in the conflicting and ambiguous understandings of elephants espoused by local people (Barua 2014b). Despite the hardships of cohabitation, very few people believe elephants have no place in the region, or that they should be eradicated. Even the likes of Susan, who told me “it is better not to have elephants”, later admitted that “[she] could like them if they did not eat the crops in my field” (R55). Julia, who spoke of her joy watching elephants at the river, at other times complained that “it is impossible to live with them” (R13). As one Conservancy employee put it: “The people here really feel elephants in a dynamic way” (R25).

This speaks to the temporal nature of cohabitation, and the fluidity of value depending on the wider assemblage of (non)human actors. In particular, the presence and/or absence of ripe crops and Kwandu’s Professional Hunter have an impact on these understandings. These individual value transformations were encapsulated in the words of one female interviewee, who told me:

“I like the elephants during August when we have finished ploughing. In August the elephant should keep on walking around so that the trophy hunter can get them to shoot and pay the trophy. Then I do not want the elephants during January, February and March because they are the destroyers of the crops. [Then] I do not want to see an elephant passing near my field.” (R1)

Jamy also acknowledged this temporal contradiction, noting that “everybody wants the elephant to be shot in their area, but they also do not want the elephant to *be* in their area” (R54). In that sense, positive environmental values such as an individual sense of ‘ownership’ over elephants are also often dependent upon whether the animal is alive or

dead. An NGO employee born in Zambezi alluded to this fluid, conflicting nature of ownership, noting:

“During the ploughing or harvesting season you will find that farmers instead of saying ‘Our elephants are destroying our crops’, they will say ‘*Your* elephants as Ministry of Environment and Tourism are destroying our crops.’ But come June, when hunting is taking place, they are viewing that elephant as *theirs*, after it is dead. But when it is causing a problem they say ‘It is *your* elephant.’” (R53)

As such, the elephant’s ‘place’ in this shifting assemblage is far from clear-cut. Individual farmers build fences, bang drums, and light fires and chilli bombs in an attempt to territorialise cropping spaces and exclude elephants. For some, these ‘practices of detachment’ are crucial to maintaining a necessary space-between-relation. These exclusionary spaces are organised around ‘hoped-for-absence’ (Ginn 2014: 538) and are central to the composition of (non)human relations in Kwandu. Yet these attempts at ‘pulling apart’ coexist with understandings that individuals are largely powerless to control these ‘wild’ animals. More than this, other nonhuman things such as rainfall also affect these interactions, rendering chilli bombs and fires futile. At other times the ontological and cartographic schisms between human and elephant spaces are much more ambiguous. Villagers acknowledge that elephants “cannot be separated from people”, contrasting the “domestic” elephant with wild animals that live far away from humans (R57).

Such conflicting understandings also derive from the varied ethologies and personalities of individual elephants. Not all elephants are alike, and those aggressive males in *musth* that raid crops during the rainy season - the ‘bad’ elephants - are not the same as females and young animals villagers may encounter at other times of the year. This ‘multi-faceted nature of cohabitation’ (Barua 2014a: 928) is often glossed over in dominant conservation narratives, whereby humans are portrayed either as ‘noble savages’ or ‘poachers’. Likewise, elephants become dangerous pests or endangered megafauna. Rather, this ethnography sheds light upon the multiple, fluid, and often conflicting values that frame relations between humans and elephants in Kwandu.

Yet these human-elephant relations also differ from one person to the next. In spite of the multifarious non-economic values espoused by local people, individual attitudes towards elephants - and by association the Conservancy - are influenced heavily by crop-raiding. As discussed earlier, these impacts are not only economic. Rather, efforts undertaken to protect crops also exert a physical and emotional strain on individuals, as does the loss of expected yields. The economic and emotional impact of these elephant-plant interactions also differs from one farmer to the next, depending on an individual's connection to other (non)humans.

In that sense, individual capacities to exercise those important 'practices of detachment' discussed above are varied. Not all households are labour rich, and for those women heading families without spousal support the task of protecting crops can be particularly arduous, if not impossible (DeMotts and Hoon 2012; Khumalo and Yung 2015). For women with young children to care for, staying awake all night to tend fires and bang drums is a particularly difficult challenge. Added to that, these women often lack the funds to purchase essential mitigation tools such as wire and chilli to protect their fields.

Compared to other individuals and households with more diversified labour and income sources, then, the fields of single women are particularly vulnerable to crop-raiding. In that sense, although elephants may be prevented from entering certain fields, this only serves to pass the problem onto neighbouring farmers who lack adequate means of protecting their crops. Having suffered crop-raiding earlier that year, Merinah noted how "[people at] other fields nearby were making noise and even had guns." Unfortunately, this meant that "the elephants came straight to [her] field" where there was "no noise or anything like chilli bombs" (R37).

Just as individual capacities to 'detach' elephants from farming spaces vary, so do the impacts of crop losses. A single mother who loses a year's harvest in one night will suffer greater economic and emotional hardship than an *induna* who loses crops from a bigger field, but has alternative income sources (Jones and Barnes 2009; DeMotts and Hoon 2012). Amongst those who own cattle or have family members in receipt of state pension payments, food can be purchased in the event of lost harvests. For those less fortunate, these events may result in food shortages. Indeed, some can afford to bypass the HWSRS scheme altogether. Having lost his maize crop earlier in the year, Jack told me that he

made a claim “so that [his] family did not suffer.” However, he also noted that other farmers “just relax if elephants attack their crops [because] they live better at their places” (R41).

As discussed in Chapter 4.2, there is a need for HWC policy in Namibia to pay greater attention to these ‘lines of fracture’ on an individual scale (Li 2014: 600), which are not solely economic. Rather, these impacts also depend upon an individual’s gender, age and marital status, as well as household labour resources, alternative livelihood strategies, landholding size and location in the Conservancy (Khumalo and Yung 2015). On that point, my own policy recommendations will be put forward later in the thesis. For now, it is important to note that those households suffering the greatest economic and emotional burden of living alongside elephants are not necessarily those who benefit from CBNRM’s economic opportunities.

As such, the extent to which these costs can be traded-off on a personal level will depend not only upon the kinds of individual socio-cultural values that were discussed earlier. Rather, they are also contingent upon the degree to which individuals are enabled and/or constrained by emergent assemblages of which they are a component part. This includes institutional organisations such as the Conservancy enabling individuals to form relational connections with (non)humans. At the same time, these (non)human relations have the potential to (de)territorialise organisational structures, perhaps stabilising the position of certain actors whilst pushing others to the margins. The next part of this chapter explores the transformation of knowledge and value within these institutional assemblages.

7.2.2 Institutional (De)stabilisation and Transformations

As the previous chapter demonstrated, the movement of an elephant's flesh and money generated from the sale of its body parts is crucial to the functioning of Kwandu Conservancy. In death, the elephant can consolidate relations between individuals and institutions, including the Conservancy, Traditional Authority and the Hunting Operator. These alignments are illustrated in Figure 7.1, produced by Namibian CBNRM NGOs in order to show the flow of (non-)economic benefits to different sections of a stylized community. This chapter now traces the transformation of knowledge and value within and between these institutional assemblages.

Recognising that conservancies are embedded in and emerge from a complex network of (inter)national organisations, however, the section moves beyond the local level to track the transformation of knowledge, values and power within this institutional network. In doing so, the section illustrates how (non)human components are territorialised by these institutional organisations, in ways which help overcome the individual disconnects and fractures discussed above. The section is thus concerned with the coming together of individual (non)human components in ways that stabilise and legitimise these institutions (DeLanda 2006; Weisser 2014). At the same time, it attempts to highlight those spaces where knowledge and value cease to flow, where (non)human relations are reassembled and the very existence of these emergent entities is threatened.

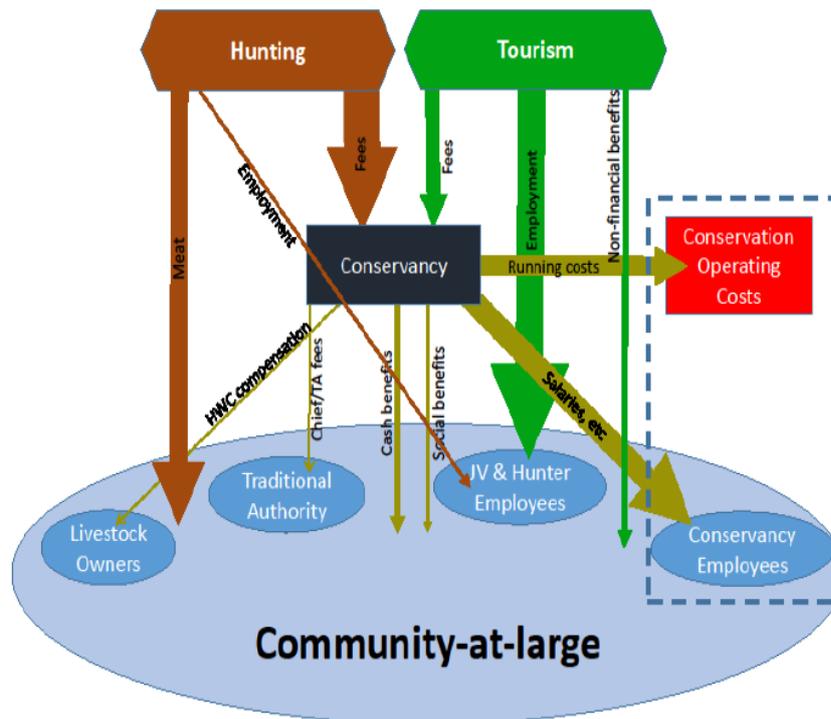


Figure 7.1: Schematic representing the flow of benefits to various sectors of a stylized local community in Namibia. Widths of arrows are proportional to actual monetary values of flows to conservancies during 2011-2013. Specific stakeholders (blue ovals) and the overall community-at-large (large light-blue oval) receive the benefit flows indicated by the arrows ending there. Hunting benefit flows are in brown, tourism benefit flows in bright green, and flows containing a mix of benefits from both hunting and tourism are in dull green. Income to the conservancy committee (black rectangle) comes from both sectors and is redistributed in the various ways indicated. The dashed box reflects reinvestment of income into conservation activities. (Naidoo *et al.* 2016: 28)

7.2.2.1 Kwandu Conservancy

Largely as a result of the income generated from elephant hunting, Kwandu is able to employ twenty-four staff members. These include the Conservancy Manager, Secretary, Treasurer, Enterprise Officer, as well as fourteen Game Guards, amongst others.⁹⁷ Each member of the Conservancy’s Management Committee also receives various economic incentives such as ‘sitting allowances’. Although there are often problems with salary payment, the importance of these jobs cannot be underestimated in a region where

⁹⁷ The Conservancy also employs a Field Officer, Forester, 2 Gardeners, 2 Security Officers and a Cleaner.

employment is extremely scarce. “When I left school I was just in the village doing nothing”, one CGG told me. “Then when the Conservancy came I got work” (R29). At the same time, this employment can undoubtedly incentivise staff - as well as family members who depend upon this income - to live alongside elephants.

As discussed in the previous chapter, Kwandu is clearly struggling to provide its wider membership with adequate socio-economic benefits. Added to that, the Conservancy’s large area and relatively high, dispersed population means it is difficult to distribute information and forge community cohesion (Collomb *et al.* 2010; MET 2013a). Both of these factors have a destabilising impact on Kwandu as an institution, leaving individuals feeling detached from the Conservancy and its central office in Sesheke area. According to Kwandu’s Constitution, all resident individuals (and their spouses) over the age of eighteen are considered ‘members’ of the Conservancy and thus are entitled to wildlife benefits (Kwandu Conservancy 2011). Yet this is not an identity resonating with many individuals who largely associate the term with those employed by Kwandu. For example, one village *induna* told me: “I am not a member of the Conservancy because I am not working there” (R15).

In the absence of these individual benefits many residents are simply “waiting around for their chance to eat” (R59), as one informant put it, hoping that they might one day be employed by the Conservancy or elected as a committee member. Some expressed a desire to join the Conservancy staff in order to “change some of the problems that are there”, whilst others complained that “even if you voice your opinions there is no good answer from the Conservancy people” (R5). Indeed, there is a general reluctance amongst residents - especially women - to attend Conservancy meetings. One female interviewee at Singalamwe told me “I am never benefitting [from] anything so there is no need for me to go to a meeting”, and that “even if I go there and raise my ideas they [will] not listen to me” (R10). Such sentiments support IRDNC’s (2015) assertion that decision-making processes, information flow, and revenue allocation has become too concentrated within the confines of Conservancy committees. This has undermined a wider sense of ownership and collective mobilisation amongst the broad membership, who believe the Conservancy is largely run by and for the committee.

In this landscape Community Game Guards (CGGs) are crucially important actors in forging ties between individuals and the Conservancy. In their interactions with those that have suffered crop and livestock losses, CGGs bring distant farmers into relation with the Conservancy as an institution. Yet their role is more than that of mere ‘extension officers’. Rather, as one longstanding CBNRM professional put it: “Game Guards are the hearts and minds of the programme” (R16). Since CBNRM’s inception in Namibia they have been at the frontline of conservation efforts - the ‘boots on the ground’ - conducting monitoring and anti-poaching patrols as well as raising awareness amongst communities about the value of wildlife (IRDNC 2012; NACSO 2014a). Having spent many hours walking alongside CGGs as they went about their daily duties, it is clear they play an important role in stabilising relations between people and elephants in Kwandu.

CGGs would often exchange information with farmers during patrols, warning them of predator presence in the Conservancy, for example. CGGs are held in relatively high esteem in their communities, and many of Kwandu’s original CGGs are still in position today or have moved onto other Conservancy roles. Their enduring presence maintains a sense of institutional order and stability, alongside other long-term employees. The Senior Ranger, for example, was part of Kwandu’s inaugural committee in 1996, during which time he “started teaching people to know what the Conservancy is” (R14). The role of these long-term employees (particularly CGGs) should not be underestimated, acting as conduits for knowledge transfer between disconnected individuals inhabiting dispersed villages. Having grown alongside the Conservancy in post-colonial Namibia, these individuals are repositories of institutional knowledge gained through decades of conservation work. For that reason, they are crucial actors in stabilising (non)human relations in Kwandu.

Yet they are perhaps the last of their kind. CBNRM NGOs are concerned that in recent years the role of CGG has lost some of its prestige amongst rural communities (IRDNC 2012). CGGs are also often overlooked while office-based staff and Conservancy committees are lauded for the achievements of the programme (NACSO 2014a). Having been based at the Conservancy office for much of my time in Kwandu, I also got the impression that administrative staff considered themselves superior to CGGs (which is reflected in differing salaries). Yet I would argue this problem is merely reflective of the general decline in status of all Conservancy positions, regardless of whether field or

office-based. As rural communities become more connected to urban centres, Conservancy roles are largely viewed as a stepping-stone to government and private sector jobs in these areas. This is particularly the case for Kwandu's youth, but is also true for the Conservancy's existing staff. These issues were apparent during a monthly meeting at Kwandu's office, as recorded in my field diary:

‘During the meeting [the Conservancy Manager] and [Field Officer] both distanced themselves from long-term Conservancy roles. Showing everyone his business card, [the Manager] advised people to use the skills gained through Conservancy employment to do other things. Similarly, [the Field Officer] told us that he had been applying for jobs with the Ministry of Environment and Tourism and that he did not wish to be a Field Officer for the next twenty years.’⁹⁸

For rural aspirants the Conservancy's utility as a career springboard is, of course, a good thing. As CBNRM practitioners point out, the programme has unlocked human capital and provided mobility for people in remote areas where access to training opportunities is limited (MCA-N 2013a). On the other hand, the inclination for skilled individuals to move away from the region erodes local institutional capacity. More than this, communities dissatisfied with perceived mismanagement amongst the Conservancy committee (of which many staff are a part) are voting them out on an increasingly regular basis. These new committee members have little experience or knowledge of Conservancy affairs, causing instability within the organisation (Jones 2010). Taken together, this draining of ‘institutional memory’ (NACSO 2014a) has a deterritorialising impact on Kwandu Conservancy and its ability to maintain relational connections between its (non)human components. Where these individuals are disconnected from - or disillusioned with - the Conservancy, the role of the Traditional Authority (TA) in stabilising these CBNRM spaces becomes ever more visible. It is to the relational interactions that both produce and are enabled by the TA that the chapter now turns.

⁹⁸ Field Diary, p.18. 14/12/2012

7.2.2.2 The Traditional Authority

Given their legal powers over land allocation in Namibia's communal areas, Traditional Authorities (TAs) are integral to the successful functioning of conservancies (Harring and Odendaal 2012). This is no different in Kwandu, where the Mafwe TA allocates customary land rights to households for residential and farming purposes (GRN 2002). In conjunction with the Zambezi Communal Land Board (ZCLB) - which resorts under the Ministry of Lands and Resettlement (MLR) - the TA may also grant leasehold rights for the commercial use of land in Kwandu, such as agricultural projects or tourism developments (Jones and Barnes 2009; MET 2013b). Added to their statutory duty under the Traditional Authorities Act to ensure sustainable natural resource use in their communities (GRN 2000), the Mafwe TA is clearly an important institution with whom Kwandu must work in close partnership.

For that reason, the TA has been heavily involved in CBNRM activities since Kwandu's inception. In practice, MET will not register a Conservancy without endorsement from the respective TA, and it is these institutions that have often been the driving force behind Conservancy formation in Zambezi (Jones and Barnes 2009). In that sense, a villager in Mwanzi stated that "this land is for traditional people [and] our *silalo indunas* allowed the Conservancy to be here" (R26). One such *silalo induna* who also sits on Kwandu's management committee supported this assertion, telling me "the Mafwe Traditional Authority are the ones who asked [MET] for the Conservancy to be here" (R52). Indeed, Kwandu's inaugural Chairman (who at the time was a village headman) recalled persuading the Mafwe Chief to approve the Conservancy alongside other *indunas* in the mid-1990s:

"We had a problem with the Chief at Chinchimane. He did not think it was possible to live with animals. One day he looked at me, because I was the main spokesperson, [and said]: 'What? Conserving wildlife? That is the duty of the government! What will you do once the wildlife starts grazing in your field?' But eventually the Chief never refuses when the local headmen have accepted. He said 'Ok, if you want it, it is up to you.'" (R59)

Since then the TA has undoubtedly become an integral component of Kwandu. With representation on the Conservancy's management committee, the TA advises on zonation and natural resource governance, as well as electing other committee and staff members from each of the Conservancy's six areas (Kwandu Conservancy 2011). CBNRM professionals are thus eager to point out that TA involvement is essential for effective conservancy governance (NACSO 2014a). As one CBNRM practitioner put it: "The TAs are your local government, so you cannot really work without them. I just cannot see how the conservancies could operate without their good will" (R44).

It might be argued that the Conservancy's dependence upon the TAs 'good will' is reflected in how Kwandu distributes economic benefits from wildlife. As discussed in the previous chapter, all benefit distribution payments go through the TA, who also receive the entire N\$ 15,000 hunting concession fee paid by Kwandu's Safari Operator. Chief Mamili and each of the six *silalo indunas* also receive a combined honorarium of 5% of Kwandu's annual income as 'patron' and 'vice patrons' of the Conservancy (Kwandu Conservancy 2011: 21). Alongside the elephant's flesh, this money reaffirms the TA's importance and stabilises its role both within the Conservancy and society more broadly. As one NGO Director put it, "it is almost as if the Conservancy sustains and *feeds* this traditional leadership" with meat and money from elephants (R39). Distribution of benefits in accordance with each of the six TA sub-*khutas* also performs and reinforces this institutional stability. Harring and Odendaal (2012: 33) are thus correct in observing a 'symbiotic relationship' between conservancies and TAs. The Mafwe TA is both legitimised and supported economically by the Conservancy, and powerful individuals such as Chief Mamili and the *silalo indunas* benefit directly from the consumptive use of elephants. The TA may, in turn, share these socio-economic benefits with community members by implementing social projects or hosting cultural festivals, thereby stabilising (their role in) the CBNRM assemblage.

At the same time, the cooperation of these powerful individuals and the broader TA is essential to the Conservancy's own institutional survival. This is particularly the case because of the TAs importance in the region, and its capacity to 'act back' upon individuals. Under Namibian law, the primary functions of TAs are to promote peace and welfare amongst community members and to ensure the observance of customary law (GRN 2000; Tchamba and Odendaal 2005). Unlike many other regions of Namibia, TAs

in Zambezi⁹⁹ have retained much of their political and cultural vigour (Collomb *et al.* 2010; Wallace and Kinahan 2011). Having spent many years working on the CBNRM programme in the region, one NGO director explained this “Zambezi phenomenon”:

“In Zambezi traditional leaders are very central to how things happen on the ground. They are given a lot of respect. The local community has kind of legitimised their existence and their presence and seems to do it in a...[pause]...it is way more than I have ever seen anywhere else in the country.” (R39)

Amongst the Mafwe in Kwandu this reverence is directed not only towards Chief Mamili, a ‘chosen’ man who is ‘respected, feared and adored’ (The Namibian 2015b). Rather, amongst communities in Kwandu the *silalo* and village *indunas* are also powerful individuals. “Our culture teaches people to respect elders so that in years to come those young ones must be the leaders”, one area *induna* told me (R52).

Indeed, this strong sense of individual identity with one’s Traditional Authority is an important factor in Kwandu. Given the TAs role in the receipt and distribution of wildlife benefits it is perhaps unsurprising that they are largely supportive of CBNRM, despite some dissenting voices amongst their own communities. “I would say that in Kwandu the *indunas* are the most supportive people in terms of Conservancy aspects, compared to the general members”, Kwandu’s current Chairman told me. “Some of [the members] are having a negative thinking, but the *indunas* really give more support”, he noted (R56). In that sense, the TA as an institution can serve to temper any dissatisfaction arising amongst local people, achieved partly through the provision of social projects and cultural festivals implemented with cash derived mainly from the consumptive use of elephants. Yet perhaps more importantly, the TAs cultural strength in the region means its support for the Conservancy goes largely unchallenged. “No one will stand up and oppose the TA”, complained one CBNRM professional (R19). Indeed, this point was supported during an interview with Kwandu’s inaugural Chairman, when recalling the initial stages of Conservancy formation:

⁹⁹ There are four government-recognised Traditional Authorities in Zambezi Region: Mafwe, Mashi, Masubiya, and Mayeyi.

“Did you have any problems getting the community on board?”

“We did not have any problems. In fact, the community were very receptive; we did not have any challenges. You know, a community led by headmen, whether they like it or not, they just respect. They just followed.” (R59)

Indunas at all levels use this cultural power to stabilise relations between individuals, elephants and the Conservancy more broadly. As Kwandu’s Senior Ranger told me: “If we spread some news in the *khutas* then the *indunas* will address their people about the Conservancy” (R14). These powerful individuals then set about fostering a conservation ethic amongst villagers, “telling them that they must stop poaching” (R52) and that “they should follow the Conservancy rules [by] taking care of the animals” (R15).

However, it might be argued that the Mafwe TAs capacity to constrain and/or enable individuals is waning, with implications for the stability of (non)human relations in Kwandu. Communities in rural Namibia are diversifying as people move more often and become exposed to the outside (Harring and Odendaal 2012). Despite all of the villages in Kwandu being linked to the Mafwe TA and the Conservancy’s constitution listing only Chief Mayuni and his *silalo indunas* as benefactors, individuals that have moved into the Conservancy - perhaps due to marriage - may actually belong to different tribes and recognise other Chiefs. Although Mafwe are the dominant ethnic group in Kwandu, Mbukushu people have also settled in the area, and there are also some San (R24). Despite claims that all in Kwandu “are just like one tribe now” (R23), these individuals are not technically under the jurisdiction of the Mafwe TA. Government recognition of a second TA for the Mafwe people - ‘Mashi’ TA, led by Chief Mayuni - has only added to the confusion.

This tribal interspersion erodes the Mafwe TAs capacity to constrain individual components in Kwandu, and *indunas* I spoke with often complained that the younger generation no longer respect their elders.¹⁰⁰ Indeed, tensions between local communities and their leaders came to a head during a two-day bi-annual planning meeting for Zambezi conservancies that I attended. Later, I described the events in my field diary:

¹⁰⁰ R52; Field Diary, 25/07/2013

‘During the course of proceedings, one recurring bone of contention was the amount of Conservancy revenue the TA should be entitled to, and the way in which they are spending it. Following the Mayeyi *induna*’s speech in which he explained the difficulty of engaging with the younger generations - including those running conservancies - the first question fired from the audience was, almost inevitably: “How are you spending the money?” Representing all four of Zambezi’s TAs, the honourable *induna* argued that such things depend on the income source. Far from appeased, the crowd pushed for more specifics. At this point, a visibly agitated *induna* got up from his front row seat in support of his peer, explaining firmly that the N\$ 10,000 his TA had received was spent on their cultural festival “because people need to eat and dance.” A prominent community member (and NGO employee) then stated: “I was once asked by a Senior Minister, ‘*How were the TAs surviving before conservancies, were they just dancing without eating?*’ and I could not give him an answer.” The comment brought much amusement to an increasingly volatile crowd.’¹⁰¹

Not only does this passage reflect a growing willingness amongst communities to challenge the authority of their superiors, but it also speaks to an institutional struggle between the TA and Conservancy for control over wildlife. Despite the TA’s integral role in authorising and governing conservancies (from which they receive relatively substantial benefits), interviews with *indunas* and others highlighted resentment towards Kwandu. Prior to Namibia’s independence and the roll-out of CBNRM, hunting quotas for elephant and other animals were allocated to the region’s TAs, who could at their own discretion decide to sell these animals as trophies (Representative Authority of the Caprivians, 1981). Yet these powers now lay with the Conservancy committees, something TAs appear uncomfortable with. Again, during the heated bi-annual planning meeting for Zambezi’s conservancies, the Masubiya *induna* argued:

“Way back before Independence there were two Tribal Authorities (Mafwe and Masubiya) in Caprivi who could manage and use wildlife as they wished.

¹⁰¹ Field diary, 24/07/2013

But after Independence most of the powers over game were taken over by the conservancies.”¹⁰²

Although these views were expressed by the Masubiya Chief, they are certainly representative of the wider power struggle between all TAs and conservancies in Zambezi, and are thus relevant to Kwandu.

These social tensions and institutional power plays hinder CBNRM programmes. Yet almost two decades since Kwandu’s formation there are still problems incorporating these traditional power structures into new democratic institutions of natural resource governance. But this is not an issue unique to Kwandu. Particularly in Zambezi, the role of the TA in conservancies remains contested amongst the communities they serve, but also between CBNRM professionals. Having earlier attended a NACSO meeting involving a heated debate concerning the TAs capturing of wildlife benefits, I asked a longstanding NGO employee to give me his thoughts on the matter:

“I left the meeting then. I had a different opinion. I would like to see the facts of what the TA is getting. I can tell you the facts of what they have given, because the wildlife rights are *theirs*; the land rights are *theirs*. They have given a lot of areas out. And sometimes they are the strongest governance structure in place [so] if they say ‘Yes’, it will work. If they say ‘No’, it will not work. So in some respects a conservancy’s performance is dependent on the TA’s performance.” (R16)

In contrast, other CBNRM professionals argued that “the whole intention of the programme is that benefits go directly to members” and that “the TA are members as *individuals* but as an *institution* they are not entitled to anything more” (R19). The risk posed to Kwandu and other conservancies by these institutional fractures means CBNRM stakeholders are keen to clarify the TA’s place in the programme. The Namibian government has set about initiating a process to formalise roles and responsibilities between conservancies and TAs (GRN 2012a), and MET’s Standard Operating Procedures for conservancies (SOPs) instruct parties to define these roles in conservancy

¹⁰² Field diary, 24/07/2013

constitutions (MET 2013a). Indeed, this is just one way in which MET attempts to stabilise (institutional) relations between components in Kwandu. At the same time, MET's relational connections with NGOs and (international) donor organisations territorialise CBNRM spaces and the role of (non)humans within them. The next part of this section considers the transformation of knowledge and value between these institutions, and their (de)stabilising impact on CBNRM spaces.

7.2.2.3 Institutional Networks: Forging Alignments and Neoliberal Governmentalities

Although MET is the lead agency in Namibia's CBNRM programme, it largely sees its role as one of coordination (MET undated; Jones 2010). Lacking the funds to implement comprehensive capacity-building support amongst the country's conservancies, the government acknowledges that NGOs have an important role to play in bridging this gap. Yet there are evidently conflicts between these actors, one former MET employee - now working for a Namibian NGO – noting how the government was “suspicious” of these organisations, particularly in the beginning (R19). Nevertheless, MET has worked closely with several NGOs since the birth of CBNRM in Namibia, continuing to do so today. The two most prominent NGOs in this respect are Integrated Rural Development and Nature Conservation (IRDNC) and WWF in Namibia (WWF-N). Both form part of the Namibian Association of CBNRM Support Organisations (NACSO), a platform for collaboration and coordination amongst CBNRM stakeholders at all levels from household support to international exchange (NACSO 2015a). Altogether, these organisations form a powerful institutional network able to access and provide funds for the CBNRM programme (Harring and Odendaal 2012).

As a framework for simultaneous biodiversity conservation and rural development, CBNRM holds much discursive capital in terms of attracting donor funding (Blaikie 2006; Horowitz 2016). Regardless of their success, co-management programmes have continued to satisfy international donor agencies' mandates for environmental protection, sustainable development, poverty reduction and democratic participation (Li 2007). In that respect, USAID and WWF-US injected some US\$ 46,000,000 into developing and

supporting Namibian conservancies in the first fifteen years of the programme (Jones 2010; NACSO 2014a). More recently, Namibia received US\$ 9 million for support to 31 conservancies (including Kwandu) between 2010 and 2014 as part of MCA-N's 'Conservancy Development Support Services' (CDSS) programme. MCA-N is a partnership between the US and Namibian governments, funded by the 'Millennium Challenge Corporation' - a government body supporting 'sustainable and transformative economic growth in developing countries that create and maintain a sound policy environment' (MCA 2014e: ii).

These are ideals aligning with those of MET and CBNRM NGO's involved in the programme. WWF-N is committed to locally established sustainable development solutions and has channelled significant funds through IRDNC, an organisation basing its work on 'three fundamental pillars of natural resource management, enterprise development, and strong local governance' (IRDNC 2015: 19-20). Indeed, NACSO's constitution sets out its aim to:

'Promote, support and further the development of community-based approaches to the wise and sustainable management of natural resources, thereby striving to advance rural development and livelihoods, to promote biodiversity conservation and to empower communities through capacity building and good governance, to determine their own long-term destinies.'

(NACSO 2011: 3)

This long-term funding has provided programme stability and allowed these institutions to solidify relations with other stakeholders. Influential individuals involved with the programme for many years have been able to forge strong ties with target communities, government officials, and donor agencies. IRDNC's Director, for example, has been involved with the organisation since the late 1990s. She told me that her work comprises "building relationships with politicians, partner organisations and key people in government" in order to "increase the profile of IRDNC in the broader community [and] stay in touch with trends in the conservation and development world" (R39). One key relationship is with WWF-N, whose Director spent many years monitoring USAID programmes that aimed to "integrate people with the environment", as he put it, before joining WWF in the early 1990s (R38). Alongside partner organisations - chiefly IRDNC

- he has been a key facilitator in the establishment of Namibia's conservancies. Other prominent CBNRM practitioners I spoke to have moved "sideways" between these organisations, playing integral roles in designing and implementing the 'Event Book' system, for example (R16).

At the same time, relations between these institutions and target communities are strengthened when NGOs employ community leaders and activists. These "local champions" (R39), as one respondent referred to them, are absorbed into the hierarchical structures of NGOs (Horowitz 2016). Often, these individuals are prominent Conservancy employees - including Chairpersons - and are able to 'put into practice good governance' in accordance with NGO ideals (IRDNC 2012: 16). As well as sitting on the board of directors for MET's 'Game Products Trust Fund', the Conservancy's current Chairman is also employed as an IRDNC Facilitator, helping coordinate the organisation's activities in Zambezi. "I am now the contact link between the Conservancy and the NGOs", the Chairman told me, noting that his job is to "advise [the Conservancy] and make it go in the right direction" (R56). Others, such as IRDNC's Assistant Director in Zambezi, described being "taken out of the community" by the NGO almost twenty-five years ago. Playing an integral role in developing the region's conservancies, he described trying to "turn the attitude of our community to understand CBNRM" (R53), including championing the programme on local radio. Crucially, he is an important actor in forging ties between IRDNC (including its CBNRM partners) and Zambezi's Traditional Authorities and local officials. During our interview he explained his role and future political ambitions:

"Now I am mostly dealing with TAs and politicians to give them information about what IRDNC is doing in the region. Some of the politicians do not support this CBNRM programme, but once I become a politician I will convince them to understand it." (R53)

Therefore, as each of these social actors move through this 'complex field of power' (Li 2007: 279), they make connections with other individuals and institutions. In doing so, each individual acts as a conduit for the transfer of knowledge and power, stabilising institutional relations in the process. In particular, IRDNC's absorption of local people and longstanding immersion in these communities confirms its identity as a 'grassroots'

organisation and ‘centre of excellence for CBNRM practice in Africa’ (IRDNC 2015: 20, 34). Not only do these alignments help avoid political challenges to which an NGO-led coalition may be vulnerable (Child and Barnes 2010), but they also mean organisations like IRDNC are ideally placed to attract donor funding alongside WWF-N and other partners.

Working together, then, these organisations are able to deliver a diverse range of technical support to conservancies. This training is geared towards building both governance and enterprise development capacity, and is coordinated by NACSO’s three working groups - the Institutional Development Working Group (IDWG), the Natural Resources Working Group (NRWG) and the Business, Enterprises and Livelihoods Working Group (BELWG). Individuals and NGOs work across and between these groups, pooling experience and resources to provide effective support (NACSO 2014a).

In the wake of individual and institutional conflicts between Kwandu and the TA, NGOs and MET play an important role in stabilising relations between components. Indeed, this is the kind of governmental network that Foucault sees working in society to ‘fix the conduct of conduct’ (Murdoch 2006: 93). Framing these conflicts as ‘conservation challenges’ and ‘wildlife management issues’, they argue that problems are to be expected during the course of programme maturation (Douglas and Alie 2014). At the same time, these local conflicts and deficiencies - arguably a result of state restrictions on resource use and access - strengthen the case for government involvement in managing these human-wildlife relations. For MET and NGOs, then, the important issue is one of engineering and improving institutional governance in conservancies in order to overcome these challenges.

As Duffy (2013) makes clear, NGOs present themselves as technical experts in this field, and organisations associated with NACSO are considered ‘vital technical support structures for community conservation’ (NACSO 2015: 80). These NGOs provide a diverse range of capacity-building support to Kwandu and other CBOs, tailored towards ‘improving good governance in conservancies’ as a means of securing environmental protection (NACSO 2011: 9). This institutional support has been provided since the beginning of CBNRM, but has become more focussed and structured under the recent CDSS programme. Induction courses for newly elected conservancy committees have

been carried out, and specific training modules for each staff member have been developed, including a description of individual roles and responsibilities (MCA-N 2013a). Particular attention has been paid to training conservancy managers, in recognition of their key role in institutional governance.

As discussed in Chapter 4, these NGOs also train conservancy staff in human-elephant conflict mitigation techniques (including assisting with zonation), quota setting, and use of the 'Event Book' monitoring system. In each of these areas - and others - Kwandu is subject to biannual audits and performance ratings as part of the CDSS project (Figure 7.2) (NACSO 2015a). For example, Kwandu's relatively generous hunting quota is based upon its commendable implementation of the Event Book system and active participation in quota setting meetings. At the same time, NGOs adjudge Kwandu's financial management to have 'improved significantly' (MCA-N 2013a: 104), with financial reports being presented at the Conservancy's successful AGMs (MCA-N 2014b).

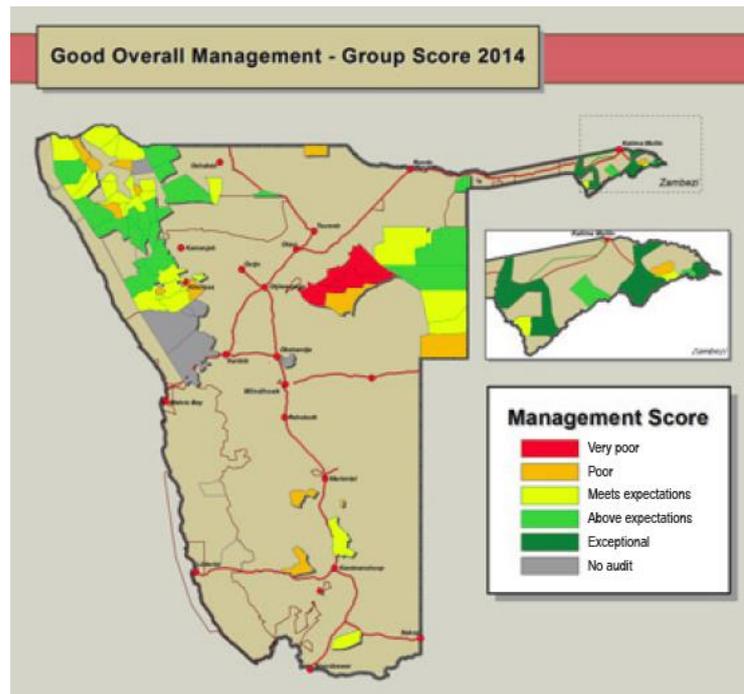


Figure 7.2: Natural resource management performance ratings for Namibia’s communal conservancies, showing Kwandu with an ‘exceptional’ score (NACSO 2015a: 28).

CBNRM professionals also emphasise the need for conservancies to have good constitutions in place. These formal written documents stipulate how a conservancy will be governed, deemed a solid foundation for effective management (MET 2013a; MCA-N 2013a). NGOs have played an integral role in developing and revising these documents, providing the ‘expert assistance’ in the formulation of ‘properly crafted rules’ (Li 2007: 267). Nevertheless, Kwandu is one of many conservancies that does not fully adhere to its own constitution.

This neglect of constitutions is one of many reasons behind the government’s recent introduction of ‘Standard Operating Procedures’ (SOPs) for conservancies (MET 2013a), referred to throughout this thesis. These rules were written by prominent CBNRM practitioners and aim to compensate for the lack of guidance on how to operate conservancies in the original CBNRM legislation, including clear compliance requirements in terms of governance and wildlife management. As the NGOs involved in their development and implementation point out, these guidelines are ‘a powerful tool for managing conservancies’ (NACSO 2015a: 30).

Of course, these attempts at improving institutional governance are also geared towards increasing economic benefits from wildlife. The CBNRM programme is a means by which Namibia aims to capitalise on its charismatic wildlife through (non-)consumptive use (GRN 2012b), and MET's most recent report to the Convention on Biological Diversity lists 'increasing private sector investment in communal areas' and 'fostering a business-oriented approach to Conservancy management' as important aims towards achieving the country's biodiversity targets (MET 2014: 47-8). NGOs are equally committed to this task, and NACSO states that developing the 'corporate identity' of individual conservancies can help significantly increase their returns from elephants and other wildlife (NACSO 2014a; 2015a).

In attempting to move towards this new generation of business-oriented conservancies, NGOs have provided institutional support through MCA-N's CDSS programme. One of the main selection criteria under this initiative was an individual conservancy's potential for income generation¹⁰³, and the CDSS programme aims to 'strengthen the capacity of conservancies to protect their natural resources, attract investment, and achieve financial sustainability so that households in conservancies receive more benefits' (MCA-N 2014b: 8). Much of the training provided by NGOs implementing the project has focussed on the diversification and management of conservancy enterprises, including both hunting and ecotourism ventures with the private sector. Between 2011 and 2014 alone, twenty-five new joint-venture agreements were signed in those conservancies supported through the CDSS programme (IRDNC 2015).

This increasingly market-based framing supports Dempsey and Suarez's (2016) assertion that today's conservation institutions must produce high-impact biodiversity benefits in order to survive. Accordingly, Namibia's CBNRM programme is one which produces nature's economic value through commodification. As Büscher *et al.* (2012: 18) argue, these 'versions of nature [...] are amenable to technocratic intervention', witnessed through the production of trophy elephants in Namibia. As discussed in Chapter 4.4, trophy animals are produced through practices of counting elephants and codifying knowledge. This social labour is undertaken by a diverse combination of (inter)national stakeholders, ranging from local CGGs to those working for IUCN's African Elephant

¹⁰³ Field notes from Chairperson's Forum held in Windhoek, 30/04/2013

Specialist Group. Market-thinking is grafted into the assemblage through tasks such as quota-setting, whereby political questions regarding the legitimacy of these institutions are reposed as matters of technique (Li 2007; Murphy 2014). As such, monitoring data produced through game counts and presented in NACSO's annual reports are deemed important management tools for conservancies (NACSO 2014a). At the same time, this information is used by MET to set export quotas which conform to technical criteria imposed by CITES.

All of these actors attempt to keep the assemblage governmental, and in doing so forge the conditions for transforming elephants into commodities. As numerous scholars make clear, this 'conservationist mode of production' depends upon the abstraction and codification of elephants so that they may be circulated in markets (Sullivan *et al.* 2013; Fletcher *et al.* 2015). Elephants are deadened and decontextualised from their ecosystemic linkages, inscribed onto Namibian and Conservancy-scale export quotas, primed for commodity capture and value generation (Duffy 2015). The direct use-value of these 'capital assets' (Barnes *et al.* 2009: 4) is then tendered to the highest bidder, sold to hunting outfitters such as JTHS who markets these elephant commodities (alongside other animals on the Conservancy's quota) at industry trade shows and auctions held by the likes of Dallas Safari Club and Safari Club International (Plate 7.1). On the company's website, JTHS offers clients 'an unequalled opportunity to hunt Africa's great game in exclusive hunting areas' (JTHS, 2016). Iconic images of the 'big five' adorn the website, which also contains photos of successful elephant hunts in Kwandu. These fetishized images are integral to the 'spectacular accumulation' of the elephant's economic value (Brockington *et al.* 2008; Barua 2016b), encouraging the likes of Dwight and Leo to purchase trophy bulls for hunting in Kwandu.



Plate 7.1: JTHS's booth at a hunting convention in the United States (www.jamyhunts.com)

As witnessed in the previous chapter, the sums paid to hunt these charismatic creatures are substantial. At the same time, Jamy is able to 'guarantee' payment for elephant trophies even if they are not found and killed. In effect, JTHS pays the Conservancy for the elephant's existence value in order to secure the animal's continued direct use-value through hunting. In so doing, Jamy stabilises both his own place and that of the commodified elephant in this assemblage. Unquestionably, the funds from hunted elephants (or those Jamy pays for but does not actually kill) are critical to the Conservancy's operations, and in the absence of a tourist lodge the Conservancy's expenses - such as staff salaries - are covered almost entirely with income from (elephant) hunting. The flow of money from elephants ties the Conservancy together as an institution, without which it would likely fall apart.

This discussion of institutional alignments and value formation reaffirms the notion that CBNRM represents a 'hybrid form of environmental governance' (Green and Adams 2014: 3). Combining neoliberal notions of private markets and decentralisation with populist arguments for bottom-up development, the CBNRM 'diagram' provides pre-packaged solutions to conservation and development issues (Horowitz 2016). In Namibia, MET moves into powerful governmental alliances with (inter)national donor organisations and NGOs which together forge the conditions necessary for generating economic value from the country's 'natural capital'. This involves developing close relationships between natural resource management institutions and the private sector, the commodified elephant's instrumental, direct use-values being sold to foreign hunters and tourists. CBNRM stakeholders emphasise the importance of utilising both

consumptive (hunting) and non-consumptive (ecotourism) revenue streams in order to realise the full economic potential of elephants and other wildlife (MET 2007; NACSO 2015a). Government and NGOs also capitalise on the elephant's existence value via international donor funding from developed countries (Naidoo *et al.* 2011). Although this commodification is based on conflicting 'sustainable use' and 'preservation' values, trade in trophies and spectacular images both result in the elephant 'paying' for its conservation through markets (Moore 2011).

More than this, following Büscher *et al.* (2012: 5) it is clear that this neoliberal ideology does not function as 'some universal code behind practices.' Rather, neoliberal conservation in Namibia is performed through practices such as wildlife monitoring and quota-setting - distinct governmentalities that seek to manage relationships between people and elephants. The assemblage is stabilised through several modalities of power, including the TA's cultural significance and 'authority', as well as MET's inducement through wildlife benefits that attempt to convince communities how to behave (McFarlane 2011; Horowitz 2016). Faced with challenges these dispersed networks of global environmental governance require continued maintenance, and this reassembling of neoliberal CBNRM spaces will be explored later in the chapter. Before then, it is important to consider the (inter)national knowledge/value disconnects and fractures which necessitate the reassembling of CBNRM in Namibia.

7.3 (Inter)national Disconnects – Destabilising Neoliberal CBNRM Spaces

7.3.1 Sectoral Disconnects

Despite the efforts of MET and its NGO partners to create an environment in which conservancies can increase economic benefits from elephants, value disconnects and power struggles between government ministries can hinder this objective. MET's relatively decentralised approach to natural resource management is not necessarily shared by other ministries eager to retain control over resources and communities. Although conservancies can gain use rights over elephants, then, rights to manage other resources upon which these animals depend are missing. Most importantly, conservancies have no legal rights to the land they share with elephants. As per Namibian law, this

communal land falls under the jurisdiction of the Ministry of Lands and Resettlement (MLR), vested in the state and held in trust for communities residing in these areas (GRN 2002).

Coupled with inadequate land-use planning and cooperation between government ministries, this lack of land rights affects the economic and institutional sustainability of conservancies. As Namibian NGOs point out, key sectors such as land, agriculture and livestock are not closely coordinated with MET or supportive of CBNRM (IRDNC 2015). Namibia's overarching development framework recognised these sectoral divisions as a major impediment to CBNRM over a decade ago (GRN 2004), yet these issues remain unresolved and MET lists 'unsustainable land management' as one of the main threats to biodiversity in its most recent National Biodiversity Strategy Action Plan (MET 2014: 20). As one former government employee told me, "because Namibia is a relatively new country [the government ministries] are still building up their ministerial empires and are not prepared to share" (R19). As such, the development of integrated regional land-use plans (IRLUPs) has been slow, and Zambezi's IRLUP has yet to be implemented.

This has led to developments at local and regional scales that are at odds with MET and Conservancy land-use plans. Haring and Odendaal (2012: 39) point to the 'dichotomy of MET having charge of wildlife but not of either people or land', a contradiction that is 'glaring in its work in [Zambezi].' As witnessed in the previous chapter, local people are settling in Kwandu's 'wildlife corridors' in order to access water, which alongside infrastructural improvements (such as road building) affects both the mobility of elephants and the aesthetic appeal of the landscape. Added to that, the notion that Zambezi should be the 'bread basket' of Namibia due to its abundant water resources has led to the development of intensive large-scale agricultural projects in the region (Jones and Barnes 2009).

To that end, the Ministry of Agriculture, Water and Forestry (MAWF) has earmarked Singalamwe and Kongola as ideal locations for two large-scale commercial farming enterprises under its 'Green Scheme' initiative. The planned fenced-farm at Singalamwe would comprise more than 5000 hectares, set aside to produce crops for local and national markets (Namibian Sun, 2013). Understandably, CBNRM stakeholders concerned with maintaining the area's wilderness value are troubled by such plans, NACSO (2015a)

arguing that the loss of habitat to other land uses is one of the prevalent threats to wildlife in communal areas. Indeed, Kwandu has written to the Zambezi Communal Land Board (ZCLB) requesting that an alternative location be found for this project. In the letter, Kwandu's Chairman asserts that 'the current location of the green scheme is in the biggest elephant corridor in east Caprivi.'¹⁰⁴ Despite conflicting with Kwandu's own zonation plan, then, the Conservancy's lack of land rights means it has no legal power to veto the project. In effect, if the TA endorses the lease allocated by ZCLB, there is nothing the Conservancy can do.

At the same time, these sectoral disconnects impact upon the Conservancy's ability to benefit from the commodified elephant. Despite government and NGO efforts to direct more revenue to conservancies via the CDSS project, Kwandu's lack of secure land tenure acts as a barrier to the levels of private sector investment envisioned by CBNRM advocates (NACSO 2015a). In particular, MLR's planned enforcement of a 'leasehold fee' on private sector investors in communal areas threatens the financial sustainability of conservancies. This fee is effectively an extra tax on tourism operators, paid to the land board, which according to CBNRM stakeholders would further deter private sector investment in communal areas and reduce returns from existing joint ventures (MCA-N 2013).

What becomes clear is that the neoliberal ideology espoused by MET and other stakeholders involved in CBNRM is complicated on the ground. The commodified elephant's presence in this spatial assemblage depends upon other nonhuman things such as water, trees, and the land itself. Despite their ecological relationship, these things are separated and controlled by different government ministries with varied enthusiasm for relinquishing management control of these resources to communities. Added to that, the commodified elephant's value does not translate between these institutions, leading to a lack of cross-sectoral collaboration and the approval of developments that 'inhibit the true potential of wildlife' (NACSO 2015a: 10). Yet, as the next section will show, the elephant's place in this assemblage is also threatened by the new, dispersed spatialities brought about through Namibia's globalised, market-based approach to conservation.

¹⁰⁴ Letter from the Chairman of Kwandu Conservancy to the Zambezi Communal Land Board Chairman, dated 30/04/2013.

7.3.2 International Disconnects

Namibia's approach to elephant conservation is based upon realising the animal's full economic potential. This strategy depends upon the circulation of elephant commodities in international markets, whether that is through the sale of the animal's body parts, or the consumption of affective images that persuade western citizens to purchase ecotourism packages or donate to conservation organisations. Yet the commodified elephant's place in this assemblage is often destabilised by the very actors brought into relation through these neoliberal governmentalities. As discussed, Namibia's previous CITES-approved sales of stockpiled ivory - and indeed its continued trade in trophy elephants - is deemed by many to be a contributory factor in Africa's current poaching crisis. Conservationists argue that this trade stimulates demand in and provides cover for illegally purchased ivory carvings in Asian markets (Brandford 2014; Travers 2014). Although a contested claim, it embodies the idea that Namibia's market-based approach to elephant conservation has come full-circle somewhat. A higher bidder has entered the scene, taking the form of unscrupulous criminal syndicates. The sums these groups can afford to pay local people to kill elephants are far above the returns individuals may receive through CBNRM participation.

Naturally, Namibian CBNRM stakeholders disagree with this reasoning. Instead, they argue that the country's poaching problems derive largely from the lack of CBNRM frameworks in bordering countries where 'consumptive use' of elephants is banned (IRDNC 2015). For conservationists in Namibia, it is not their own neoliberal framing that is to blame for current poaching levels, but the unwillingness of other nations to devolve use rights to citizens sharing space with elephants. Either way, one cannot deny that the commodified elephant's existence is threatened by illegal killing. Indeed, those against consumptive use might think it ironic that the individual elephants most threatened by poachers are also those likely to be identified as 'trophies' by hunters. Of course, this reduces the amount of trophy elephants available for hunting in places like Kwandu, negatively affecting Conservancy income.

The dispersed components brought into relation through Namibia's neoliberal approach can also exercise destabilising capacities upon the assemblage. The country's trade in elephant commodities depends upon Namibia's connections with international NGOs and

governments, stabilised through conventions such as CITES. Yet in opening itself up to the movement of transnational capital flows from trophies or spectacular images, Namibia simultaneously creates space for western, animal-welfare centred sensibilities to permeate the assemblage. The values espoused by those paying for the elephant's existence are not in alignment with those of CBNRM stakeholders committed to realising the full economic potential of elephants through consumptive use. Together, these urban populations fund powerful animal welfare NGOs that hold sway over governments at CITES meetings, evidenced in ivory trade restrictions, hunting bans, and airline embargoes on trophy transportation.

These international value disconnects pose a grave threat to Namibia's CBNRM programme (Duffy 2013; IUCN *et al.* 2015). Yet Namibia is unable to withdraw from CITES for fear of losing international financial aid. What this shows is that emergent assemblages of global environmental governance both enable and constrain their component parts. The commodified elephant's place in Kwandu is contingent upon relational connections between international actors, such as those party to CITES. On the other hand, these neoliberal assemblages contain their own fractures and 'possibility spaces' which threaten the economic sustainability of CBNRM in its current form.

All the while, international donor funds which for two decades have stabilised the CBNRM programme are now dwindling. Over US\$ 100 million has been invested in conservancy development, largely through core funding from international donors including USAID, the EU, and WWF that allowed the CBNRM programme to expand rapidly (Figure 7.3). Despite earlier government projections that 65 communal conservancies could be registered by 2030 (GRN 2004), there are currently 82 conservancies in Namibia covering a greater percentage of land than all of Namibia's national parks combined (MET 2014: 5). Humavindu and Stage (2015) are thus correct to point out that this exponential growth has largely been driven by international governments and NGOs. But it is also indicative of MET's strategy to 'extend the protected area network in order to drive development'¹⁰⁵ and achieve the nation's Millennium Development Goals (MDG). In that sense, having over 15% of its land area

¹⁰⁵ Field notes from speech made by the Minister for Environment and Tourism, Pohamba Shifeta, at the Chairperson's Forum in Windhoek, 29/04/2013.

covered by communal conservancies is deemed an important indicator towards achieving goal seven on ‘environmental sustainability’ (MET 2014).

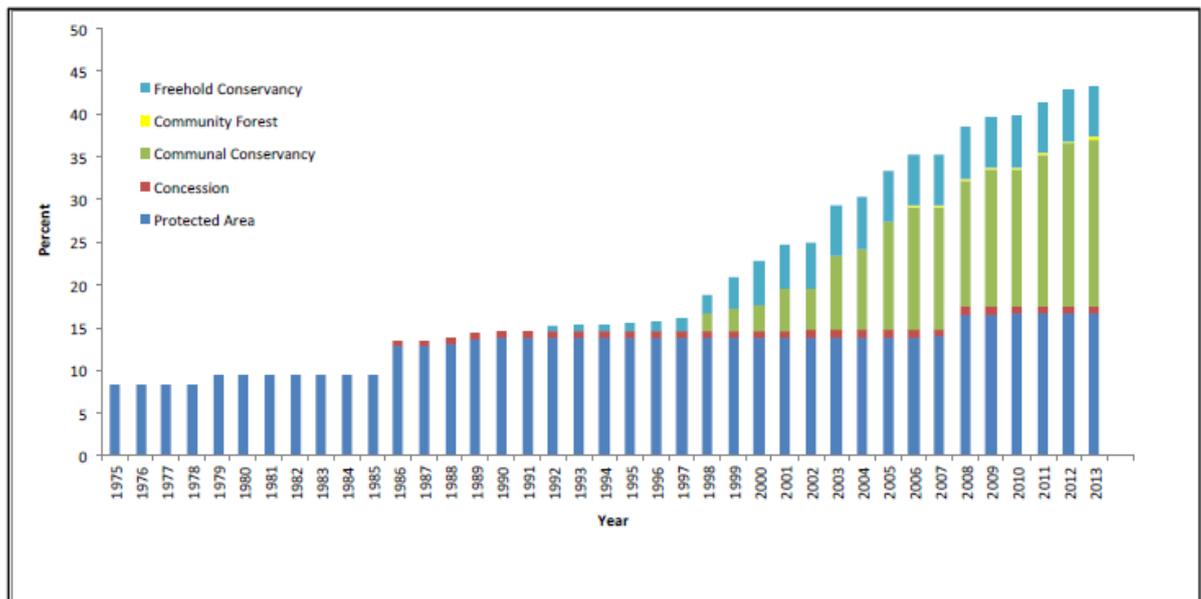


Figure 7.3: Graph showing the marginal increase in the percentage of territory covered by communal conservancies and other conservation areas in Namibia (MET 2014: 5)

Yet Namibia is suffering from the wider donor shift away from MDG objectives towards ‘big development’ projects such as infrastructure investment (Harman and Williams 2014). Income streams for CBNRM are becoming more fragmented, and NGOs involved are struggling. Whereas the economic sustainability of conservancies is compromised by the sectoral and international disconnects discussed above, this is not necessarily the case with foreign investment reductions. That is because conservancies with resources that the private sector wishes to use will continue to receive income through hunting and ecotourism (subject to all of the issues above) (Jones and Barnes 2009). Nevertheless, these donor trends do pose a threat to the institutional sustainability of conservancies. As discussed, NGOs depend upon these funds to provide technical support to conservancies in order to improve institutional governance and natural resource management. The end of MCA-N’s CDSS project is symptomatic of this problem, having facilitated intensive governance support to one-third of all conservancies from 2009 until 2014. CBNRM stakeholders are understandably concerned, and NACSO (2015a: 81) claims the

programme currently enjoys ‘only a fraction of the management resources it requires to be truly effective.’

This discussion of sectoral and (inter)national disconnects illustrates the contingent and fractious nature of neoliberal governmentalities in practice. The commodified elephant’s value is produced by actors operating through dispersed networks of environmental governance. At the same time, the elephant’s value does not always translate between components involved in this global assemblage. Indeed, relations may be reassembled in ways that threaten the economic and institutional sustainability of CBNRM in its current form. Poor land-use planning and sectoral collaboration, poaching, hunting bans, ivory trade restrictions and donor funding trends all contribute to a moment in which ‘CBNRM is at a crossroads’ in Namibia (NACSO 2015a: 81). Faced with this contingency and fluidity, the next section considers how CBNRM stakeholders attempt to reassemble these neoliberal CBNRM spaces in order to ensure their economic and institutional stability.

7.4 Reassembling Neoliberal CBNRM Spaces

Given the current political and economic threats to Namibia’s CBNRM programme, stakeholders must forge new connections with ‘outside’ elements in order to stabilise - or reterritorialise - the CBNRM assemblage. As the following sections will discuss, this reassembling is geared towards securing the institutional and economic sustainability of the programme, and involves further strengthening links with private sector actors, especially those involved in the hunting industry. It also includes bringing professional managers into conservancies in an attempt to combat the loss of ‘institutional memory’. This strategy is indicative of broader attempts to ‘scale-up’ CBNRM as a means of overcoming the diverse (inter)national disconnects discussed above. As such, this upscaling takes two forms: a concern with devolving use rights to a broader range of natural resources, and a focus on integrating CBNRM with landscape conservation projects that are increasingly the recipients of donor funds.

7.4.1 Reassembling Relations with Professional Hunters and other Private Sector Actors

In the wake of reduced investment from international donor agencies, CBNRM stakeholders are eager to diversify income streams in order to fund technical support services. NACSO (2015a: 75) recognises that NGOs need to ‘continue to be proactive by including all entities that work with communal area residents on conservation issues, [including] the business community.’ As a result, the Namibian government and NGOs have set up the Community Conservation Fund of Namibia (CCFN), a trust fund through which to channel finances from various sources, including the private sector. These payments would include those generated by the ‘Wildlife Incentives and Credits Scheme’, through which external donors make conservation performance payments and payments for ecosystem services, and existing tourism operators can provide financial rewards to conservancies based on wildlife sightings, for example. These funds would be used to provide institutional governance support, build private sector partnerships, combat poaching, and facilitate human-wildlife conflict mitigation. In all, this ‘redesigning of the patterns of support’ will, according to IRDNC (2015: 18) ‘provide for the long-term financial sustainability of CBNRM.’

In particular, this shift has seen professional hunters brought into closer alignment, not only in terms of funding but also with regard to technical support and CBNRM advocacy. CBNRM stakeholders aim to develop existing *ad hoc* financial contributions from the hunting industry into more structured, ongoing technical support (NACSO 2015a). More importantly, however, Namibian stakeholders co-opt the poaching crisis and rework the sustainable utilisation discourse in order to strengthen the case for ‘conservation hunting’. Pointing to the role Professional Hunters (PHs) play in preventing poaching in conservancies, utilisation advocates counteract the anti-hunting lobby by arguing for even greater involvement of PHs in conservation. Hunting companies have been encouraged to spend money on anti-poaching units, and although one might seriously doubt the extent to which PHs can ‘control the elephant that come in to the various fields and do crop damage’¹⁰⁶, there is a general understanding that their presence is important in combating illegal killing at the local level.

¹⁰⁶ Interview 34

This reframing of the hunter's role has coincided with a more robust defence of trophy hunting amongst CBNRM practitioners. The significance of hunting revenue to conservancy operations has been downplayed in the past, largely due to moral and emotional issues that cause NGOs to fear losing their western funding base (Paulson 2012). Yet conservationists in Namibia increasingly recognise the importance of stabilising what is at present a tenuous alignment with their donor communities. In order to achieve this objective NGOs deem positive positioning of the hunting sector to be an 'urgent priority' (NACSO 2014a: 80), emphasising the need to present the case for consumptive use in a transparent and effective way to the outside world.

One way of doing this is to train and employ local people as Professional Hunters. As Gressier (2014: 196) points out, trophy hunting unsettles not only from a moralistic animal rights perspective, but also due to 'disturbing continuations of the race, class and gender hierarchies stemming from colonial times.' Further, in spite of Namibia's progressive CBNRM legislation, it is often argued that the economic benefits from hunting are failing to translate at local levels, largely a result of skill shortages amongst communities which hinder their participation in the industry (Lindsey *et al.* 2006). MET's recent guidelines thus stipulate that training of members as PHs should be included in conservancy hunting contracts (MET 2013a). WWF has also partnered with The Namibian Association of Professional Hunters (NAPHA) and the Namibia Tourism Board to fund training courses for black Namibians to become PHs. These courses aim to 'indigenise hunting outfitters', providing guidance on the rules and regulations that govern the industry (New Era 2014c).

This move to 'indigenise' the hunting industry could be said to threaten the place of existing Safari Operators such as JTHS. More broadly, however, the place of hunters in conservancies is secured through stakeholder efforts to reassemble relations. In the face of destabilising impacts such as reduced funding and high levels of illegal killing, stakeholders reterritorialise the assemblage around new, closer relations with Professional Hunters and other private sector actors. This reassembling also involves forming novel connections with other professionals, besides hunters, and will be discussed in the next section.

7.4.2 'Outside' Managers

Given the increased focus on cultivating a business-oriented approach in conservancies, the need for strong governance and management is clear. As such, the training of conservancy managers has been an integral component of MCA-N's CDSS project. Yet the current draining of 'institutional memory' in conservancies counteracts these efforts, limiting their capacity to attract private sector investment and grow existing businesses. CBNRM stakeholders thus acknowledge that the skills and business acumen required to manage growing numbers of enterprises are still lacking in many conservancies (NACSO 2015a; IRDNC 2015).

In order to overcome these issues and reduce the burden on NGOs to 'prop-up weak conservancies' (R16), CBNRM practitioners are promoting the idea of employing professional managers. Some NGO staff I spoke to described it as 'patronising' to think that communities can run multi-million-dollar businesses (R44), and employing skilled managers is deemed a logical step in addressing the programme's governance challenges. Importantly, these skilled managers would likely be sought from 'outside' the local/regional area, perhaps from places as far as Windhoek, an idea that has been met with scepticism in communities such as Kwandu. In a region where tribal loyalties are strong, the notion of employing an 'outsider' in one of the most important roles has proved unpopular.

This may also prove an expensive - and often unaffordable - option for a single conservancy. As Kwandu's Chairman told me, "that person would require more money that the Conservancy does not have" (R56). For that reason, NGOs suggest that conservancies group together to employ one skilled manager. Indeed, these 'clusters of adjacent conservancies' (IRDNC 2015: 38) are integral to stakeholder attempts at 'scaling-up' CBNRM. It is to these new, reassembled spatialities of natural resource governance that the chapter now turns.

7.4.3 'Scaling-Up' CBNRM

In its original CBNRM policy document MET foresees the implementation of communal conservancies acting as an incentive for the development of broader resource management institutions (MET 1995: 2). This vision was reiterated in the country's long-term development framework, in which CBNRM targets are set. The government envisages the programme developing into an holistic, integrated approach to communal resource management, through which conservancies would be 'empowered to manage and hold group tenure over their rangeland, woodland, water, freshwater fish and the land itself' (GRN 2004: 154).

There has been some progress made towards this objective, such as the integration of conservancies and community forests (which fall under the jurisdiction of MAWF) in places like Kwandu. On the whole, however, the proliferation of parallel local management structures and uncoordinated government interventions has led to the sectoral and national divisions discussed above. For that reason, stakeholders have for a number of years recognised the need to remove these CBNRM barriers - caused in part by the 'perception that the programme is about wildlife only' (NACSO 2011: 22). In overcoming these sectoral and institutional disconnects, MCA-N and those NGOs involved in the project have encouraged MET to establish a policy framework for the integration of all devolved natural resource rights under one institution (NACSO 2014a; IRDNC 2015).

To that end MET has developed a national CBNRM Policy, launched in 2013, which provides guidance on the community-based management of a wide range of natural resources (MET 2013e). On that point, MET's Director of Parks emphasises that 'conservancies are not areas for wildlife and tourism only' (HIN magazine, 2014: 6). Specifically, MET aims to 'increase the yields of benefits derived from natural resources, enable investment in conservation related businesses, strengthen community institutions, and enable communities to engage collectively in the monitoring and management of natural resources and mitigation against climate change' (MET 2013d: 31). According to those involved in the programme, this CBNRM policy is the first step towards improving

cooperation between ministries.¹⁰⁷ At the same time, there is scepticism amongst NGOs over the extent to which other government sectors will buy into this policy, given that it was written by MET.¹⁰⁸

For CBNRM stakeholders including USAID's technical director for CBNRM, then, the question remains: "How do you make CBNRM bigger and take it further?"¹⁰⁹ On that issue, CBNRM practitioners are more optimistic about securing the future of conservancies through an alternative method of 'upscaling'. This reassembling of relations involves embedding conservancies within broader landscape conservation approaches, notably the Mudumu Protected Landscape Conservation Area (MPLCA) and Kavango-Zambezi Transfrontier Conservation Area (KaZa). As discussed in Chapter 4.3, these landscape approaches are geared towards enhancing ecological connectivity and extending wildlife corridors for mobile species like elephants (MET 2013b, 2013c, 2014). This reassembling is based on the principle that institutional and ecological landscapes should be aligned, and that units of proprietorship should match those of production, management and benefit (Murphree 2004; MET 2012). The strategy is thus intended to generate economies of scale for investments and enterprise opportunities, increasing wildlife benefits whilst reducing management costs (NACSO 2014a).

This scaling-up is also an attempt to overcome national CBNRM barriers and disconnects by fostering cooperation between different sectors and organisations. MET thus refers to the principle of 'multifunctionality' that underpins its landscape approach, recognising the need to include multiple stakeholders in decision-making processes regarding natural resource management (MET 2013d, 2014). As such, in its strategic plan for the Mudumu PLCA, MET emphasises the importance of involving other line ministries such as MLR and MAWF on both the MNC and broader Mudumu PLCA management committees (MET 2012). Although lacking legal powers to ensure individual conservancies or other institutions conform to management principles, these committees are charged with coordinating resource management activities and developing a shared vision for the landscape. In particular, they are tasked with formalising a landscape management plan

¹⁰⁷ Field diary, 23/07/2013

¹⁰⁸ Field notes, NACSO 40th Members Meeting, 01/10/2013

¹⁰⁹ Field diary, 31/07/2013

and Integrated Regional Land-Use Plan (IRLUP) in order to combat HWC and preserve ecological corridors (MET 2013d, 2014) (R56).

As discussed earlier, these corridors stretch beyond Namibia's borders, and Mudumu PLCA is deemed critical to the successful ecological functioning of KaZa. Recognising that this transboundary project is attracting much international donor interest¹¹⁰, MET and CBNRM NGOs are keen to align their work with that of the KaZa Secretariat. In Namibia's most recent National Development Plan, MET is tasked with developing a fundraising strategy in sync with KaZa's objectives so that the country can benefit from this regional development initiative (GRN 2012b). As MET (2013d: 44) makes clear with regard to the Mudumu Landscape, there is 'potential for synergistic activities between the Landscape Committee and KaZa.'

These activities have largely revolved around formulating national integrated development plans (IDPs) for KaZa. With support from Peace Parks Foundation (PPF)¹¹¹, MET has led the development of Namibia's IDP, in which it deems CBNRM a priority project towards achieving the objectives of KaZa (MET 2013b). More broadly, the document attempts to align strategic planning and development between different government ministries, the private sector, and communities (PPF website). Eventually, Namibia's IDP will be combined with those of the other four partner countries to produce a 'master' IDP¹¹², a key strategic document guiding the process of operational policy harmonisation between KaZa nations. According to KaZa stakeholders, this international alignment of natural resource management and development approaches is needed to enhance biodiversity, whilst increasing business and benefit flows in the landscape, particularly from tourism (KaZa Secretariat 2011; MET 2013b, 2014). As WWF-N's Director told me, this international approach is particularly important for elephant conservation:

¹¹⁰ KaZa is largely funded by the German Federal Ministry for Economic Cooperation and Development (GIZ), which provides funds through its main donor institution, the KfW Development Bank. To date, these institutions have provided close to US\$ 50 million towards developing KaZa (PPF website).

¹¹¹ Peace Parks Foundation (PPF) was appointed as implementing agent by the partner countries to provide financial management and technical support to the KaZa Secretariat.

¹¹² This document was due for completion by January 2016, but has yet to be finalised.

“There needs to be better transboundary management of the southern African herd. We have 250,000 elephants in KaZa, and no single country can manage it alone. So there needs to be protocols on anti-poaching, protocols on management, protocols on planning around the elephant population and herds.” (R38)

Given the importance of communal conservancies in achieving this vision, NGOs such as IRDNC must adjust their position in this shifting assemblage. They do so in order to stabilise relations and secure their own position. Having been somewhat constrained by a need to deliver MCA-N project outputs in recent times, IRDNC intends to ‘revitalise, re-orient, and re-prioritise its work with conservancies’ in the coming years (IRDNC 2015: 21). As such, the organisation emphasises its ‘strong grassroots ties and capabilities’ and its ‘unique positioning within KaZa as the main source of expertise in CBNRM, capacity building, [and] enterprise development’ (IRDNC 2015: 13). Faced with decreased donor funding from conventional sources, IRDNC is thus able to position itself in alignment with KaZa objectives in order to secure resources for CBNRM. Alongside NACSO partners, this involves establishing site selection criteria for deciding which conservancies to support, including the conservancy’s commercial viability, governance performance, and - crucially - its importance in securing ecological landscape connectivity for key species such as elephant. As such, these conservancies will be grouped into regional ‘clusters’, ensuring NGOs work at appropriate landscape scales whilst improving the efficiency of service provision as part of the CBNRM Sustainability Strategy (NACSO 2014a; IRDNC 2015).

IRDNC also points to its longstanding work supporting transboundary forums that link communities in Zambezi with those in neighbouring Zambia and Botswana. This is despite scepticism over KaZa’s potential to harmonise operational procedures and policies at international levels (R39), and IRDNC pledges to ‘work with the KaZa Secretariat to continue building local-level transfrontier links to increase the voice and involvement of local communities in transboundary natural resource management’ (2015: 45). As such, IRDNC’s Director told me that their role would increasingly involve “finding creative ways to establish very *local* alternative approaches to transboundary management that work for the people” (R39). One such local forum is that created

between Kwandu and Imusho¹¹³, a ward in neighbouring Zambia. Members of the Kwandu-Imusho Joint Forum (KIJF) include community members from both areas, TAs, MET, the Zambian Wildlife Authority (ZAWA) and IRDNC. Given problems with stock theft, forest fires, and elephant poaching on either side of the border, the forum was initiated to improve transboundary communication and coordinate joint fire management and anti-poaching patrols (IRDNC 2012; MCA 2013a). Therefore, CBNRM NGOs argue that it is vital KaZa Secretariat recognises and supports these local transboundary forums (R38; R39), ensuring that this reassembling proceeds from the ‘bottom-up’ and is not simply dictated from above (Schoon 2013).

In all, this section has shown how actors rework neoliberal governmentalities in response to deterritorialising processes such as the poaching crisis and reduced CBNRM funding. This reassembling involves bringing existing components - notably Professional Hunters and other private sector actors - into even closer alignment. New elements are also grafted onto the assemblage (Li 2007), such as locally trained Professional Hunters or skilled managers from ‘outside’ of Kwandu. All are component parts in the (re)deployment of discourses that seek to consolidate relations or allow for more flexible operation in this geopolitical assemblage (Dittmer 2014). These (de)coding processes are evident in discourses about ‘indigenising’ the ‘conservation hunting’ industry and ‘scaling-up’ CBNRM to secure ecological connectivity and combat socio-political threats. This reassembling further entrenches neoliberal ideology within the assemblage, in spite of its flaws and the current ‘crisis’ moment for CBNRM. For that reason, the next section considers the impact of this (re)assembling upon local socio-natures in Kwandu Conservancy, and how this increasingly neoliberal framing has transformed the very identity of Namibia’s CBNRM programme.

¹¹³ Imusho ward contains three separate ‘Village Action Groups’: Mbala, Imusho and Mbaao (R22).

7.5 Impacts of Neoliberal Governmentalities on Local Socio-Natures

The CBNRM assemblage consists of diverse actors and institutions that combine to produce economic value from the country's natural resources. Namibia's CBNRM programme is therefore indicative of the broader 'sustainable development historic bloc', through which a transnational class of government officials, NGOs, corporate CEOs, and other professionals work together to promote market-based solutions to biodiversity crises (Igoe *et al.* 2010). Under this 'conservationist mode of production' (Brockington and Scholfield 2010) previously uncapitalised land such as that in Zambezi has been transformed into transnationally regulated zones for megafauna preservation and ecotourism, while elephants and other aspects of nature are separated so that they may be circulated in commodity markets (Barua 2016a).

Yet as Sullivan (2013) makes clear, this abstraction and deadening of nature under neoliberalism can prove problematic in its socio-ecological effects. Despite moves to manage elephant populations across ecological landscapes such as MPLCA and KaZa, hunting quotas in Namibia are still distributed at Conservancy level. Kwandu is allocated five elephants on its hunting quota, based on MET's calculation that one in every two-hundred animals can be killed without negatively affecting overall numbers (MET 2007; NACSO 2014c). This decontextualisation and alienation of individual elephants on export quotas is necessary in order to transform the animal into tradeable exchange-value. This is in spite of research suggesting societal cohesion is negatively affected by the hunting of old bulls, leading to increased aggression and HEC amongst groups of young male elephants (Selier *et al.* 2014; Cornell 2015). At the same time, the connections integral to ecosystem resilience become increasingly fragmented and estranged as a result of the commodification of their constituent elements under neoliberalism.

It can be argued that this market-based approach asserts the state's authority over elephants, despite contrary discourses of community empowerment and ownership. As the government ministry charged with managing Namibia's natural resources, MET is clearly an important institution in this assemblage. In the original CBNRM policy document conservancies are described as a partnership venture between MET and rural people on communal land, through which both parties share wildlife benefits and the responsibility for protecting it (MET 1995: 14). Undoubtedly the programme has been

embraced by rural communities, Kwandu being one of 82 communal conservancies gazetted in the country (NACSO 2014a). Irrespective of the institutional issues discussed above, then, MET has indeed devolved use rights to those living on communal land so that they may derive economic benefits from elephants and other wildlife.

Nevertheless, the question remains as to whether these facts uphold the vision of Namibia's first President, Sam Nujoma¹¹⁴, that 'ownership' of wildlife would be conferred upon rural communities and that 'animals once again belonged to them' (Martin 2005: 41). With regard to elephants specifically, the government's own species management plan acknowledges that CBNRM has yet to entrust ownership of elephants to local people, which very much remain state-property (MET 2007). Almost a decade later evidence from Kwandu suggests little has changed, benefits derived from elephants being dependent on state-defined conditions of use and access (Moore 2011). As discussed in Chapter 4.4, Kwandu's rights to hunt elephants are not pre-given, but contingent upon MET's satisfaction with the Conservancy's monitoring performance. More than this, despite efforts to increase conservancy involvement in the quota-setting process, these decisions are ultimately taken by MET. Indeed, this disjuncture between rights and ownership was alluded to by a Conservancy employee, who told me:

"We are learning. This is a start. But the Conservancy is for the *Ministry*. It only gives us *rights* to monitor the resources. They are still teaching us how to monitor things." (R62)

Far from devolving ownership to local communities, then, it can be argued that MET has simply absolved itself of 'responsibility' for managing wildlife. It is the community that is responsible for monitoring game populations and dealing with human-wildlife conflict incidents in conservancies (Gibbes and Keys 2010). Prior to CBNRM MET received parliamentary budget to carry out these tasks, but these operational costs have now been passed to conservancies. That said, there is no deceit on the state's part, and since CBNRM's inception MET has sought to 'benefit from a decreased protection and management burden' by delegating these activities to conservancies (MET 1995: 15).

¹¹⁴ Samuel Nujoma led SWAPO in its long struggle against South African rule and was elected as Namibia's first President upon independence in 1990. He served as President for three terms and left office in March 2005.

Somewhat contrary to discourses of local empowerment and ownership, then, the money and meat from elephants serves to reassert the state's authority over these animals, as well as the land upon which they roam (Barua 2014a; Horowitz 2016). As Büscher *et al.* (2012: 23) point out, communities are 'constrained to participate in and benefit from neoliberal conservation initiatives to the extent that they accept associated opportunities [...] in particular economic terms.' In effect, socio-economic benefits derived through a community's participation in CBNRM tie them to the state's project (Murphy 2014), a process serving to legitimise MET's position vis-à-vis local communities (including the Conservancy and TA) as the dominant authority in this conservation space. This forging of (albeit fragile) alignments with villagers is essential to governmentalising localities and asserting state power in Namibia.

Nevertheless, as this chapter has shown, MET cannot stabilise this CBNRM assemblage alone. Rather, this spatial and conceptual territorialisation has for many years depended upon MET's relational connections with (inter)national donor agencies, NGOs, and private sector actors (Zeller and Kangumu 2007). Spierenburg and Wels (2010: 34) are thus correct in arguing that CBNRM programmes often 'introduce new stakeholders with entitlements to resources hitherto controlled - either *de jure* or *de facto* - by local communities.' In Kwandu, this is evidenced in the Conservancy's relationship with its Professional Hunting Outfitter, Jamy Traut Hunting Safaris (JTHS). Put simply, Kwandu is the 'middle-man' in a transaction between MET and JTHS (Selfa and Endter-Wada 2008). In tendering its hunting quota and negotiating a contract with JTHS, the Conservancy effectively implements decisions that were made by MET. Disturbingly, given the levels of HEC in places like Kwandu communities are becoming increasingly dependent on the market economy to meet livelihood needs. As Gressier (2014: 205) warns, whether this 'cultural shift from hunting animals to hunting tourist dollars' is a positive development remains a complex question for all CBNRM stakeholders to ponder.

What this case study clearly shows is that fundamental elephant management decisions - such as whether to kill - are ultimately taken by JTHS, not the Conservancy. As demonstrated in the previous chapter, Jamy refused to hunt the final trophy bull on Kwandu's quota because of sustainability concerns, despite pressure from Conservancy staff to make the kill. It might be argued, then, that the power to manage elephants under

CBNRM has not so much shifted from the state to local communities, but to private sector actors. Only Professional Hunters and their clients are permitted to do the killing in this assemblage, and local communities have been largely cut-off from their traditional hunting practices (Paulson 2012). Those that do hunt elephants or other animals - even if for subsistence - are labelled as poachers. Yet, as Duffy (2014) makes clear, 'poaching' is a constructed concept resulting from a governmental assemblage that brings trophy hunters into relation with elephants whilst excluding others.

For that reason, it might be argued that the state's granting of hunting rights (through conservancies) to private businesses such as JTHS amounts to 'green grabbing' (Green and Adams 2014). Described as the 'appropriation of land and resources for environmental ends', leading to the restructuring of agrarian social and economic relations (Fairhead *et al.* 2012: 237, in Barrett *et al.* 2013: 339), aspects of this enforced territorialisation can be seen in efforts to zone Kwandu and move people from productive agricultural land in order to make space for elephant corridors, for example. More than this, JTHS plans to develop a 'Core Wildlife Area' in Kwandu, stretching from the Zambian border to the floodplain below Singalamwe. Should this wildlife area be established Jamy also promises to employ additional CGGs, as well as increasing staff at the hunting camp.¹¹⁵ Despite wanting to "help establish something that is ecologically sustainable and productive", then, Jamy admits that it is "ultimately a business" for him (R54). Indeed, it is a business centred on creating landscapes (such as the 'People's Park') that conform to western ideals of a people-free African 'wilderness' (Butt 2012; Gressier 2014). These spatial imaginings may not necessarily correlate with the protection of important ecosystems, much less the alternative, non-economic wildlife values of local people.

In privileging the elephant's exchange-value over its use-value, the affordances pursued by actors able to leverage the greatest capital take precedence over those most immediately affected by conservation decisions (Matulis 2014). The 'trophy' elephant's commodity value emerges only as other values and lives - such as those of crops, livestock, and 'non-trophy' elephants - are abandoned or destroyed (Ginn 2014; Gibbs *et al.* 2015). Undoubtedly, then, this research supports Büscher *et al.*'s (2012) contention

¹¹⁵ Contract proposal letter from JTHS to Kwandu Conservancy, September 2013.

that alternative value practices can be suppressed in the assembling of neoliberal conservation. Additionally, this study has shown that local, non-economic values of elephants are not completely erased by these market-based governmentalities (Duffy and Moore 2010). Not only does this include the elephant's diverse socio-cultural value amongst local people, but also the value of the hunting experience to the likes of Dwight. These values are often impossible to measure economically, meaning the elephant eludes complete commodification under CBNRM (Moore 2011). Despite its perceived failures, attempts to entrench neoliberal ideology within the CBNRM assemblage continue, critics arguing that these neoliberal rationalities have foreclosed other, more progressive possibilities (Dempsey and Suarez 2016).

On that note, it is clear that the very identity of Namibia's CBNRM programme has been transformed since its inception. As one prominent stakeholder put it, the CBNRM legislation was "something of the times", and was originally seen as an anti-colonial programme centred on a 'rights-based' approach to wildlife management (R39). These rights were not contingent upon the demonstration of valuable natural assets, but were instead part of an effort to counteract historic discriminatory policy under the South African regime. As such, communal conservancies were seen more as a platform for social organisation around a common cause, rather than simply a means towards financial benefits (R39).

Yet, as this chapter has demonstrated, the programme's objectives and ambitions grew in tandem with increased international donor funding. CBNRM became a powerful global discourse for generating funds from institutions concerned with 'selling nature to save it' (Büscher *et al.* 2012). Despite communities originally participating in CBNRM in order to regain some semblance of control over natural resources, practitioners in Namibia have increasingly sought to give elephants and other aspects of nature value through markets, irrespective of CBNRM's original objectives (Dressler *et al.* 2010; Horowitz 2016). This is evidenced in the rapid expansion of Namibian conservancies over the past decade, leading in part to the current institutional and economic concerns over programme sustainability. The reaction of MET and NGOs alike to CBNRM's current predicament has been to introduce stricter feasibility studies for emerging conservancies, taking these institutions yet further away from their post-colonial, rights-based origins. Increasingly,

the ‘potential of the Conservancy to generate income’, as well as its ‘assets’ are deemed critical factors in deciding whether to gazette individual conservancies (MET 2013a).

As this chapter has shown, such measures are part of stakeholder attempts to reassemble CBNRM in order to overcome the current problems. Despite copious critiques of market-based approaches to conservation (Brockington and Duffy 2010; Sullivan *et al.* 2013; Fletcher *et al.* 2015) this reworking involves an intensification in the pursuit of private sector capital investment, and only reaffirms anti-political explanations for problems such as the elephant poaching crisis. Crucially, this neoliberal (re)assembling operates through a ‘utilitarian construction of a passive nature’ (Büscher *et al.* 2012: 24), or what Sullivan refers to as ‘nature-as-mute-and-stilled-object’ (2013: 55). Yet, as the next section of this chapter will show, elephants and other nonhumans are agentic in the assembling and (de)stabilisation of these conservation spaces. In their relations with other ‘things’, elephants make a difference to the unfolding of neoliberal conservation in practice, their ethology and corporeality being central to value production. At the same time, these neoliberal governmentalities are not inherently detrimental to local people on the ground, who also work alongside elephants to reassemble these spaces for their own ends.

7.6 Elephants and other Nonhumans as (De)territorialising Components

7.6.1 Assembling More-Than-Human Value in Kwandu

As this thesis has shown, elephants are undoubtedly ‘tools’ of powerful governmental alliances (Munster 2016: 426), used to territorialise space and stabilise particular knowledges and economic values of nature (Ranganathan 2015). This is evidenced in arborescent practices of counting elephants and documenting their presence, used to abstract individual animals for conservation hunting. As such, the elephant’s commodification - as big game trophy, charismatic megafauna, or endangered species - is produced through inscriptive symbolism and the circulation of spectacular images.

However, these representations also depend upon the elephant’s ‘lively biogeographies’ (Lorimer 2010) and its capacity to affect other (non)humans. Conservationists plan connected conservation landscapes such as Mudumu PLCA and KaZa around elephants,

the animal's large home range and landscape requirements giving credence to these spatial imaginaries. Barua (2016a) is thus correct in arguing that these 'megafaunal ecologies [...] *afford* conservation organisations opportunities to maintain biological diversity and ecological integrity over extensive areas'. What becomes evident is that the elephant's economic value as a 'flagship' or 'landscape' species - used to generate donor funds for corridor planning and implementation - does not result only from inscriptive symbolism. Rather, it is also dependent upon the elephant's ethology and specific ecological capacities.

The same applies to the animal's (non-)consumptive value generated through hunting, ecotourism or charitable donations for elephant preservation. Moving alongside hunters on the elephant trail, it became clear that the animal's 'ecological charisma' (Lorimer 2007) is integral to the hunting experience. The affective capacities it exercises in relation with other (non)humans - such as trampling vegetation, mock-charging, and disappearing altogether - are central to the 'quest' that big game hunters such as Dwight and Leo so value (Gressier 2014). Similarly, the elephant's fondness for feeding on fresh reeds in the river - a place where the animal behaves less aggressively - allows hunters and tourists alike to get closer to these charismatic creatures. In such proximate contact spaces the elephant's affective properties are heightened, and its embodied commodity value is produced.

Therefore, it is important to recognise that these ecotourism experiences are contingent upon the elephant's ethological and corporeal potentials. The animal's commodity value stems not only from its use or consumption by humans, but also from the tasks performed by these lively and recalcitrant pachyderms. Barua (2016a, 2016b) refers to these relational achievements as 'encounter value', through which human affordances and the elephant's own labour and liveliness work to co-construct its commodity value. As such, these findings build upon previous critiques of neoliberal development to emphasise the role agentic elephants play in the production of (consumptive) ecotourism experiences, including trophy hunting.

These tasks are often value-forming for the elephant, too; perhaps none moreso than the animal's interactions with plant-life, especially crops. Sexually mature male elephants in particular engage in crop-raiding, seeking to benefit from the increased nutritive value of

plants such as maize and millet (Selier *et al.* 2014). At first, it may not seem that these relations are productive of the elephant's commodification, and Barua (2016a: 12) states that these 'undesirable encounters' constrain capture by market logics. However, I would argue that these elephant-crop encounters are not 'undesirable' to all actors, particularly those wishing to prove elephant presence and make the case for consumptive use in places like Kwandu. As one Conservancy employee told me: "We are not happy if crops are not damaged or livestock is not predated, because it means we have no wild animals here, and that is not good for the Conservancy."¹¹⁶

This study demonstrates the centrality of these inter-species relations in constructing the animal's economic value. Impacts of these elephant-crop interactions are calculated by CBNRM practitioners and prescribed monetary value, and the revenue from sales of elephant commodities is deemed critical to offset these costs. Alongside the megaherbivore's capacity to degrade large areas of forest if left unchecked, these nonhuman relations allow utilisation advocates to construct the elephant's identity as 'destroyer', legitimising the 'sustainable use' discourse and associated hunting practices.

The money derived from the sale of trophies and spectacular images is ploughed back into the earth, literally and figuratively. Farmers use payments received through the government's HWSRS to buy more seeds. New crops grow, attracting elephants into the Conservancy which can be counted, watched, and perhaps killed. As such, the elephant's place in assemblage is contingent upon both the capacity of humans to grow crops and their inability (or negligence) to protect them due to other factors such as alternative livelihood strategies or "knowing they will get a coin in the end" (R53). And although elephants diminish the individual capacities of farmers to produce food, they increase the Conservancy's capacity to generate income. Through this cycle of destruction and benefit it becomes clear that the (commodified) elephant and botanical beings 'contribute to the material constitution of each other' (Gibbs *et al.* 2015: 63). More than this, these paradoxical relations between nonhuman matter are fundamental to producing the elephant's commodity value.

¹¹⁶ Field Diary, 12/12/2012

This CBNRM space is thus produced through agentic elephants and other ‘things’ ‘encountering each other in more or less organised circulations’ (Thrift 2003: 96). These patterns of repetition stabilise Kwandu and are relatively specific to the Conservancy’s spatial and temporal context (Ginn 2014). Alongside a diverse assemblage of more-than-human actors, the elephant is agentic in its own value production and territorialisation of neoliberal governmentalities. By definition, then, this is a transitory configuration, and is not simply dictated from above. As the next section will show, these lively and autonomous beings have the potential to affect the implementation of neoliberal conservation in their rhizomatic interactions with other (non)humans.

7.6.2 The Role of Nonhumans in (De)stabilising Neoliberal CBNRM Spaces

7.6.2.1 Nonhuman presence/absence

The elephant’s commodity value is produced through relational interactions between human and nonhuman actors. The often repeated and corporeal interactions between elements stabilises the place of each component in assemblage, yet the agency of these nonhuman elements means the conditions for deterritorialisation are always present in Kwandu (Rosin *et al.* 2013). Although the elephant’s elusive nature can, in fact, increase its value as ‘worthy quarry’ in the eyes of trophy hunters, at a certain point the animal’s absence in Kwandu begins to affect its commodity value. In the dry season elephants move through the Conservancy to access the Kwandu River and feeding areas in Bwabwata National Park and the State Forest (Von Gerhardt *et al.* 2014), but largely undertake these journeys at night, making hunting during the day extremely difficult for Kwandu’s Safari Operator. This task is therefore easier during the cropping season, when elephants are more visible. Yet poor rainfall levels often cause crop failures and drought in Zambezi, which, in turn, affects elephant movement patterns and presence in Kwandu (DeMotts and Hoon 2012). Indeed, having received poor rains that year, farmers told me that “there are fewer elephants this year because the maize is not ok” (R14), and “when there are no crops the elephants cannot be seen” (R41). In such conditions, elephants may indeed become absent from the Conservancy, choosing instead to forage in more bountiful areas. In doing so, the elephant is unavailable to Kwandu’s hunter, emphasising the animal’s capacity to resist human territorialisation and commodified encounters.

Similarly, elephants resist human efforts to place them in ‘corridors’. Local people were sceptical towards the notion of corridors and the likelihood of elephants sticking to them, particularly during the rainy season when crops are ripe. “Elephants do not *only* use those corridors; they just walk from every way”, one man in Sesheke told me. These disconnects also demonstrate the role of other nonhuman things - besides elephants - to destabilise relations and deterritorialise capital’s capture of nonhuman labour. In drought conditions caused by global climate change, subsistence agriculture becomes almost impossible. In Kwandu, fertile land is struggled over between farmers seeking to feed their families and those attempting to protect ‘elephant corridors’. What becomes evident is that transient relations between actants such as rainfall and crops do not only stabilise the elephant’s place in Kwandu, but also pose risks.

Clearly the elephant’s place in this spatial assemblage is not only threatened by human actions such as poaching, but also by the changing relations between nonhuman things. This deterritorialisation is not limited to the pachyderm’s interactions with botanical life, but also includes other charismatic creatures. As such, although the elephant’s resilience and penchant for crops means that it can be found in places like Kwandu, a lack of other ‘big game’ reduces the animal’s commodity value. This is particularly the case with ecotourism, where the spectacular accumulation of nature depends upon a diverse assortment of wildlife inhabiting people-free landscapes.

What I have attempted to demonstrate in the preceding sections is that these more-than-human assemblages are contingent, not necessary. The elephant’s *umwelt*¹¹⁷ - the activities it finds meaningful or value-forming (Barua 2016a) - is co-constitutive of its commodity value alongside spectacular images and human affordances. The animal is clearly agentic; but it is also vulnerable to other (non)human agencies. In Kwandu Conservancy, elephant presence depends on components such as rainfall patterns and forest cover. In effect, the elephant’s place within this spatial assemblage is no more secure than that of a maize plant. As numerous critiques of neoliberal conservation demonstrate, humans are often vulnerable in these spaces, too. Further, the elephant is clearly complicit in this violence, particularly through crop-raiding. Nevertheless,

¹¹⁷ In ethology the term ‘*umwelt*’ refers to the world as it is experienced by a particular organism.

elephant ethologies also permit some local people to re-work neoliberal CBNRM spaces for their own benefit, as the next section will show.

7.6.2.2 Singalamwe Secession

Moving alongside elephants in Kwandu has shown that they frequent certain areas of the Conservancy more than others. In particular, Singalamwe area's relatively large human population suffers greater levels of crop-raiding than other villages. Elephants and farmers alike are attracted to these fertile lowlands in the Conservancy's northern reaches, close to the Zambian border. As the CGG charged with collating Kwandu's HWSRS claims put it: "Every human-wildlife conflict is always Izwi¹¹⁸, Izwi, Izwi!"¹¹⁹ Relatedly, the vast majority of Kwandu's (elephant) hunting also takes place in Singalamwe.

For a number of years now these spatial differences have caused friction within the Conservancy. Most pertinently, some in Singalamwe are committed to separating from Kwandu and forming their own Conservancy called '*Ingenda*'.¹²⁰ The process has been driven by the *silalo induna*, who told me of his desire to secede from a Conservancy that is too big and thus failing to provide his people with tangible household benefits.¹²¹ In a letter sent to Kwandu's office the Singalamwe sub-*khuta* states that its people are 'no longer a partner in conservation with Kwandu.'¹²² Although women I spoke to in Singalamwe were generally supportive of the idea, those attending organisational meetings with the area *induna* were largely men.¹²³ Many of them explained their frustrations during interviews, such as a young man considering moving to Windhoek in search of work:

¹¹⁸ Izwi is a small village in Singalamwe area, close to the Zambian border and Kwandu's main wildlife corridor.

¹¹⁹ Field diary, 31/12/2012

¹²⁰ '*Ingenda*' was the name of the first *silalo induna* at Singalamwe area (R11)

¹²¹ Field diary, 29/12/2012

¹²² Letter from Singalamwe sub-*khuta* to Kwandu Conservancy, 25/11/2012

¹²³ Field diary, 31/12/2012

“For me, it is a good idea to have our own Conservancy. We have a lot of bush [so] the hunter will always come and hunt *here*, not that side. So if we make our own Conservancy, a lot of people here will be employed.” (R6)

Many others in Singalamwe supported this view, such as a male villager who complained about the inequity of benefit distribution:

“We want to be our own Conservancy. The hunter only comes to our side, but when the contribution money comes we only get little. We are getting less money but *we* are the people who are protecting the animals. If you talk about Kwandu Conservancy, you talk about Singalamwe!” (R3)

Faced with these issues, Kwandu’s management committee was considering making changes to the Conservancy’s benefit distribution plan. Rather than distributing annual payments (when available) equally amongst the six areas, the committee was planning to provide these benefits in proportion to an area’s population. As Kwandu’s Manager explained, this change would be based on the principle of ‘equitable’ - as opposed to ‘equal’ - benefit distribution (R22). These changes were due to be set out and discussed at the end of year AGM, which had, for now, appeased those in Singalamwe.

The ‘Singalamwe Secession’ issue thus provides important insights into the more-than-human workings of neoliberal governmentalities. First of all, it supports Green and Adams’ (2014) contention that ‘accumulation by dispossession’ is not only carried out by states and private companies, but also local actors. Those in Singalamwe arguing for secession strategically deployed neoliberal environmentalities in an attempt to dispossess other villages in Kwandu. This involved claiming elephants as Singalamwe’s own, private property, rather than a communal resource to be shared amongst all areas. As one villager in Sesheke complained: “The people [at Singalamwe] are selfish! They think this is our own animal because it is found at our side” (R31).

As Green and Adams (2014) make clear, such contestation results from the state’s creation of an incentive structure. In attempting to overcome their own development issues, Singalamwe residents used CBNRM’s existing neoliberal framing to the detriment of neighbouring villages. Although critiques of nature’s commodification often

emphasise its negative impact on local communities and socio-natures, then, this case study illustrates the local complexity and hybridity of CBNRM spaces. Not all individuals in Kwandu are resistant to nature's neoliberalisation, and some may harness these governmentalities for their own ends (Leap 2014; Jackson and Palmer 2014). Power and resistance in conservation spaces is contextually specific, determined by relations between more-than-human actors (Grove and Pugh 2015).

Power struggles over natural resources are commonplace amongst heterogeneous communities, and the literature is replete with studies showing that those marginalised and excluded from benefits can become hostile to wildlife and CBNRM initiatives (Dzingirai 2003; Nielsen and Lund 2012; Vargas Del-Rio 2014). What is novel in this case, however, is that Kwandu's destabilisation does not so much result from exclusion, but relation. The desire amongst individuals in Singalamwe to form a new conservancy stems from their relational connections with agentic elephants - those that trample their crops and are hunted close to their villages. The animal's 'encounter value' (Barua 2016a) is greater in Singalamwe than other areas, meaning the elephant's ethology is central to this deterritorialisation and the (re)assembling of CBNRM in Kwandu. As such, the next section discusses the elephant's role in (re)producing relational conservation spaces, asking how (community-based) conservation practice might better attend to the transitory nature of these assembled relations.

7.7 Assembling Conservation Spaces and Practicing Relational CBNRM

7.7.1 Assembling Conservation Spaces

Whether it be Kwandu Conservancy, the wider CBNRM programme, or the elephant itself, all spatial entities are (re)made from processual relations between multiple components (Anderson 2008). Not only is knowledge and value assembled through these affective relations, but these connections also produce conservation space and scale (Massey 2005). Socio-natures in Kwandu are thus produced in an ongoing tension between the arborescent and rhizomatic (Deleuze and Guattari 1987) - between those practices that territorialise space and stabilise relations, and those that smooth space and encourage heterogeneity.

Both spatially and conceptually Kwandu Conservancy is not a pre-existing given, but is (re)produced through relations between humans and nonhumans. In order for the organisation to function and for spatial coherence to emerge, these relations must be stabilised, albeit only ever provisionally (Murdoch 2006; Weisser 2014). To that end, in their agentic interactions with other (non)human things, elephants exercise a range of ecological, socio-cultural and economic capacities that stabilise relations in Kwandu (Chagani 2014; Head *et al.* 2015). Patterns of repetition between (non)human actants co-produce the elephant's commodity value, and institutional relations are stabilised through hunting revenue. Simultaneously, elephants establish connections with individuals in Kwandu through their capacity to enchant, excite, and engineer the forest. The animals' tracks are recorded and mapped, arborescent practices that fix and striate this CBNRM space (Cresswell 2014). Undoubtedly, then, elephants contribute to the 'robust internal character' (Harman 2014: 129) of CBNRM spaces.

But the animals are not defined by these connections. Rather, they move into relation with other components such as animal welfare groups and discourses of protectionism. These 'relations of exteriority' (DeLanda 2006) emphasise the elephant's autonomy, as well as their capacity to make new connections that transform the assemblage (Harman 2008; Dittmer 2014). The animals transgress cartographic divisions between 'corridors', cropping spaces, and countries (Barua 2014a), folding space through their megafaunal movements. Making connections with things from 'outside' the assemblage, elephants 'force actors [...] to consider them' (Murphy 2014: 12), evidenced in the 'scaling-up' of CBNRM in order to overcome institutional disconnects and secure ecological connectivity. The animal's economic value in Kwandu also depends upon the global circulation of elephant commodities, purchased by trophy hunters and tourists alike. Moving beyond the 'local' site, this assemblage framing demonstrates how conservation space and scale is produced not by topographic connections, but through topologic relations between elephants and other (non)humans (Bear 2013; Baker and McGuirk 2016).

This pulling together and apart demonstrates the ambivalence and contingent nature of CBNRM in practice. Spatial relations in Kwandu are produced through provisional cycles of destruction and benefit, or what Bear (2013: 36) refers to as 'composed chaos, a chaotic

variability rendered consistent'. Maintaining the assemblage's spatial and conceptual stability is hard work, and it is always susceptible to infiltration from above or below (Harman 2014). Yet, as Head *et al.* (2015: 402) make clear, 'relationality is not a synonym for dynamism and fluidity', and this study has demonstrated the 'detachments' that are constitutive of relational space (Ginn 2014). Assembled socio-natures contain gaps and 'spaces between relation' in which new connections can be made. If these 'possibility spaces' are actualised, components must reassemble to stabilise relations.

Neoliberal conservation spaces are not, therefore, dictated from above by some hegemonic force. Rather, neoliberal governmentalities in places like Kwandu are locally hybrid, assembled through contingent relations between (non)human components. These relations shape space, but there is always an excess of lively, more-than-human agencies than can be controlled by the political-economic project (Leap 2014). Powerful relations that do gain spatial coherence also contain gaps and fragile relay points, hiding a multitude of possible relations beneath the surface (Murdoch 2006; Sullivan 2013). It is this point that gives optimism to those concerned with assembling more equitable and ecologically healthy compositions (Büscher *et al.* 2012; Braun 2015). For that reason, the question for the final part of this chapter is how conservation/CBNRM practice and policy might better attend to the fluidity and contingency of these assembled socio-natures.

7.7.2 Conserving Assemblages and Practicing Relational CBNRM

Adopting a flat ontology of human and nonhuman entities, this study has demonstrated how elephants produce space in their relational connections with heterogeneous actants. As such, the animal's 'place' in Kwandu is not a precondition of the elephant itself, but is contingent upon shifting assemblages in which it may or may not be a component part (Gibbs *et al.* 2015). The elephant's value and identity is thus transformed as it becomes together with other (non)humans. However, these non-dualistic understandings of socio-natures are fundamentally at odds with conservation geared towards preserving idealised natures and fixed, predictable states.

Following elephants has shed light upon the open-ended and anthropogenic nature of socio-natural assemblages. It has drawn attention to the more-than-human ethologies that constitute conservation spaces, played out in a constant tension between fixity and flow (Ranganathan 2015). To that end, the study supports claims made by relational geographers such as Lorimer (2012) and Braverman (2014) that conservation needs to focus on preserving these dynamic processes. Although this will be difficult to achieve in practical policy terms, it is these open-ended relational connections between humans and nonhumans that CBNRM initiatives should be geared towards.

Undoubtedly, the scaling-up of CBNRM in Namibia should be welcomed as a management policy more 'attuned to the fluid configuration of the [assemblage's] components' (Bear 2013: 33). MET seeks to 'maintain the open nature of the ecosystem' in Mudumu PLCA in order to mitigate against unplanned system changes brought about by climate change, for example (MET 2013d: 46). The government also emphasises the importance of adaptive management in conservancies and national parks, allowing dynamic landscapes to 'absorb non-linear shocks [and] unforeseen interactions' (MET 2013d: 15). Namibia's strategy is therefore in sync with current approaches in conservation biogeography that challenge fixed scales and territories for biodiversity. As Lorimer (2012) notes, work on 'ecological networks' and 'landscape fluidity' attends to these fluid spatialities, anticipating and allowing for the nonhuman mobilities that will accompany ecological adaptations to climate change.

As Lorimer and Driessen (2014) make clear, this shift towards fluid spatialities and experimentation offers a more dynamic and democratic model of environmental governance. CBNRM spaces are therefore integral to these open-ended landscapes in Namibia. As this thesis has shown, these spaces are also transient assemblages of more-than-human components. Rather than attempting to 'render the present eternal' (Hinchliffe 2008: 93), CBNRM practice and policy must instead attend to the unique nature of each socio-natural assemblage (Braverman 2014; Speed-Rossiter *et al.* 2015), which may involve moving beyond a focus solely on instrumental or intrinsic nature values. CBNRM practice should also be geared towards harnessing the emotional and relational values derived not from specific things, but from responsibilities towards - and relationships with - animals like elephants (Chan *et al.* 2016). Rather than focussing only on 'selling nature to save it', CBNRM practitioners should be equally concerned with

strengthening these relational values, allowing humans and nonhumans alike to flourish in their mutual becoming.

7.8 Conclusion

This chapter has explored the assembling of knowledge, value and power that produces conservation space in Namibia and beyond. It has drawn attention to the multiple, fluid, and often conflicting values that frame relations between humans and elephants. The elephant is an animal with the potential to polarise people - to attract or repel - yet provides 'entertainment' value nonetheless. For some, they are 'friends' - an integral part of the landscape in spite of the damage they cause.

This speaks to its educational value and the need for younger generations to see and learn from elephants in the region. To many they are known as a 'good' animal, with human-like abilities to observe danger and avoid conflict with people, qualities directly linked to the elephant's religious value amongst the community. For those who know elephants as 'unclean' animals, their socio-economic value may indeed be reduced. But this can also be offset by the environmental value of elephants, and the way in which their movements prevent bush encroachment, provide firewood, and open up new grazing areas for cattle. These (emotional) socio-cultural values are no less significant than economic values, each traded-off during the cognitive and emotional becoming of individuals, influencing attitudes towards elephants and their conservation.

At the same time, individual capacities to 'detach' elephants vary from one farmer to the next; as do the impacts of these crop-raiders. The extent to which economic and emotional impacts can be traded off on a personal level are not only influenced by these socio-cultural values, but are also contingent upon an individual's place in emergent assemblages which may enable and/or constrain local people in their relational connections with (non)humans. The Conservancy brings some people into relation through employment, but others remain disillusioned with perceived mismanagement, caused in part by a draining of 'institutional memory'. In this situation the Conservancy's 'symbiotic relationship' (Harring and Odendaal 2012: 33) with the Traditional Authority

increases in significance, owing to the latter's cultural strength and capacity to stabilise relations in Kwandu.

MET also moves into powerful governmental alliances with (inter)national donor organisations and NGOs that stabilise the assemblage. Together, they forge close alignments with private sector actors in order to capitalise on the elephant's instrumental and existence values. These neoliberal governmentalities are performed through practices that seek to manage relationships between people and elephants, including wildlife monitoring and quota setting. Elephants are abstracted and codified under this 'conservationist mode of production', so that they may be circulated in markets (Brockington and Duffy 2010; Sullivan *et al.* 2013; Barua 2016a).

However, these dispersed networks of global environmental governance require continual maintenance, opening up spaces in which these governmentalities can be challenged and reworked. Poaching, hunting bans, ivory trade restrictions and donor funding trends all threaten the economic and institutional sustainability of CBNRM in its current form. Further, the elephant's place in assemblage is destabilised by a lack of cross-sectoral collaboration. What becomes clear is that neoliberal governmentalities are contingent and fractious, with the ongoing possibility of reassembling.

In response CBNRM stakeholders reassemble relations in order to secure the programme's economic and institutional stability. This involves bringing existing components such as Professional Hunters into even closer alignment. New elements are also grafted onto the assemblage, such as skilled managers from 'outside' of the Conservancy. Perhaps most significantly, this reassembling includes efforts to 'scale-up' CBNRM, both in terms of devolving use rights to a broader range of resources and embedding conservancies within broader landscape conservation approaches. This reassembling further entrenches neoliberal ideology within the assemblage, intensifying its pursuit of private sector capital investment and reaffirming anti-political explanations for conservation issues. Not only are more progressive possibilities foreclosed, but the very identity of Namibia's CBNRM programme is transformed.

Yet elephants and other nonhumans are agentic in the assembling and (de)stabilisation of these transitory conservation spaces. The elephant's ethology is co-constitutive of its

commodity value alongside spectacular images and human affordances. Exercising a range of ecological, socio-cultural and economic capacities, elephants stabilise CBNRM spaces, but also make new connections that transform the assemblage. Indeed, it is these topologic connections that produce conservation space and scale. As such, the chapter argues for CBNRM practice and policy to focus on conserving these open-ended relational connections between humans and nonhumans (Lorimer 2012; Braverman 2014). Practitioners should therefore promote and harness the emotional values derived from individual and collective relationships with elephants, and not focus solely on instrumental and/or intrinsic values. In such spaces, more equitable and ecologically healthy socio-natures can be assembled.

Chapter 8: Conclusion

This conclusion chapter begins by revisiting the theoretical approach and aims of the thesis (8.1), assessing its contributions to the conceptual framings of political ecology, assemblage, and neoliberal conservation (8.1.1), before going on to address research questions one and two in detail (8.1.2). Section 8.2 addresses the third research aim by putting forward conservation policy recommendations, before the study's limitations are discussed (8.3). The thesis ends in section 8.4 with some suggestions for future research directions.

8.1 Revisiting the Theoretical Framings and Aims of the Thesis

8.1.1 Political Ecology and Assembling Neoliberal Socio-Natures

This thesis adopted a political ecology approach to explore the discursive and material (trans)formation of site-specific 'nature' knowledges and values in Kwandu Conservancy, situating these within the broader social and political context of landscape-scale conservation. More than this, the thesis sought to 'ecologise' political ecology by bringing it into closer conversation with 'more-than-human' geographies, going beyond the humanist frameworks of political economy and constructivist approaches in order to reveal complex, lively socio-natures (Bakker 2015). This more-than-representational approach explored the discursive construction and structural power relations of (neoliberal) natures, whilst also attending to the specific ecological and affective capacities of nonhumans that co-produce knowledges and (de)stabilise socio-natures.

In doing so the thesis has made important contributions to three of political ecology's core analytical concepts: environmental knowledge, environmental change, and environmental governance. The study shed light on embodied 'nature' knowledges and values co-produced between humans and nonhumans through practices of tracking, watching, and killing, demonstrating the importance of the elephant's corporeal charisma to both its commodity value and socio-cultural value. Indeed, the latter are no less important than economic values, playing a fundamental role in the (de)stabilisation of

socio-natures in Kwandu. The study also contributes to knowledge about environmental/social change and the impacts of specific socio-natural constructions upon different individuals and groups. It shows that the fragmentation of particular ‘natures’ for commodity circulation cuts up vital ecosystemic linkages, and that this abstracted exchange value fails to filter down to household level, whilst botanic, bovine, and ‘non-trophy’ elephant lives are abandoned. At the same time, speaking to the concept of environmental governance, the thesis draws upon Foucauldian ‘governmentality’ approaches to demonstrate how powerful (inter)national institutional networks stabilise CBNRM governmentalities (Castree 2010). This involves forging new connections with outside actors, (re)deploying discourses, and undertaking practices that seek to consolidate relations and manage interactions between people and elephants, the latter playing an agentic role in this (de)stabilisation.

In exploring the political ecology of CBNRM spaces the thesis utilised ‘assemblage’ as an analytical framework. Although others have applied an assemblage framing to issues of environmental knowledge and governance, this study responds to Bear’s (2013) call for assemblage studies to engage with their emergent form from within. This was done by following elephants materially and perceptively, attending to the assemblage of (non)human labour, representations and arborescent/rhizomatic practices through which socio-natures are produced. Not only did this approach highlight the connections that (de)stabilise socio-natural formations, but it also underlined the importance of spatial and conceptual ‘detachment’ in the holding together of (institutional / human-nonhuman / CBNRM) assemblages. In that sense, the study invites those adopting assemblage as an analytical lens to think through this looser mapping of relationality, as well as the importance of absences/silences in (de)territorialising socio-natural configurations.

Following on from its contribution to political ecology more broadly, this study has made specific contributions to understanding and conceptualising the neoliberalisation of nature/conservation. It did so through intensive ethnographic and empirical research into the lived experience of those participating in market-based CBNRM initiatives, an approach largely absent in the literature (Silva and Motzer 2015). The study shed light upon the ‘active processes of narration’ (Lejano 2017) and performed practices through which neoliberal conservation is assembled. In Namibia, these governmentalities operate through a utilitarian construction of a passive, muted, and stilled ‘nature’, produced

through arborescent practices such as counting and quota-setting. In response to destabilising processes and knowledge/value fractures these governmentalities are reworked, including bringing existing components (such as professional hunters) into closer alignment, making new connections with ‘outside’ actors (including external managers), and (re)deploying discourses about ‘scaling-up’ CBNRM allowing for the assemblage to operate more flexibly. This reassembling further entrenches neoliberal ideology, intensifying the pursuit of private sector capital investment and economic growth as means towards securing both biodiversity conservation and rural development.

Bringing Marxist and constructionist frameworks into closer conversation with hybrid and non-representational approaches to socio-natures, the study not only generates an improved empirical understanding of neoliberal conservation’s structuring effects, but also its contingent vulnerabilities. In both of these aspects biophysical ‘natures’ are crucial actors - their labour and ethologies central to the production of consumptive ecotourism experiences. The study demonstrates the importance of elephant ethologies in co-producing the animal’s commodity value, but other lively things are also central. Elephant presence is contingent upon nonhuman beings such as rainfall, maize plants, and trees that combine in cyclical processes to produce ‘undesirable encounters’ for many farmers. Contrary to suggestions that these relational encounters elude market capture (Barua 2016a), however, this study has shown that such nonhuman labour is central to producing elephants for consumptive use. As such, the multinatural approach improves and complements political ecology understandings of nonhuman difference, and the importance of this variation in shaping neoliberal conservation approaches (Lorimer 2012).

Undoubtedly, the fragmentation of ecosystems through commodification of their constituent ‘natures’ is a concern, and this research supports assertions that neoliberal conservation can disempower local people and suppresses alternative (non-economic) value practices (Büscher *et al.* 2012; Sullivan 2013). Indeed, the relational values enacted between humans and elephants are impossible to abstract into fungible exchange value. At the same time, the study emphasises the contextual specificity and complexity of CBNRM on the ground. In Kwandu, ‘accumulation by dispossession’ was not only carried out by MET and private companies, but also groups of villagers in Singalamwe who attempted to re-work these governmentalities for their own ends. What is even more

interesting in this case, however, is that Kwandu's destabilisation as a political and spatial entity resulted not so much from exclusion, but relation. Singalamwe's desire to secede from Kwandu was born out of the relational connections its villagers made with elephants, for better or worse. Again, we see how more-than-human actors combine to (de)stabilise and reassemble neoliberal conservation spaces.

Far from being solely top-down and hegemonic, then, this study has illuminated the contingent and fractious nature of neoliberal governmentalities on the ground. Kwandu Conservancy and the wider CBNRM programme are processual assemblages of more-than-human agencies: elephants, farmers, objectives, power, knowledge and values. These relations require continued maintenance in order to retain spatial coherence. But there is always an excess of lively things that can be controlled by the political-economic project, and these hybrid, metabolic relations are always subject to change. In drawing attention to the role of agentic (non)humans in the assembling of neoliberal governmentalities, the study has prised open a space-between in which capitalist nature-cultures can be challenged and reworked.

8.1.2 Revisiting the Aims

In terms of answering the first research question *how do different CBNRM stakeholders know and value 'nature' / African elephants?* the study has shown that situated knowledges and values are co-produced between (non)humans. Patterns of repetition between humans, elephants, crops, rainfall, and other lively 'things' allow for the co-production of knowledge. Multiple stakeholders engage in arborescent practices of counting elephants and codifying knowledge in 'Event Books', for example, representing elephants as 'destroyers' and used to produce elephants for consumptive use.

In these processes the elephant is not merely a passive actor; its labour, ethology and affective capacities are central to the production of knowledge and value. Its 'ecological charisma' (Lorimer 2007) affects those attempting to track the animal, forging epistemic spaces where situated knowledge about its movement and behaviour is produced. These knowledges and values are multiple, embodied and 'more-than-representational',

produced in relation with agentic elephants. As such, the elephant's commodity value derives not only from human affordances and inscriptive symbolism, but is also contingent upon tasks and labour the elephant finds meaningful. It is the animal's capacity to instil fear, awe, and excitement that hunters so value, but these embodied knowledges and values are not limited to tourists. Rather, this study has shown that a lack of economic benefits at household level can be offset by emotional, socio-cultural values, produced through corporeal interactions with charismatic elephants considered 'friends'.

As such, elephants and other 'natures' are not presumed to have essential ontologies in these socio-natural assemblages. This study has shown that the elephant's value as a 'trophy', 'ecosystem engineer', or 'charismatic megafauna' are not pre-existing givens, but result from the pachyderm's position in processual relations with other (non)humans. These 'relational values' are not static and do not inhere in elephants or other 'things'. Rather, they are affective, spatially contingent, 'more-than-human' events that must be continually (re)enacted in order to exist. Whether they are tracks in the sand, GPS points on maps, 'destroyers' on HWC claim forms, 'trophies' on wildlife quotas or stories of encounter with farmers, elephants establish connections. These lively pachyderms move into relation with other (non)human components, exercising a range of affective capacities through which embodied knowledge and value is formed.

Having established that these socio-natures are formed through more-than-human assemblages, the thesis has traced the elephant's relational interactions in order to answer the second research question: *How and why does knowledge/value vary and transform within and between different spaces through relational assemblages? Where and when are the (dis)connections, and for what reasons?* In following African elephants, the thesis has charted a new direction for 'thing following', engaging with the pachyderm's networked spaces and beastly places. Crucially, it was a means by which to explore the spatial transformation of knowledge and value, and the elephant's role in (de)territorialising (CBNRM) spaces.

As such, the thesis has elucidated the elephant's integral role in the definition and reinforcement of spatial boundaries. Humans attuned to the creature's ecological rhythms map and striate 'elephant spaces' separate from agricultural settlement, for example. At the same time, material knowledge representations move through institutional networks,

playing a performative role in the formation of (inter)national policy and action, including the setting of quotas for trade in elephant ‘trophies’. Relational connections between MET and (inter)national NGOs are central to this process, and the economic value generated from these elephant commodities stabilises relations between individuals and institutions involved in CBNRM. Money and meat from the hunted elephant fortify the ‘symbiotic relationship’ between the Conservancy and TA, and these institutions are able to constrain individual humans. The Conservancy employs community members, whilst benefit distribution conducted via Kwandu’s six area sub-*khutas* reinforces the TAs cultural power in Zambezi. As such, the thesis has demonstrated how (non)humans come together in ways that stabilise Kwandu Conservancy as a spatial entity.

Yet these arborescent practices seeking to order space and legitimise certain knowledges and values exist in constant tension with deterritorialising processes. In its megafaunal movements the elephant smooths space, traversing spatial boundaries between ‘corridors’ and cropping areas, and its economic consumptive-use value does not always translate. Moving alongside those on the elephant trail, it became clear that things ‘outside’ the assemblage - including farmers that settle in riverine corridors and lions that wander into distant concessions - can disrupt the holding together. Likewise, following the elephant’s ivory drew attention to points of stillness that impede value circulation. International hunting bans, trade restrictions and airline trophy embargoes prevent the elephant from ‘paying its way’, threatening the very existence of conservancies in Namibia.

The economic value of hunting to conservancies is indisputable. Yet having followed the money and meat from a hunted elephant in Kwandu it was evident that few ‘benefits in pockets’ accrue at household level. The elderly and vulnerable especially are disconnected from these benefits, and others actively distance themselves due to religious values. These gaps opened up ‘between relation’ offer opportunities for (non)humans to make new connections that reconfigure the assemblage, perhaps by engaging in illegal killing. At the same time, this study has been clear not to confuse relationality with fluidity, demonstrating the importance of ‘detachments’ in holding assembled spaces together. This looser mapping of relationality was evidenced in the assembling of the elephant hunt and the production of economic value therein. Humans and illusive elephants both engaged in refusals, and CBNRM NGOs distanced themselves from the

practice in order to maintain fragile alignments with western donors. Such ‘pulling apart’ ensures that the assemblage continues to operate in its current form.

What this study emphasises, then, is the importance of conceptualising CBNRM spaces in terms of ‘relations’, as opposed to fixed scales or ontologies. As a spatial and conceptual entity, Kwandu Conservancy is not merely formed by topographic connections on a ‘local scale’. Rather, this space is constantly reproduced and (de)territorialised through topologic relations between diverse (non)human actants. There is constant tension between fixity and flow - between (non)humans working to stabilise spatial relations, and those that smooth space. Some components - including elephants - can exercise both capacities, perhaps simultaneously. The elephant’s ‘relations of exteriority’ mean it is not defined by the stabilising connections it makes with actors in Kwandu. Following its own megafaunal ‘lines of flight’ the elephant folds space in its relational connections with (non)humans. These socio-natures may be absent on the surface but can cohere at any moment.

Having established that socio-natures in CBNRM spaces are more-than-human and assembled, then, what are the practical policy implications for a CBNRM programme that currently finds itself at a crossroads? As such, the next section of this conclusion chapter addresses the third research question: *What are the implications of this relational approach to socio-natures for CBNRM policy and practice? What policy/institutional changes are required to assemble more equitable and ecologically healthy socio-natures?*

8.2 Research Implications and Policy Recommendations

Political ecology approaches aim not just to critique the interplay of environment and political/economic/social factors, but to change them. In its socio-material approach to exploring these more-than-human assemblages, then, the study has helped demonstrate that alternative, non-capitalist socio-natural futures are possible. The thesis has shown that there is no singular, balanced nature to be conserved; nor are there fixed ‘local’ or ‘landscape’ scales for biodiversity protection. Instead, natures are multiple, fluid, and produced in contingent assemblages of more-than-human actors. This research therefore

supports calls for environmental policy to embrace this generative ontology and its inherent uncertainties. Concerned less with the diversity of current non-human forms, conservation practice should focus on fostering and preserving dynamic topological processes through which ‘natures’ may become otherwise (Braverman 2014; Lorimer 2012; 2015).

Conservancies are thus integral to maintaining these open-ended, resilient landscapes. As this study has shown, the elephant’s presence in the CBNRM assemblage is contingent upon other nonhumans such as water, trees and land that are separated and controlled by different government ministries. There is clearly a need to improve cross-sectoral collaboration, and plans to ‘scale-up’ CBNRM by devolving use rights to a broader range of natural resources are a step in the right direction. As such, Namibia’s 2013 CBNRM policy is certainly more ‘attuned to the fluid configuration of the [assemblage’s] components’ (Bear 2013: 33), which are not only animals and humans. At the same time, MET’s efforts to embed and ‘connect’ conservancies within landscape conservation networks can also harness these fluid spatialities and nonhuman mobilities, strengthening ecological resilience against climate change impacts, for example. While conservancy/CBNRM action plans and biodiversity targets are necessary, then, they should also allow for multispecies deliberation and experimentation (Lorimer 2012). This means that human-wildlife conflict policy must be temporally adaptive and responsive to highly mobile animals like elephants that may habituate to traditional mitigation tactics. In places like Kwandu (non)human interactions are contingent and constantly evolving, and management policy must be so, too.

Attending to these multi-natural ontologies emphasises the complexity and hybridity of socio-natures, problematising capitalist notions of undisturbed nature deployed by ‘experts’ to striate and commodify space. As such, this study argues against top-down policy and planning that overlooks local, situated contexts. Having traced the assemblage of (non)human actors in Kwandu, it is worth questioning whether financial offsetting of crop losses is effective in a place where farming conditions are so difficult. This study has shown that these payments contribute to a ‘cycle of destruction and benefit’ that stabilises the CBNRM assemblage overall, but has a disproportionate impact on certain households based on gender composition, labour resources and field location, for example. In this situation, economic remuneration acts as an ‘agricultural subsidy’ that

feeds this cycle but fails to deal with the root cause of conflict, nor its emotional and continuing impacts. As such, HWC policy would be better directed at diversifying livelihoods and strengthening ‘social’ - as well as ecological - resilience in conservancies.

Faced with these emotional concerns and ongoing impacts, economic benefits alone are unlikely to foster positive conservation values. For most individuals not in positions of power in the Conservancy or TA, economic benefits only serve to reinforce state control over these resources. For that reason, alongside proper devolution of wildlife rights, there is a need to increase participatory democracy in places like Kwandu. At present, most individuals are cut-off from decision-making processes and feel as though the Conservancy exists only for the committee’s benefit. In a large conservancy like Kwandu where villages are dispersed and transport is lacking, devolution of authority to appropriate sub-units (e.g. through the TA sub-*khutas*) would foster a wider sense of ownership amongst communities.

Having contributed to the broad critique of neoliberal conservation, this study also recognises the risks of championing multinatural political ecologies. These immanent, non-equilibrium approaches might legitimise and promote expanding markets in fluid ‘natures’ that can be produced, transformed, and disposed of in the process of capital accumulation. For that reason, the fixities and detachments that this study has highlighted are also central to composing vibrant ecologies. In Kwandu, this includes spatial striation through improved land-use planning and the provision of boreholes away from riverine habitat, for example.

Ultimately, CBNRM policy and practice must be attuned to the unique nature of each socio-natural assemblage. Attending to situated socio-natures in Kwandu Conservancy, this study has shown that relational knowledges and values are formed through open-ended, mutual negotiations between humans, elephants and other lively things. These relational values are processual, embodied, and impossible to abstract into fungible commodities for exchange. Folding space, these topological relations destabilise and subvert the territorialising practices of neoliberal governmentalities. In the ‘spaces between’ conservationists can harness and institutionalise new cultural values, moving beyond capitalist framings in favour of alternatives such as ethics-based management, re-commoning and de-growth (Matulis 2014; Huber 2018). Attending to the mutual

becoming and relational interactions between humans and nonhumans, we may begin to assemble more ecologically healthy and equitable socio-natures.

8.3 Thesis Limitations

The in-depth ethnography and case study approach utilised in this study was ideally suited to exploring the spatial (trans)formation of socio-natures. At the same time, the theoretical approach adopted conceptualises space as open-ended, dynamic, and always in a state of becoming. Of course, the study's empirical and methodological approach embraces this relational ontology, but it also means that the ethnography presented can only ever be treated as a partial perspective amongst multiple 'realities'. The assembled relations described here are spatially and temporally specific to Kwandu, subject to change, and by no means representative of other conservancy assemblages. Given their heterogeneity and indeterminacy, even speaking of 'the' CBNRM assemblage is problematic, perpetuating the subject-object dichotomy (Carolan 2013).

The observations made and affective (non)human encounters experienced are grounded in situated interactions that are spatially and temporally specific. They emerge from contingent relations between researcher and other things that may or may not desire - or indeed be permitted - to affect proceedings. The knowledge produced in these spaces is thus framed by the researcher's own embodied value judgements and decisions over where and when to 'follow' the action. Always in process, these assemblages contain multiple possibility spaces that are inevitably absent from this research.

At the same time, the knowledge produced in these assembled spaces continues to be framed by the speaking, rationally reflective human researcher (Dowling *et al.* 2017). Despite the study's conceptual contributions to 'multinatural' geographies, then, it has largely approached human-elephant relations through the human lens. Undoubtedly, there exists an epistemological tension here, and much methodological innovation will be required before nonhumans can 'speak' for themselves in our research encounters (see below). That said, this study does not pretend nor aim to present an absolute truth of nonhuman worlds, but to shed light on the co-production of socio-natures in which I was

an integral part. Of course, the ‘more-than-representational’ approach adopted to achieve this aim might attract criticism for being too posthumanist or, conversely, for paying insufficient attention to structural power relations and politics. My hope is to have maintained a productive tension between posthumanism and humanism, providing inspiration for others that seek to explore and contest the relational production of socio-natures.

8.4 Future Research

This study illustrated the workings and contingency of neoliberal conservation on the ground in a specific, situated context. As such, future research could explore these embedded practices, actors and spaces in other places and contexts (Silva and Motzer 2015). Such research would add to political ecology understandings concerning the hybridity of neoliberal conservation programmes, including CBNRM. In this endeavour - and building upon the ‘more-than-representational’ approach adopted in this thesis - there is undoubtedly scope for further constructive engagement between critical work on capitalist ecology and more-than-human geographies. The abundance of multinatural approaches being adopted can continue to ‘animate, ecologise and render affective the humanist frameworks of political ecology’ (Lorimer 2012: 607). Recognising that these fluid ecologies inhabit a capitalist Anthropocene, however, a political ecology framework can help track the winners and losers of conservation practice ‘after nature’ (Lorimer 2015).

Despite the difficulties posed by existing power structures, then, this work should continue to challenge the dominant nature-culture framing in environmental policy. This means developing radical ontological responses that displace utilitarian conceptions of ‘natural capital’ and ‘ecosystem services’, for example. Future research should build upon existing work exploring diverse embodied natureculture ontologies, generated through affective interactions with multiplicitious alive agencies in the world (Sullivan 2017a, 2017b). Drawing attention to the relational values enacted between more-than-human entities, this study has attempted to highlight different ‘ecological truths’, and future studies should explore how these relational values might fortify social movements

challenging neoliberalism (Bollier 2016). These relational socio-natures are enacted in multiple combinations and spaces - from urban rooftop gardens to the African plains - and political ecologists must explore their assembled composition and effects.

Given the propensity for neoliberal conservation approaches to abstract and render different aspects of 'nature' commensurable, there is also a need to broaden understandings of the specific agencies of varied non-human entities. Again, this study has taken steps towards releasing elephants from the black box of 'nature', attending to their specific ecological and affective capacities. Future research could continue along this new track for 'thing following', tracing the spaces and beastly places of other (commodified) life forms, including plants and other less charismatic species. This necessitates a continued commitment to decentering human agency, and future studies should continue to develop methods that combat the over-reliance on textual representation in human geography and the social sciences more broadly (Dowling *et al.* 2017). Such methodological innovation would expand our ways of tuning into the affective nonhuman entities that assemble socio-natural worlds alongside us.

Appendix 1: List of Interviewees

Interviewee No. R=Respondent	No. of People	Interviewee(s)	Date
R1	1	Female villager, Singalamwe area	10/02/13
R2	3	2 female villagers and 1 male villager, Singalamwe area	13/02/13
R3	1	Male villager, Singalamwe area	26/02/13
R4	1	Female villager, Singalamwe area	27/02/13
R5	1	Female villager, Singalamwe area	27/02/13
R6	1	Male villager, Singalamwe area	28/02/13
R7	1	Female villager, Singalamwe area	28/02/13
R8	1	Male villager, Singalamwe area	28/02/13
R9	1	Female villager, Singalamwe area	01/03/13
R10	1	Female villager, Singalamwe area	01/03/13
R11	1	Male villager, Singalamwe area	03/03/13
R12	1	Female villager, Singalamwe area	04/03/13
R13	1	Female villager who had suffered elephant crop damage, Singalamwe area	06/03/13
R14	1	Male Community Game Guard, Mwanzi area	07/03/13
R15	2	Male village induna and wife, Singalamwe area	08/03/13
R16	1	Male NGO employee, Windhoek	15/04/13
R17	1	Male NGO employee, Windhoek	17/04/13
R18	1	Male NGO employee, Windhoek	24/04/13
R19	1	Male NGO employee, Windhoek	25/04/13
R20	1	Male conservancy employee, Sikaunga area	07/05/13
R21	2	Fixed Patrol Walking Interview with 2 male CGGs, Sikaunga and Sesheke areas	21/05/13

R22	1	Male conservancy manager, Singalamwe area	22/05/13
R23	1	Male conservancy employee, Kayuwo area	24/05/13
R24	1	Male villager, Sikaunga area	30/05/13
R25	1	Male Community Game Guard, Singalamwe area	08/08/13
R26	1	Male villager, Mwanzi area	21/08/13
R27	3	Fixed Patrol Walking Interview with 3 male CGGs, Singalamwe and Mwanzi areas	22/08/13
R28	1	Female farmer who had suffered elephant crop damage, Singalamwe area	28/08/13
R29	1	Male Community Game Guard, Sesheke area	29/08/13
R30	1	Female villager, Sesheke area	30/08/13
R31	1	Male villager, Sesheke area	02/09/13
R32	1	Male Community Game Guard, Singalamwe area	04/09/13
R33	1	Female villager, Mwanzi area	05/09/13
R34	1	Male trophy hunter from the U.S.	09/09/13
R35	1	Male trophy hunter from the U.S.	11/09/13
R36	1	Male trophy hunter from the U.S.	15/09/13
R37	1	Female villager, Mwanzi area	22/09/13
R38	1	Male NGO Director, Windhoek	25/09/13
R39	1	Female NGO Director, Windhoek	27/09/13
R40	1	Male villager, Mwanzi area	20/10/13
R41	1	Male villager who had suffered elephant crop damage, Kayuwo area	23/10/13
R42	1	Female villager, Sikaunga area	23/10/13
R43	1	Male <i>silalo induna</i> , Kayuwo area	24/10/13
R44	1	Female NGO employee, Katima Mulilo	25/10/13
R45	1	Female villager, Mwanzi area	11/11/13

R46	1	Female villager, Mwanzi area	11/11/13
R47	1	Male villager, Sikaunga area	12/11/13
R48	1	Female villager, Mwanzi area	12/11/13
R49	2	Husband and wife, Mwanzi area	13/11/13
R50	1	Male ngambela, Mwanzi sub-khuta	14/11/13
R51	1	Female villager, Sesheke area	19/11/13
R52	1	Male <i>silalo induna</i> , Mwanzi area	20/11/13
R53	1	Male NGO employee, Katima Mulilo	22/11/13
R54	1	Male professional hunter, Katima Mulilo	23/11/13
R55	1	Female farmer who had suffered elephant crop damage, Kongola area	25/11/13
R56	1	Male Conservancy Chairman, Kongola area	25/11/13
R57	1	Male villager, Kongola area	26/11/13
R58	1	Male NGO employee, Kongola area	27/11/13
R59	1	Male Inaugural Chairman of Kwandu Conservancy, Sikaunga area	28/11/13
R60	1	Female villager, Sesheke area	28/11/13
R61	1	Male MET staff, Katima Mulilo	29/11/13
R62	1	Male Conservancy employee, Sikaunga area	04/12/13
R63	1	Female villager, Mwanzi area	05/12/13
R64	1	Male NGO employee, Katima Mulilo	05/12/13

Appendix 2: List of Fieldwork Events and Meetings

Meeting	Location	Date
Kwandu Conservancy meeting on Staff Contracts and Policy	Kwandu Conservancy Office	14/12/2012
HWC Committee Meeting	Kwandu Conservancy Office	07/02/2013
HWC Committee Meeting	Kwandu Conservancy Office	25/02/2013
NACSO IDWG Meeting	NACSO Offices, Windhoek	02/04/2013
39 th NACSO Members Meeting	NACSO Offices, Windhoek	03/04/2013
Chairperson's Forum	Safari Court Hotel, Windhoek	29-30/04/2013
Information Sharing Meeting	Kwandu Conservancy Office	13/05/2013
Kwandu Conservancy and IRDNC Meeting on Staff Policy	Kwandu Conservancy Office	20/05/2013
Zambezi conservancies workshop	Balyerwa Conservancy, Zambezi	22-23/07/2013
Bi-annual Planning Meeting for Zambezi conservancies	Balyerwa Conservancy, Zambezi	24-25/07/2013
Kwandu-Imusho Joint Forum Meeting with WWF	Kwandu Conservancy Office	31/07/2013
KaZa IDP Launch	Bwabwata National Park, Zambezi	01/08/2013
Kwandu Conservancy Audit Feedback Meeting with WWF	Kwandu Conservancy Office	08/08/2013
Mwanzi Sub-Khuta Meeting	Mwanzi Sub-Khuta, Kwandu Conservancy	21/08/2013
Kongola Sub-Khuta Meeting	Kongola Sub-Khuta, Kwandu Conservancy	03/09/2013
Kayuo Sub-Khuta Meeting	Kayuo Sub-Khuta, Kwandu Conservancy	03/09/2013
40 th NACSO Members Meeting	WWF Offices, Windhoek	01/10/2013

HWC Committee Meeting	Kwandu Conservancy Office	30/10/2013
Kwandu Conservancy AGM	Kwandu Conservancy Office	10/12/2013

Appendix 3: Glossary of Sifwe Terms

Induna: Headman with authority over a particular village. Is a descendant of the first family to settle in the area.

Khuta: A court/council of the Traditional Authority. It is the highest traditional legislative, administrative and judicial body in the tribal area.

Ngambela: An individual that is second in command to the Chief of a Traditional Authority, and communicates the chief's wishes to the *Indunas*. Also known as the 'prime minister'.

Njovu: Elephant

Silalo Induna: Headman representing a group of villages within the Traditional Authority

Sub-Khuta: Local court/council where *Indunas* meet to discuss issues and resolve community disputes.

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