Quirimbas: A society reconfigured by nature

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DECLARATION

I, **VERA RIBEIRO,** declare that the work contained in this thesis is my own original work and that it has not been previously submitted for a degree or any other qualification at this University or any other institution.

Signature: Signed by candidate

Date: 17/10/2022

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Abbreviations

ANAC	*Administração Nacional de Áreas de Conservação* or National Agency for Conservation Areas
BIOFUND	*Fundação para a Conservação da Biodiversidade* or Foundation for the Conservation of Biodiversity
CBD	Convention on Biological Diversity
CBNRM	Community Based Natural Resource Management
CDZ	Community Development Zone
CFC	Community Fishing Councils
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DINAC	*Direcção Nacional de Áreas de Conservação* or National Directorate for Conservation Areas
DUAT	*Direito de Uso e Aproveitamento de Terra* or Land Use and Benefit Rights
EAME	Eastern Africa Marine Ecoregion
EWT	Endangered Wildlife Trust
GECORENA	*Gestão Comunitária dos Recursos Naturais* or Community Natural Resource Management
IUCN	International Union for Conservation of Nature
MoU	Memorandum of Understanding
MPA	Marine Protected Area
SUZ	Specific Use Zones
TPZ	Total Protection Zones
USAID	United States Agency for International Development

1. Constructions of nature and the disruption of society in the Quirimbas National Park

1.1 Introduction

Notions of wilderness, landscapes and national parks have been instrumental in the social construction of nature. While critical scholarship has shed light on how such notions have been constructed, far less attention has been devoted to the ways in which nature reconfigures society, i.e. how these constructions of nature impact on structures of and within society. By using the Quirimbas National Park (herein also referred to as Quirimbas) as a case study, this thesis seeks to understand how nature has been used as a vehicle for the social and political stratification of society.

Through a political ecology lens, the study will draw on various constructions of nature to demonstrate that readings and meanings associated with landscapes, wilderness areas and national parks in the Global South have historically been shaped by, or associated with global/international discourses, narratives, and imaginations of nature (Castree 2001; 2005; Cosgrove 1984; Gerber 2019; Fletcher et al 2021; Grove 1995; Nash 1967; Trisos, Auerbach & Katti 2021), whilst local perspectives have generally been ignored or silenced. In line with the dichotomous approach which underpins much of Western thought, nature has historically been perceived as something 'out there' waiting to be 'discovered' and attributed 'meaning' by the human mind (Ingold 2005). Within this imagined nature, locals have either been placed within the landscape, albeit as non-humans or semi-humans (i.e. as savages, part of the indigenous local flora and fauna, or as a source of amusement/interest/excitement to Europeans), or otherwise removed from the landscape in order to give way to truly natural environments (Cosgrove 1984; Cronon 1995; Mushonga & Matose 2020; Nash 1967; Neumann 1998; Ramutsindela, Matose & Mushonga 2022). Over the *longue durée*, approaches to protected area management in the South have been informed by such dominant nature readings, which have resulted in the adoption of mechanisms of separation or disruption between 'nature' and 'culture'. Although these have fluctuated over time, they have essentially maintained the same underlying purpose of interrupting the links between people and the environment.

This thesis traces this separation through highlighting the continuities of mechanisms imposed on Mozambican landscapes throughout the history of the Portuguese colonial administration,

particularly from the late nineteenth century, and up to and following the country's independence in 1975. Whether implemented in the form of legislative arrangements and territorial planning instruments by the Portuguese, or as 'new' legal provisions and zoning tools in post-independence Mozambique, albeit through the prism of inherited colonial legislation and/or informed by international environmental agendas, such separation mechanisms have, in practice, resulted in the disruption of local people's livelihoods and access to nature, and limited/restricted their rights through processes of displacement and marginalisation and, particularly, violence and criminalisation.

Besides interrupting the link between 'nature' and 'culture', disruption/separation mechanisms have also led to the 'placing' of locals in function of colonial and/or conservation interests and/or imaginations. In other words, locals have historically been grouped or classified into categories that changed over time, depending on how dominant groups in society viewed and approached nature. Whether classified as part of the local flora and fauna, or as mystic savage creatures that belonged in the wild, exploited as slaves during hunting expeditions and exploratory journeys, or removed from nature for being 'backward' and 'primitive', or returned to nature as a product for consumption by tourists (Dlamini 2020; Enes 1946; Martinho's 1934; Rufino 1929), locals have been placed in flexible or unstable and often contradictory categories according to the interests/imaginations of colonial authorities. Following independence, locals were once again rebranded or categorised as a reflexion of activities taking place close to them (in this case, nature conservation), and this time as 'local communities' (Blaikie 2006; Bocarejo & Ojeda 2016; Fairhead, Leach & Scoones 2012; Vihemäki 2005). Although local communities were allowed to access nature, natural resource use was, and remains, in the case of Mozambique, restricted to subsistence and/or what was defined as sustainable use levels (De Wit & Norfolk 2010; RdM 1999). Whilst legally allowed to reside within protected areas in the twenty first century, locals are still categorised as 'primitive', ignorant' and 'criminal' for having livelihood practices that are 'incompatible' with nature protection objectives (RdM 2014).

To understand the consequences of breaking or interrupting the link between people and the environment, the study also engages with the assemblage theory and the concept of 'nature arrangements', which posit that there is no real division between humans and nature, with all living and non-living things arranged and intertwined in a process of constant formation (Deleuze cited in Colebrook 2002; Escobar 2008; Ingold 1993; 2000; 2005). By constraining protected areas to the 'nature'-'culture' binary or dichotomy, landscapes are essentially

reduced to blocks, prisons, or containers that only allow some constituents in, while prohibiting others (Ingold 1993; 2000; 2005), thereby disabling the formation of new nature arrangements (Deleuze cited in Colebrook 2002). This is the case in the Quirimbas, which has historically been imagined, and then conceived externally as a series of bounded landscapes with fixed borders and a rigid management plan, instead of a complex and flexible spatiality that recognises multiple local land uses and the links that people have with the land they inhabit and the resources they use (Grandia & Ojeda cited in Holmes 2014). Whilst such disruption can have severe consequences for local residents and socio-ecological relations (Bocarejo & Ojeda 2016; Brockington 2002; Brockington & Igoe 2006; Büscher 2012; Dowie 2009; Duffy 2010; Marijnen 2017; Massé 2019; Mushonga & Matose 2020; Ramutsindela, Matose & Mushonga 2022), it also ultimately forces society to reorganise/reconfigure itself in the process.

1.2 Constructions of nature, nature arrangements and the consequences of disrupting the nature-culture unity

1.2.1 Imagined natures

According to Castree (2001; 2005), 'nature' is a socially constructed concept, whose meaning and value changes according to different actors. While dominant groups in society have historically controlled nature readings based on specific social interests and/or imaginations, local people's perspectives, ontologies and epistemologies regarding nature and natural resources have generally been neglected and/or suppressed (Castree 2001; 2005; Fletcher et al 2021; Gerber 2019; Santos 2018; Trisos, Auerbach & Katti 2021).

Closely linked to Western thought and the history of imperialism and settlement, notions of 'wilderness' and 'landscapes' (Cosgrove 1984; Grove 1995; Nash 1967) have been instrumental in the social construction of nature. Whether perceived as 'empty' lands with 'abundant' natural resources akin to Eden, or wastelands with harsh environments occupied by 'savages', these concepts have largely been shaped by imaginations and understandings of nature (Blaikie 2001; Cosgrove 1984; Grove 1995; Nash 1967). These constructs have, in turn, informed the way in which protected areas or national parks have been conceptualised globally, i.e. based on imaginations of 'pristine' landscapes devoid of people, resulting in attempts to forcefully remove local residents to enable the recreation or reinvention of truly 'natural' environments (Cronon 1995).

In Mozambique, protected area management is firmly rooted in these dominant constructs and discourses on nature, landscapes, and wilderness, where national parks are legally defined as areas set aside "for the propagation, protection, conservation, preservation and management of flora and wildlife, as well as the protection of places and landscapes […] of scientific value […]" (RdM 2014, p. 1299). Park residents and socio-cultural landscapes are either excluded from the narrative, or otherwise described as a risk to conservation. Historically, this is linked to the fact that most protected areas in the country were established by the Portuguese colonial administration as *coutadas* - or areas set aside for hunting by Europeans (SANParks 2015), with locals either removed from the landscape or exploited as part of the environment. Protected areas proclaimed by post-independent Mozambique – albeit based on global green agendas and motivations – have also attempted to recreate nature blocks where natural resource dependent groups are not only excluded and criminalised but are also perceived as a threat to the essence of nature.

1.2.2 Arrangements of nature

As a critique to the nature-culture binary, Ingold (1993; 2000) rejects the idea that nature is solely a product of our imagination and suggests instead that no real separation exists between substance and matter (the real or external world) and perception (our understanding of, or meaning we attach to it). According to Ingold (1993), this dichotomy is embedded in Western thought, which broadly understands nature as something waiting to be given meaning by the human mind. Ingold (2005) further suggests that, because nature conservation projects are based on an ontological rather than epistemological approach to nature, they result in the enclosure or the demarcation of fixed boundaries around protected areas to set it apart from human/social interaction. This, he claims, reduces nature or landscapes to blocks, prisons or containers, where only a few constituents that are perceived as fitting in are allowed to exist and partake in it. Accordingly, Ingold proposes that we acknowledge alternative ontological views of nature as a matter of engagement, rather than construction.

Like Ingold, Deleuze's theory of *agencement* (Colebrook 2002) and Escobar's (2008) exploration of nature assemblages also suggest that there is no division between humans and nature and that all things – both living and non-living – are arranged and entangled in a process of constant formation. This entanglement enables different arrangements to be continuously produced and reproduced, giving rise to even more/new arrangements. Accordingly, it is

important to maintain the link between the two so as to enable new arrangements and formations (*Chapter 2*).

1.2.3 Nature-culture disruptions

In order to further investigate Ingold, Deleuze and Escobar's argument on the continuity and interconnectedness between humans and nature, it becomes fundamental to assess the consequences of separating or disentangling people from nature or disrupting the links between humans and the landscapes or the protected areas which they inhabit. These consequences have been extensively researched (Adams et al 2004; Bocarejo & Ojeda 2016; Brockington 2002; Brockington & Igoe 2006; Brockington & Wilkie 2015; Büscher 2012; Dowie 2009; Duffy 2010; Lunstrum 2017; Lunstrum & Ybarra 2018; Marijnen 2017; Massé 2019; 2020; Mushonga & Matose 2020; Norton 2015; Oldekop et al 2015; Ramutsindela, Matose & Mushonga 2022; Tumusiime & Vedeld 2015; Verweijen 2020) and include, among others, the physical and economic dispossession and marginalisation of residents from protected areas; restrictions or erosion of natural resource-based livelihood strategies and mobility through the landscape; selective removal of populations or groups from a landscape's history, memory and representation; loss of power/delegitimisation of residents; loss of identity; commodification of nature and wildlife resources resulting in inflated prices for local products, violence over and criminalisation of natural resource dependent groups, etc..

1.3 Statement of research problem

While critical scholarship has shed light on how nature is socially constructed and therefore constrained by, or attached to dominant discourses, narratives, interests, concepts, and ideologies, not much attention has been paid to the way in which imaginations of landscapes, wilderness and national parks have resulted in the disruption of society and nature, i.e. that through different separation mechanisms applied over time, society and nature have been subject to multiple processes of disruption. This thesis, therefore, explores the way in which separation mechanisms have consistently been applied in Mozambique over the *longue durée*, from the Portuguese colonial administration starting from the late 1800s up to the 2020s, with a focus on the Quirimbas archipelago. As will be illustrated through the study, while separation mechanisms have morphed over the years – i.e. from territorial planning tools such as the establishment of *coutadas* and *reservas indígenas* or protected area zonation, to legal

instruments such as the enactment of specific legislation on hunting, conservation, and wildlife management – their main goal or outcome remains the same, which is to disrupt the links or separate humans/people from nature/non-humans and non-animals.

Considering these mechanisms of separation between nature and society have also led to the 'placing' of locals, the study investigates how locals have historically been classified according to unstable or flexible categories, as a reflection of how dominant groups in society perceived and approached nature. Whether branded 'noble savages' and placed within the wilderness to excite the senses of European explorers, hunters and *conquistadores*, or criminalised and perceived as pre-modern subjects to justify removals and allow 'civilised' men to enjoy 'untouched environments', or reinserted back into nature to serve as a product for consumption by tourists (i.e. 'native life'), locals have historically been subjected to various rules or practices which colonial authorities imposed at any given time throughout history. As a result of the inherited colonial legacy on the one hand, and pressure from the international community on the other, locals were once again (re)categorised or (re)branded by independent Mozambique, this time as either 'local communities', 'subsistence users', 'criminals', 'thieves', 'poachers', 'primitive' and/or 'ignorant'.

As protected areas in Mozambique have been externally conceived and managed according to the nature-culture binary, existing links between people and the environment have been disrupted, whilst local residents have been boxed into unstable categories. Besides interrupting the links that people have with the landscapes they inhabit, the disruption also restricts or limits the formation of new arrangements between humans and nature, as well as amongst individuals themselves. Although the interruption can take many forms, the disconnection itself forces new 'arrangements' and opens up space for new processes of construction, which ultimately means that resident communities end up seeking new ways of relating to the environment (either new or altered), being forcefully reconfigured in the process.

1.4 Primary research location: Quirimbas National Park

Although only recently established as a national park (in 2002), the research shows that the Quirimbas, and particularly its archipelago, were perceived early on[1] by Portuguese *conquistadores* as a "repulsive" landscape, yet at the same time "attractive" for the relief from

[1] During Portuguese occupation of Mozambique in the early 1500s.

arduous sea travels, and an important "refuge" against the "local savages" (Sousa 1960, p. 128). The archipelago was later described by the Portuguese colonial administration as an important place for naturalists and tourism development given its rich marine fauna, idyllic islands and white sandy beaches, dense forests, and the perfect conditions for quiet, reflection and spending time away from civilisation (Sousa 1960). Although only declared a national park in the post-independence period, conservation motivations were replicated from the colonial imaginings and linked primarily to the archipelago's "scenic landscapes" and the need to preserve and protect its "natural values" (Biofund 2021; MITUR 2010a, p. 28), despite the fact that the Quirimbas was a populated, vast and complex socio-cultural landscape.

Current scientific research suggests that the park is facing 'severe' human pressure leading to reduced fish stocks; degradation of mangroves, coral reef and seagrass ecosystems; increased human and wildlife conflicts; and loss of forest cover (MITUR 2010a). As in many protected areas throughout the Global South (Baines 2021; Blaikie 2006; Branch et al 2022; Brondízio et al 2021; Cañete, Oyanedel & Gelcich 2022; Cruz e Silva n.d.; Dar & Singh 2022; Domínguez & Luoma 2020; Ekpo 2021; Júnior et al 2021; Meher 2022; Munro 2009; Neumann 1995; Olson & Jardel-Peláez 2022; Ramutsindela, Matose & Mushonga 2022; van Uhm & Grigore 2021; Welch et al 2022; Wondu & Wube 2022), park residents and neighbouring communities are blamed and criminalised for environmental degradation and resource depletion in the park (Cruz e Silva n.d.; MITUR 2010a; Rios, Bandeira & Bila 2019). Common descriptions that echo the historical placing of locals include, among others, 'primitive', 'illiterate', 'environmentally destructive', 'poacher' and 'criminals' (see for example Carta de Moçambique 2020; Macua Blogs 2009; O País 2020; Silvestre 2014; 2015; WWF n.d. a; n.d. b; 2013). Besides failing to acknowledge and be more inclusive of local understandings or perceptions of nature and ways of relating to the environment, this type of research also introduces conservation practices that are neither supportive nor cognisant of local realities and contexts.

Furthermore, the Quirimbas has been the focus of considerable support and interest from 'external' actors (Blaikie 2001), including international conservation or environmental NGOs, multilateral and bilateral agencies, scientists, and other donors (EJAtlas 2014; Sitoe, Salomão & Wertz-Kanounnikoff 2012; VRD 2015) as well as national government structures such as the police, the defence force and the public prosecuting office (Interview 14, Park Official, 03 August 2018; MITUR 2010b). As a reflection of different historical, political and economic interests and backgrounds, external actors are likely to interpret 'nature' differently when

compared to 'internal' actors (i.e. park residents or natural resource users), by (re)producing dominant colonial and neo-colonial nature readings that mirror the "dualistic, binary structure of Western imagination" (Santos 2018, p. 5). This plurality of actors with (likely) opposing views on nature (Castree 2001; 2005; Flodén 2020) in the Quirimbas was seen as an opportunity to explore different imaginations of nature as well as to investigate how dominant constructs not only prevent internal actors from representing nature in their own terms, but also end up reshaping, reconfiguring, or stratifying society in political, social and economic terms.

1.5 Aim and objectives of the study

By engaging with constructions of 'nature' (Castree 2001, 2005), 'wilderness', 'landscapes' and 'national parks' (Cosgrove 1984; Grove 1995; Nash 1967), the assemblage theory (Deleuze & Guattari 1987) and the concept of 'nature arrangements' (Colebrook 2002; Ingold 1993; 2000; 2005; Escobar 2008), the study aims to investigate how nature has been used as a mechanism or instrument for the reconfiguration of society in the Quirimbas over the *longue durée*. Three objectives were formulated to achieve the study's aim. The first objective is to document the political and historical context of the Quirimbas and surrounding communities. In terms of the key theories applied in the research project, constructions of nature were largely used to understand how imaginations of 'nature' were historically imposed on the Quirimbas, and locals placed and/or removed from the landscape. The second objective is to identify key actors in the creation of the park, including, but not limited to: local communities, NGOs, park authorities, government officials, private sector, donors, scientists and universities, as well as their historical perceptions of the Quirimbas landscapes. Once again, the relevance of constructions of nature to this objective is that it allows for the examination of how some perceptions have been dominant over others. The third and last objective is to identify and explore crucial societal changes or shifts as a result of constructions of nature/park. The relevance of the 'rhizomatic' thinking or assemblage theory (*Chapter 2*) to this objective is that everything – living and non-living - is believed to be interconnected in a series of multiple and invisible relations, where separations are not possible. Forced divisions between nature and culture, as applied to protected areas in general and the Quirimbas in particular, thus end up producing only new formations/relations, as opposed to real separations. The type of changes the thesis seeks to address include identity shifts at the individual, group (e.g. fishermen and/or fisherwomen; youth; women, etc.) and/or community level; variations in behaviour and social interactions among park residents as well as between 'locals' and 'foreigners'; and forced

adaptations with regards to livelihood strategies. Given the extensive and variable range of possible societal changes, the ones of interest to this study were defined during the field work component, since it is only when local realities are confronted that particular societal shifts of interest can be identified.

1.6 Significance of the study

One of the contributions of the thesis is to build on existing literature on constructions of nature by exploring how approaches to conservation and protected area management have historically been informed by prevalent ideas/imaginations/viewpoints on nature as rigid systems with fixed borders, or the 'nature'-'culture' binary. By attempting to, on the one hand, deconstruct the production of knowledge and, on the other, explore local/suppressed knowledge systems and the ways in which different actors or groups in society construct nature differently, the study aims to contribute to a form of research that is more inclusive of subaltern or oppressed social groups' perspectives, which are often voiceless or neglected, while encouraging or inspiring new forms and approaches to nature conservation.

Although a significant body of research has engaged with constructions of nature, the manner in which constructed natures reconfigure society has received less attention. Insufficient research has been directed towards the understanding of how constructions of nature impact on socio-ecological relations. By investigating the history of the Quirimbas region/archipelago and how the park came to be designed – i.e. as 'nature blocks' or 'nature containers' which reject the connectivity, continuity or permeability between nature and humans, or perceptions of nature and culture as one – the thesis contributes to an improved understanding of how society is forced to reorganise itself following disruption.

The thesis further contributes to the current lack of contemporary studies on nature conservation in Mozambique and the Quirimbas National Park, particularly from a sociological perspective, considering that research there is generally limited and primarily linked to the natural and/or biological sciences. By engaging with the way in which nature has forced the restructuring of society in the Quirimbas National Park over the *longue durée*, the research contributes to knowledge production regarding the Quirimbas region as an extensive socio-cultural landscape, rather than as a mosaic of 'pristine' or 'idealised' environments produced externally.

1.7 Thesis structure and overview of chapters

The thesis is organised into eight chapters. This introductory chapter laid the foundation of the thesis by posing the main research question and objectives of the study, and described the reasons for selecting the Quirimbas National Park as a case study, which was to explore the way in which constructions of nature impinge on socio-ecological relations and, in the process, force the reconfiguration of society and/or local livelihoods.

Chapter 2 develops the theoretical background to support the research thesis, particularly the understanding of constructions of nature, nature assemblages, and the consequences of disconnecting the nature-culture complex.

The chapter firstly engages with the processes and thought associated with the social construction of nature and demonstrates how historical understandings or imaginations of the three concepts – 'landscapes', 'wilderness' and 'national parks' – all derive from or are informed by specific nature readings or discourses. The chapter also explores the placing of 'locals' within these imaginary constructs – i.e. as either an integral part of the wild, or physically displaced to give way to 'genuine' wilderness environments – by linking it to the way in which prevalent narratives on nature have historically been dominant over others.

The second area of research focuses on the concept of 'nature arrangements', where literature on the connectivity or continuity between nature and humans, and how attempts to disrupt the links between the two result in new 'arrangements' and processes of construction. This area of research is used to investigate the consequences of separating people from the environment, or of disabling or disturbing that continuity. The effects of this disconnect are illustrated through examples from protected areas throughout the Global South.

Chapter 3 introduces the design, methodology and qualitative research-focused approach applied in the study and how it allowed for a comprehensive investigation of the feedback and interchange loops between constructed natures, changing social realities and livelihood strategies in the Quirimbas National Park. The thought process used to select the study site within the park as well as the overall research plan (including procedures and methods for data collection), study participants and methods of analysis are described. Ethical considerations such as positionality and processes of self-reflexivity, as well as meaningful limitations encountered during the study, are also outlined in this chapter.

Through a historical lens, *Chapter 4* explores the ways in which nature in Mozambique came to be imagined and administered by the Portuguese, to illustrate how this served as a basis for,

or shaped approaches to conservation in the country after independence. In particular, the chapter explores *coutadas* (or hunting reserves) as commodified landscapes created between the late 1800s and the first half of the 1900s, which were thereafter transformed into protected areas, in line with regional and international developments or agendas that pushed for the preservation of fauna and flora resources in their 'natural state'. The chapter also explores the placing of locals or the *indígenas* in these newly created landscapes, particularly in relation to the overall context of Portuguese colonial administration, land use, and territorial organisation. One of the key intentions of the chapter is to contribute to the understanding of how hunting grounds and protected areas disrupted the links between nature and culture. Lastly, a brief historical overview of the Quirimbas archipelago dating as far back as the 1500s is also provided in order to contextualise the park and trace landscape readings of the Portuguese *descobridores*.

Chapter 5 engages with the way in which approaches to conservation and protected area management adopted by post-independent Mozambique have perpetuated colonial legacies of resource use. The focus of the analysis in this chapter is to assess how pressure from the international community, as well as hegemonic views, perceptions, and narratives on nature, resulted in the enactment of new legislation which had unintended consequences for rural communities and natural resource-dependent groups. The chapter also discusses the consequences of more recently (i.e., in the twenty first century) adopted approaches to conservation in the country, such as the criminalisation, exclusion, and marginalisation of park residents/natural resource users.

Chapter 6 comprises the empirical and analytical review of how external and hegemonic imaginations of 'nature' have been imposed on the Quirimbas landscapes. By exploring biodiversity values assigned to the park (as opposed to socio-cultural ones), perceived threats, and protected area management approaches, it illustrates how conservation in the Quirimbas has introduced processes of exclusion, violence and criminalisation of park residents and, therefore, disrupted the links between 'nature' and 'culture'. In essence, the chapter investigates how approaches to conservation in the Quirimbas have resulted in the reorganisation of local landscapes according to a rigid and time-bound system that not only dispossessed local residents from their homes, but created fixed boundaries that separate people from nature, criminalise local livelihood strategies, and ultimately attribute environmental and resource degradation to park residents.

Chapter 6 explores correlations between imagined 'natures', changing social realities and livelihood strategies in the Quirimbas National Park to address the key research question of how societies are reconfigured by hegemonic nature readings. Research findings are predominantly linked to the criminalisation of, and violence inflicted on park residents, who are forced to change/reorganise/restructure themselves and ways of relating to 'nature'. Processes of criminalisation and violence imposed on the Quirimbas society results in the transformation of park residents into 'thieves', 'poachers' and 'environmental predators', which ultimately dispossesses and excludes communities from their homes and delegitimises them as 'rightful' park residents. Moreover, the adoption of conservation approaches based on external green agendas that are neither supportive nor cognisant of local realities and contexts, leads to the reconfiguration of society, as they introduce or enhance divisions among groups of residents (e.g. 'local' vs 'foreigner'; 'good' vs 'bad'), force residents to engage in new and overwhelmingly 'illegal' livelihood activities, thereby disempowering and silencing local communities.

The concluding chapter (*Chapter 8*) deliberates on the outcomes of the study by returning to the broader themes explored in *Chapters 2* through to *6* and addresses the hypothesis and questions posed in the introductory chapter. The three main findings or insights from the study are therefore elaborated in this chapter.

2. Hegemonic nature readings, assemblages of nature and the placing of locals

2.1 Introduction

This chapter develops the theoretical background to support the research thesis, particularly in the understanding of two broad areas of enquiry, namely, constructions of nature, and nature assemblages, both of which have been used or applied within a largely political ecology framework.

By engaging with literature on the processes and thought associated with the social construction of nature, this chapter explores how readings and meanings associated with 'landscapes', 'wilderness areas' and 'national parks' have historically been constrained by or ascribed to dominant discourses, narratives, and imaginations of nature which are, in turn, linked to the history of modernity, capitalism, imperialism and modernity. In line with a predominantly dichotomous or binary approach to nature, the chapter also explores the placing of 'locals' within the landscape. Whether framed as part of the wilderness and categorised as 'flora and fauna', or physically displaced to give way to 'truly untouched' environments, or reintroduced back in nature as a source of consumption to Europeans, the categorisation of locals in function of colonial and/or conservation imaginations and interests is discussed and brought to the fore through the provision of examples of approaches to conservation from across the world.

The second area of research focuses on the concept of 'nature arrangements', which theorises that nature (or matter) and humans (or perception), are one or part of the same continuum. In other words, it reviews literature based on the concept that all that exists is interconnected and in constant formation; thus, attempts to disrupt the links between the two result in new 'arrangements' and processes of construction. This area of research is used to understand the consequences of separating people from nature, or of disallowing or disturbing that unity. Extant literature is provided to illustrate the results or effects of the disconnect when protected areas are established, with a focus on the Global South, as well as on processes of criminalisation of natural resource users.

These two perspectives are important for the study in the sense that, constructions of nature have provided the foundation for an improved understanding regarding the history of conservation in Mozambique, and particularly how protected areas and the Quirimbas National Park came to be imagined and then conceived in practice. The way in which locals or natural-

resource dependent groups have historically been placed within these imagined natures (such as in the Quirimbas National Park) was also made possible through the use of this perspective. Nature arrangements, on the other hand, helped with the exploration and understanding of the consequences of separating people from nature when protected areas are established, as well as how people are forced to reinvent themselves and the ways they relate to each other as well as with nature.

2.2 Constructions of nature and the categorisation of locals

2.2.1 Feeding the Western mind

Although landscape is a complex term, with numerous epistemologies depending on one's vantage point,[2] from a constructivist perspective, Cosgrove (2006, p. 50) defines it as a social perception, whereby material environments "come into being" only through the eye of an observer. Like Cosgrove (2006), Greider and Garkovich (1994) argue that landscapes are constructed through cultural symbols and as a reflection of ourselves, while Wattchow (2012) suggests that landscapes are a continuous interaction between natural and cultural events. Demeritt (1994) also suggests that within the social construction paradigm, landscapes are perceived either as constructed spaces according to particular social and linguistic contexts associated to them (Cosgrove 1984; Rose 2002; Stokowski et al 2021), or else positing some independent agency in nature – claiming that no landscape is completely cultural where all meaning is determined by humans, but rather that it is understood of as a result of landscape-culture interactions (Demeritt 1994). Based on these various interpretations, Cosgrove (cited in Matless 1992) discusses the ways in which landscapes have historically been considered in relation to a number of binaries, among them ideological and material, unreal and real, authentic and inauthentic, depicting reality or deceit of representation, and science and experience. These binaries, Matless (1992) theorises, suggest that the idea of landscape is value laden.

Cosgrove's *Social Formation and Symbolic Landscape* (1984) suggests that landscapes are a form of discourse or representation of the ways in which (dominant/powerful) social groups frame themselves in relation to the land and other groups. According to the author, the idea of

[2] i.e. a pure "naturalistic" or realist one that perceives landscapes as plain physical reality and neutral to human agency, and a "culturalistic" or relativist one that associates landscapes with social and symbolic constructions (Castree 2005; Cosgrove 2006; Ingold 1992, p. 152; Rose 2002; Wattchow 2012).

landscape can be traced back to the history of European societies, having first emerged and then refined and reproduced repeatedly according to a set of "political, social and moral assumptions" (Cosgrove 1984, p. 1). A materialistic or Marxist perspective on landscapes, for example, is discussed by Cosgrove (1984) and Matless (1992), highlighting questions of power over land with the emergence of capitalism in Europe and the subsequent creation of landscapes through paintings by wealthy actors, denoting spaces devoid of people from which individuals were often dispossessed for the rich to enjoy tranquil, harmonious and 'empty' lands.

In *Green Imperialism*, Grove (1995) provides a historical account of the origins of environmentalism, including the ways in which European expansion shaped the creation of landscapes in the South. He notes that European imperialism resulted in tropical settings being perceived, produced, and reproduced as idealised landscapes for Western imaginations, which in turn affected the planning and appropriation of newly colonised lands. These 'idealised' landscapes, he argues, were based on the 'white man's' encounter with lands perceived as large, abundant, sparsely populated, and unaltered by the 'noble savages', while at the same time vulnerable to degradation by the economic greed of the colonial power. At the time, civilisation, evolution, and the white European race were perceived to be prone to the process of degeneration[3] (rather than natural selection, which was at play in the animal/more primitive worlds), which was not only a threat to the progress of human systems (Lankester in Foster 2020), but could also be contagious and degenerate natural systems. It was in these Southern landscapes, the author argues, where Eden and Paradise could be reached, Purgatory and Redemption attempted, and feminised environments opened to violation and offering relief from arduous travels, found.

Gregory (2001) also links this type of discourse to the feminisation of nature or something 'unpredictable' that requires domestication and taming, as well as descriptions of Southern environments as 'wild', 'luxuriant', 'harsh' and 'extreme', versus a 'temperate' European nature that is 'constant' and 'moderate'. Historically, as knowledge of the world grew and became more widely available and disseminated, and the economic interests of colonial powers grew more salient, 'idealised' landscapes became less attractive, giving rise to different or contrary perceptions such as 'abnormal', 'dangerous', 'inhospitable' and 'hot' environments (Grove 1995, McCann 1999). At the time, Southern wilderness landscapes became associated

[3] Degeneration defined as a "gradual change of the structure in which the organism becomes adapted to less varied and less complex conditions of life" (Lankester, cited in Foster 2020, p. 37).

with health risks, and with local people viewed as a threat to the white European race (Grove 1995, McCann 1999).

The history associated with the social construction of Africa's landscapes in particular is discussed by McCann (1999) and that of South Africa and the Kruger National Park by Dlamini (2020), who posit that Africa's landscapes are anthropogenic and a product of both global and local forces. In essence, they argue that Africa's landscapes are, to a large extent, a product of concepts, opinions, and prescriptions of how land should look like or as a product of utilitarian function by (particularly) colonial governments, but also Africans themselves. Land degradation rather than a changing landscape, for example, has been a dominant perception and discourse regarding Africa's lands created by outsiders and perpetuated by Africans (McCann 1999). These imaginary landscapes have been recreated by a wide range of actors, as well as instruments such as the fourth estate (e.g. through television, photography, etc.) arts and culture (e.g. literature) and policy (e.g. legislation), to name a few (Greider & Garkowich 1994; McCann 1999). While there is no doubt that African landscapes have changed over time, what McCann (1999) points out is that the dynamics behind those changes ought to be discussed, instead of silenced, which may for example include the concept of extraversion used to highlight the agency of African subjects in relation to unequal relationships with the external environment (Bayart 2007). As an example, McCann (1999) examines the historically prevalent image of Ethiopia as a predominantly deforested landscape/environment. According to Robbins (1967) and McCann (1999), this image of Ethiopia's landscapes was created based on oral accounts accepted as 'factual' among Western scientists, as opposed to empirical data. It was in turn passed on to national professionals and replicated as true and factual knowledge, eventually becoming a local narrative and part of a national self-image (McCann 1999).

Fairhead and Leach (1996) also reflect on the way in which degraded landscape imaginations are created and/or replicated based on inadequate research, and how the meaning of 'degraded' landscapes is often contested or challenged by locals. As an example, they describe the way in which the idea of 'degraded forest landscapes' was imagined, created, and linked to human habitation in Guinea by both scientists and policy makers, while long term social research concluded that local inhabitants had in fact been responsible for the restoration (and not degradation) of forests through collaborative efforts. Another example is provided by Maezumi et al (2018), who discuss and provide evidence of the way in which several indigenous groups have positively shaped parts of the Amazon into complex landscapes over the course of some

4,500 years, rather than causing deforestation, highlighting local people's role and knowledge in managing and shaping ecosystems.

The theory and examples provided so far suggest that landscapes in the Global South have been largely created as a direct result of European imaginations of nature projected on to 'Southern' lands over the *longue durée,*[4] while at the same time excluding local knowledge systems and understandings of nature as unscientific (Ginn & Demeritt 2009; Grove 1995; Santos 2018), which is explored below.

2.2.2 Power, knowledge and contested views on nature

Blaikie (2001) explores the multitude of actors involved in the social production and reproduction of landscapes. Accordingly, actors can be both 'external' and 'internal', with the latter defined as resource-dependent groups that can be further divided by gender, race, class, profession, beliefs, ethnicity and culture, all of which can produce "purely local environmental politics" based on competition for, and value attached to resources (p. 139). External actors, on the other hand, include international finance institutions, global multilateral and bilateral agencies, scientists, activists, conservation groups, NGOs, forest contractors, charcoal producers, industry and politicians, to name a few (Blaikie 2001). All these different actors, he contends, interpret nature differently from one another, resulting in the production of essentially 'contested landscapes'. Although arguing that different actors produce contested landscapes, Blaikie (2001) as well as Castree (2001; 2005) and Santos (2018) highlight issues of power and dominance of particular types of knowledge over others, particularly 'Western' and 'scientific' over 'local' and 'traditional'. Blaikie (2001) links this to why landscapes in the Global South tend to be imagined or perceived as degraded or, as Foster (2020) documents, more prone to degeneration, which in turn resonates with colonial and neo-colonial readings that attribute degradation/degeneration to the 'primitive', 'irrational', 'ignorant' and 'reckless' attitudes of indigenous peoples and the justification for colonial management.

Likewise, Gregory (2001) discusses constructions of nature in relation to culture and power, by arguing that the production of nature is largely based on colonial discourses, in particular the production of imaginative geographies that construct separate and distanced societies i.e. the colonised, and the colonising. Escobar (2008) explores the concept of the 'coloniality of

[4] *Longue durée* in this context refers to a continuous process throughout history and is not necessarily restricted to an individual period (e.g. mercantilism, colonialism, independence, etc.).

nature' in more detail, which relates to notions of nature as something that is outside the human domain, yet still subject to human domination. Morris cited in Foster (2020) refers to this as a 'superabundant' nature that requires conquering and command by humans. This view of nature tends to classify or hierarchise objects, and places nature, as well as the 'primitives' or 'non-moderns', at the bottom to the scale (Morris cited in Foster 2020.). It is a form of subalternisation of the 'Other', as well as their knowledges and views on nature (Morris cited in Foster 2020).

The link between knowledge production systems and constructions of nature has been widely documented and researched, suggesting that specialist or 'expert' knowledge tends to be promoted within the construction of landscapes, while local knowledge is essentially devalued/disregarded (Anderson 2001; Braun & Wainwright 2001; Bryant 1998; Fletcher et al 2021; Gregory 2001; Trisos, Auerbach & Katti 2021), through what Santos (2018, p. 8) defines as 'epistemicide', denoting the denial of all "kinds of knowledge other than those produced by modern science". Bryant (1998) for example, provides a summary of critiques on the hegemony of knowledge production, which includes, among other aspects, male-oriented environmental knowledge that entails the subjugation of nature (and, by extension, women), as well as fragmented scientific knowledge that chooses to select or focus on limited or restricted aspects of reality, thereby failing to provide a holistic analysis of the biophysical world. While the benefits associated with a more inclusive research of local and indigenous knowledge systems has been widely documented, Anderson (2001) argues that 'race' as a social construct must be addressed at the outset, particularly as it determines power and defines the boundary between one (dominant) group over the 'Other' (Santos 2018).

Landscapes are therefore products of "ideology, hegemony and dominant relations of power" (Rose 2002, p. 457), with powerful groups able to manipulate and often control landscape contexts for their own benefit, while undermining/dismissing other constructs. Exploring these struggles is considered essential in order to achieve an improved understanding of the landscape and how it comes to be meaningful (Rose 2002) for different actors in society. As Greider and Garkowich (1994, p. 2) point out, "any physical place has the potential to embody multiple landscapes" depending on the cultural definitions of each observer or group of participants. They explain this further by providing examples of how particular landscapes such as the Narmada River in India and the Yucca Mountain in the United States of America are perceived differently by different groups of people and how these 'imaginations' become contested. Given its 'incredible' healing powers and as an important pilgrimage site, the

Narmada River was perceived as the holiest and most sacred river for Hindus, whilst also considered an important site for the development of projects such as dams, dykes, and irrigation systems by the Indian government and the World Bank (Greider & Garkowich 1994). Likewise, the Yucca Mountain was identified by the US government, engineers, and scientists as having suitable geological conditions for the disposal of radioactive waste, with several studies focusing on technical questions regarding the site's geological stability (Greider & Garkowich 1994). Southern Paiute (indigenous) elders, on the other hand, believed that rocks in these mountains were spiritually powerful, and perceived local geological conditions very differently from mainstream society (Greider & Garkowich 1994). These contrasting understandings of landscapes often arise among different groups within society such as scientists, engineers, developers, and government officials (i.e. external actors) wanting to modify a specific natural environment, versus local inhabitants who may perceive the modification as a threat to the fundamental meaning of the landscape (Greider & Garkowich 1994; Stokowski et al 2021).

Another interesting and related example is provided by Walker and Fortman (2003), who explore competing landscape ideas in Nevada county, California, where a former mining and ranching community experienced rapid gentrification and 'in-migration'. What is clear from this account is that whilst there seems to be no unified definition of landscape among the groups of people (i.e. long-time residents *versus* in-migrants), "particular ('elite') ideologies of landscape" dominated others, depending on economic, social, historical and cultural standings (Walker & Fortman 2003, p. 482). In this analysis of the politics of landscape, competing landscapes arise based on "practical" and "aesthetic", or "production" and "consumption" landscapes (Day & Patel 2021; Williams cited in Walker & Fortman 2003, p. 484), which in turn can shape decisions regarding that particular landscape and eventually reshape the landscape itself (Walker & Fortman 2003). It is thus clear that both power, knowledge, and politics need to be considered when discussing landscape and nature readings, imposition, and domination. In essence, power results in the imposition of specific landscape and nature readings by particular groups in society, which may not only be disadvantageous or detrimental to other groups, but result in dominant landscape readings that ultimately influence society as a whole as well as the allocation of resources (Greider & Garkowich 1994).

2.2.3 Replicating hegemonic views on nature

2.2.3.1 Wilderness areas

Similar to the concepts of 'landscape' and 'nature' discussed above, different epistemologies have generated conflicting and contested views on the meaning and understandings of 'wilderness'. For some (realists), wilderness are 'real' areas of land, largely untouched by humans, but increasingly threatened by urbanisation and industrial development, while for others (constructivists), wilderness areas are a Eurocentric social construct emanating from hegemonic environmental discourses (Proctor 1998). For the former, the protection of wilderness areas is essential to safeguarding natural resources and processes from the effects of civilisation such as degeneration, while for the latter a better understanding of the cultural, social, and political meanings associated with the term is essential in order to adequately protect it (Foster 2020; Proctor 1998).

Nash's *Wilderness and the American Mind* (1967, p. xi) provides a detailed historical account of the way in which 'wilderness' perceptions were informed by Western thought which subsequently became "the basic ingredient of American Civilisation". In other words, he documents how perceived notions of 'free' and abundant natural resources in North America enabled settlers to 'build' a civilisation out of the 'wilderness'. While a second Eden was expected to be found in North America after the 'first Eden' was 'discovered' in Southern landscapes (discussed above), the idea soon faded away when the first European settlers (Cronon 1995) found themselves faced by endless forested and swampy wilderness areas with extreme climates, indigenous 'savages', and 'beastly animals' (Cosgrove 1984). Wilderness areas thus quickly morphed into unruly, uncontrollable, and unfamiliar wastelands requiring "conquest […] in the name of progress, civilisation and Christianity" (Nash 1967, p. xii). Wilderness areas not only became perceived as hostile environments inhabited by 'savage men' and 'wild beasts', where 'modern people' could become confused and lost, but also dangerous places where savagery was contagious given that indigenous people were "disciples of the devil" (Nash 1967, p. xii). Associated with these images of hostile environments, Nash further documents, was a sense of barren and infertile land where basic necessities such as food and shelter were only possible by overcoming the wilderness. Civilising the wilderness meant taming the wild, bringing it out of darkness and backwardness, changing it from evil to good and from wastelands to 'productive' land (Nash 1967). Gaining control over nature, or the wilderness, was therefore the only way one could escape notions of fear and insecurity (Nash 1967).

As the nation developed, however, wilderness areas gradually shifted to be associated with places of quietness and tranquillity, where one could escape the harsh realities of civilisation (Nash 1967). According to Nash, this was largely informed by Christianity, which associated wilderness areas with sanctuaries, or places conducive to meditation, clarity, and spiritual awareness. Linked to these images was the growing association between wilderness areas and the new concept of 'American assets'; where, given that Europe's cultural grandeur in the form of castles and cathedrals could not be replicated in America, the imagination of a 'pure spiritual' America was slowly created and constructed based on its wild landscapes (Nash 1967). Besides Christianity, the advent of Romanticism also contributed to wilderness areas becoming less repulsive and fearful, as aspects typically associated with these landscapes such as mysteriousness and calmness became more venerated, and towns became increasingly equated with materialism, immorality, degeneration, and debauchery (Foster 2020; Nash 1967). Primitivism was an important aspect of Romanticism in the sense that man's happiness and wellbeing was seen as "decreasing in direct proportion to his degree of civilisation" (Nash 1967, p. 47), which implied that the less civilised one was, the happier one became.

Cronon's *The Trouble with Wilderness; or Getting Back to the Wrong Nature* (1995) examines the ways in which the idea of wilderness was created, focusing on two main constructs i.e. one based on the sublime, where wilderness is seen as a creation of God, and the other on the frontier, or wilderness as the border between civilisation and primitivism. The sublime resonates with Romantic conceptions, as discussed above, where wilderness areas had biblical connotations, and were associated with spaces where one may become insane or devilish, but also meet good fortune and find enlightenment (Cronon 1995). The frontier one, on the other hand, was related to the American frontier life, where wild places and primitive peoples were considered 'freer' and 'more natural' than civilised/controlled ones (Cronon 1995). As these wild areas were replaced and lost with colonisation and subsequent 'development', a national nostalgia for a 'wild lifestyle' grew amongst Americans, who started viewing those who maintained some frontier quality in their lives as a virtue (Cronon 1995).

In addition to providing a historical account of the ways in which wilderness areas have come to be imagined, Cronon (1995) further argues that while these perceptions have changed over several centuries of European history, some key features remain the same in the twenty first century. This is the case for wilderness areas, which are still perceived as the opposing pole of civilisation (Cronon 1995; Proctor 1998) or, as put forward by Nash (1967), the closer one gets to the wilderness, the less human influence one experiences. These constructs of wilderness

areas as tracts of land devoid of humans, Cronon (1995) argues, tend to originate from the fantasies of people who have never had to work or live off the land. Indigenous people, while previously seen as part of, and living in harmony with the wilderness, were soon removed/excluded from these areas due to practices perceived as inadequate and destructive, such as hunting, the collection and gathering of natural resources and materials, and the use of lands for pasture, among others (Cronon 1995; Schroeder 1999). This resulted in justifications for the forced removals of indigenous people throughout the Global South in order for external actors (e.g. colonial elites, hunters, tourists) to enjoy what was perceived as a truly natural and Godly landscape (Cronon 1995). In colonial Africa, for example, black people were initially considered to be part of the local flora and fauna (as were Aboriginal people in Australia) and thus allowed to live within wilderness areas, following which this joint occupancy was framed as being detrimental to the preservation of wildlife, which was perceived as important for recreation and the economic interests of the colonial elite (Schroeder 1999).

These examples highlight the extent to which wilderness narratives have been framed and utilised by external actors as imaginations with broad political, economic, social, and cultural effects and motivations, rather than a depiction of 'reality' (Robbins 2012). Imaginations and narratives about wilderness areas as well as ways to protect them were subsequently exported from America and Europe to developing countries, where different constructions and social relations to wilderness areas already existed. As outlined above, this resulted in the exclusion of local users from their ancestral lands (Guha cited in Blaikie 2001) in order to create opened and vast lands where nature could be protected, and persist eternally without 'intruders' who threaten the essence of 'Paradise' (Adams & McShane cited in Witter 2013).

2.2.3.2 Protected areas and the categorisation of locals

Neumann (1998) extensively documents the way in which wilderness imaginations imported from Europe and America have been imposed on African landscapes, creating new environments that had never existed before and/or that were perceived differently by local people. These imaginations of aesthetic African landscapes based on European ideals not only informed the creation and establishment of protected areas in Africa, but were also reinforced by international conservation societies, thereby further excluding and disempowering local people who had lived in, and in fact contributed to the creation of the very landscapes which are now being protected from them (Neumann 1998). The Yellowstone conservation model for

example, a largely protectionist and exclusionary model based on the assumption that certain types of human use are detrimental to conservation (Khothari & Coony 2015; Zimmerer & Basset 2003), was applied in Africa (as elsewhere in the South), perpetuating European imaginations of wilderness areas as spaces where nature was at its fullest/undisturbed by primitive peoples, while reinforcing imperial rule. Neumann (1998) provides examples of conservation actions in Tanzania that demonstrate how the historical construction of wilderness is critical to understanding the social construction of the 'national park' concept, which is basically a landscape "of consumption upon which are projected ideas of culture and nature and of where (literally) to draw the boundary between them" (p. 11). His analysis focuses on the way in which European ideals of wilderness areas have been imposed on local Tanzanian landscapes, resulting in the subsequent displacement and exclusion of local residents from accessing their land.

Demeritt (2002) and Dlamini (2020), expand on the 'categorisation' or placing of different groups of people in relation to nature. According to them, indigenous people have always been "represented as living in a state of wilderness nature" and under the influence of natural laws (Demeritt 2002, p. 33) or perceived to be "idyllically traditional" or uncorrupted by modernity, while "modern" people are seen as having escaped this naturalness into a civic society which in fact dominates nature (Dlamini 2020, p. 102). In other words, not only did Europeans conceive of the idea of an unspoiled Africa, but also of a primitive local society (Neumann 1998). Bayart (2007, p. 130) relates this to the colonial enterprise as a "fertile laboratory for subjectivation", which produced modes of existence or lifestyles that turned white people into colonisers/moral subjects, and Africans into natives/savages who they came to civilise or, as documented by Dlamini (2020, p. 119) to be used as a manner of "raw material". This, Bayart (2007) argues, not only attributed identities to natives and imprisoned them in a customary lifestyle, but also made moral subjects out of colonisers.

Through a political ecology approach, Robbins (1967) discusses the social construction of wilderness areas and their effects on local people in the Serengeti and Masai Mara Protected Areas in Tanzania and the Amboseli Conservation Area in Kenya. He highlights how mainstream views on wilderness areas ignore the ways in which local people and ecologies have in fact helped create the very same wilderness areas outsiders seek to protect. By importing wilderness imaginations from abroad, he argues, local livelihoods and ecosystem functions are often compromised. He further explores the implications that constructions of nature can have on current environmental and conservation management practices, given that

it is also likely to inform our understanding of the social 'origins' of environmental problems. The study highlights the use of fire by local residents in the Tsingy de Bamaraha Nature Reserve in Madagascar, which was specifically created for the protection of the lemur population (Robbins 2012). According to Robbins, the use of fire by local residents in slash-and-burn agriculture within the reserve and its outskirts has been singled out by WWF as the main threat to this biodiversity-rich reserve and identified as the cause of an imminent ecological disaster. He details, however, how fire has been used as an important agrarian tool for generations by local residents as a means to, among others, control exotic species and insects, and to clear land for ploughing. This type of conservation rhetoric, which is common in protected area management in the Global South, not only targets local residents (in this case small-scale Malagasy producers) for the loss of important habitats and a reduced lemur population (i.e. identifies locals or their activities/livelihoods as a 'problem'), but also attempts to remove or control the use of an important tool for local livelihoods (Robbins 2012) without the provision of appropriate alternatives.

Nash (2002, p. 225) also reflects on how imaginations of wilderness areas are essentially based on colonial legacies, suggesting that colonialism remains applicable in the twenty first century through "modern systems of law and government, silencing and severely restricting the ability of first nations and indigenous people to contest their dispossession". She illustrates this by examining the work of Head (2000), who demonstrates that colonial/settler perceptions of 'empty land' and 'wilderness areas' continue to inform conservation efforts and protected area management in present day Australia, while at the same time celebrating 'pre-historic' Aboriginal art. What this means, in essence, is that natural and 'untouched' lands continue to be nationally celebrated as the epitome of rural Australia (similar to the rural-erotic urban-intellectual experience explored by Kumar cited in Foster 2020), very much in line with the notion of *terra nullius* during early European settlement, thereby excluding not only past, but also present Aboriginal attachments and views on land (Head cited in Nash 2002). At the same time, Aboriginal agency in contemporary Australia is refuted or suppressed, given the national emphasis and value placed on Aboriginal 'pre-historic' heritages only (Nash 2002).

By using the Kakadu National Park in Northern Australia as an example, Palmer (2004; 2007) provides a detailed account of how nature is interpreted differently by different sectors of society. Similar to the way in which nature is valued in its (perceived) 'pristine' state, indigenous Australians are often associated with "timeless hunters and gatherers", but also portrayed as lacking scientific knowledge and tools to effectively manage Kakadu (Palmer

2004, p. 259). While park managers perceive the landscape as purely 'natural', she contends, Aboriginal people associate it instead with both current and past social and cultural histories. For example, they perceive introduced animals such as buffaloes and horses as belonging in the landscape, and value them both economically and culturally. Conversely, for park managers, on the hand, who apply mechanistic/scientific management approaches to conservation, these animals have no place in Kakadu's natural landscape (Palmer 2004). Palmer (2007) further posits that, while both actors agree that the park needs protection from the negative effects brought about by these introduced animals, preferred management approaches differ substantially between each group.

Willems-Braun (1997, p. 5) discusses the role that constructions of nature played both "rhetorically and materially" in the colonisation of social environments, in particular how definitions of nature under colonial administrations excluded colonised peoples and how current constructions of nature are informed and marked by legacies of colonialism. In particular, he discusses how struggles over particular 'natural' sites of British Columbia in the twenty first century risk recreating colonial relations. Examples of such sites are provided by the author, which, although considered cultural landscapes by First Nations, were described in national government papers as empty wilderness areas with suitable resources (such as land, forests and timber) to be "leased to transnational companies for the benefit of the general population" (p. 11). Other sites, he documents, were set aside as primitive spaces for natives to occupy, as opposed to modern spaces from where the Canadian nation could emerge. Besides the division and categorisation of land, indigenous populations were also described in detail, however always under the discourse of 'primitive culture', which resulted in their displacement from the surrounding landscape, to be fixed and contained in particular sites or villages (Willems-Braun 1997). What he suggests is that these representations of First Nations as primitive and traditional are still prevalent in the contemporary Canadian psyche. For First Nations to have a say on issues other than the sites demarcated as primitive land, he claims, is to lose some authenticity as a native, and therefore the right to speak as a native. On the other hand, to refuse involvement in national affairs other than those directly associated with First Nations is to forever remain where they were initially placed, i.e. "back in nature, always outside modern forms of rationality, as undeveloped, primitive precursors to modern cultures" (Willems-Braun 1997, p. 24).

Witter (2013) and Lunstrum (2013) also explore the ways in which wilderness narratives are still present in contemporary park management actions in the Limpopo National Park in

Mozambique. According to them and other authors (see for example Iordăchescu 2021 and Spalink 2022), both park authorities and international conservation agencies make use of 'technical justifications' based on constructed natures to defend certain decisions such as the need to resettle local residents outside park boundaries. These 'technical justifications' include issues related to community safety (i.e. the danger of having communities live in close proximity to wildlife) and interference with both anti-poaching operations and wildlife populations, which in turn are used to justify removals of local communities to areas outside the park. Removing people from the park, Lunstrum (2013) argues, avoids disrupting the wilderness 'feel' and 'character' of the park, which is based on colonial imaginations of parks as purely natural environments.

2.3 'Arrangements' of nature

2.3.1 Landscapes as spaces of engagement and dwelling

Ingold (1993; 2000) rejects the idea that landscapes are solely a product of our imagination and that they exist merely for us to make sense of our surrounds. He suggests there is no real separation between the "inner and outer worlds" (Ingold 2000, p. 191) or, in other words, between substance and matter (the real or external world) and perception (our understanding of, or meaning attached to it), but rather should be understood of as a process associated with the theoretical principles of "ontological interconnectedness", the "complex connections and processes" that make up living things, "non-anthropocentrism" and so on (Keller & Golley cited in Foster 2020, p. 190). According to Ingold (2000), this is a dichotomy that is embedded in Western thought, and one which sees nature as something 'out there' waiting to be given meaning by the human mind. In his essay, *Hunting and gathering as ways of perceiving the environment*, Ingold (2005) discusses the lack of separation between the mind and nature for hunter-gatherers, with the latter being approached not as something that needs to be grasped, but rather as part of their own environment. Without intending to compare worldviews of hunter-gatherers in relation to those of Western scientists, Ingold (2000, p. 42) suggests that we should rather acknowledge alternative ontological perceptions of nature, where nature is not "a matter of construction but of engagement, not of building but of dwelling". As such, this is in fact a critique of constructivism, which is founded on Western thought's ontological dualism between nature and society.

Based on the theory above, Ingold (1993, p.154) developed the concept of landscapes as dwelling spaces where, "through living in it, the landscape becomes a part of us, just as we are part of it." This happens through engagement with the world i.e. through the types of activities one carries out in the landscape, as well as through sights, sounds, and smells experienced in any specific environment (Ingold 1993). Ingold (1993; 2005; 2006; 2015) further argues that, regardless of who the actors are, whether human or non-human, through this continuous engagement with the landscape or the world, all contribute to its ongoing formation/reformation. This continual formation is linked to many different agents or producers, that is, not only to human formation or how people's lives unfold, but also to that of other creatures, as well as the wind, the rain, the moon, the stars, and so on (Ingold 2005; 2006). Ingold (2011) argues that all human and non-human relations are shaped by the agency of both human and non-human elements. Taking a generally non-anthropocentric approach to nature, he points out that an environment that has been clearly shaped by human activity, such as a garden, for example, is no more artificial than an environment that shows no clear signs of human presence (Ingold 2005). These two environments have simply been 'formed' by different producers or, rather, the main agents or producers are different in each case.

While challenging mainstream (Western) ontological views of nature, Ingold (2005), like several other scholars mentioned in this chapter, also critiques existing assertions or claims about nature, which have been used by particular/mainstream groups of people with the power to impose their views upon others, dictating the circumstances under which they live their lives. The notion of *terra nullius,* discussed earlier in the chapter, is provided as an example whereby uncultivated land was claimed to be devoid of people during European conquest in Australia, which in turn enabled the expropriation of land and exploitation of indigenous people (Ingold 2005). Another example includes contemporary pleas for ecological restoration projects throughout Australia that claim to revert landscapes back to imaginations of 'original', 'wild', 'pristine', or 'untouched' lands, which are associated with pre-historic times, or a time before the arrival of humans (Ingold 2005) or modernity.

2.3.2 Protected areas as natural enclaves

For nature conservation, Ingold (2005) claims that current attempts to protect nature are in fact destroying the protection of 'place' because it entails closure, which in turns destroys 'place'. By this he means that the protection of nature usually involves the demarcation of fixed

boundaries around a particular region or 'continuous' landscape, setting it apart from human and social interaction. In other words, divisions, borders and/or fences are often set up which not only impede the free movement of wildlife, but also of people. However, animals often transgress these divisions, as for example explored by Barua's (2014) research on elephants in the Indian Sonitur Reserve, which suggests that these pachyderms may in fact consider human settlements and agricultural plots as 'their' space as well, therefore actively shaping/producing/reproducing the landscapes we all inhabit (Ingold 2005; 2006). Management tactics applied to conservation areas often include aggressive policing, surveillance, and even militarisation, more often than not directed at local people who rely on natural resource-based livelihoods (Ingold 2005; 2006; Brockington & Duffy 2022; Kashwan et al 2021; Lombard & Tubiana 2020; Mushonga & Matose 2020). This enclosure of nature, according to him, reduces landscapes to 'landlocked views' where only those constituents that 'fit in' within the boundaries are allowed to exist and partake in it. He equates these enclosed blocks with prisons, or places that have been converted into containers. Moreover, he contests that places or landscapes have horizons rather than boundaries, for which reason it becomes unrealistic to reserve blocks, build fortresses or create containers for society and others for nature (Ingold 2005; 2006). In addition to the above, Ingold (2006) also discusses the way in which nature conservation projects tend to be based on scientific approaches to both design and management, while excluding local ontological perspectives on nature. Here, he once again critiques the focus on scientific thought and exclusion of others by arguing that "if science is to be a coherent knowledge practice, it must be rebuilt on the foundation of openness rather than closure, engagement rather than detachment" (Ingold 2006, p. 19).

Deleuze and Guattari's theory or concept of *agencement* or assemblage in English, holds that anything that exists is the outcome of a series of connections, aggregations and entanglements of different elements and that, therefore, life is a process of connection and interaction (Colebrook 2002). The theory is based on 'rhizome', a philosophical term used to describe relations and connections between things. It suggests that everything in the world - just like rhizomes – is interconnected and form part of larger assemblages, with many invisible connections (Olivier 2015). According to Deleuze and Guattari's theory, this means that we live within multiplicity and complexity, where anything - living and non-living - "can be connected to any other thing at any point", in a series of layers upon layers (Olivier 2015; no pagination). Separations between these links are not possible in this rhizomatic system of multiplicity, where assemblages get created as new connections are formed. Ultimately, the

theory is a critique to western thinking where the world is perceived as consisting of isolated objects and things that can be controlled and dominated, instead of a complex set of ever changing rhizomatic interconnections (Olivier 2015).

The French word for the theory of assemblage is *agencement*, the direct translation for which would be 'arrangement', implying a less rigid organisation of elements than the word 'assemblage', with many more resulting possibilities, many of them unexpected and uncontrolled. When shifting, these arrangements change or produce new realities, applicable to all structures and levels, including for the individual, social organisation, spaces, and ecologies, among others (Livesey 2010). Escobar (2008) also explores the concept of nature assemblages, in particular the way in which Western knowledge and all meaning associated to it compares to those of Afro-Colombian communities. While modern rationality tends to separate nature as something external to humans, he claims, the logic of the Afro-Colombian communities is one of "fragmentation and recombination […] based on a principle of mixing that continuously weakens the binary oppositions" (Escobar 2008, p. 116).

Ingold, Deleuze and Escobar seem to suggest that there is no division between humans and nature, with all things, both living and non-living, arranged and entangled in a process of constant formation. Different arrangements are continuously being produced and reproduced, each giving rise to yet more/new arrangements. Likewise, constructions of nature are also formed based on the continuous interaction between 'observers' and 'nature', often reflecting specific social, economic or political contexts and interests. While such processes result in numerous contested views on nature, more powerful groups tend to control which views are fit for nature conservation projects. Landscapes perceived and evaluated as 'wild', 'pristine' or 'empty' are therefore often identified for the protection of nature (and consumption by some) rather than culture or human existence, with local people's ontological assumptions of nature all but excluded, their epistemologies neglected, and their homelands removed and socio-ecological relations disrupted. In addition, the formation of new arrangements between local people and nature as well as with themselves is inhibited or restricted through imposed barriers, either physical or legal, which in turn force new 'acceptable' arrangements, and open up space for new processes of construction. Resident communities thus need to seek new ways of relating to the environment (either new or altered), being, therefore, likewise reconfigured in the process, as will be discussed below.

2.4 Disconnecting people from nature: the consequences

Based on the argument of the embeddedness of people and the environment explored above, the consequences of separating or disentangling people from nature or disrupting the links between humans and the landscapes they inhabit is now explored. Displacement can take multiple forms, and may include the material/physical and economic dispossession, processes of criminalisation, violence and marginalisation of residents from conservation areas; restrictions to, or erosion of natural resource-based livelihood strategies, such as limited access to natural resources and/or bans on the mobility of local residents; the selective removal of a group or groups from a landscape's "history, memory and representation" (Brockington & Igoe 2006, p. 425); the loss of a group's power and control over their own surroundings and community (i.e. delegitimisation of communities); the loss of a group's identity; the commodification of nature and wildlife resources resulting in inflated prices for local products (Adams et al 2004; Bocarejo & Ojeda 2016; Brockington 2002; Brockington & Igoe 2006; Brockington & Wilkie 2015; Büscher 2012; Dowie 2009; Duffy 2010; Lunstrum 2017; Lunstrum & Ybarra 2018; Marijnen 2017; Massé 2019; 2020; Mushonga & Matose 2020; Norton 2015; Oldekop et al 2015; Ramutsindela, Matose & Mushonga 2022; Tumusiime & Vedeld 2015; Verweijen 2020). Ultimately, the forced disassociation often leads to poverty, despair, and destitution; the criminalisation of protected areas' residents; resentment over protected areas; and various forms of resistance to conservation, as will be discussed below.

2.4.1 Exclusion, marginalisation and poverty

Dowie's (2009) *Conservation Refugees* provides a critique of how dominant views on nature have resulted in the exclusion and marginalisation of indigenous people and rural communities from conservation areas throughout the world. With examples from Africa, Asia, the Americas and Australia, his focus is on the impacts of protected areas on the poor and natural resource dependent groups. By exploring the history of the Mkomazi National Park in Tanzania, for example, he details how conservation resulted in the eviction of thousands of Masaai, Parakuyo and Pare peoples into landscapes that were not only less productive for cattle rearing and agriculture production (principal basis of their livelihood), but also had water and food shortages. As a direct result, evictees were forced into poaching, low-wage work on nearby farms, and prostitution, while older people with few employment prospects turned to drinking (Dowie 2009; Neumann cited in Kicheleri et al 2021). The eviction of the Basarwa from

Botswana's Central Kalahari Game Reserve into a refugee settlement is further example which resulted in very similar effects, in particular poverty, alcoholism, and despair (Dowie 2009).

The creation of the Amboseli National Park in Kenya likewise resulted in restrictions in terms of both access to natural resources and hunting by the Maasai people (Dowie 2009; Ondicho 2021). According to Dowie (2009), poverty spread through these communities, resulting in resentment over the park, as well as resistance in the form of spearing of wildlife. Like many displaced peoples from protected areas in the world, the Maasai were later on 'returned' to the landscape to provide cultural entertainment, and arts and crafts to tourists (West, Igoe & Brockington 2006). In other words, while the Maasai were physically 'added back' into the landscape, the objectives were not to reinstate their previous interactions or links with nature nor enable new formations, but rather to provide tourists with a more genuine 'wilderness' experience in the Amboseli.

The Bwindi Impenetrable National Park in Uganda is another example where Dowie (2009) shows how the establishment of conservation areas can disrupt local livelihoods. Since being evicted, the Batwa have lived in refugee camps near the park and are prohibited from collecting or using forest products or visiting their ancestral lands and graves. As one Batwa elder explains, the community has become one of "beggars, thieves, and prowlers" in their own land, and he fears that their identity as a people is also being lost (Dowie 2009, p. 69). By interviewing evicted households from the Bwindi National Park to evaluate displacement effects on local people, Tumusiime and Vedeld (2015) also conclude that the loss of land, crops, homes and jobs, ultimately resulted in food insecurity and forced the Batwa to migrate from their homes in search of more favourable areas.

The Baka people, who are renowned hunters from Congo, have been banned from hunting and forced away from forest areas in the name of conservation, resulting in food insecurity, malnutrition, and vulnerability to diseases in these communities (Dowie 2009; Ramutsindela, Matose & Mushonga 2022). Following the ban, the Baka perceived conservationists as murderers who targeted their community by prohibiting the consumption of an important source of protein (bush meat) without providing alternatives, thereby resulting in increased health risks to the community and conservation activities were associated with discrimination against a people (i.e. the Baka) by "economically stronger, dominant groups" (Dowie 2009, p. 76).

Dowie (2009) also provides examples of the ways in which conservation actions based in the tenets of Western science have affected local people throughout the world, particularly by favouring 'nature' over people, as well as questioning indigenous views on nature. According to him, the perception many indigenous groups hold regarding 'rotational cropping', an activity that has been implemented for centuries by the Karen people in Thailand, the Mayans in Guatemala, Belize, Honduras and Mexico, and the Aboriginal people throughout Australia in areas now proclaimed as national parks, is that once 'conservationists' arrive on 'their' lands, hunting and 'slash-and-burn agriculture' (the Western or scientific name given to the local practice of rotational cropping) are prohibited within park boundaries. Decisions such as these are made without local people being consulted regarding their livelihoods, land use patterns, views and perceptions about the landscape, thereby ignoring local ontological values, as well as the knowledge production systems linked to rotational cropping.

Much like in the rest of the Global South, conservation efforts in India have been largely based on the Yellowstone model of conservation, where forest and/or protected areas are preserved for their 'pristine wilderness' character, without human occupation (Dowie 2009). Nautiyal and Nidamanuri's (2012) study on the socio-economic effects of conservation policies on the Rajiv Gandhi National Park concluded that the vast majority of park residents were opposed to the establishment of the park, particularly as it banned agricultural activities and the collection/use of forest products, restricted rearing and grazing, and excluded local communities from tourism and conservation programs. These forms of protected area management in India, Dowie (2009) argues, have not only resulted in the eviction of Adivasi forest dwellers from conservation areas, but also in allegations against/labelling of this group as 'poachers' and 'encroachers'. Following evictions and accusations, resentment over the loss of livelihoods and 'identity' grew among members of this community, resulting in the use of forest fires as a form of resistance to conservation (Dowie 2009; Roy 2010). Interestingly, the Adivasi are an indigenous group also known or associated with the Maoist guerrillas that are said to control the 'Red Corridor', a large, forested area that crosses some of India's poorest territories (Nielsen 2018). According to Nielsen (2008, p. xvi), "it is generally accepted that Adivasi support for the Maoists is related to the rampant impoverishment and dispossession that characterises tribal life in this area", with Oskarsson (2017) also referring to the Adivasi as a marginalised and forest-dependent group in India who have, since British colonial times, struggled over the ownership and rights to their lands and forests. The Maoists, whose key objective has been "the overthrow of the 'semi-feudal', 'semi-colonial' state through a

protracted people's war", have faced severe state oppression and brutality over the years and have, more recently, been classified as 'terrorists' (Giri 2009, p. 464).

Besides the forced separation or disconnect between people and nature, West, Igoe and Brockington (2006) illustrate how conservation areas are also changing the way in which people perceive themselves in relation to the environment. They explore the way in which the Huaorani Indians perceived their surroundings as integral to themselves in the past (i.e. inseparable), and how the creation of conservation areas is slowly distinguishing and separating nature from culture (Dong et al 2021; West & Brockington 2006; West, Igoe & Brockington 2006). What is important to note here, Brockington and Igoe (2006, p. 449) point out, is that besides inflicting "considerable material and psychological harm", the eviction of people from their environments is also reshaping both the landscape itself and people's memory.

In terms of creating or enhancing divisions between groups of people in society, Brockington, Igoe and Schmidt-Soltau (2006) point out the ways in which conservation efforts favour some groups over others. Indigenous groups within protected areas, for example, or people perceived as being 'local', are often favoured over non-indigenous or non-local people, in a system they call the "politics of indigeneity" (p. 251). According to the authors, the framing of indigenous/local communities as the 'rightful' owners of resources or those likely to behave more sustainably because this is 'their' own land, as opposed to, for instance, neighbouring communities, can further marginalise and exclude other groups who may be poorer and/or have lived/utilised the area for longer periods of time. This can, in turn, create or exacerbate divisions amongst groups in society.

2.4.2 Criminalisation of natural resource use

2.4.2.1 The criminalisation process

The process of criminalisation, which in this study refers to the way in which social behaviours are transformed into crimes, and individuals into criminals (Jenness 2004), has been the focus of a significant body of scholarship. Criminalisation processes specifically associated with natural resource use, however, seem only recently to have gained traction, and is now a growing field of research analysis (Peterson et al. 2017). Despite the myriad and complex forms and understandings of criminalisation, the focus of analysis herein is on three types, which are believed to have either informed, or been applied to the criminalisation of wildlife and other natural resource-based uses, practices, and activities over the *longue durée*: (i) criminalisation

through policy; (ii) criminalisation through discourse; and (iii) criminalisation through history. The discussion below on the three types of criminalisation does not suggest that each is an independent process of criminalisation, but rather acknowledges that there are both continuities and overlap between the three. Moreover, it is not the intention of the study to provide an extensive review or discuss the diverse array of social conditions and processes, be these demographic, political, structural, institutional or organisational, which facilitate and shape, or even inhibit criminalisation (Jenness 2004). These factors are nonetheless mentioned and discussed throughout the chapter where applicable.

Criminalisation through policy

McNamara et al (2018) define 'criminalisation' as a public policy tool that serves to address harmful conducts, or conducts that carry a risk of harm in, or to, society. This type of criminalisation process i.e. a regulatory approach to crime defined by the state, involves the creation and enforcement of criminal offences through legislation, punishment of transgressions, as well as investments in policing in the name of prevention (McNamara et al 2018; Roberts cited in Jenness 2004). Despite this seemingly straightforward definition of criminalisation through policy, McNamara et al (2018) question the factors or drivers that lead to the criminalisation of certain behaviours over others, as well as the way in which these factors can change over time and, perhaps more importantly, "what normative principles have exerted influence over criminalisation decisions and by whom have these principles been invoked?" (p. 110). In other words, in this form of criminalisation, new criminals and criminalities or crimes are regularly created through policy, which is in turn based on the structure of dominant/subordinate relations within population groups rather than the incidence of crime in itself (Williams & Drake 1980). As Jenness (2004, p. 153) rightly points out, "When structural conditions change in ways that create or amplify existing social cleavages, then inter-group tension is magnified and criminalization [sic] processes incited."

There are several examples of criminalisation through policy, and the way in which it tends to be influenced or guided by more dominant groups in society. Carrington (2011), for example, discusses how modern forms of biopower in Australia have resulted in the criminalisation of certain groups in society, which, in her case study included 'state wards',[5] 'unlawful non-

[5] Term used to describe children deemed 'neglected', 'uncontrollable' or 'in moral danger', to be put under the guardianship of the State's child welfare authority between 1880 and 1989 (Find & Connect 2018).

citizens' (meaning a non-Australian citizen who has entered Australia 'illegally'), and 'indigenous youth'. She details the ways in which these three population groups have been aggressively criminalised through policy, and then punished through various forms, such as by physically removing children from so-called 'dysfunctional' families into state guardianship, setting up innovative and inhumane immigration controls, and forcefully removing Aboriginal children from their families. With regards to indigenous people in particular, 'Aboriginal Protection Acts' were put in place to control people's lives, including place of residency, employment, marriage, social life, and other aspects (Parliament of Victoria 1869). These acts enabled the forced removal of Aboriginal children from their families with the aim of protecting "the nation, the population, its health, future, prosperity and wellbeing" (Carrington 2011; p. 32) from the 'unruly' and 'primitive'. In other words, dominant groups in society (i.e. white Australians) criminalised Aboriginal people by forcing them into reserves or town fringes to live under government control and policing, while simultaneously stealing their children to 'contain' the reproduction of 'savages' or breeding out the aboriginal.[6] The Human Rights and Equal Opportunity Commission cited in Carrington (2011) suggests that between 1900 and 1969, as many as one in three Aboriginal children were forcefully and violently removed from their families, particularly mixed-race children who could pass as white, with the aim of removing the "corrupting influences of their 'savage' forbears" and assimilating them into white society (p. 35), thereby protecting racial purity in Australia through the practice of eugenics.

Another example of how dominant groups in society dictate or influence criminalisation processes through policy is linked to the way in which decreasing birth rates among the middle and upper classes in the 1850s in America led to the criminalisation of abortion (Conrad & Schneider cited in Jenness 2004). Prior to that, Jenness (2004) claims, abortions were common legal practices performed by doctors and midwives, and were relatively stigma-free. Dwindling birth rates among the rich and wealthy, however, resulted in concerns amongst the medical association and legislators, many of whom viewed abortion as the major contributor to declining births. Simultaneously, she notes, the large influx of immigrants/'non-whites' with (perceived) extended families, at the time, contributed to feelings of anxiety amongst the white, middle and upper classes about the decline in 'native' (here referring to 'white') American babies. Ultimately, this resulted in the American Medical Association influencing and

[6] Which differs from racist biocentrism, which saw miscegenation as something to be avoided to prevent 'degeneration' (Foster 2020).

convincing legislators – two powerful and privileged groups in society – to enact a resolution criminalising abortion in 1859 (Jenness 2004).

Criminalisation through discourse

Methven cited in Farmer (2018), adds another dimension to the process of criminalisation by associating it not only to legislation and enforcement, but as dependent on "a range of other (in this case linguistic) processes which frame and construct certain forms of conduct as a threat to the community" (p. 2). Babacan (2007) explores this further by discussing and providing examples of how asylum seekers in Australia have been criminalised through language, rhetoric, and discourse over the years. According to Gale (cited in Babacan 2007), language is crucial in setting out both a policy problem and a perceived solution to the problem. For the specific case of asylum seekers in Australia, this involved the systematic use of binary terms such as "deserving/undeserving" and "legal/illegal" (Babacan 2007; no pagination) to create a value system that established asylum seekers not as vulnerable humans fleeing persecution and protected by international law, but as 'different' or 'nonconformant' as 'the Other', ultimately justifying their criminalisation. Whilst this discursive criminalisation of asylum seekers in Australia was adopted by the government to inform policy (i.e. criminalisation through policy), it was also enhanced by media groups who portrayed asylum seekers as 'people smugglers' and associated them with other criminal activities, thereby reinforcing the image of the refugee as a risk to Australia's culture and sovereignty (Babacan 2007). This process of criminalisation led to the construction of refugees as 'ungenuine refugees', with issues related to vulnerability and persecution entirely erased from what might have 'created' these refugees in the first place.

From a different perspective, Dadusc and Dee (2014) illustrate how discourse can stigmatise and label people by discussing the way in which the act of squatting in England, Wales and the Netherlands has resulted in the association of the squatter population as criminal, and contrary to the overall "decent community and its moral values" (p. 115). They attempt to illustrate the power that discourse can have in terms of "how they work, how they conflict and what effect they produce in terms of subjection and resistance" (p. 111). Foucault's work on discursive formation is used to highlight how language and discourse become important tools for social control, power, and domination, and conclude that, in the case of squatting, discourses tend to stigmatise and label the act of squatting, while criminalising the squatter community. They also note that, in a government poll conducted in England and Wales in 2011, as many as 81% of

respondents were in favour of criminalising squatting, and often referred to squatters as ‘criminals’ and/or ‘foreigners’ (YouGov Survey cited in Dadusc & Dee 2014).

Criminalisation through history

Besides the regulatory and discursive forms of criminalisation, the criminalisation process through history has also been extensively discussed in the literature and is intertwined with the former two. Alexander (2011), for example, explores the criminalisation of ‘blackness’ and how racial cast is still “alive and well in America” (p. 7) by illustrating how rates of imprisonment, particularly of African Americans, have consistently soared over the past thirty years regardless of fluctuations in crime rates. In the twenty first century, she documents, prisons in America have more black people than any other racial group, and a very high percentage of black people, particularly young black man, tend to have criminal records. Historically, she further argues, the criminalisation of ‘blackness’ was initiated following the abolition of slavery, when a system of convict leasing was instituted. The system relied on the arrest of large numbers of black men for an array of minor crimes such as vagrancy, who were then leased to plantations to ‘earn back’ their freedom (Alexander 2011). This however, she says, perpetuated their imprisonment, as they could never afford to pay back the plantation owner their freedom. Smiley and Fakunle (2016) also investigate the ways in which black men have become criminalised through history, by exploring the social construction of race. They trace back the way in which black people, particularly black males, were initially framed as ‘docile’ and ‘manageable’ creatures during the institution of slavery to create the imagination that slavery was the best possible position for black people, and how this image later changed into a ‘mythical black brute’, depicting black people as being more prone to violence and aggressive behaviour in order to, once again, control/place this group within society.

The British Criminal Tribes Act of 1871 in India is another example of how some communities have been criminalised historically, but also legally and through discourse for having nomadic lifestyles, making use of lands and forests perceived to be ‘unproductive’, or simply for being Hijras (eunuchs) (Hinchy 2019). According to the author, Hijras were historically viewed as sodomites that challenged the colonial legal system, and an affront to the principles of the heterosexual family and sexuality. This perception was aggravated by the cultural performances and clothing of Hijras, which led to the criminalisation of their behaviour. Under the Tribes Act, the Hijra community became outcasts; they were prohibited from wearing

female clothing and performing in public, which meant that their livelihood options were reduced. Male children were also forcefully removed from Hijra households for fear of sodomy and castration of little boys, with the objective of gradually exterminating the Hijra community (Hinchy 2019). While repealed by independent India in 1949, she argues that, because post-independent India was largely shaped by the values and morals of middle-class India, which was, in turn, shaped in the context of British colonialism and to some extent extraversion, the treatment of the Hijra community continues to be guided by the Criminal Tribes Act of 1871 till the twenty first century, which has also been reproduced through specific legislation in a number of Indian states.

2.4.2.2 Nature and crime

The criminalisation of wildlife and other natural resource uses, practices and activities is likely to have varied across boundaries, societies and time periods. In line with the thesis' research objectives, the discussion provided here focuses on the ways in which historical approaches to natural resource use have resulted in the criminalisation of local livelihoods, ultimately depriving local peoples of their lands and autonomy (Büscher & Fletcher 2018; Duffy 2015; Duffy et al 2019; Kabra & Das 2022; Kareri 2021; Kicheleri et al 2021; Ramutsindela, Matose & Mushonga 2022; Reddy et al 2010). Given the continuities and overlap between the three forms of criminalisation discussed above (through policy, discourse, and history) and its applicability to the history of nature conservation and the placing of locals within wilderness landscapes, the analysis provided below focuses not only on one single form of criminalisation, but rather on the criminalisation process as a whole.

Ramutsindela (2016) argues that conservation areas have been the scene of numerous crimes and criminalisation processes and are therefore important "for understanding the relationships between conservation, violence, and conflict" (p. 160). Duffy (2016) describes how the relationship between conservation and crime has developed over time in three key phases: the fortress conservation type, war for biodiversity, and war by conservation. While there are many continuities and overlaps between these three phases (Ramutsindela 2016), it is useful to present them individually for improved understanding of the criminalisation process within conservation areas.

The 'fortress conservation' is a model of protected area produced through the removal, eviction, and displacement of people from their homes to create enclosed landscapes for

wildlife/nature (Banerjee 2021; Duffy 2010; 2016; Fletcher, Dressler & Büscher 2015; Rai et al 2021; Murdock 2021; Wang 2015). In this model, park residents (and adjacent communities) are not only evicted, but also criminalised through policy, for having livelihoods based on resources located within the boundaries of heavily protected areas (Duffy 2016; Ramutsindela 2016). Besides being criminalised through policy, park residents are also criminalised through discourse by being labelled 'environmental predators', 'ignorant', 'poachers', and 'endogenously primitive', implying they are unable to change (Devine 2014).

The criminalisation process continues in what Duffy (2016) calls the second phase of the conservation-violence link or 'war for conservation', which posits that wildlife is under ominous threat, and therefore requires more forceful conservation approaches that can truly protect and preserve it; in other words, war is required to save biodiversity. This phase is linked to the 1992 Rio Conference and the Convention on Biological Diversity, which is in turn linked to efforts of conservationists to stop biodiversity loss through discourses of imminent catastrophic and irreversible environmental crises (Neumann 2004; Ramutsindela 2016). In Mozambique, for example, this period is linked to the enactment of new environmental/natural resource management legislation, and increased pressure from the international community and donors regarding the enforcement of external environmental agendas (more detail provided in *Chapter 5*). Duffy (2016) points out that poaching, hunting for bushmeat, fishing (particularly for iconic and protected species) and the use of forest fires, are all associated with crimes against nature and criminalised through conservation legislation and narratives/discourse, as well as images of what constitute crimes against nature. According to her, it is during this phase that protected areas became more militarised, particularly across Sub-Saharan Africa.

The last and current phase, 'war by conservation', involves a greater integration of conservation objectives with global security concerns, in particular the US war on terror, whereby conservation agencies increasingly make use of force to tackle poachers (Duffy 2016). While not explicitly stated, this is evidenced in USAID's recent programme to support Mozambique in prosecuting wildlife crime, based on the fact that "transnational organized criminal syndicates" use Mozambique to procure and transport illicit wildlife products to "finance a wide range of illicit activities globally", including terrorist ones (USAID 2017; p. 9) (please refer to *Chapter 5* where this is discussed). This phase, Duffy (2016) argues, is linked to increased rates of wildlife poaching in Sub-Saharan Africa, as well as alleged rises in organised forms of poaching. It is also more aggressive, she claims, as it tends to extend way beyond the borders of protected areas into the land of surrounding/adjacent communities. Here,

conservation becomes more offensive, in the sense that, instead of acting to defend wildlife, conservation areas become active aggressors by removing, evicting, or displacing people from their homes (Duffy 2016), as well as arresting and prosecuting people who attempt to access resources (e.g. hunting for bushmeat, catching protected or iconic species, burning land for agriculture), and even shooting to kill individuals who they identify as poachers and/or members of terrorist groups.

Political ecologists have also assessed the links between conservation, criminalisation, and violence. Neumann (2004), for example, notes how violence has become normalised in African conservation practice and left largely unexamined which, in his perspective, is linked to the way in which people (i.e. black people), places (i.e. African landscapes) and things or resources (e.g. elephant, rhinoceros, turtles, forests, etc.) have been and are discursively constructed. He argues that biodiversity conservation operates within a discourse that identifies and defines victims (e.g. elephant) and criminals (e.g. black poacher), thereby establishing "relative moral positions of wild animals and human groups" (p. 816). Neumann links this further by illustrating common and dichotomous ideas between 'nature' and 'culture', providing the example of how hunting is generally accepted as 'moral', but 'illegal' and 'unacceptable' when carried out within protected areas or by certain types of people.

Neumann (2004) and Escobar (2008) also discuss the way in which neo-Malthusian understandings of resource scarcity are continuously used in conservation, resulting in the push towards what Hardin (cited in Neumann 2004, p. 817) calls "lifeboat ethics", which basically posits that "it is more ethical to let some people die in situations of scarcity rather than risk the destruction of the resource base that supports all of humanity". More importantly though, Neumann (2004) highlights the significance of discursive formation in conservation, linking it to the way self and 'Otherness' are imagined and discoursed, with the 'Other' being morally and culturally destructive to self in terms of interactions with animals (e.g. described as brutal, backward, black), and how much this discursive formation influenced the design and location of conservation areas during colonialism and how it continues to do so in the 2020s (Kashwan et al 2021). This is clearly linked to the criminalisation process within conservation areas, when one thinks about how a black hunter has always been portrayed as the 'villain' and associated with imaginations of the 'savage' and 'indiscriminate' poacher, when compared to the European hunter, who hunts for sport and adventure, and is even considered conservation-minded (Neumann 2004). These discursive constructions of the poacher as the 'Other', or "processes of othering" as proposed by Kashwan et al (2021, p. 9) and the hunter as 'European',

are accompanied by constructions of certain animals as human-like by international conservation agencies (e.g. elephant, rhinoceros, dugongs, etc.) to raise donations which, together, result in imaginations of innocence/feminisation (i.e. the animal) requiring protection (i.e. through largely European-based models of conservation) and villain (i.e. the poacher or natural resource user).

2.4.2.3 The criminalisation of protected areas' residents

Carmenta, Coudel and Steward (2018) provide a brilliant illustration of the criminalisation of natural resource use in the Brazilian Amazon where forest fires used by locals to clear land for shifting agriculture have primarily become associated with destructive practices and have subsequently been criminalised through policy. They discuss how policy was developed based on anti-fire narratives and anti-fire approaches that condemn and criminalise the use of fire, thereby stigmatising common local practices. These policy developments have largely been created or initiated by external agents such as the World Bank and the UN through mechanisms, initiatives, and approaches such as REDD+ (Carmenta, Coudel & Steward 2018). At the local community level, they demonstrate how forest fires remain indispensable for small-scale farmers, not only from a cultural perspective, with locals actually valuing cleared fields as 'beautiful' landscapes and associating them with images of land that has resulted from hard work, but also because it is less labour-intensive than other alternatives, which require not only more people to work the land, but also additional financial and technological resources and expertise, which they lack. In particular, the authors point out how existing policies have been created "that are neither supportive nor cognisant of rural Amazonian realities and contexts" (p. 7) and therefore, result in the criminalisation of local practices (in this case, the use of fire), with subsequent (severe) restrictions, and oftentimes, dire impacts on local livelihoods.

Ramutsindela's paper on wildlife crime in Southern Africa (2016) touches on issues of crime and criminalisation in conservation areas by linking it to violence and conflict in South Africa. Through the history of conservation globally, he illustrates how natural resource users have been continuously and progressively denied access to their lands and natural resources with the creation of protected areas, from the fortress-type conservation phase to the war on biodiversity and war by conservation, as described by Duffy (2016), and then criminalised for the 'illegal' use of natural resources in those same protected areas in order to justify removals

(Ramutsindela 2016). In this case, the criminalisation of park residents becomes a precondition for displacement and eviction.

Through a political ecology approach and agrarian studies, Cavanagh (2018) explores the links between processes of green economic development and dispossession in Liberia and Sierra Leone. He shows how 'nature' itself is increasingly being viewed as a form of accumulation for conservation initiatives, which in turn results in the displacement of millions of people. Behind displacements and evictions are different processes of criminalisation linked to the way in which British and French colonial histories enclosed land and natural resources, while prohibiting their use by rural populations (Cavanagh 2018), in a process termed 'accumulation by dispossession' (Harvey 2005). Discursive forms of criminalisation in these two countries are also linked to the displacement of rural communities through the prescription of what constitutes 'sustainable' *versus* 'unsustainable' forms of resource use and management, as well as the ways in which population growth was understood as a precursor to ecological degradation (Cavanagh 2018). Besides Liberia and Sierra Leone, he provides examples of the staggering number of people displaced from other African parks as well as the resulting physical and cultural disconnect between rural communities and 'nature'. Drawing on these and other examples, he further notes that the interruption of the links between people and nature is only getting worse as the "need for the intensification of conservation and the expansion of a protected area network" grows and finds impetus globally (p. 128).

Geisler (2003) also explores historical, discursive, and legislative forms of criminalisation by illustrating how natural resource dependent people/marginalised groups in society are perceived as a threat to conservation, national parks, and 'nature' itself, which in turn leads to the eviction of people from their lands in the name of conservation. Conservationists, government, and civil society have come to perceive local communities within and around protected areas as a threat to biodiversity, due to what are considered 'unsustainable' forms of natural resource use and livelihood strategies (Geisler 2003). While this is used as a basis for their removal from protected areas, the lack of appropriate alternatives provided, the author argues, perpetuates dependency on natural resource use, which leads to 'encroachment' back into conservation areas. He explains how this is used to criminalise local communities and justify forced removals, restrictions in resource use and other violent approaches, despite increased levels of poverty. In this context, Geisler's paper (2003) highlights how conservation proponents tacitly accept destitution and the loss of livelihoods, particularly if it refers to poor,

marginalised, black/indigenous people, for what is perceived as a "greater good" (for which 'nature' stands as proxy; p. 70).

In an interview with Bento in 2019, Grada Kilomba, a Portuguese psychologist and writer on issues related to Portuguese colonialism, patriarchy, and racism, describes the consequences of associating 'immigrants' with 'illegality'. She suggests that the use of the word 'illegal' when referring to migrants in well-worn terms like 'illegal immigrants' leads to associations between immigration and illegality, which, in turn, have severe consequences for the way in which migrants are perceived in society (Bento 2019). According to her, perceiving an immigrant as illegal means that she or he is acting, or has acted outside the law. If an immigrant is perceived as acting illegally, she contends, it means that she/he is committing a crime, and is therefore dangerous (and should be punished). Feeling threatened when faced with a dangerous criminal is common, and, as argued by Kilomba, can generate feelings of our right to kill in order to protect ourselves and the society in which we live. The relevance of her argument to the thesis' theme are the associations and images society creates when we start referring to (and therefore perceiving) certain groups of people as 'illegals' or 'villains' in a process called discursive criminalisation, as discussed above, which has historically been applied to natural resource users or park residents who hunt, fish, and make use of forests (see illustrations below). It also means that violence against 'illegals' (i.e. shooting, killing, beating, arresting, displacing, and evicting) becomes justifiable in the name of nature/conservation.

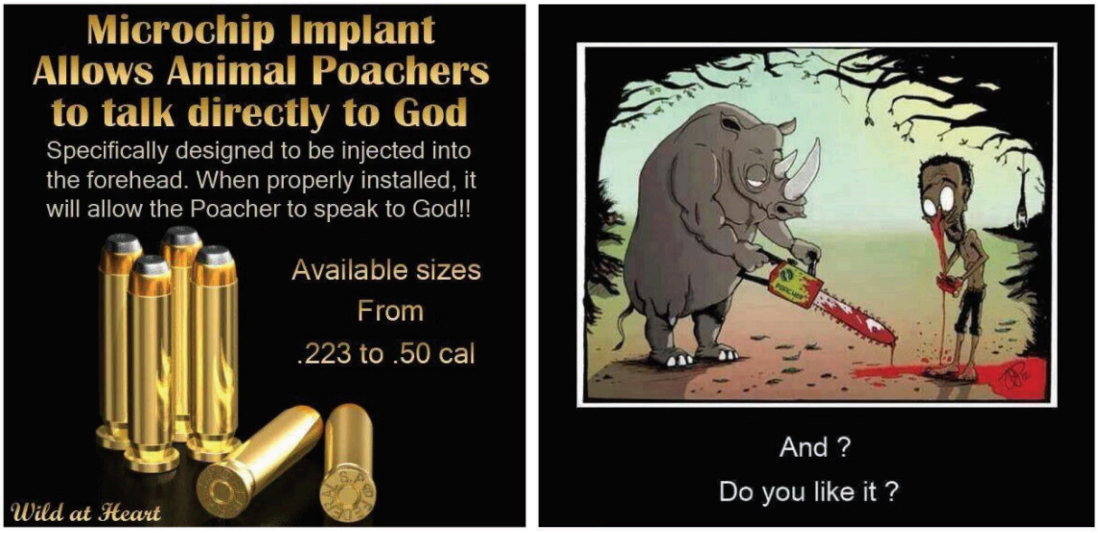


Figure 2-1 – Examples of largely accepted but violent images and messages against poachers, and natural resource users in general (Source: Büscher 2016)

The examples provided so far intend to illustrate the way in which park residents or natural resource users are displaced from protected areas and become criminalised through a series of processes that transform existing behaviours and livelihoods into crimes and individuals into criminals. The criminalisation process is effected by creating a victim (e.g. 'nature' itself, wildlife species, forests, etc.), a perpetrator or problem (local communities/use of resources), and turning what park residents normally do into a public offence by substantially restricting and limiting existing livelihood options (e.g. subsistence fishing and hunting becomes redefined as poaching, farming becomes redefined as slash and burn agriculture and forest clearing) so that people are forced or coerced into carrying out 'illegal' acts (e.g. fishing or collecting firewood and other forest resources at night time and within sanctuaries), and lastly by attributing higher societal values to natural resources *versus* people, which can in turn lead to destructive behaviours against those same natural resources one seeks to protect (e.g. when the life of a sea turtle is considered more valuable than the life of a subsistence fishermen, which can in turn result in destructive actions by the fishermen against sea turtles, i.e. poaching).

2.5 Conclusion

This chapter has reviewed two broad areas of enquiry and associated concepts and discussions, that is, constructions of nature and nature assemblages/assemblage theory, and illustrated how they apply to the study's main argument. Constructions of nature was used to explore the way in which 'landscapes', 'wilderness', and 'national parks' have been instrumental in the social construction of nature, and linked to the history of European imperialism and settlement, which forged new land use paths or patterns in the Global South over the *longue dureé*, in spaces that might have previously been considered 'public'. Imaginations of nature have also led to the placing of locals into unstable or flexible categories, that have historically varied as a function of how dominant groups in society viewed and approached the landscape. Whether classified as belonging in the wild (i.e. flora and fauna, noble savages), removed from the landscape (i.e. backward, primitive, criminal), or placed back into nature as a product of consumption for tourists, locals have historically been subjected to whatever rule or practice colonial authorities/conservation interests decided to introduce at any given time. The assemblage theory, on the other hand, which postulates that there is no separation between humans and nature, with all beings, living and non-living, arranged and interlinked in a process of constant formation (Deleuze cited in Colebrook 2002; Escobar 2008; Ingold 1993; 2000; 2005), was

used to explore the consequences of interrupting ‘nature arrangements’ or disconnecting ‘nature’ from ‘culture’, particularly by creating protected areas as nature ‘blocks’, which ultimately results in, or forces the reorganisation of society.

3. Research methodology

3.1 Introduction

This chapter introduces the theory, approach and methods applied in this qualitative research-focused study, which sought to explore societal changes or shifts at the community level in the Quirimbas National Park as a result of constructions of nature. Through a comprehensive investigation of the feedback and interchange loops between constructed natures, changing social realities and livelihood strategies in the Quirimbas, the approach allowed for the development of theory from the data in order to understand how 'nature' reconfigures society, i.e. how constructions of nature impinge on socio-ecological relations. Besides justifying the selection of the research site, the chapter discusses the applicability of both the constructivist theory and the assemblage area of enquiry to the study, as well as the overall research plan including methodological approach and data collection methods. The final section discusses ethical considerations including positionality and processes of self-reflexivity as well as meaningful limitations encountered during the study.

3.2 Setting: the Quirimbas National Park and its zoning system

As the most populated protected area in Mozambique (RoM 2018), where the majority of residents have natural resource-based livelihoods (i.e. fishing, farming, hunting and use of forests), the Quirimbas National Park was selected for the research study as this was considered an indication that different ontological assumptions of 'nature' could be explored, as could the effects of disconnecting people from nature.

Historically, the Quirimbas was declared a conservation area in 2002 and designed based on externally conceived concepts such as 'exclusion zones' or 'nature blocks' (IUCN 2022),[7] which were demarcated according to local biodiversity values as well as population density and distribution numbers. Accordingly, the Quirimbas is partitioned into three key zones in addition to a buffer zone, each with its own set of 'illegal' land uses/livelihood activities in areas that previously had diverse and overlapping land use patterns. In essence, with the proclamation of the park, the Quirimbas landscapes were reorganised and bounded in a system

[7] According to IUCN's system of protected area categorisation, the 'national park' category (or category II) combines ecosystem protection and recreation, and is subject to 'zoning', a specific protected area management tool. Zoning is recommended as the best way to manage resource use in national parks, which usually consist of core zones or strictly/highly protected areas (IUCN 2022; 2008).

that not only dispossessed local communities from their land and access to resources, but created fixed boundaries that separated people from nature/resources and therefore forced the reorganisation of socio-ecological relations. The three main zones or blocks (MITUR 2010a; p. 42; RoM 2018), with decreasing levels of natural resource protection, as detailed in Figure 3-1 below, include:

(i) Total Protection Zones (TPZ), which cover 46% of the park and provide the highest level of natural resource and ecological protection from 'human disturbance'. There are 12 TPZ in the park, of which three are terrestrial and nine are marine. No human activities are allowed in these blocks, other than for scientific or park management reasons, or ecotourism. There are approximately 700 inhabitants in the TPZ, which accounts for less than 1% of the park's population. Although very few residents live within the TPZ, most of these areas constitute essential spaces, historically utilised for subsistence fishing and farming, as well as the collection of natural resource products for those communities living in the Specific Use Zones, the Community Development Zones as well as neighbouring communities to the park and those from Nacala[8] and further afield.

(ii) Specific Use Zones (SUZ) cover 13% of the park and offer an intermediate level of resource protection when compared to TPZ and those areas set aside for community development (described below). Only 'sustainable' and 'subsistence' resource use is allowed in these areas, subject to specific licensing and regulatory arrangements. There are 40,823 inhabitants in the SUZ, which constitutes approximately 24% of the park's population.

(iii) Community Development Zones (CDZ) cover 41% of the park, and is where the majority (approximately 75%) of the park's population live (i.e. 125,362 people). Communities are allowed to live in the CDZ, albeit "in harmony with nature", and by using resources "sustainably".

[8] Nacala is a coastal town in Nampula Province, located to the south of Cabo Delgado/the Quirimbas.

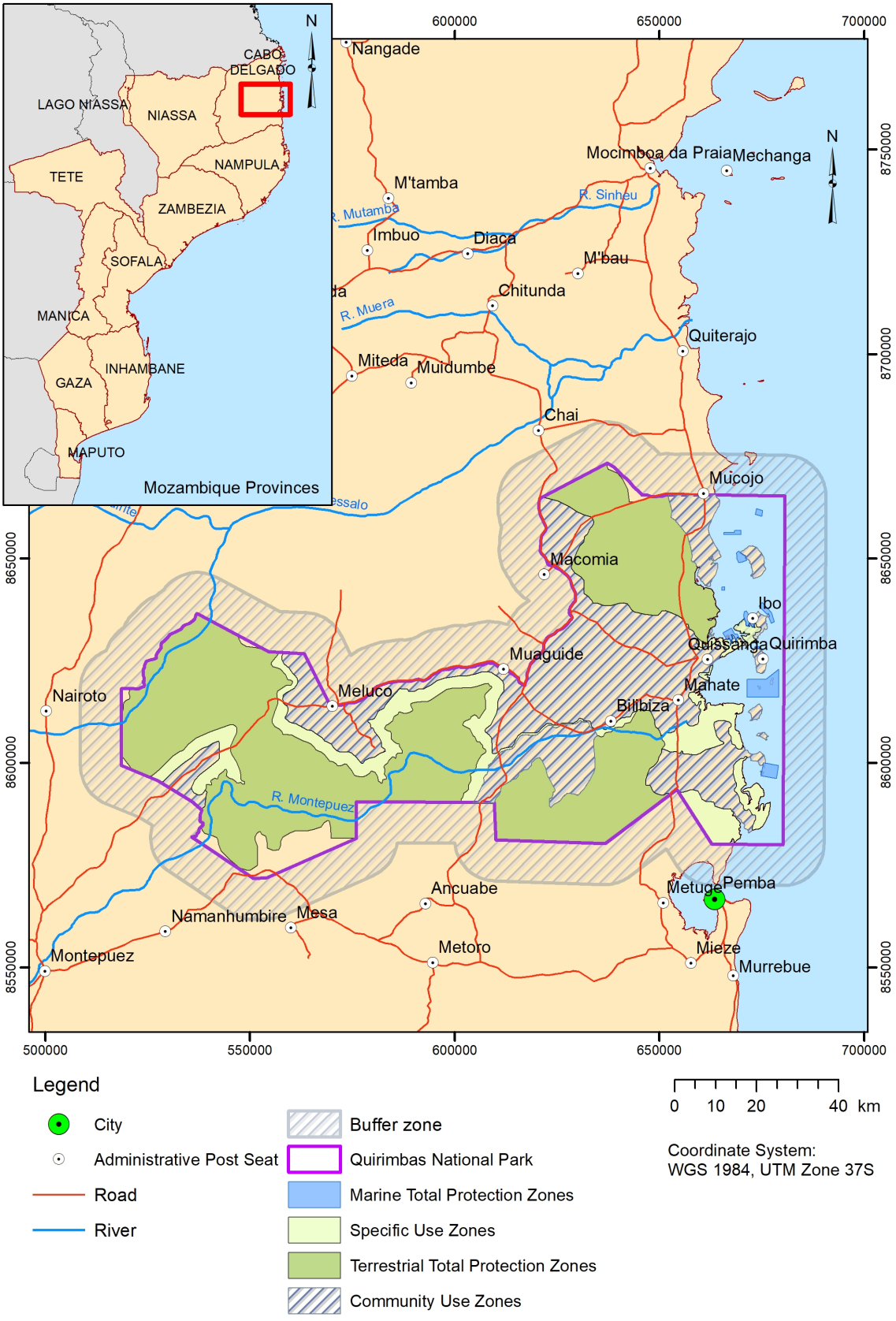


Figure 3-1 – Map showing the Quirimbas zoning system (Compiled by Miguel Nazareth 2021)

3.2.1 Selection of primary research site

Given that the Quirimbas is a relatively large park, covering some 750,000 ha,[9] and an estimated population of 166,000 people,[10] (RoM 2018), the selection of a primary research location covering one or two villages in which to explore societal shifts as a result of constructions of nature was always intended. The primary research location was selected during the initial phases of the study, through a combination of methods (discussed later in the chapter) that included a detailed analysis of park data, in particular its zoning system or protection blocks and corresponding population statistics (briefly described above and assessed in more detail in *Chapter 6*), as well as interviews with key stakeholders.

Based on these preliminary assessments, the marine and coastal area of the park was selected as the focus of the research thesis. As will be explained, this was in part due to the fact that the Quirimbas was primarily created as a marine park, with conservation activities having been initiated and focused on its marine and coastal environment.[11] In fact, the park's first headquarters was based on Ibo Island, which, at the time of the study, functioned as the park's office for the marine and coastal area, with the terrestrial section being managed by the park's main headquarters in Ancuabe-Biaque, located on the mainland and outside park boundaries (RoM 2018).

Having selected the park's coastal and marine environment as the focus of the research, the next step entailed the selection of site/s of study. While the choice of a site located within the park's Total Protection Zones and/or Specific Use Zones might have been preferred from the standpoint that these areas are subject to tighter restrictions and regulations in terms of land and natural resource use, they are also the least populated areas in the park, as indicated above and further detailed in *Chapter 6*. As such, in order to adequately address the key research questions, it was considered important to, on the one hand, select a site with an established resident population who had first-hand experience of the physical establishment of the park and associated conservation activities in the early 2000s and, on the other, engage with communities who were being actively subject to the park's conservation policies and goals in the 2020s. From this perspective, the Community Development Zones were deemed to provide a good case study not only because they are the most populated areas in the park, but also

[9] Including both marine and terrestrial environments, covering 11 islands and seven districts.
[10] It is worthwhile mentioning that while all parks in Mozambique have communities living within park boundaries and dependent on locally available natural resources, the Quirimbas is by far the most populated park in the country (RoM 2018).
[11] Where the first marine sanctuary was established in 2001, a year prior the formal declaration of the park.

because the park's principal objective there is to have local communities exist in "harmony with nature" (MITUR 2010a, p. 42), which would enable the exploration of constructions of nature at the local level. In addition, proximity to, or selecting a community that made use of, or relied upon the Total Protection Zones prior to the establishment of the park was also considered important, given that these areas cover 46% of the park and have the highest level of natural resource protection. Ethnographic research at the village level in these areas of the park, i.e. coastal environment located within the Community Development Zones, but in close proximity to, or dependent on the Total Protection Zones, would therefore be likely to yield better insights into how landscape readings and approaches to nature in the Quirimbas were resulting in societal changes and/or shifts.

In addition to the reasons provided above, issues related to accessibility and security (discussed later in the chapter) guided the selection of the research site to Ibo Island which, besides falling under the park's Community Development Zones, is bordered by Specific Use Zones towards the west/south-west (which corresponds to a large mangrove area), as well as several Total Protection Zones or marine sanctuaries (see Figure 3-2 below).

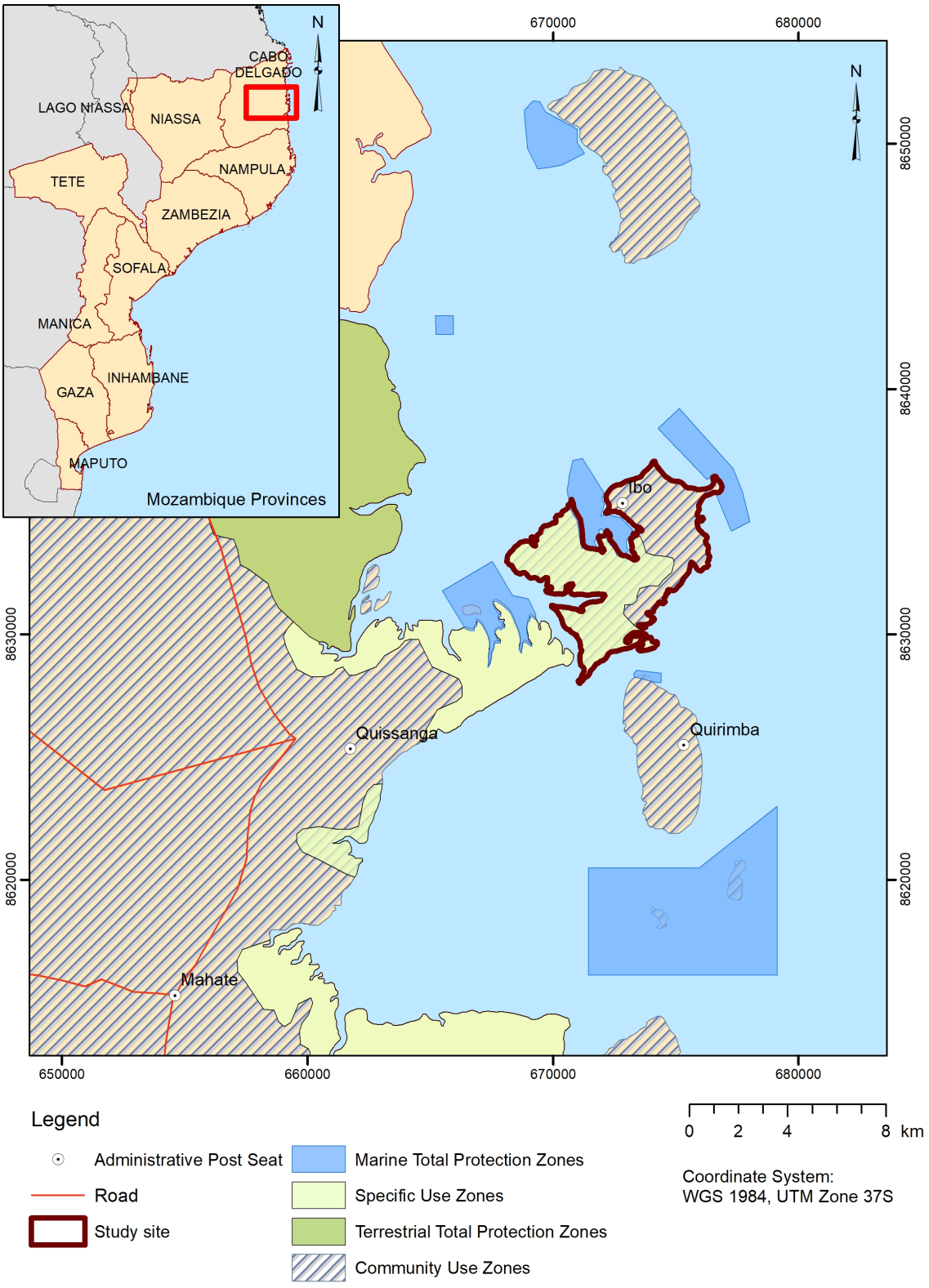


Figure 3-2 – Primary research location and the Quirimbas zoning system (Compiled by Miguel Nazareth 2021)

3.2.2 Overview of Ibo Island

As a district in the Province of Cabo Delgado, Ibo is divided into two administrative posts, Ibo-Sede and Quirimba (see Figure 3-3 below and refer to *Chapter 5* for details on Mozambique's administrative division). The Ibo-Sede Administrative Post covers the islands of Ibo, Matemo, Quirambo and Nfiõ, as well as the Ndegane e Mussemuco villages located on the mainland (Distrito do Ibo 2017). Ibo Island is an organised town that serves as the district's headquarters, and is divided into three main *bairros* or neighbourhoods, namely Cumuamba, Rituto, and Cimento. The district's public administration facilities are found here, as are most public services and banks, hotels, restaurants etc. (Distrito do Ibo 2014), while the other islands and villages, including the largest one after Ibo (i.e. Matemo), are essentially rural. The Quirimba Administrative Post covers the Quilálea, Sencar, Naue and Rolas islands, of which only the former is inhabited and organised in villages (Distrito do Ibo 2017).

With an estimated population of 13,025 inhabitants[12] in 2017, and a population density of 174 inhabitants/km^2, the population of Ibo District is mainly concentrated in the Administrative Post of Ibo-Sede, consisting of some 9,385 people, and the remaining 3,559 are the residents within the Quirimba Administrative Post (Distrito do Ibo 2017). Ibo Island has the highest population density in the district, followed by Matemo and Quilálea (Distrito do Ibo 2017). It is also one of the largest islands of the Quirimbas archipelago within the park, together with Quirimba and Matemo[13] (Distrito do Ibo 2017).

[12] According to population projections from the 2017 national census.
[13] The other equally large island in the Quirimbas archipelago is Vamizi, although located outside park borders.

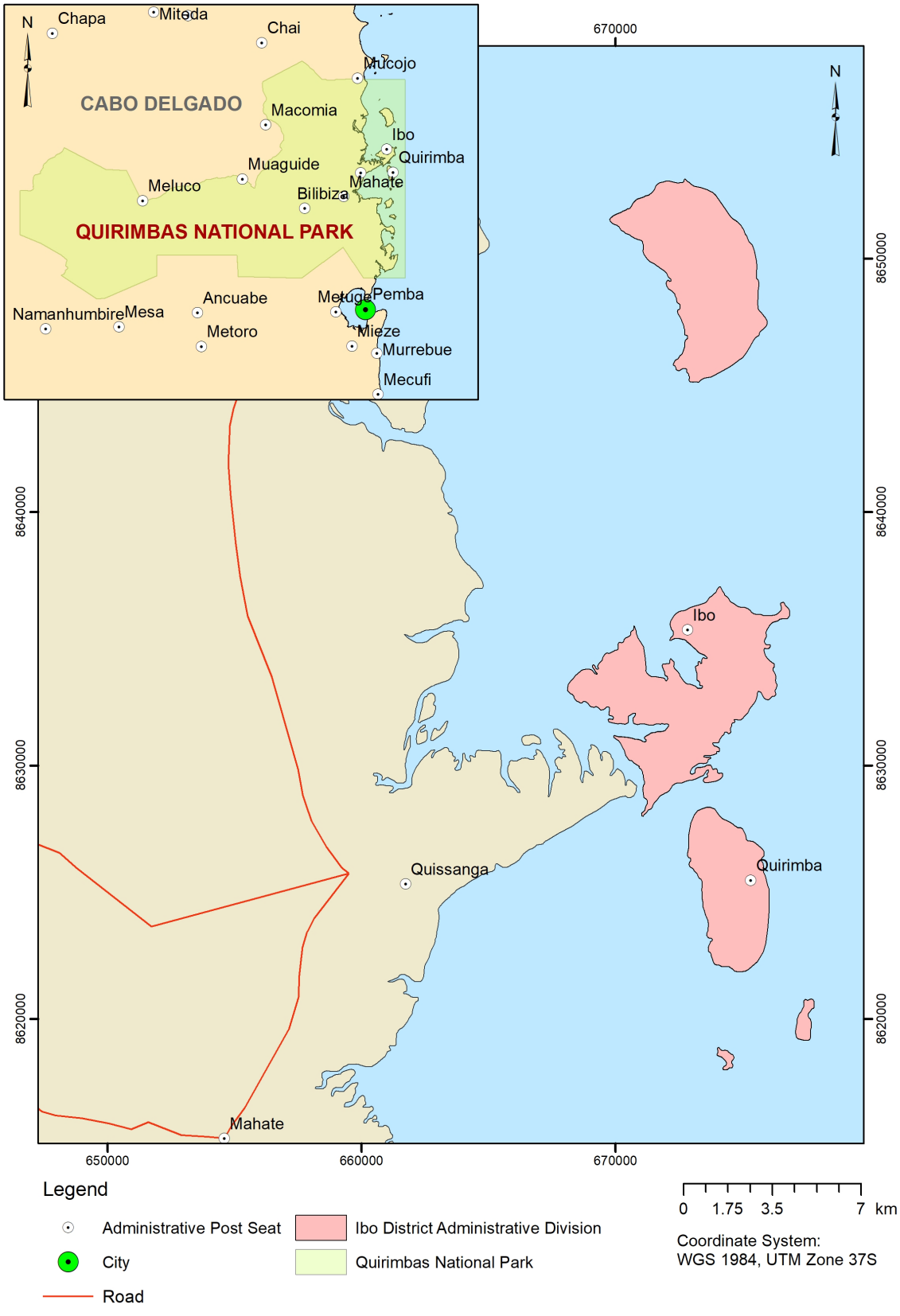


Figure 3-3 – Ibo District's administrative division (Compiled by Miguel Nazareth 2021)

As mentioned, although Ibo District falls within the park's Community Development Zones, it is bordered by a Specific Use Zone as well as ten Marine Total Protection Zones or marine sanctuaries, most of which are important areas used by residents for fishing, the collection of seafood products and other natural resources (see Figure 3-4 below).

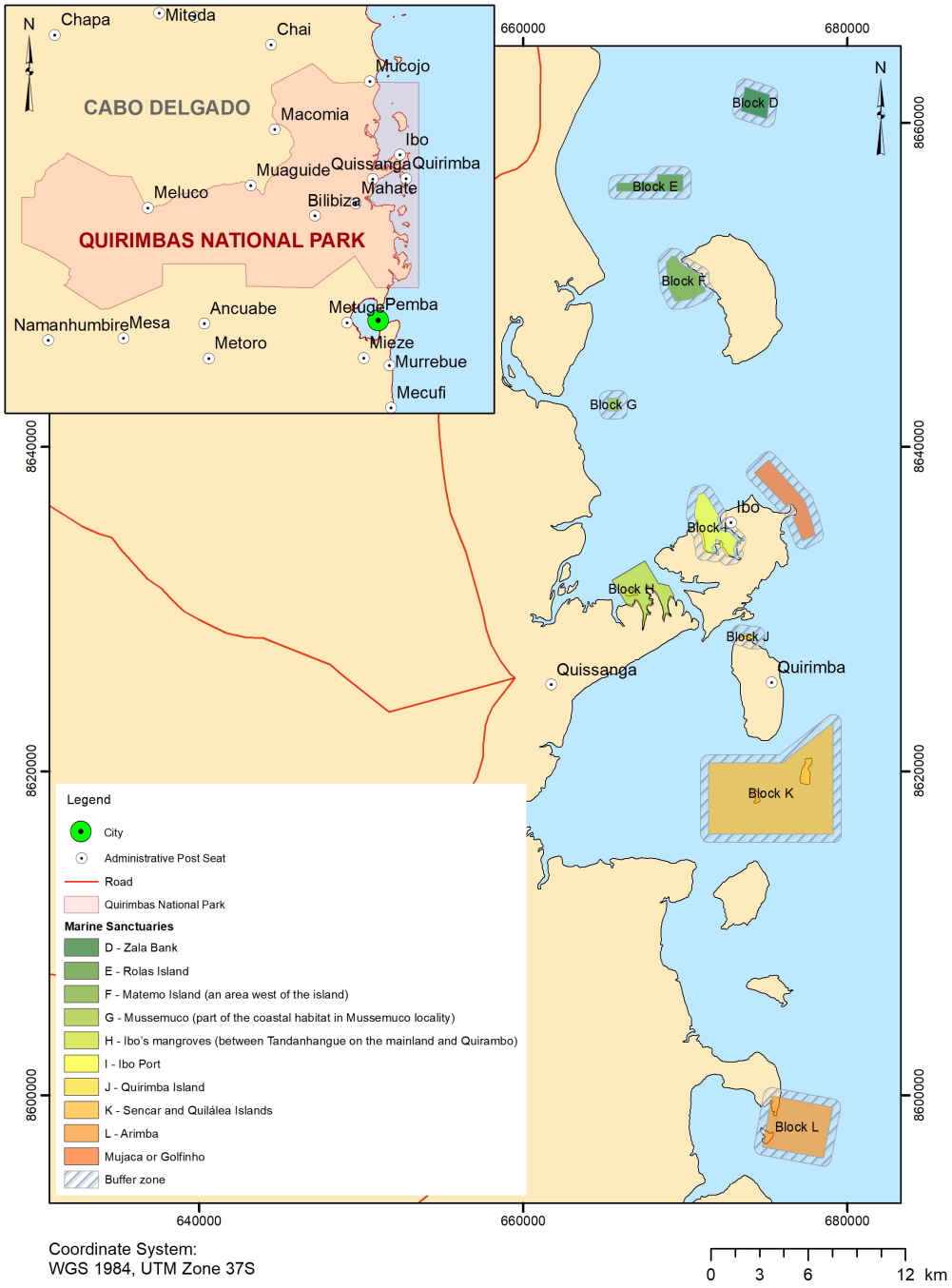


Figure 3-4 – Important Marine Total Protection Zones for park residents (Compiled by Miguel Nazareth 2021)

From a historical perspective, Ibo (as well as Quirimba) Islands were important to the Portuguese due to their port capacity, and overall strategic position in the Indian Ocean (Sousa 1960; República de Portugal 1969). Both served as slave commercial stopovers to different colonial powers (Bento 1972) and, at the time of writing, still harboured churches, forts, and other historical buildings, mostly in a state of disrepair (Ibo Island) and/or ruin (Quirimba Island). A brief historical overview of Ibo Island and the Quirimbas archipelago is provided in *Chapter 4*.

3.3 Research design

The study was designed to consider how societies have been and continue to be reconfigured or restructured by prevalent nature readings, having used the Quirimbas National Park as a case study. In order to explore how nature becomes a conduit for the disruption of socio-ecological relations in the Quirimbas, the study drew on the constructivist theory, particularly on ideas of how nature is socially constructed or imagined, which argues that dominant groups in society control nature readings and meanings based on specific social interests, while local people's perspectives and knowledge systems are marginalised and neglected (Castree 2001; 2005; Fletcher et al 2021; Santos 2018; Trisos, Auerbach & Katti 2021). In line with this theory, imaginations of nature have been informed by the way in which 'landscapes', 'wilderness' and 'national parks' (*Chapter 2*) in the Global South have been perceived/constructed throughout the history of European imperialism and settlement (Cosgrove 1984; Grove 1995; Nash 1967). These constructs e.g. 'large', 'empty', 'abundant', 'harsh', 'Eden' lands, and so on (Blaikie 2001; Ginn & Demeritt 2009; Grove 1995; Nash 1967), have, in essence, historically been imposed on Southern landscapes, forging new land use paths and patterns, in what might have previously been perceived by locals as 'public' spaces. In other words, landscapes came to be imagined either as spaces devoid of people, or sparsely populated by 'primitive' and 'ignorant' 'savages', which in turn enabled or justified the forced removal of local residents from their lands or the separation of people from the environment, to enable the recreation or reinvention of 'truly natural' environments (Cronon 1995). This imagined nature is still prevalent in current protected areas (i.e. in the 2020s), as evidenced by the way in which parks (and local residents) are managed.

A second area of research applied in the study focuses on the concept of 'nature arrangements' and the theory of *agencement*, which suggest that anything that exists is interconnected and in

constant formation (Colebrook 2002; Ingold 1993; 2000). This area of research is used to illustrate that attempts at disconnecting people from nature, enclosing nature/landscapes into self-contained blocks, or disrupting the links between the two, result in new 'arrangements' and processes of construction. It is specifically applied to understand the consequences of detaching nature from people or culture, or of disallowing or disturbing that unity, which, it is argued, forces society to reconfigure itself.

3.3.1 Approach and theory

The main qualitative research paradigm applied was the interpretivist approach, which attempts to understand and describe the lived experiences or meaning systems from the perspective of the individuals or groups subject to the study, which includes the way people interpret and make sense of their experiences in order to then produce theories/knowledge (Creamer 2021; della Porta & Keating 2008; Esterberg 2002; Haradhan 2017). Grounded theory was applied to the qualitative research, which is based on the collection and analysis of data as a means to develop theory (Charmaz & Thornberg 2021; Glaser & Strauss 1967). It consists of a number of flexible and open-ended inductive strategies which lead to the emergence of key findings, rather than pre-emptively boxing possible results into preconceived categories, as is common in more traditional research designs which plan each phase carefully to test existing theories (Charmaz 1996; Charmaz & Thornberg 2021; Creamer 2021; Dey 2004). In other words, the research thesis did not set out to test an existing hypothesis, but rather to develop ideas regarding the way in which 'nature' reconfigures society through qualitative evidence drawn from a wide range of sources that allowed for triangulation, including ethnography or participant observation, archival research, interviews, and focus group and informal discussions (Baxter & Eyles 1997; Creamer 2021; Dey 2004; Philip 1998), which have been discussed below. Furthermore, and as is common in this type of qualitative research, instruments used for data collection changed throughout the research study in order to adapt to and accommodate local circumstances, as well as to pursue what was considered to be interesting and/or relevant material for the study (Charmaz 1996).

3.3.2 Methods

To explore societal shifts in the Quirimbas, the study applied a small-scale yet intensive qualitative methodology which enabled the understanding of social phenomena and processes

contextually, while at the same time paying "attention to the subjective nature of human life" (Esterberg 2002, p. 2) including not only of those being researched, but also the researcher herself (Philip 1998). In other words, besides focusing on the way people interpret and make sense of their experiences, and particularly due to the subjective nature of interpretation, the methodology applied some degree of self-reflexivity, which included aspects related to positionality, perceptions, experiences, prejudices, expectations, among other issues (Baxter & Eyles 1997; Philip 1998; Tracy 2015), which are further elaborated on later in the chapter.

The tools and techniques employed in data collection consisted of a combination of ethnography, or participant observation in Ibo Island, supplemented by archival research, interviews, and focus group discussions.

Archival research was initially conducted to ground the historical and political context of the Quirimbas and its residents. This exercise involved investigating the history of conservation in Mozambique, with a particular focus on understanding the ways in which the Portuguese colonial administration perceived and managed 'nature' or 'wilderness landscapes', as well as the ways in which local people were excluded from or integrated into these imagined landscapes. Exploring the meaning and purpose of *coutadas* (or areas set aside for hunting, in Portuguese) gained prominence during archival research, given that most protected areas in the country fall within originally proclaimed hunting spaces that were imposed on the landscape by, and for, external (European) actors to enjoy.

Interviews were carried out with a number of 'internal' (i.e. resource dependent groups) and 'external' actors (i.e. government officials, park authorities, conservation organisations, NGOs, the private sector and tourism sector, scientists, and researchers) as proposed by Blaikie (2001) and Flodén (2020), as a means to explore people's understandings or constructs of the Quirimbas' landscapes and nature, and to investigate historical readings of the park.

Ethnographic research (which included numerous informal conversations and life histories) and participatory techniques (focus group discussions and interviews) applied at the local level on Ibo Island were fundamental to observing and interpreting societal changes resulting from the establishment of the Quirimbas National Park and its policies. Data collection stopped when theoretical saturation was reached i.e. when further data no longer prompted new findings which could feed into the emerging theory.

3.3.3 Archival research

Archival research entailed the collection of relevant geographical, historical, political, and social data which served as contextual material for the thesis research focus (Clark 2005) i.e. the Quirimbas National Park. Given the overall dearth of particularly historical data on the Quirimbas, time spent in the archives was substantially prolonged and focused not only on trying to understand the park's context and background, but also the history of the 'Quirimbas archipelago/region'[14] and the 'Cabo Delgado Province/District/territory',[15] two extensively documented regions in the history of Portuguese colonial rule. Historical records of these areas were sought to help understand which nature readings and discourses were imposed on the Quirimbas landscapes in order to create a new environment, i.e. a national park, as well to investigate the placing of locals within these constructs.

The history of conservation in Mozambique was also used as contextual material and linked to the establishment of hunting grounds or *coutadas* in the country during the early 1900s, specifically as a response to uncontrolled hunting and the London Convention of 1900, but also with the intention of promoting 'hunting tourism', renowned at the time for the considerable revenue it generated for colonial governments (Dias 1968) (*Chapter 4* explores colonial landscape readings in the country). Used primarily and foremost for hunting, *coutadas* were essentially sources of revenue and trade (e.g. skin, meat, ivory and other trophies) before tourism was introduced for foreigners, 'explorers' and 'adventurers' (i.e. Americans, Portuguese and other Europeans) to enjoy (Gonçalves 2003; Martinho 1968; Dias 1968). *Coutadas* were then slowly 'transformed' into national parks and hunting reserves from the early 1920s in line with international green agendas. At the time of writing, most protected areas in the country fell within these hunting spaces demarcated during colonial rule (SANParks 2015). Given that most *coutadas* in Mozambique were established in the 1900s and that one of the objectives of the research was to understand or explore the ways in which 'nature', a socially constructed concept discussed in *Chapter 2* came to be imagined and approached by the Portuguese, and how this then served as a basis for, or shaped approaches to conservation in the country after independence, archival research focused on the analysis of documentation and maps covering the period between the late 1800s and independence in 1975.

[14] The Quirimbas archipelago/region refers to a group of 34 islands located in the Cabo Delgado Province of Northern Mozambique that extend beyond the borders of the Quirimbas.
[15] Cabo Delgado is the province in which the Quirimbas is situated. During the Portuguese colonial administration, Cabo Delgado was referred to as a 'district' as well as 'territory', as Mozambique was considered a province of Portugal.

Understanding the history of *coutadas* was therefore fundamental to the research thesis, in the sense that the intention was to investigate the extent to which these areas were created based on colonial imaginations of the 'African landscape' – consisting of vast areas of land with abundant (wildlife) resources for the colonial power to exploit and devoid of civilisation, as discussed in *Chapter 2*. Historical documents and texts produced as part of the process of creating the *coutadas* and conservation areas in Mozambique in general, and the Quirimbas National Park in particular, were therefore sought through archival research. Historical maps were likewise consulted to interpret the ways in which *coutadas*/park boundaries were defined historically, particularly in relation to the demarcation of places for 'nature' and places for 'locals'/'natives'. This entailed exploring the ways in which the external/European spirit of 'adventure' and 'dominance' were exercised over local realities and how/if local people were excluded/included from these imaginations. The key findings related to this part of the research are presented in *Chapter 4*.

Archives visited in Maputo included the *Arquivo Histórico de Moçambique* (Mozambique Historical Archive), the largest historical archive in the country established in 1934 (UEM 2020); as well as the archives of the *Direcção Nacional de Florestas e Fauna Bravia* (National Directorate for Forests and Wildlife), and the libraries of the *Ministério da Terra e Ambiente* (Ministry of Land and Environment); the *Ministério do Turismo* (Ministry of Tourism) and the *Instituto de Investigação Agrária de Moçambique* (Mozambique's Agrarian Research Institute). With the exception of the Mozambique Historical Archive, which contains historical data linked to a number of disciplines and regions in Mozambique, all other archives were visited as a result of having specific data on protected areas and conservation policies, including information pertaining to hunting grounds, flora and fauna, and natural resources in general.

Documents collected at these archives included bulletins, annals, and journals from the 1960s and 1970s, with information on the Quirimbas archipelago that ranged from specific dendrological and livestock studies, to more general social and historical assessments. In addition, legislation, maps and other documentation on the history of conservation in Mozambique, either related to hunting, national parks and/or *coutadas,* was gathered. Besides visiting archives in Mozambique, the Special Collections library at UCT was also consulted for having a wide array of historical material on African studies.

During this period, and through informal conversations with historians and academics from Mozambique and abroad, it was suggested that part of the historical documentation produced

in the country was moved to Portugal upon independence in 1975.[16] Given that understanding the Quirimbas' historical background was essential to the thesis, particularly with regards to how local landscapes came to be constructed/imagined by the Portuguese, a visit to Lisbon was arranged in search of additional historical data. In Lisbon, information was primarily sought at the *Arquivo Histórico Ultramarino* (Ultramarine Historical Archive), which contains extensive text and image-based resources on Portuguese colonial rule between the 1500s and 1974-1975 (AHU 2018). The *Sociedade de Geografia de Lisboa* (Geographical Society of Lisbon), which archives data related to the Portuguese *descobrimentos* and expansion, as well as the geography, history and ethnography of different Portuguese speaking countries (SGL 2018), was also consulted.

Information consulted at these archives comprised data from the late 1800s to about 1975 including maps, atlases and chorographical descriptions of Mozambique in general, the Cabo Delgado territory, and the Quirimbas region in particular. With the aim of exploring hunting interests by the colonial government, hunting legislation was traced back to the very first hunting legislation published in Mozambique in 1909, as well as hunting monographies of colonial Mozambique. Specifically, maps identifying areas with hunting interests were sought specifically for the Quirimbas region and the Cabo Delgado territory. Given the link between hunting and tourism, as well as the potential of the Quirimbas archipelago for tourism development, tourism bulletins and annals were also sought covering the period immediately prior to independence, between the 1960s and early 1970s. Specific literature on the Quirimbas region was also collected from bulletins, journals and periodicals from 1930 to 1960, as well as more recently drafted papers by the Portuguese historian Carlos Lopes Bento, including a PhD thesis on the *Colonial Situation, Resistance and Change in the Querimba Islands between 1742 and 182*2 (Bento 1993) and a book on *The Governance of the Querimba Islands – Population, Fragilities, Violence and Rebellion* from 2017 (Bento 2017).

3.3.4 Interviews, participatory techniques, and ethnographic research

In addition to archival research, a number of engagement tools (i.e. interviews, focus group discussions and participant observation) were applied, which required patience, sensitivity, and

[16] For example, according to the archivists at the Ultramarine Historical Archive in Lisbon, data from Mozambique (and other Portuguese colonies) was sent to Portugal on a regular basis throughout the history of Portuguese settlement and also with the country's independence. According to the same sources, the quality of data pertaining to a particular colonial territory and/or period was apparently determined by the acting governor at the time, resulting in either detailed data or a general dearth of information.

flexibility. Given that interviews and focus group discussions were carried out with a total of 108 individuals from different locations and backgrounds (i.e. Maputo, Ibo Island, Nairobi, Lisbon, Johannesburg, and Cape Town), engagement had to be done as efficiently as possible, particularly when time was limited, which sometimes required negotiation in order to enable access to stakeholders, and flexibility in terms of responding to local settings (Lewis 2003).

As recommended by Lewis (2003), a number of different approaches were adopted during stakeholder engagement. Clearance from senior individuals or so-called 'gatekeepers' was sometimes necessary prior to interviews and focus group discussions taking place, which required sensitivity to local hierarchical relations. For example, in Mozambique, it is considered courteous and prudent to approach local government authorities (in this case Ibo's District Administration), as well as park authorities (in this case the head of the coastal and marine section of the Quirimbas National Park)[17] prior to conducting interviews so as to introduce the researcher and the scope and nature of the research. This was done in accordance with Mozambican norms.

In addition, attempts were made to provide both 'gatekeepers' and participants with clear and concise information pertaining to the objectives and purpose of the research, type of information required, envisaged timespan of the interviews and focus group discussions, range of people involved, estimated number of visits as well as how the findings would be used. Particularly at the local level, for example, during interviews and focus group discussions with park residents, cooperation tended to become easier and more fluid after discussing and explaining the research objectives, which were accepted as valuable by those involved. In other words, park residents seemed assured and more willing to engage in the discussions once it was clarified that the study was being conducted from an academic perspective, and particularly that it did not involve the park or the government.

Park authorities, on the other hand, became less opened to discussing issues related to the park once they realised the content or objectives of the research study, and were more inclined to emphasise the benefits that nature conservation had brought to the Quirimbas, not only from a biodiversity perspective, but for local residents as well. It was also apparent that three of the four park officials based in Ibo, with the exception of the *chefe de fiscalização* or head of patrol

[17] The park's overall headquarters are based in Ancuabe-Biaque, which is located south-west of Ibo Island and outside park boundaries. Fieldwork therefore entailed direct communication with the park's office for the marine and coastal area only, which is located on Ibo Island. Communication with Ancuabe-Biaque was carried out telephonically and/or electronically.

and enforcement, were generally fearful of being too critical of the park, although this tended to ameliorate as the interviews unfolded.

3.3.4.1 Interviews

Running concurrently with the archival research, primary data was collected through in-depth, unstructured and semi-structured interviews, and informal discussions with key stakeholders, carried out either face-to-face or electronically/telephonically to gather oral histories, perspectives, values, and meanings associated with the Quirimbas landscapes, the establishment of the park, as well as conservation in Mozambique. Interviews involved questioning one to three people at the same time, with a focus on both questions from the researcher and responses from the participants (Morgan cited in Gibbs 1997). Other primary data collection methods, such as questionnaires, were not used as, according to Valentine (2005), these are too restrictive in the sense that they do not allow respondents to freely explain their perspectives, experiences and other, more complex issues as may be fundamental to the objectives of the research. According to the author, interviews are "sensitive and people-oriented, allowing interviewees to construct their own accounts of their experiences by describing and explaining their lives in their own words" (p. 111). As such, the material resulting from interviews is usually rich, comprehensive, and complex, depicting a fuller image of local realities, which was the intention of the research.

Stakeholders were initially identified through purposive sampling and document analysis, and later through the snowball method, which was used to identify and select additional stakeholders (Berg 2001; Esterberg 2002) based on the potential contribution they might bring to the study. Formally interviewed stakeholders included particularly 'external' but also 'internal' actors, as proposed by Blaikie (2001), such as conservationists, historians, researchers, government authorities, NGOs, park authorities, conservation organisations and the private tourism sector ('external), as well local/park residents ('internal'), as presented in the following Table 3-1.

Table 3-1 - Number of interview respondents per affiliation

Organisation/Affiliation	Code	Number
'Internal' stakeholders		
Local residents in the form of individual interviews	Interview 10, Park Resident, 01 August 2018	1
	Interview 16, Park Resident, 05 August 2018	1
	Interview 22, Community Leaders, 07 August 2018	3
	Interview 21, Community Elder, 06 August 2018	1
'External' stakeholders		
Government authorities from Ibo District	Interview 11, Local Government Authority, 02 August 2018	1
	Interview 12, Local Government Authority, 02 August 2018	1
Park authorities	Interview 14, Park Official, 03 August 2018	1
	Interview 18, Park Officials, 06 August 2018	3
WWF-Mozambique, the main non-state actor involved in the establishment of the Quirimbas Park in early 2000 and who continued to provide technical support to the park at the time of the study; WWF-Mozambique was interviewed both locally (i.e. on Ibo Island) and in Maputo	Interview1, NGO Official, 30 August 2016	1
	Interview 4, NGO Official, 30 October 2017	1
	Interview 15, NGO Official, 04 August 2018	1
	Interview 23, NGO Official, 16 August 2018	1
Relevant local NGOs working in the Quirimbas, including Oikos and Fundación Ibo	Interview 17, NGO Official, 05 August 2018	1
	Interview 19, NGO Official, 06 August 2018	1
	Interview 20, NGO Interns, 06 August 2018	2
The private sector, including tourist operators from Ibo Island	Interview 5, Tourism Sector, 01 November 2017	1
Relevant international agencies such as the French Development Agency who has provided financial support to the park in the past	Interview 9, International Development Agency, 13 April 2018	1
Scientists, scholars, and independent consultants with research interests in the Quirimbas	Interview 2, Independent Consultant, 01 September 2016	1
	Interview 3, Independent Consultant, 05 September 2016	1
	Interview 6, Independent Consultant, 10 November 2017	1
	Interview 7, Independent Consultant, 26 March 2018	1
	Interview 8, Independent Consultant, 12 April 2018	1
	Interview 13, Independent Consultant, 02 August 2018	1
	Interview 24, Scholar, 18 December 2018	1
Total number of respondents		**29**

Besides the formal interviews outlined in Table 3-1 above, informal contacts/interviews were made with about 45 other individuals, of which the majority were park residents, but also historians, conservationists, archivists, and government officials from relevant departments (e.g. the Foundation for the Conservation of Biodiversity or BIOFUND, a private financial institution that finances conservation in Mozambique as well as the National Agency for Conservation Areas or ANAC, who is responsible for overseeing all conservation areas in Mozambique), who provided insightful contributions to the research and/or helped in guiding the direction of the research.

Topics explored during interviews and informal discussions included historical and political reasons associated with the park's establishment; actors involved in, and/or excluded from the creation of the park; perceived ideas about the park's landscapes and resources; park management issues, among others (Appendix A contains the guiding interview questions for key informants). Interviews were either recorded or subject to note taking depending on the individual's preference, and then transcribed to enable data analysis and selection of key findings, or themes, which are discussed later in the chapter.

Interviews confirmed that the first section of the Quirimbas Park subject to physical demarcation back in 2002 was its marine and coastal area, with the creation and delimitation of its terrestrial section being less clear (Interview 2, Independent Consultant, 01 September 2016; Interview 7, Independent Consultant, 26 March 2018; Interview 8, Independent Consultant, 12 April 2018). In fact, some interviewees suggested that the selection and delimitation of the park's terrestrial section was always somewhat ambiguous, with others implying it was linked to political motives (Interview 7, Independent Consultant, 26 March 2018; Interview 8, Independent Consultant, 12 April 2018). In other words, Frelimo has often been 'accused' of having a 'tribal' and 'regional' identity, favouring Southerners and marginalising those from the North (Chichava 2008). This is linked to the fact that Frelimo's leadership was initially formed mainly by members from the south, with people from the North - the Macondes in particular - being underrepresented, despite constituting (particularly the Macondes) the majority of Mozambican emigrants in Tanzania, when Frelimo was created in Dar-es-Salaam in 1962 (Chichava 2008), and despite the fact that the fight for liberation was initiated in the Northern part of the country (Meneses 2015). After independence, and despite Frelimo's efforts to build a national identity by fighting discrimination based on colour and tribalism (see more on the history of Mozambique in *Chapter 5*), it has been argued that the resentment which Northerners felt against Frelimo and its predominantly Southern leaders

became acute, particularly as development in the North lagged substantially behind when compared to the south (Chichava 2008). It is in this context that one interviewee suggested that the Quirimbas was impulsively established in the North without much thought nor planning, but rather to placate these perceived divisions between South and North:

> We had no conservation areas in Cabo Delgado at the time, despite the fact that this province, as well as Niassa, had the highest numbers of megafauna in the country […] and there was a big push from Cabo Delgado's provincial authorities to establish conservation areas there (Interview 8, Independent Consultant, 12 April 2018).

Particularly at the local level, collecting and understanding community perceptions about the Quirimbas was a key aspect of the research, where questions related to local residents' involvement in the park's establishment were explored, as were feelings of hostility towards the park due to processes of criminalisation imposed on local residents by park authorities, but also the marginalisation and exclusion of local people from the Quirimbas landscapes. Park authorities' perceptions were equally investigated, including wilderness imaginations associated with the Quirimbas' landscapes, main perceived threats/risks to biodiversity, potential solutions to the park's management, as well as the imagining of 'a park without people'.



Figure 3-5 – Interviews with an elderly park resident (left) and with the *Secretários de Bairro* (right), Ibo Island (Bram Naidoo 2018)

3.3.4.2 Focus group discussions

While interviews were conducted over a period of three years across different geographical locations, focus group discussions were carried out with park residents only (i.e., 'internal' actors), specifically those from Ibo Island. As opposed to interviews, where the focus of the discussion was on both questions and responses from the researcher and participant, focus group discussions relied instead on the interaction between people within the group, based on topics provided by the researcher (Conradson 2005; Morgan cited in Gibbs 1997). According to Gibbs (1997), the main characteristic of focus group discussions is that data and insight is produced directly from the interaction between participants. This is done by drawing "upon respondents' attitudes, feelings, beliefs, experiences and reactions, in a way that would not be feasible using other methods, for example observation, one-to-one interviewing, or questionnaire surveys" (Gibbs 1997; Why use focus groups and not other methods?, para. 1). She further suggests that, because participants themselves may end up taking the initiative in focus group discussions, the researcher has less control than in interviews, for example. Lastly, the author also argues that focus groups discussions are particularly valuable when seeking to explore the degree of consensus about a particular topic, which was one of the research intentions.

Focus group discussions were carried out in the Rituto and Cumuamba *bairros* of Ibo Island, which are known to house mostly fishing households (Interview 11, Local Government Authority, 01 August 2018; Interview 12, Local Government Authority, 02 August 2018) (Figure 3-6). The discussions comprised a total of 35 and 45 participants respectively, and took roughly one-and-a-half hours to complete (Table 3-2), although following both discussions, individual conversations were held with some of the participants, who felt they had not provided sufficient input and/or wanted to clarify a point raised during the meetings. Whilst the suggested maximum number of participants in a focus group discussion is between 10 and 12 (Nyumba et al 2018), over-recruiting was considered important (Conradson 2005), given that the likelihood of fishermen and women not being able to attend was relatively high, and dependent on environmental conditions (e.g. tides and wind, as elaborated later in the chapter); as well as taking into consideration Mozambique's history of hosting larger community meetings. Even though it may seem polemic, large community meetings are common practice in Mozambique and have been so historically, which means that despite the size of the group, participants usually feel free to openly express their feelings and voice their opinions.

Table 3-2 - Number of participants in the focus group discussions held in Ibo Island

Bairro	**Code**	**Number of participants**
Rituto	Group Interview 1, Bairro Rituto, 02 August 2018	45
Cumuamba	Group Interview 2, Bairro Cumuamba, 02 August 2018	35
Total		80



Figure 3-6 – Focus group discussion in *bairro* Cumuamba (Bram Naidoo 2018)



Figure 3-7 – Focus group discussion in *bairro* Rituto (Bram Naidoo 2018)

The discussions were held in Portuguese and Kimwani, the main local language, with the help of a local interpreter, who was a neutral arbiter with experience in interpreting Portuguese and Kimwani in Ibo Island (see more on how adequate participant engagement and understanding was ensured later in the chapter). The choice of communities for the focus group discussions was determined after the initial interviews on the island with the then district administrator

(Interview 11, Local Government Authority, 01 August 2018), followed by additional meetings and informal discussions with other residents as well as reconnaissance trips by foot around the island.

Despite the fact that the majority of Ibo's residents are heavily reliant on natural resources, fishermen and women were specifically selected for the focus group discussions [i.e. the general design principle applied for intra-group homogeneity was occupation sector, which would allow for a productive conversational dynamic (Conradson 2005)], for two main reasons, which have been reflected upon in terms of whether there was a bias in selecting households who were 'directly' affected by the park (i.e. fishing households as opposed to households with more diversified livelihoods); and whether this could restrict the analysis to events involving 'conflict' with conservation measures/policies/park guards while excluding other views or ways of living in, and relating to, a protected area. Ultimately though, the selection was based on the fact that the majority of Ibo's population is either directly or indirectly involved in artisanal/subsistence fishing, with women (and sometimes children) being generally responsible for the collection of invertebrates in intertidal areas and nearshore shallow waters, particularly octopus, oysters and pen shell, while men collect deeper water invertebrates, although relatively close to the coast, including a variety of fish as well as crabs, prawns, squid, and lobster (a brief analysis of local socio-economic conditions is provided in *Chapter 6*). The few residents who are formally employed in either government, conservation, or the tourism sector also have one or more family members engaged in fishing, signifying these households are also dependent on natural resources for their livelihood. This was confirmed during interviews and informal discussions with park residents, who were likewise vociferous in their defence of fishermen and women, and their rights over those of the park as an entity.

Moreover, given that local communities have been historically involved in artisanal fishing activities in the Quirimbas archipelago, coupled with the lack of alternative livelihood opportunities 'outside' of the marine environment, residents feel 'attached' to the sea and somehow incapable of performing other income generating activities other than fishing (Interview 22, Community Leaders, 07 August 2018; Group Interview 1, Bairro Rituto, 02 August 2018; Group Interview 2, Bairro Cumuamba, 02 August 2018). In essence, these factors suggest a heavy reliance on natural/fishing resources by local communities on the one hand, as well as the lack of alternative livelihood opportunities on the other. This also means that local residents, particularly fishermen and women, are likely to feel strongly connected to the

landscape/seascape in which they inhabit/utilise given that they 'explore' and 'utilise' the park's resources 'directly' as well as navigate through its landscapes on a daily basis. This, in turn, implies more regular conflicts, engagements, and the need to negotiate with the 'park', which were considered more applicable to the objectives of the study.

While participants within each group varied in both age and sex, more men than women attended both focus group meetings and were generally more vocal in providing input, responses and opinions. Due to their occupation, i.e. fishing, participant recruitment was largely dependent on their availability, which was in turn essentially determined by environmental and socio-economic factors. By exploring social and ecological conditions affecting fisherwomen's behaviour in Ibo, Wosu (2018) suggests there are four variables that can significantly predict daily fishing efforts, these being: season (with efforts waning in the wet season); wind (octopus fishing trips dropping on windy days); tide (efforts going up during spring season); and household head (with lower daily fishing efforts among women headed households). This extreme reliability on environmental factors (e.g. tides, winds, and season) is common among Mozambique's artisanal fishing communities and is applicable to both fishermen and woman in Ibo Island, who make use of rudimentary fishing gear such as home-made harpoons, iron rods, small nets (seine and gill nets), mosquito nets, lines and hooks, spear guns, traps, buckets and baskets as well as unmotorised fishing boats or canoes, locally called *casquinhas*. In essence, this meant that the organisation of focus group discussions was also dependent on local environmental conditions, particularly those affecting fishing activities i.e. tides and prevalent winds.

The key benefits of using focus groups included the ability to collect different perspectives about the same topic (in this case, nature conservation in the Quirimbas) and gain insight into local resident's shared understanding of everyday life in the park, as well as the ways in which individuals are influenced/not influenced by others in the group and interact with each other (Gibbs 1997; Wilkinson 1999). Through the use of focus groups, the research managed to tap into local people's normal, everyday life of engaging with family, friends and/or neighbours about everyday experiences (Wilkinson 1999) such as fishing, sailing, engaging with the park, etc. This allowed not only for the examination of how residents engaged with each other to generate, express and/or modify meaning or opinions, but also shifted the control and power of the researcher to the participants (unlike during interviews, for example), thereby allowing for a better understanding of local people's opinions and interpretations, as well as the setting of local agendas (Wilkinson 1999).

Two further advantages of focus groups (Race, Hotch & Parker 1994) which are perhaps more common in longitudinal studies is that they can provide participants with the opportunity of becoming more actively involved in the research and valued as experts, as well as "become a forum for change both during the focus group meeting itself and afterwards", as speaking freely and publicly about local/perceived problems can result in feelings of emancipation on the one hand, or result in real changes on the other (Gibbs 1997).

3.3.4.3 Ethnographic research

Ethnographic research, also called participant observation, is a type of research approach that entails "immersing yourself in the social life of a group, observing, and writing about what you see" (Esterberg 2002, p. 58). In essence, it involves gaining insight into a certain group of people's social settings and social behaviours through active observation and participation that is creative and evolving (Cook 2005; DeWalt & DeWalt 2011; Esterberg 2002; Snape & Spencer 2003; Tracy 2015), followed by constructing and interpreting field experiences while being reflexive of one's own thoughts (Berg 2001). Sampling is required in any given ethnographic work, given that the researcher cannot observe and register everything that occurs (Ritchie, Lewis & Elam 2014), and it is generally accepted that adequate sites for participant observation tend to be small-scale (Esterberg 2002), as is the case of Ibo Island. While many ethnographic research studies are conducted over extended periods of time, short and intense participant observation is also considered a legitimate type of research as data produced under these circumstances can be of significant value to a dissertation (Cook 2005).

Whilst on Ibo Island, a number of ethnographic tools were used, including attentive observation, interaction, note taking, informal or formal interviews, data analysis, and write up (Berg 2001; DeWalt & DeWalt 2011; Tracy 2015). Given that Ibo is a relatively small island town, days were spent walking around its different *bairros*, visiting its beaches and sanctuaries as well as meeting places such as the 'old' town, local *praças*, water collection points, market and schools, with the aim of watching and listening, asking questions as well as informally engaging with residents including children, the youth, women, men and the elderly. An analytical diary was used to register field notes including observations, conversations, remarks, important locations as well as potential new participants. These were done at the end of the day each day, following field work.

Ultimately, participant observation in Ibo Island was used to explore/understand the ways in which the establishment of the Quirimbas affected its residents in terms of access/use of natural resources as well as community and social organisation. In other words, participant observation aimed to investigate if and how social realities and livelihood strategies had been transformed as a result of the establishment of the park and the disconnect between nature and culture.

3.4 Themes/findings

A number of themes emerged from the review, transcript, and typing of both focus group discussions and interviews as well as the review of ethnographic data/field notes. Typing field notes and transcribing interviews and focus group discussions enabled a re-familiarisation with the details from field work and marked the beginning of theme identification (Ryan & Bernard 2003). Following the transcript of data, text material was read multiple times to help find themes. This initial analysis of data entailed combing text material "slowly and thoroughly" as a means to open coding, which allowed for the identification and extraction of themes in a systematic way (Berg 2001; Crang 2005, p. 222). Guidelines used when conducting open coding included asking the data a set of questions, exhaustive data analysis, writing down theoretical notes during the coding process as well as never leaning towards certain variables unless the data identified it as relevant (Strauss cited in Berg 2001). Hybrid forms of coding were used – i.e., inductive and deductive coding (Fereday 2006) – which resulted in a list of topics that were organised according to the same logic of the interview guide (Appendix 1): (i) Park creation (overfishing, marine environment, marine protected area, wildlife, marine life, turtles, corals, elephants, forests, idyllic beaches, virgin landscapes, human-wildlife conflicts); and park management (sanctuaries, *zonas de veda*, total protection zones, specific use zones, community development zones, fence-off, closure, exclusion, monitoring, policing, patrolling, military, prohibitions, restrictions, illegalities, imprisonment, fines, environmental education (ii) Communities (foreign fishermen/outsiders, *Nacalenses*, *vindouros*, Tanzanians, Chinese, immigrants, destroyers, offenders, uneducated, problematic, unsustainable, criminals, irrational, thieves, poachers, stealing and (iii) Park perceptions (afraid, scared, attacked, hungry, suffering, zero benefits/opportunities, no access/dialogue with park, authoritarianism, powerful). During this initial process of coding, codes were linked to the thesis' key conceptual interests, which included the understanding of how dominant nature readings have been imposed on the Quirimbas landscapes and what this meant for locals; examining key perceptions of the Quirimbas landscapes by both internal and external actors; as well as

identifying societal changes or shifts occurring at the community level as a result of constructions of nature.

Following open coding, analytic induction as well as creativity were applied to organise the data into categories and subcategories, which were then used to not only interpret patterns, but also introduce relevant theoretical perspectives regarding constructivism and assemblage theories to link the analysis into the existing theory, as well as develop one's own emerging grounded theory (Berg 2001; Crang 2005; Charmaz & Thornberg 2021).

The main themes or findings that emerged from the data analysis and interpretation included violence and the criminalisation of park residents, the creation or enhancement of social divisions among groups of residents, the adoption of 'illegal' livelihood arrangements by local residents, and the transformation of local communities into a voiceless and powerless group in society (discussed in *Chapter 7*). The most salient of these four findings was linked to violence and processes of criminalisation of park residents. In essence, this finding relates to the ways in which park residents, who are entirely reliant on locally available natural resources, have become criminalised through different but interlinked processes of criminalisation and violence. Through structural, physical, and symbolic forms of violence associated with regulatory, discursive, and historical processes of criminalisation (explored in *Chapter 2*), the park not only restricts, limits, and criminalises local livelihood practices without providing or enabling appropriate alternatives, but also delegitimises local communities as the 'rightful' residents of the park and, ultimately excludes them from their homes. These findings are discussed in *Chapter 7*.

3.5 Ethical considerations, positionality, and reflexivity

Because this study involved in-depth and unstructured qualitative research with human participants, it adhered to the requirements of UCT's Faculty of Science Researcher Ethics Statement (see research ethics approval in Appendix B).

Informed consent from participants was obtained following the provision of information regarding the purpose of the study, the university where the research was undertaken, myself, the ways in which research findings would be used and/or applied, as well as participant requirements including the type of individuals likely to be covered and the estimated amount of time needed, to name a few (Lewis 2003). Besides informed consent, issues related to anonymity and confidentiality were also given concerted attention and thought (Lewis 2003)

and, throughout the thesis, most interviewees have been named indirectly by referring to a collective group (e.g. 'Group Interview 1, Bairro Rituto, 02 August 2018') or an individual (e.g. Interview1, NGO Official, 30 August 2016) (see above for a description of how participants have been coded).

Depending on the subjects being interviewed, two forms of consent were obtained during the research, viz. oral and written. The main motivation for using an oral consent form with park residents was that the majority of Ibo's residents only speak Kimwani, and illiteracy rates are high on the Island, particularly among women (INDA 2011), as in the District of Ibo as a whole (at approximately 65%) (Distrito do Ibo 2014). To ensure adequate participant engagement and understanding, collaboration was sought with a local resident to translate all communications between myself and the community, including the oral consent form. Written consent forms were also provided to any informant who so preferred, as well as to more literate participants such as government officials, park authorities, consultants, scholars, etc. In addition, during all interviews and focus groups discussions, permission was sought from participants to record the sessions. Ultimately though, as a researcher, my main belief with regards to ethical commitments towards participants was based on clearly informing interviewees about research objectives as well as stressing the importance of their contribution towards the study, rather than just obtaining signatures, which is believed could have reinforced unequal power relations.

Community participation in Mozambique is generally quite strong, in the sense that people are used to voicing their opinions in public, and interpreters are often required to translate and transmit people's opinions into Portuguese. It is also quite common for Mozambicans to mix local languages with Portuguese and, as I understand Portuguese, I believe I was able to confirm the veracity of the interpretation during the focus group discussions held in Ibo. The choice of interpreter was someone who was a 'neutral' arbiter, with experience in interpreting Portuguese and Kimwani locally. Prior to conducting the focus group discussions, individual meetings were held with the interpreter so as to ensure that he felt comfortable in my presence, comprehended the nature and requirements of the discussions, and understood informant's confidentiality. In other words, by maintaining an opened and honest relationship with the interpreter, I felt that participant's words were more likely to be accurately represented and their confidentiality secured. In addition, while conducting group interviews, cognisance of local customs, power dynamics, as well as those gender and class discrepancies that enable/disable individuals from speaking freely were assured.

Given the nature of the study, reflection on positionality was applied throughout all stages of the research, including fieldwork, data analysis, interpretation and writing, by constantly challenging, reflecting and being attentive to issues of power, privilege and knowledge production (Cunliffe 2003; Jones 2016; Muhammad et al 2015; Sultana 2007). Despite being Mozambican, I was born and raised in Maputo, which has distinctive social and economic conditions to those found on Ibo, a rural and remote island in Northern Mozambique. Generally, people in rural areas such as Ibo tend to look up to those coming from urban areas, particularly Maputo, as the city is perceived to offer better living conditions such as improved access to education and health, but also employment opportunities, to which most rural Mozambicans aspire. However, having lived in rural Mozambique when younger and having travelled extensively in country both for work and leisure, I felt familiar with and at home in Ibo's rural settings, and was able to easily navigate through, engage with and establish trusting relationships with local residents. Individual privileges were nonetheless acutely reflected upon, particularly in terms of education and class, which are likely to have affected the way I was perceived locally; in other words, I did not become an 'insider' amongst the Ibo community, nor did I establish fully 'equal' relationships with local residents. This encouraged processes of reflexivity on positionality throughout the research process, not only whilst doing fieldwork in Ibo, but also on the research process/design itself, the representation of findings as well as in the construction of knowledge, or what Muhammad et al (2015) describe the epistemology of power. Ultimately, however, it would appear that the community accepted me as a Mozambican 'from the city' who was in Ibo doing 'useful' research from a local perspective. This has also been intensely reflected upon by deconstructing one own's reality, knowledge, and assumptions (Latour 1988 cited in Cunliffe 2003), as well as by decentring the self and questioning one own's privilege, power, and voice, while attempting to theorise and transmit local/subaltern voices or socially constructed realities which have generally been silenced. This should in no way suggest that local park residents lack in active or historical agency, nor seeks to limit the analysis to processes of marginalisation and victimisation of locals, but rather serves to acknowledge that different forms of knowledge, perspectives, imaginations, meanings, expressions, and relationships with/perceptions of nature/landscapes/wilderness areas have been epistemically suppressed and in fact labelled as 'primitive', 'irrational', 'traditional', etc. throughout the history of a largely Western/Eurocentric-based approach to nature conservation.

3.6 Limitations

The main limitation encountered during the research study was linked to security issues experienced in Northern Mozambique starting in 2017 until the time of writing, which, together with accessibility issues (discussed below), had implications and somewhat determined the areas and period covered during field work.

As mentioned earlier in the chapter, the selection of a primary research location in the Quirimbas' marine and coastal area covering one or two villages was always intended. However, a series of violent events reported on remote villages throughout Northern Mozambique at the end of 2017[18] ultimately restricted the research focus to an island environment, as it was considered safer when compared to villages located on the mainland. The Island of Ibo and neighbouring islands (e.g. Quirimba to the south and Matemo to the north) as well as adjacent coastal villages located on the mainland were therefore selected as potential research sites. However, whilst in Ibo, it became apparent that travelling between Ibo and these nearby villages would have become too time consuming as well as expensive as (i) travelling times between these areas depend on tides; (ii) there is no reliable transport system between them; (ii) accommodation is only available on Ibo Island, implying returning to Ibo on a daily basis following fieldwork; and (iv) most islands in the archipelago have much smaller population numbers than does Ibo. Furthermore, after the first few sets of interviews and focus group discussions on Ibo, it became clear that the social conditions of local communities in relation to natural resource use/dependency, livelihoods, income generation, and access to basic services were similar throughout the District of Ibo, and that, as such, overall findings were unlikely to vary substantially. It also became evident that travelling to the mainland – even to adjacent coastal villages such as Tandanhangue – was not considered safe by locals, as evidenced by the lack of recent park patrols along the coast precisely because of the "war" situation (Interview 18, Park Officials, 06 August 2018). This also meant that conducting fieldwork on the mainland would have potentially distorted the findings, given that people were scared to talk freely, as well as to conduct their livelihoods normally.

[18] Reported in the media at the end of 2017, the events were linked by some to young and disenfranchised Mozambicans with possible links to radical Islam groups (Habibe et al 2018; Hanlon 2021a; 2021b). Despite the spread in violence throughout most of the Province of Cabo Delgado, including the coastal areas of Macomia and Quissanga (Agência Lusa 2018; Issufo 2018; Lutxeque 2018; Morier-Genoud 2020), both part of the Quirimbas and relatively close to Ibo Island, limited information was disclosed throughout the period the research study was conducted.

A few additional limitations to the ones above were observed during the research study. The initial setback was linked to limited historical material on the Quirimbas National Park found at the archives and libraries visited in Mozambique (discussed earlier in the chapter), which resulted in a trip to Lisbon in search of historical information on colonial imaginations and/or interests projected onto the Quirimbas landscapes. Given the importance of the Quirimbas region to the history of Portuguese settlement in Mozambique,[19] however, an overwhelming amount of documentation was found at the archives dating back to as far as the 1400s (see more in *Chapter 4*). While incredibly interesting from a historical perspective, going through large volumes of historical data also meant that a considerable amount of time was spent trying to determine/trace whether, or at what point, were the Quirimbas prioritised or identified as a potential conservation area by the Portuguese. In addition, while going through the collections at the *Arquivo Histórico Ultramarino* and the *Sociedade de Geografia de Lisboa*, it became clear that other archives also contained relevant historical material on Portugal's colonial administration, such as the *Arquivo Nacional Torre do Tombo* and the *Biblioteca Nacional de Portugal*. However, time and budgetary constraints did not allow for research at additional archives whilst in Lisbon. Instead, these were electronically contacted, and research conducted online.

Despite having found extensive data on the Quirimbas region as a whole, specific information pertaining to the park and/or conservation interest in this region was generally limited, which meant that a substantial part of data collection was spent tracking the right individuals, government institutions and organisations who had played key roles in the creation and initial management of the park and were therefore able to help trace the park's history. Because some of these individuals no longer worked in Mozambique, additional efforts were required to track them in order to gather primary data and perspectives on the Quirimbas. Whilst the lack of historical information on the park was initially perceived as a limitation to the thesis, this was overcome by collecting sufficient data to, on the one hand, understand/frame the historical and political context of the Quirimbas and, on the other, engage with and address the key research questions.

A different setback was linked to accessibility and cost, as mentioned earlier. Apart from being an expensive destination, the Quirimbas National Park in general and Ibo Island in particular are of difficult access due to poor road and transportation conditions. Ibo Island can be reached

[19] Mainly given the fact that the Portuguese initiated their occupation of Mozambique in this archipelago in 1498 (Newitt nd).

by a two-and-a-half-hour flight from Maputo to Pemba[20] on one of the most expensive domestic flights, followed by an approximately eight-hour drive (depending on local road conditions) to Tandanhangue Village and a hour boat ride to Ibo. A more costly alternative includes an approximately 30-minute charter flight from Pemba to Ibo. The difficulty in access and high travelling costs meant that fieldwork had to be completed in one single, relatively short-term site visit of eight days,[21] which, according to Knoblauch (2005; no pagination), is called "focused ethnography" as opposed to "conventional ethnography", as it demands intensive data collection and analysis. Whilst this could potentially be considered a limitation to the research thesis or seen as "superficial" ethnographical research, the short-term period covered in the Quirimbas was compensated for by intensive data production, where a large amount of data was collected through tape recordings, participant observation, interviews, informal conversations, and focus groups discussions described earlier in the chapter (Knoblauch 2005; no pagination).

Whilst in the field, part of the time was spent waiting for participants' availability as well as rescheduling interviews and focus groups discussions with park residents, particularly those with fishermen and women. This is linked to the fact that local artisanal fishermen and woman's livelihoods and income generation activities are very much dependent on tidal variation and other environmental factors, as discussed earlier in this chapter. For instance, participants sometimes failed to arrive at a previously arranged focus group discussion because fishing conditions had improved (where for example, the wind may have died down and fishermen had gone out to sea), or gotten worse, and residents decided they needed to use the available time to engage in other economic activities to enhance household income, such as the sale of fish, seafood and other products in the local market, or small-scale agriculture production, fetching water, etc. As such, it was felt that those who did choose to participate had gone out of their way to attend the meetings without any benefits, whilst taking time out of their regular daily activities and (much needed) income generation. Not wishing to inconvenience them any further, a certain amount of time was spent waiting for participants. However, 'waiting' time was not lost, as it was used to engage in participant observation, get acquainted with the Island, and enter into informal conversations with its residents.

During desktop research on the Quirimbas, two extensively documented community complaints stood out as important, and therefore informed the fieldwork's approach. One was

[20] The capital city of Cabo Delgado Province.
[21] Fieldwork in Ibo Island took place from the 1st to the 8th of August 2018.

the lack of access to certain 'touristic' beaches/sites by locals, and the other was related to local residents being photographed by tourists. Whilst in Ibo, local residents were constantly photographed by tourists, in what seemed like an attempt to capture 'native life' or processes of 'Othering': fishermen transporting and selling freshly caught fish, women collecting invertebrates in Ibo's shallow waters or with large fish baskets on their heads, girls collecting water or helping their mothers gleaning, and so on. Clear discomfort and anger by local residents were noticed on more than one occasion. I then reflected on, or imagined being a park resident conducting research in Stockholm, for instance, and photographing 'local' modes of living – e.g. local businessmen adjusting their ties whilst staring at their screens, children playing in the snow in awkward winter clothing, etc. - whilst categorising Stockholmers as 'subjects' and not citizens. In other words, I reflected on whether processes of 'othering' would be possible or likely (clearly not!) had the research site been located the North and conducted by someone from the South. Given that the focus of the research was partly on constructions or perceptions of landscapes and imagined nature, the Quirimbas' many sceneries, settings, and backgrounds were recorded instead. Photographs of park residents going about their lives without showing their faces were also collected from a local resident, and photographs showing people's faces were only used after confirming their agreement.

As mentioned earlier, the focus group discussions were held in a combination of Kimwani and Portuguese, with the help of a local translator. The fact that the author does not speak Kimwani was considered a limitation linked to the possibility of missing out on nuances and subtleties during the discussions. This limitation was particularly felt whilst transcribing focus group discussions and using excerpts from transcripts to voice local respondents' opinions, as one worried about losing authenticity given that people's words had to be changed/translated (Crane et al 2009) not only from Kimwani to Portuguese, but also from Portuguese to English. Translation was, however, a necessary task which was reflected upon in order to translate "the words and meanings of respondents into academic text" (Crane et al 2009, p. 43). In this sense, processes of reflexivity and awareness or deconstruction of one's own positionality throughout the study, enabled the researcher to question assumptions about what constitutes reality and how knowledge is produced (Cunliffe 2003), and therefore how best the data collected as well as participants' voices could be represented (Jones 2016).

The Quirimbas was designated a biosphere reserve in 2018 (UN News 2018) based on the fact that it comprises terrestrial, marine and coastal ecosystems and constitutes a special place "for testing interdisciplinary approaches to understanding and managing changes and interactions

between social and ecological systems, including conflict prevention and management of biodiversity" (UNESCO 2017; para. 1). The proposed zoning of the Quirimbas Biosphere Reserve overlaps somehow with the Quirimbas National Park zoning system, although different denominations and boundaries are proposed (RoM 2018). 'Core areas' of the biosphere reserve coincide with the 'Total Protection Zones' in the park; 'buffer areas' corresponding to a buffer around the 'core areas'; and 'transition areas' coinciding with Community Development Zones. Whilst acknowledging the fact that the Quirimbas is now a biosphere reserve, the analysis provided in the thesis focuses on the Quirimbas as a park and not a biosphere, particularly as it is still locally perceived and managed as a national park .

3.7 Conclusion

This chapter described the methodological approach, procedures and methods used to collect and analyse data to investigate societal changes or shifts at the community level in the Quirimbas National Park as a result of prevalent nature readings. The study made use of two broad theories of enquiry i.e. constructivist (Castree 2005; Cosgrove 2006; Cronon 1995; Ingold 1992; Proctor 1998) and assemblage theories (Deleuze & Guattari 1987; Escobar 2008; Ingold 1993; 2005; 2006; 2015) explored in detail in *Chapter 2*. The research also adopted an interpretivist approach based on intensive qualitative research techniques including ethnography or participant observation at the local level (Ibo Island), supplemented by archival research, interviews and focus group discussions, which facilitated insight into how European/Portuguese imaginations of nature have been projected onto Mozambican landscapes in general, and the Quirimbas in particular. This was considered in the context of the period of *longue durée*, and focused on what this meant for local residents.

4. Colonial landscape readings and the placing of locals

4.1 Introduction

Through a historical lens, this chapter explores the ways in which 'nature', a socially constructed concept investigated in *Chapter 2,* came to be imagined by the Portuguese, and how this subsequently served as a basis for, or shaped approaches to conservation in Mozambique. While acknowledging the fact that hunting was an important part of pre-colonial histories, be it in the form of defensive hunting to protect humans and crops, hunting for trade and export of ivory, horns and hides, and/or hunting as a source of meat, skins, and ornaments (Antero 1952; MacKenzie 1988; Newitt 1995), the chapter focuses instead on the analysis of hunting as a colonial creation, and precursor of protected areas in Mozambique, as seen in other parts of the African continent.

In particular, the chapter explores the ways in which *coutadas* were first introduced in Mozambique between the late 1800s and the first half of the 1900s as commodified landscapes, and thereafter slowly transformed into national parks and reserves, in line with regional and international developments or agendas, which pushed for the preservation of fauna and flora resources in their 'natural state' (CITES 2003; IUCN 2004). The placing of the *indígena* within these newly created landscapes is also explored, particularly within the overall context of Portuguese colonial administration, land use, and territorial planning. The chapter therefore aims to understand, as part of this research, the ways in which hunting grounds and protected areas have historically disrupted the links between nature and people.

Whilst the focus of the analysis falls between the late 1800s and the first half of the 1900s, a brief historical assessment of the Quirimbas archipelago dating as far back as the 1500s is also provided, so as to contextualise the area in which the park is inserted, and also to trace landscape readings of the Quirimbas by the *conquistadores*, given that the Portuguese initiated their occupation of Mozambique through this archipelago (República de Portugal 1969; Sousa 1960).

4.2 From hunting interests to conservation

4.2.1 In search of colonial adventures

Throughout the history of colonialism and European expansion, landscapes in the South have been generally constructed externally, and according to the specific readings, interpretations,

and interests of the West. In this respect, Southern landscapes have not only been perceived, but also depicted and reproduced as either 'untouched' environments occupied by the 'noble savages', or as 'wild' and 'hostile' environments occupied by the 'beastly savages' requiring domestication and domination in the name of progress and civilisation (Cronon 1995; Grove 1995; Nash 1967) (see *Chapter 2* for a detailed discussion on the historical construction of Southern landscapes).

African landscapes, in particular, have been perceived as ideal places for adventure, excitement, and exploration (Bayart & Ellis 2000; Berenson 2010; Mackenzie 1988; Martinho 1934; Youé 2006), as evidenced by the way in which hunting has been historically portrayed as a symbol of white masculinity and dominance in the literature, arts and photography[22] (Mackenzie 1988; Vicente 2014), and wilderness landscapes as a symbol of European conquest over nature (Storey cited in Hussain 2010). In other words, colonial encounters with the 'genuine' wilderness areas of the African continent, as opposed to the 'fake' hunting experiences in the North, provided European adventurers and *conquistadores* access to raw, exciting 'nature' and unique adventures (Hussain 2010). At the same time, the 'backward' and 'primitive' nature of Africans, coupled with the late arrival of 'civilised' or 'modern' subjects on the continent, was perceived to be the main reason that wilderness abounded in Africa (Martinho 1934).

While hunting by Europeans had been practiced for many decades in Southern Africa (Newitt 1995), big game hunting rose in popularity in the late 1800s, where the prospect of killing game without constraint was used to attract white hunters, explorers, 'adventurers', farmers, and others (Dias 1968; Elder 1989; Turner 2017) into the continent, including Mozambique. At the time, hunting was promoted and practiced freely throughout the African landscape in the name of 'exploration and discovery' (Dias 1965; Handique 2009) and, in Mozambique, was specifically linked to the formation of the Lisbon Geographical Society in 1875, which, in partnership with the Portuguese government at the time, organised a number of 'exploratory' journeys throughout the country, in line with Europe's focus on the acquisition of 'scientific knowledge', which would in turn support or confirm the need to 'civilise' and 'dominate' the continent (Newitt 1995). These landscape imaginations and wildlife/resource arrangements, Dias (1965) claims, resulted in uncontrolled forms of hunting which, coupled with the 1896

[22] Photography being the main means used to replicate and display colonial experiences between 1860 and 1960 (Mackenzie 1988; Vicente 2014).

bovine pest[23] that decimated thousands of wildlife species throughout the region, significantly reduced game populations and resulted in the extinction of a few species in Southern Africa in the early 1900s.

4.2.2 Portuguese colonial administration and the territorial organisation of Mozambique's landscapes and peoples

In the late 1800s, the Portuguese colonial administration in Mozambique was restricted to a few coastal settlements and commercial routes, in addition to the lower Zambezi valley (Vail 1976), with otherwise vast areas of 'unused' or 'empty' landscapes, particularly towards the interior of the country (Direito 2013b). During this period, the country was largely unmapped, lacked a unified administrative system, and lagged substantially behind in terms of basic services when compared to other colonial powers (Newitt 1995). A Constitutional Monarchy since 1820 (Hespanha 2012), Portugal relied heavily on borrowed money since about 1850, and declared itself bankrupt in 1892 (Neil-Tomlinson 1977), which was, according to Isaacman and Isaacman (1983), linked to a centralised, inept, and corrupt colonial government that prioritised the interests of a few private companies and settler groups over the development of the country as a whole.

In the wake of Europe's increased interest and scramble for Africa (Vail 1976) and the 1890 British ultimatum (Neil-Tomlinson 1977), Portugal sought to affirm its political, administrative and economic sovereignty over Mozambique following a series of agreements between the Portuguese, the British, and the Germans, with regards to its territorial delimitation (Vail 1976). To secure its imperial ambitions in Africa amidst a financial crisis, Portugal granted a series of incentives and support to private and public businesses in order to access land through a system of land concessions (Direito 2013b), particularly in the Central and Northern parts of Mozambique (Newitt 1995). As a result, the administration, exploitation, and pacification[24] of the entire Northern Niassa territory was conceded to the royal *Companhia do Niassa* from 1891 up until 1929 (Neil-Tomlinson 1977; Newitt 1995), while its Central region (Manica and Sofala territories) was conceded to the *Companhia de Moçambique* from 1892 until 1942 (ANTT

[23] According to Dias (1965), a bovine pest was introduced in the continent in the late 1800s by cattle brought in from India. The pest is said to have affected millions of domestic animals as well as wildlife throughout the region, including Mozambique.

[24] Following the Berlin Conference in 1884/85, Portugal implemented a series of military campaigns throughout its colonies with the objective of controlling and the *indígena* and its territories. These were called *Campanhas de Pacificação* or Pacification Campaigns (Afonso & Borges 2015).

2009; e-DITTIP 2013; Newitt 1995). Aside from these two sizeable concessions, huge tracts of land were also leased to British, German, French, and Swiss companies throughout the country (Mamdani 1996), while the south of the country stayed under direct Portuguese state administration (Newitt 1995).

Although the mid 1800s were characterised by a centralised Portuguese administration system that perceived and attempted to manage the colonies as "limbs of the mother-country", the events of the late 1800s gave rise to decentralisation and greater colonial autonomy (Newitt 1995, p. 380). An important change during this time was the introduction of a new colonial labour law in 1899 – the *Regulamento do Trabalho dos Indígenas* or the Regulation on Indigenous Labour – which, as Newitt points out, marked a fundamental change in the direction of Portugal's overall colonial policy. The new law rejected any previous intentions to integrate and assimilate the inhabitants of its colonies as Portuguese citizens by clearly defining two classes of citizens: the *indígena* and the *não-indígena* (Newitt 1995). Whilst the latter had full Portuguese citizenship rights and lived under the metropole's rules and regulations, the *indígena* was to be administered under African law, and according to the legislation of each individual colony (Lourenço 2010; Newitt 1995).

A number of additional land policies were enacted between 1900 and 1940, the first of which turned "Africans into tenants or squatters in state-owned or alienated land", through a practice that allowed for the alienation of land from locals, with the landowner deciding whether they could remain in their property or be evicted into areas specifically assigned for them (Direito 2013b, p. 356). In areas set aside for indigenous people, either within alienated lands or other, 'vacant' lands, Africans were to be ruled by 'custom' or a system of collective or communal land use rights (Direito 2013b; República de Portugal 1918). In 1909, a new bill was passed – *Regímen provisório para a concessão de terrenos do Estado na província de Moçambique* (or Provisional regime for state land concessions in the province of Mozambique) (República de Portugal 1909a) – that allowed Africans 'squatting' in alienated lands to be compensated (as opposed to 'vacant' land where no compensation was provided), a system that was used to gather cheap labour and maintain production by the colonial administration (Direito 2013b). This same bill also gave the Portuguese government and Mozambique's governor general the power to create *reservas indígenas* (reserves for Africans), which is discussed later in the chapter. Additional reforms and enactments were introduced in the early 1900s, such as the *Reforma Administrativa de Moçambique* in 1907, which divided the country – which was, at

the time, organised into five districts, each managed by a governor – into *circunscrições* and *conselhos* (Isaacman & Isaacman 1983; Newitt 1995).

Circunscrições or 'non-European' areas were located in rural spaces inhabited by the *indígenas,* and further divided into *postos administrativos* governed by poorly educated and poorly trained Portuguese officials (Isaacman & Isaacman 1983; Newitt 1995). For the administrative system to work in these areas, the Portuguese reached out to members of local royal families, customary authorities or *régulos* to implement colonial rule and manage the *indígenas*, replacing them if/when they refused to cooperate (Isaacman & Isaacman 1983; Newitt 1995). In other words, *régulos*, which were usually village chiefs or headmen, were used by the Portuguese as agents to collect tax, recruit labour, carry out low-level governmental functions and, in essence, help manage the *indígenas* or 'uncivilised tribesman' (Convery 2006; Newitt 1995). In turn, they were exempt from taxation and forced labour, and became paid state employees (Isaacman & Isaacman 1983). Within spaces where no formal systems of chieftaincy existed, the Portuguese created fictional ones in order to administer the locals (Isaacman & Isaacman 1983). *Conselhos*, on the other hand, were mostly urban spaces, where most of the 'civilised' (i.e. white) population lived (Newitt 1995).

The *Reforma Administrativa de Moçambique* also led to the establishment of a *Secretaria dos Negócios Indígenas* in 1907, responsible for the administration of a series of native-related aspects including the indigenous justice system, the management of *régulos* and other traditional authorities, the codification of 'African customs and traditions', the management of a civil registry for indigenous people, the identification and establishment of indigenous reserves, as well as the management and provision of African labour to both public and private owners (Boletim Oficial cited in Lourenço 2010).

The Republican period, which was initiated after the end of the Monarchy in 1910 was, once again, characterised by decentralisation efforts (Newitt 1995). While financial autonomy had been granted to the colonies by 1920, the same author documents, by 1926 Mozambique had a series of accumulated deficits from a combination of the effects of the First World War and the fact that more than half of its territory was managed by quasi-feudal companies. This resulted in the decision to reverse decentralisation once again, with power having been devolved to Lisbon in the last years of the Republic, and strengthened further during the *Estado Novo* (Newitt 1995) .

The *Estado Novo* resulted from a military coup to overthrow the Republican government in 1926 and, between 1928 and 1962 under the new Salazar regime,[25] Portugal significantly centralised its administrative agenda and entered into strong alliances with the catholic church, formalising the *Regime do Indigenato* in 1928 as a means to ensure that the majority of Africans would remain subordinate in terms of race and class (Isaacman & Isaacman 1983; O'Laughlin 2000) through a system that adopted both direct, but particularly indirect rule (Mamdani 1999). Under these regimes, Africans who could read and write Portuguese and had therefore 'rejected' 'tribal' customs, were termed *assimilados,* and could in principle enjoy all rights of Portuguese citizens. Whilst several past colonial policies were repealed by the Salazar regime, previous land policies were reconfirmed and reinforced, particularly by integrating constitutional provisions that limited access to private property by Africans (Direito 2013a).

The *Regime do Indigenato* defined natives as "part of a community ruled directly by a chief, and subject in the first instance to African customary law", which included "access to communal land" (Mamdani 1996; p. 143). Communal reserves were demarcated by law in 1918 (República de Portugal 1918), and their size increased by a substantial fourfold in 1927 (Newitt cited in Mamdani 1996), illustrating how Africans were required to return to rural areas and their 'tribes', where they 'permanently belonged' (Mamdani 1996). Despite the fact that the *Regime do Indigenato* in principle allowed Africans to become Portuguese citizens, by 1950 there were only 5,000 'civilised' Africans in Mozambique, not only because of the difficulty in attaining this status, but also because an *assimilado* would lose all rights in communally held land (Mamdani 1996). This colonial system of indirect rule had implications for how natural resources were managed. In essence, it meant that chiefs and their subordinates were used by the colonial administration to manage natural resources that were not under direct state control, thereby potentially privileging some members of society over others (Shafer & Black 2003). According to the same authors, this strengthened the power of native authorities, thereby entrenching the ruling of particular individuals and groups, while restricting and constraining local communities' ability to exercise as much control over their leaders as they may have had previously.

[25] The highly authoritarian state led by Salazar, "whose ideology was characterised by his catholic fundamentalism, traditionalism and anti-liberalism" (Cairo 2006, p. 371).

4.2.3 *Coutadas* as commodified landscapes

The depletion of wildlife populations and species extinctions experienced in the late 1800s due to overhunting and the bovine pest, coupled with fears of reduced revenue from hunting, sparked wildlife preservation concerns amongst colonial administrations in the late 1800s and early 1900s (Dias 1965). It also gave rise to imaginations of the African landscape as a manner of 'lost Eden' (*Chapter 2* discusses imaginations of Eden in relation to African landscapes) that was in need of protection and conservation (Prendergast & Adams 2003). First initiated by the British elite, nature conservation initiatives were then replicated throughout the empire (Prendergast & Adams 2003), as well as by other colonial powers. While concerns over the loss of valuable hunting resources/crippling wildlife monopoly in Africa were growing amongst European administrations, wealthy Americans were likewise concerned over the imminent extinction of the American bison (Elder 1989). Together, these two episodes shaped the very first nature conservation ideas worldwide, which tended to focus on the protection of hunting interests, as evidenced by the creation of notions/concepts such as "royal game, hunting preserves and annual hunts" for Europeans (Elder 1989, p. 1183). It was in South Africa, where hunting is said to have resulted in the largest wildlife decline, where game preservation initiatives were first introduced in the late 1800s, either through private initiatives (i.e. fencing of property where certain species of game were found), or state measures (i.e. creation of reserves and national parks) (Dias 1965; Prendergast & Adams 2003).

In turn, these developments led to the first international agreement to protect commercially valuable species in 1900 – the *Convention for the Preservation of Animals, Birds and Fish in Africa* – which took place in London and was attended by all African colonial powers i.e. Germany, France, Portugal, Spain, Italy, and the Belgian Congo (Prendergast & Adams 2003; Weinberg 2006). The Convention aimed to reinforce and standardise game laws across colonial Africa, with signatories agreeing to establishing lists of species in danger of disappearing that needed protection from hunting; limiting the sale of elephant tusks; and establishing adequate reserves to protect wildlife resources (Prendergast & Adams 2003).

According to Dias (1968), hunting grounds or *coutadas* in Portuguese were first introduced in Mozambique during this time i.e. in the early 1900s, specifically as a response to uncontrolled hunting and the Convention of 1900, but also with the intention of developing a form of hunting tourism similar to that practiced in Kenya and Tanzania in the form of safaris, renowned at the time for the considerable revenue it conveyed to colonial governments. Although still used to denote land set aside for game in the 2020s, the word *coutada* in old Portuguese referred to

"land set aside for hunting exclusively for the royal family and their guests" (Infopédia 2003; no pagination), suggesting or confirming the 'elitist nature' of these hunting spaces.

The first hunting regulation in the country was enacted in 1903 covering hunting activities in the then Lourenço Marques area alone (modern day Maputo) (Soto 2009), the only territory in Mozambique under direct Portuguese administration at the time (Newitt 1995), as mentioned earlier in the chapter. Revised in 1909 to cover the entire province of Mozambique[26] (República de Portugal 1909b) the new hunting regulation established a system of *coutadas oficiais* (official hunting grounds) in the districts of Lourenço Marques, Inhambane, Zambézia and Tete,[27] and *coutadas particulares* (private hunting grounds) throughout the country (República de Portugal 1909b; Soto 2009). The primary focus of *coutadas oficiais*, which were administered and exploited by the state, was the development of hunting tourism, while *coutadas particulares* were designed for use by private landowners (República de Portugal 1909b; Soto 2009). *Coutadas particulares* were therefore primarily established on private land (i.e. land under the administration of concession companies), while *coutadas oficiais* were established within Portuguese administered territory.

Coutadas oficiais were managed by the Central Hunting Commission, the first administrative hunting services in colonial Mozambique established in 1920 under the direct order of the country's civil administration body and governor-general (Rosinha 1992). To control hunting activities as well as enforce hunting regulations in different areas of jurisdiction, the Hunting Commission was locally supported by district hunting services (Rosinha 1992). Despite these administrative hunting services, however, the general lack of state capacity led to the privatisation of several *coutadas*, a process that followed no particular procedures nor tenders, while new *coutadas* were also demarcated without official supervision nor planning in terms of wildlife distribution and/or movement (Dias 1965). Described by Dias (1965; 1968, p. 19) as a "rush for hunting-related profits", this period led to the establishment of *coutadas* in nearly half the surface area of the provinces of Manica and Sofala, many of which were considered unsuitable for tourism. In addition to *coutadas*, the first hunting reserve in the country, the Gorongosa Hunting Reserve, was proclaimed in the Province of Sofala in 1921, and bordered by several *coutadas* (República de Portugal 1960b; Correa 2011). At the time, hunting reserves

[26] At the time, Mozambique was considered a province of Portugal and was divided into districts. Following independence, most of the colonial districts became known as provinces.
[27] Areas that were not under the direct management of the *Companhia do Niassa* nor the *Companhia de Moçambique*.

were primarily created for wildlife viewing rather than hunting and, as such, were not as important or prioritised by the Portuguese as were *coutadas* (Martinho 1968).

In view of the "rush for hunting-related profits" (Dias 1968; p. 19), the Portuguese attempted to map Mozambique's hunting potential per district according to local wildlife resources, ease of access, availability of potable water, and local (African) guides (Martinho 1934). Whilst Cabo Delgado (where the Quirimbas is located) was not considered one of the richest districts in terms of wildlife (see Figure 4-1 below), it was still identified as an important hunting region with abundant game, in particular elephant but also rhinoceros, buffalo, zebra, lion, leopard, hippo, and antelope (Antero 1952; Martinho 1934). Despite the hunting potential, however, hunting tourism in this district was never realised due to difficulties in access, lack of infrastructure, and persistent tsetse fly infestations (Andrade 1960), in addition to the fact that the North of the country was largely 'unpacified' or unknown/unexplored by the *conquistadores*, and therefore occupied by 'violent tribesman', particularly towards the interior (Newitt 1995). For these reasons, vast areas of the district remained unmapped when compared to the south and central territories (Newitt 1995).

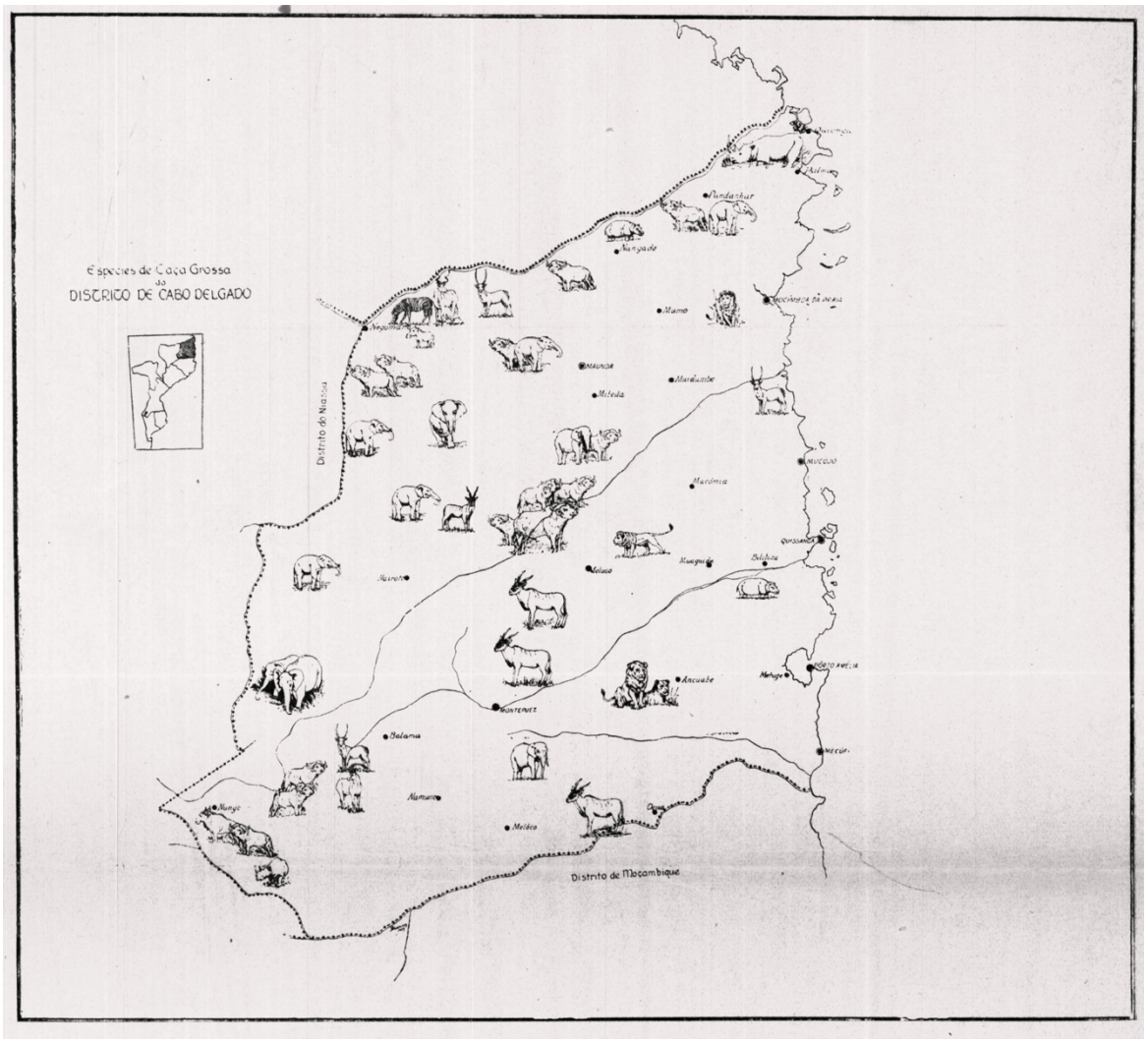


Figure 4-1 – Mapping of game resources in the Cabo Delgado District by the Portuguese in 1938. Source: Martinho (1934)

The mapping of game resources, in conjunction with the establishment of *coutadas*, are likely to have forged new geographies of resource use throughout Mozambique, as it resulted in the commodification of wildlife (and other natural resources) as a product of Portugal/Portuguese ownership (i.e. *coutadas oficiais*) or, alternatively, belonging to white landowners (i.e. *coutadas particulares*). Within these newly created geographical spaces, local residents were excluded and physically evicted through processes of violence and persecution from both the state and private *coutada* owners, with the objective of creating new landscapes for the exclusive use by wildlife and for hunting by white explorers (Dias 1968) (the way in which the Portuguese 'managed' the *indígenas* is further explored below). This, in turn, is likely to have created entirely new landscapes that were no longer perceived the same by local residents,

external actors, and (hypothetically) by non-human agents (e.g., wildlife). In other words, it is likely to have resulted in contested views over the same physical landscape/environment. For example, local landscapes might have changed from being perceived as 'home' by local residents, to spaces assigned for wildlife; from being perceived as 'forested Eden', into spaces of consumption by Portuguese settlers; and even navigated through or approached differently by wildlife (e.g., changes in the movement or behaviour patterns of certain species of wildlife as a result of new human landscape arrangements). In essence, and as theorised by Ingold (1993; 2000; 2005) (see *Chapter 2*), *coutadas* are likely to have created new landscapes filled with traces of colonial greed, interests and/or arrangements, as well local struggles and possibly non-human agency, all with different levels of imprint depending on local power dynamics. In these constructed landscapes, the Portuguese, as the most powerful group in society at the time, manipulated and controlled the landscape to their own benefit, while undermining other (contested) constructs. Furthermore, these newly created landscapes are likely to have entrenched divisions between nature and culture, particularly through the direct exclusion and marginalisation of local residents from their homes as well as their ontologies from the landscape, while at the same time valuing 'nature' and natural resources above humans.

4.2.4 *Reservas indígenas* and the placing of locals

As mentioned earlier in the chapter, a number of land policies enacted by the Portuguese colonial government between 1900 and 1940 aimed to control land use in the country and specifically administer the *indígena*. The 1909 bill (Provisional regime for state land concessions in the province of Mozambique), in particular, gave the Portuguese government and Mozambique's governor general the power to create *reservas indígenas* (reserves for Africans), resulting in the establishment of several reserves from 1911 onwards (República de Portugal 1909b) and specifically from 1918, with the passing of the *Regulamento para a Concessão de Terrenos do Estado da Província de Moçambique* (Regulation for the concession of state land in the province of Mozambique) (República de Portugal 1918). While locals could occupy these reserves as they wished, they weren't allowed to become landowners (Direito 2013b). Furthermore, there were no specific guidelines for the establishment and management of indigenous reserves, with aspects such as size, physical characteristics, use and type of developments permitted, etc. entrusted to the Portuguese government on an individual basis (Direito 2013b).

Native reserves were established up until, but particularly during the 1940s (Direito 2013b), when pressure over land allocation was at its highest, which in turn pushed for clearer land use planning arrangements and the provision of land rights (Newitt 1995). Reserves were established primarily in Southern Mozambique, given that this part of the country was under direct Portuguese administration, with only a few established in the North. In essence, reserves were established and managed in function of colonial interests, as well as land use planning instruments that ultimately controlled and dictated where locals could live, and therefore be used/exploited as reserve dwellers, wage labourers, etc.

The limits of individual indigenous reserves generally coincided with the administrative boundaries of one or more 'indigenous territories', which were large areas of land mapped and classified as 'dominated' or 'pacified' and known at the time for having 'suboptimal levels of civilisation and progress' when compared to white and 'sophisticated' settlement areas (Pedro 2015; República de Portugal 1907). Indigenous territories were generally established in rural and remote spaces away from 'civilisation', within landscapes described as forested/wild environments inhabited by 'ferocious' animals, while white settlement areas were established within urban and 'tamed' environments (Pedro 2015; República de Portugal 1907). These landscapes were considered ideal for indigenous occupation, particularly in the context of locals being perceived or imagined as premodern subjects, 'one with nature', or as eternally belonging in the wild (see figure below) (Rufino 1929), as seen throughout the African continent (see for example Dlamini 2020, who documents how locals were perceived, placed and managed in the Kruger National Park).

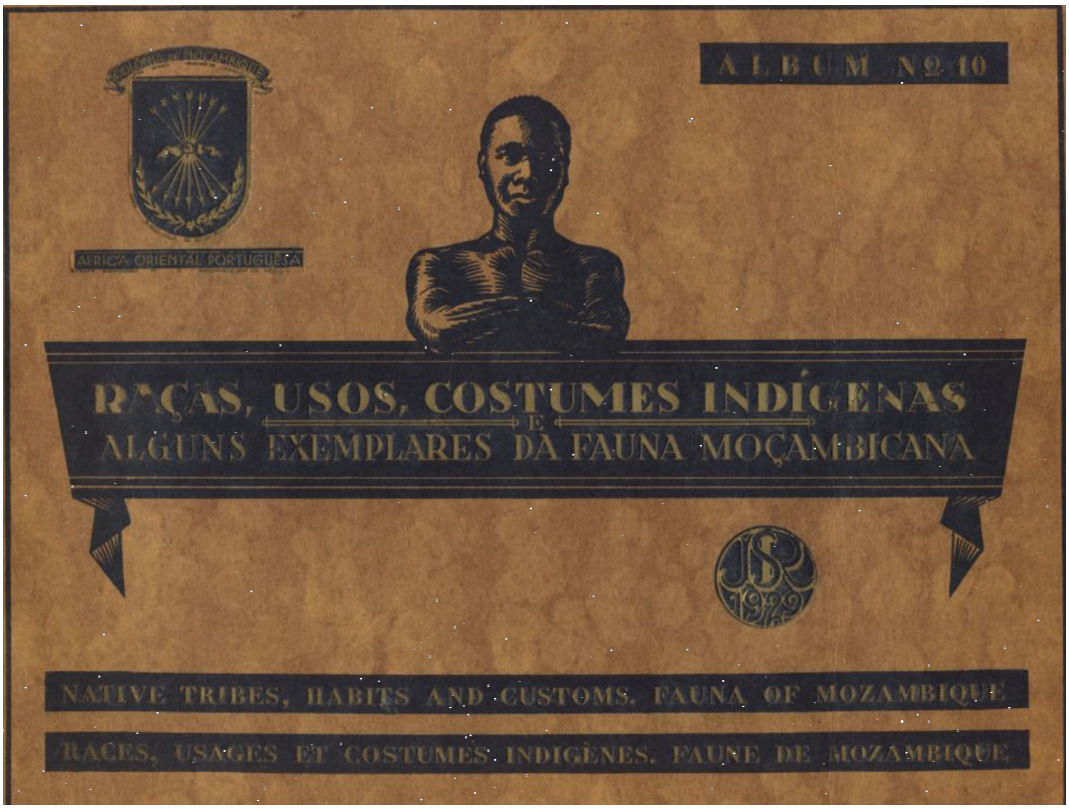


Figure 4-2 – Photographic album illustrating both indigenous people and fauna 'specimens' in the same book. Source: Rufino (1929)

The photographic album illustrated in Figure 4-2 above (and other reports on locals, such as for example Enes 1946) describes the *indígenas* of Mozambique as a diverse group of 'wild', tribal people with diverse costumes and cultures (Rufino 1929). The *indígena* is further portrayed as having physical characteristics that tend to vary according to the 'habitats' in which he/she inhabits (Rufino 1929), in line with Bews' proposition, as a follower of Jan Smuts, that some humans are more determined by their environment than others, and that 'primitives' are still entwined with the mother-earth, and should be left as much as possible in their original state (Bew cited in Foster 2020).

While acknowledging some diversity among different groups, the Portuguese described the *indígena* as naturally very similar to each other, precisely because the environment/surroundings/landscapes they inhabit, in this case described as either 'nature' or 'green forests', are the same (Rufino 1929). As argued by Dlamini (2020), at the time, "to know the African wild was to the know the African subject" (p. 36). Rufino (1929) goes even further to suggest that indigenous groups from other (Southern) nations are identical to those found in Mozambique, as 'nature' and 'wilderness' environments tend to "produce identical individuals,

neither better nor worse, [just] savage and very little civilized" (p. XII). "Super-human appearance", "diabolic" and "savage" are some of the terms employed by Rufino to describe the locals from Mozambique in this album (p. IX). In relation to 'modern' men, a distinction is made between coastal *indígenas* and those from the interior of the country, with the former described as more intelligent given their contact with civilisation (i.e. Portuguese towns and people) and the latter as "stupid, a mixture of human being and animal, who live within the virgin forest as rulers of the animals, amongst wild beasts…" and compared to "prehistoric man" (Rufino 1929, p. IX).

Economic interests by the colonial power, coupled with perceptions of local landscapes and the *indígena* informed the way in which Mozambique was 'divided' into distinctive land use categories. An agricultural report from colonial Mozambique covering the period between 1940 and 1944 (see Figure 4-3 below), for example, illustrates three categories of reserves/land use types in the country: (i) reserves for national colonisation (i.e. for use by Europeans); (ii) indigenous reserves; and (iii) hunting reserves (República de Portugal 1946). In this map, hunting reserves and indigenous reserves share the same spaces, suggesting or confirming Portugal's perception of the *indígena* as part of the local flora and fauna, or 'wild people' who 'belonged in nature'. Because 'wild people's' 'beastly' customs and appearances were likely to excite the senses and experiences of hunters, adventurers, and *descobridores*, it was important for the *indígena* to remain in 'nature' and thus enhance the white man's adventure and sense of danger and mystery.

On the other hand, rural/forested/bushy/wild landscapes were, at the time, largely perceived as 'wastelands', and devalued for being inadequate for European development and settlement. Hunting was therefore fomented in these areas, precisely to open up spaces in the name of progress and civilisation. In this sense, having locals within or in close proximity to these spaces was beneficial to the Portuguese as, besides being a focus of excitement and observation of 'native life', they could also be used/exploited as guides, trackers, and slaves during hunting expeditions. As clearly described by Martinho's *A Caça* (1934, p. 27):

> The company of blacks is always indispensable during hunting. One needs at least a guide, a tracker and another black to transport water; however, as a rule, more blacks are needed to transport spare rifles and ammunition, lunch, to cut the meat and transport it to the campsite, alongside our trophies.

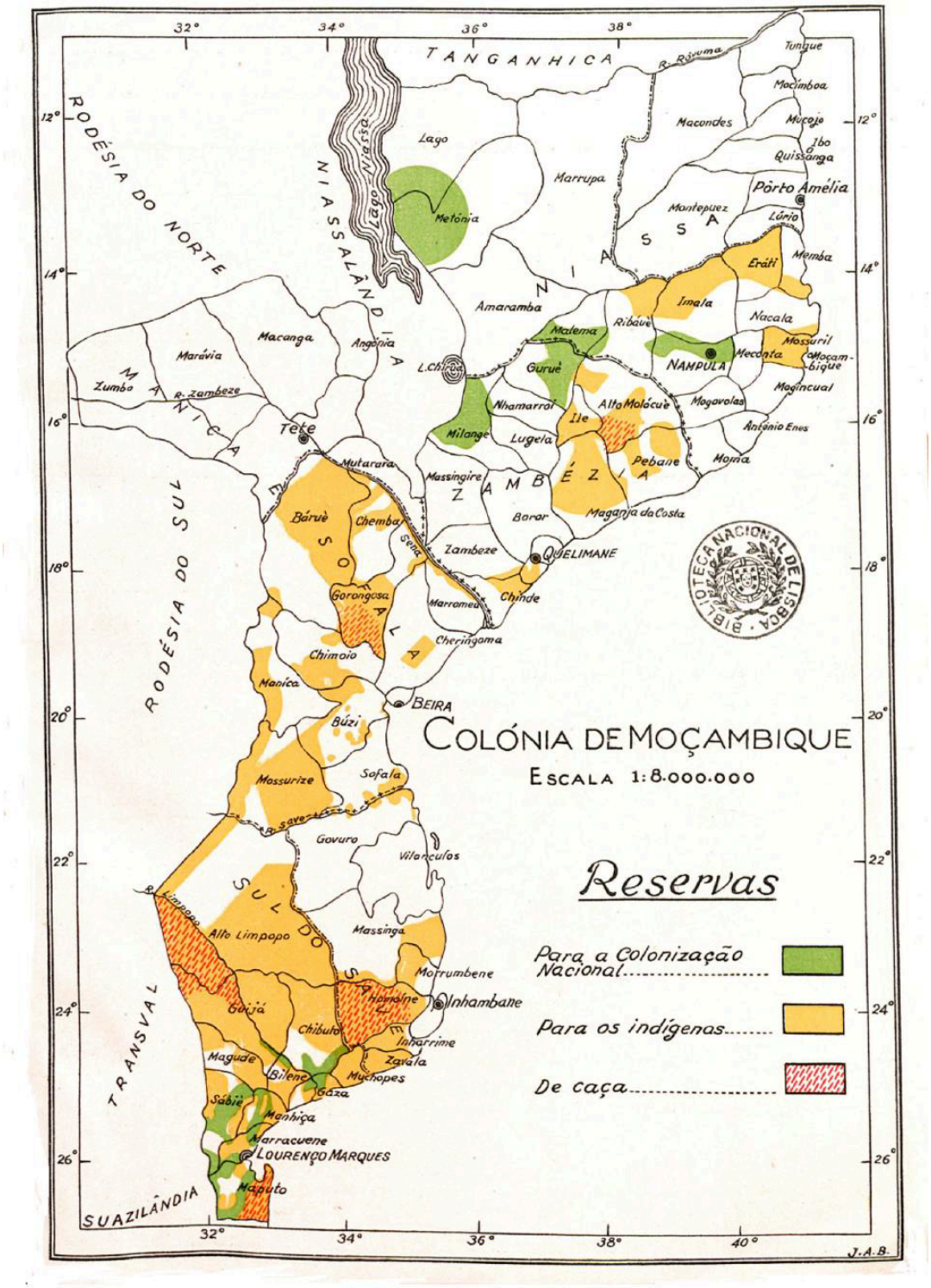


Figure 4-3 – Land use planning in colonial Mozambique in the 1940s, with hunting and indigenous reserves overlapping. Green areas illustrate reserves set aside for use by Europeans, orange areas for *indígenas*, and red and white for hunting. Source: República de Portugal (1946)

While perceived as being part of the local fauna and flora, and therefore managed in such a way so as to 'remain in nature', the *indígenas* were also removed or excluded from these spaces due to practices and livelihoods perceived by the Portuguese as inadequate or irresponsible towards 'nature' (i.e. classified as "natural enemies", as proposed by Dlamini 2020, p. 35), such as hunting and the use of natural resources, which were by then perceived and appropriated as a produce of the Portuguese colonial government (*Chapter 2* explores the inclusion/exclusion of locals from nature). In other words, whilst the *indígena* was categorised, it was according to flexible or unstable classes, in the sense that these changed according to Portugal's interests and/or perceptions of the landscape/resources. In line with these perceptions, Dias (1968) claims that while not always physically removed, natives who resided within or in close proximity to *coutadas* or hunting reserves were oppressed or forcefully evicted from their lands through violent home invasions and raids, the burning and destruction of property, as well as arrests, particularly if/when caught utilising wildlife (and other natural resources) within these spaces (Dias 1968). In this sense, Mozambique was no exception to the rest of colonial Southern Africa, where hunting reserves were designed for whites, with Africans excluded, arrested, and/or their weapons confiscated if found hunting (Elder 1989) and viewed as poachers instead of hunters (Dlamini 2020).

4.2.5 The move towards conservation

The *Convention Relative to the Preservation of Fauna and Flora in their Natural State*, also known as the *London Convention of 1933,* was adopted and signed by nine states in 1933 (CITES 2003; IUCN 2004). Much like the *London Convention of 1900*, the objective of this resolution was the preservation of valuable game species, being the first legally binding instrument that allowed for the creation of conservation areas in Africa, including national parks and nature reserves (CITES 2003; IUCN 2004). Portugal ratified the *London Convention of 1933* sometime between 1936 and 1950[28] (Cioc 2009; Ecolex n.d.; Pro Natura 1973) alongside six other states (Cioc 2009). According to Dias (1965), wildlife protection was taken more seriously thereafter, as evidenced by the publication of a series of hunting regulations

[28] There are seemingly different accounts with regards to Portugal's signature of the *London Convention of 1933*. While Cioc (2009) suggests signature as early as 1936, Pro Natura (1973) claim that Portugal did not ratify the convention nor declare its support to conservation until as late as 1948. This, they claim, was linked to the fact that, in general, the educated classes of Portuguese society did not, at the time of the convention, exhibit conservation interests, unlike members of society from other signatory countries.

either promoting or creating hunting reserves or establishing new hunting rules to improve the overall protection of wildlife.

Hunting regulations enacted during this period (República de Portugal 1932; 1941; 1960a; 1960b; 1965a; 1965b; 1965c; 1965d; 1965e) provided updates on the state of hunting areas, as well as details regarding existing hunting licenses; lists of wildlife species that could be hunted; types of hunting methods permitted; communications on closed hunting periods, and so on. Furthermore, while existing *coutadas* remained operational throughout the years, new ones were established over and above other forms of protected areas such as 'reserves' and, for the first time, 'national parks'. As part of the new conservation efforts, the surface area of the Gorongosa Hunting Reserve established in 1921 was expanded in 1935[29] (Correa 2011; República de Portugal 1956) and the Maputo Special Reserve declared in 1930 within a previously declared *coutada* (Correa 2011).

Despite the expansion and/or declaration of new reserves, however, *coutadas* remained the most important type of protected area in Mozambique, primarily due to the associated revenue it generated when compared to other conservation spaces (Martinho 1968). Whilst important from a revenue standpoint, hunting reserves accrued a very modest income when compared to *coutadas,* as they were used for wildlife watching/viewing tourism, which was considerably less sought than hunting tourism (Martinho 1968).

According to Martinho (1968) and Dias (1968), the way in which the Portuguese perceived and managed *coutadas* in the country also changed over the years. While key priorities initially included the development of the country's hunting tourism potential, the transformation of 'wastelands' into productive lands and contribution to the state's coffers, building an image of Mozambique overseas as a 'remarkable' destination with 'outstanding' landscapes later became essential as well. This led to the promotion of both hunting reserves and national parks for recreation and cultural tourism, with advertisements suggesting that the country's landscapes offered the perfect "bush experience far from civilisation", "tropical and paradise sunrises that sparked strong and contrasting sensations in one's body", while *coutadas* and 'wastelands' remained important from a hunting perspective (Dias 1965, p. 10).

In the 1950s, and in line with the new international push towards conservation, Mozambique's game resources were once again mapped to emphasise the country's potential for wildlife viewing tourism, in addition to hunting tourism (Antero 1952) (see Figure 4-4 below). Figure

[29] From 1,000 km^2 to 3,200 km^2 (Correa 2011; República de Portugal 1956).

4-4 shows that vast areas of the country were, at the time, perceived and depicted as areas with abundant wildlife resources, particularly Central Mozambique where most *coutadas oficiais* were initially established (Manica and Sofala Districts), including the Gorongosa Hunting Reserve, as well as Southern Mozambique, which was under the direct administration of the Portuguese colonial government.

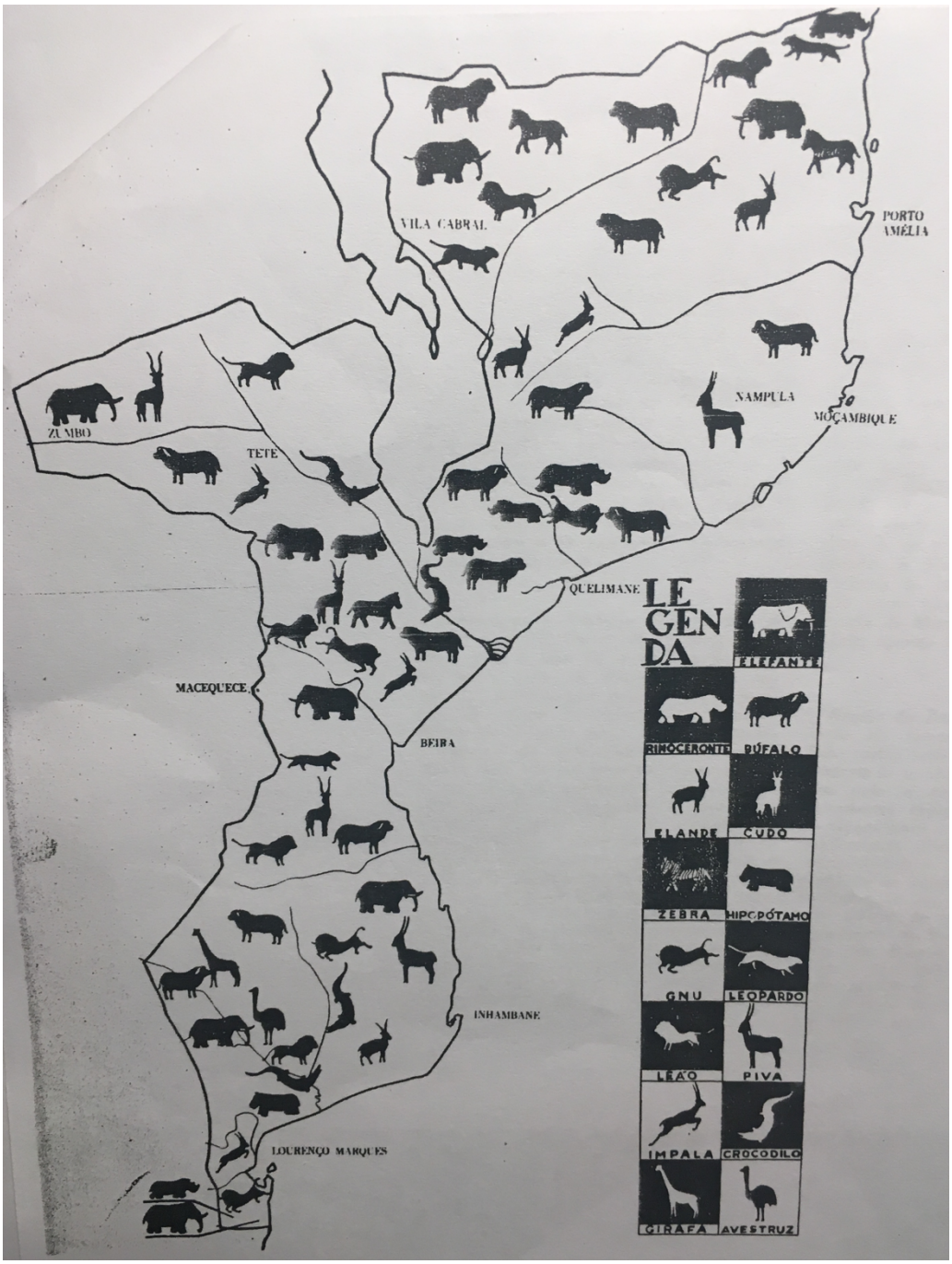


Figure 4-4 – Mapping of Mozambique's wildlife resources by the Portuguese in 1952. Source: Antero (1952)

According to Chande (1992) and Dias (1965), however, wildlife conservation attempts in the country were hampered by the lack of law enforcement and management capacity, coupled with the introduction of *caça utilitária* or utilitarian hunting in 1955. While other colonial states in Africa were, at the time, beginning to promote cattle farming as a source of meat/protein to help preserve wildlife, the Portuguese promoted instead a free and indiscriminate form hunting by private companies, missionaries and the state. Mozambique's response to uncontrolled hunting, wildlife depletion, and species extinction was therefore seen by other colonial states as 'utilitarian' rather than 'protectionist', given that it encouraged hunting and the use of game for food and trade (Child 2009; Soto 2009).

As mentioned earlier in the chapter, although Lisbon had held all essential legislative and executive powers over its colonies since the first decade of the 1800s, some powers were devolved to them from about 1950 onwards (Matos cited in Direito 2013). Therewith was the permission to draw up their own rules and regulations with regards to the protection of soils, flora, and fauna (Matos cited in Direito 2013). In Mozambique, this led to the publication of the 1960 Hunting Decree (as amended in 1965) which, among others, allowed the state to create wildlife conservation zones to protect, propagate and conserve wildlife, thereby creating a slight shift away from hunting. These wildlife conservation zones were termed 'national parks', 'integral natural reserves', 'partial reserves', 'special reserves' and 'areas subject to special enforcement regimes' (República de Portugal 1960; Farinha 1972). A wildlife protection department was established under the national veterinarian services and entrusted with the supervision and management of wildlife resources (Farinha 1972). Four national parks were created soon thereafter, namely the Gorongosa Hunting Reserve, which became a national park in 1960; the Bazaruto National Park, which was established in 1971 (República de Portugal 1971); and the Zinave and Banhine National Parks, established in 1973 (República de Portugal 1973a; 1973b). According to Martinho (1968), the new conservation focus by the Portuguese was likely sparked by prospects of increased revenue from 'nature-based tourism', as witnessed by other regional conservation projects. An example is the proclamation of the Gorongosa Reserve as a national park in 1960, at a time when it was quickly becoming one of the most popular and 'glamorous' conservation areas in Africa, attracting both national and international tourists (Martinho 1968; Pringle 2017), including Hollywood stars and other wealthy travellers (Richardson 2019).

In line with the country's 'shift' towards 'nature conservation', Mozambique's first Nature Protection Association was founded in 1959, but remained inactive for the first 12 years

following its establishment (ACFBM 1973), illustrating the fact that despite a limited number of conservation efforts having been initiated, Portugal remained 'behind' the rest of the regional colonial states. The *African Convention on the Conservation of Nature and Natural Resources* was signed in Algiers in 1968, having reiterated and expanded on the 1933 London Convention which, for Portugal, resulted in additional pressure to adhere to nature conservation practices.

Prior to Mozambique's independence in 1975 following the approximately 10-year war for independence and the Portuguese *coup d'état* that replaced the *Estado Novo* in 1974 (Newitt 1995), the country's protected area network entailed four national parks, five reserves, seven zones under special surveillance, and about 13 *coutadas*[30] (Farinha 1972; Matias 1992), as illustrated in Figure 4-5 below. Outside protected areas, free hunting was still allowed as long as carried by licensed individuals, including in the District of Cabo Delgado, where the Quirimbas is located (Martinho 1968) (Figure 4-6 illustrates hunting enforcement sites throughout the country, including within regions falling outside formally protected areas).

[30] The exact number of *coutadas* in the country prior to independence varies according to different sources.

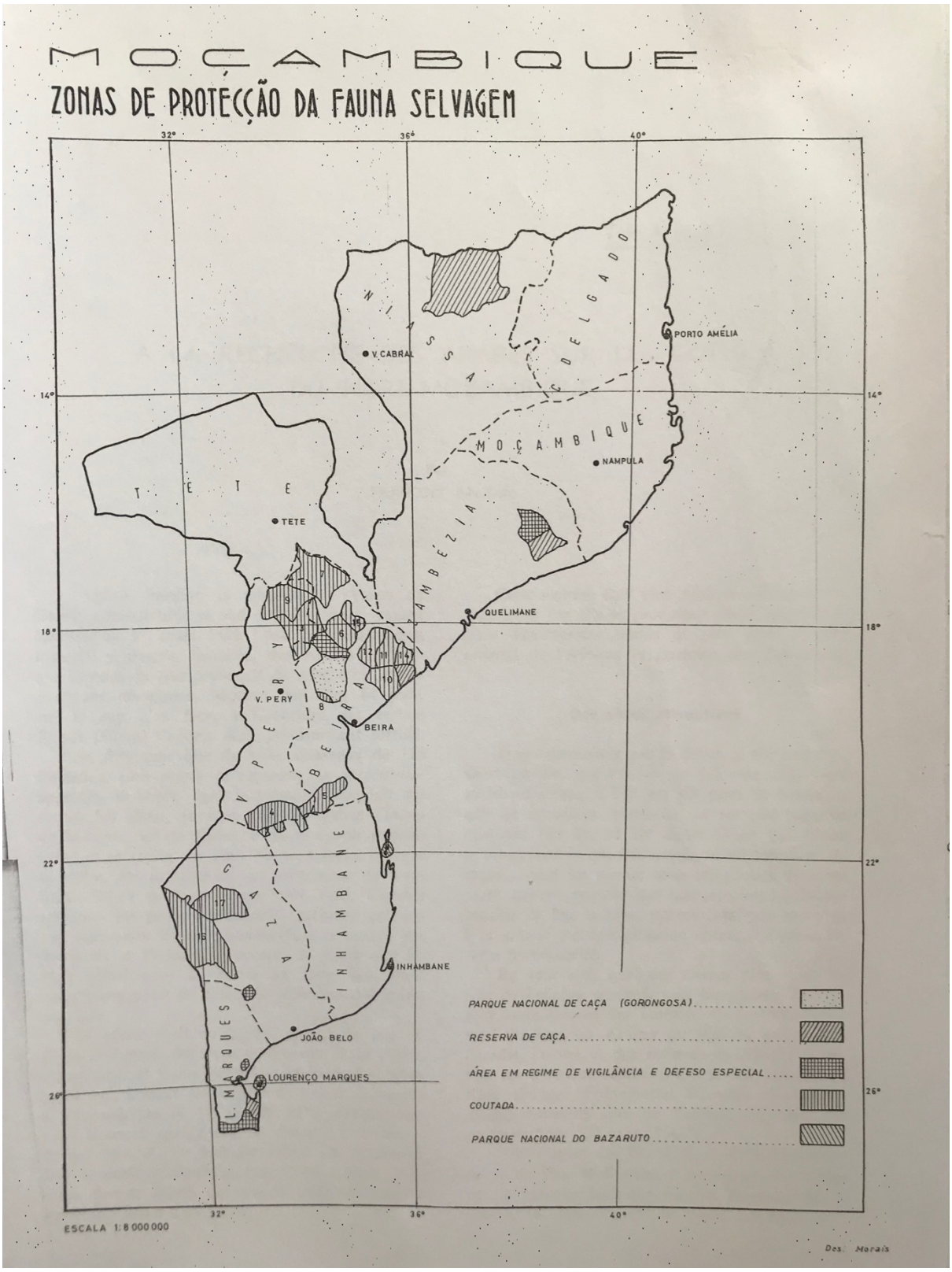


Figure 4-5 – Protected area network in Mozambique in 1972, prior to independence. Source: Farinha (1972)

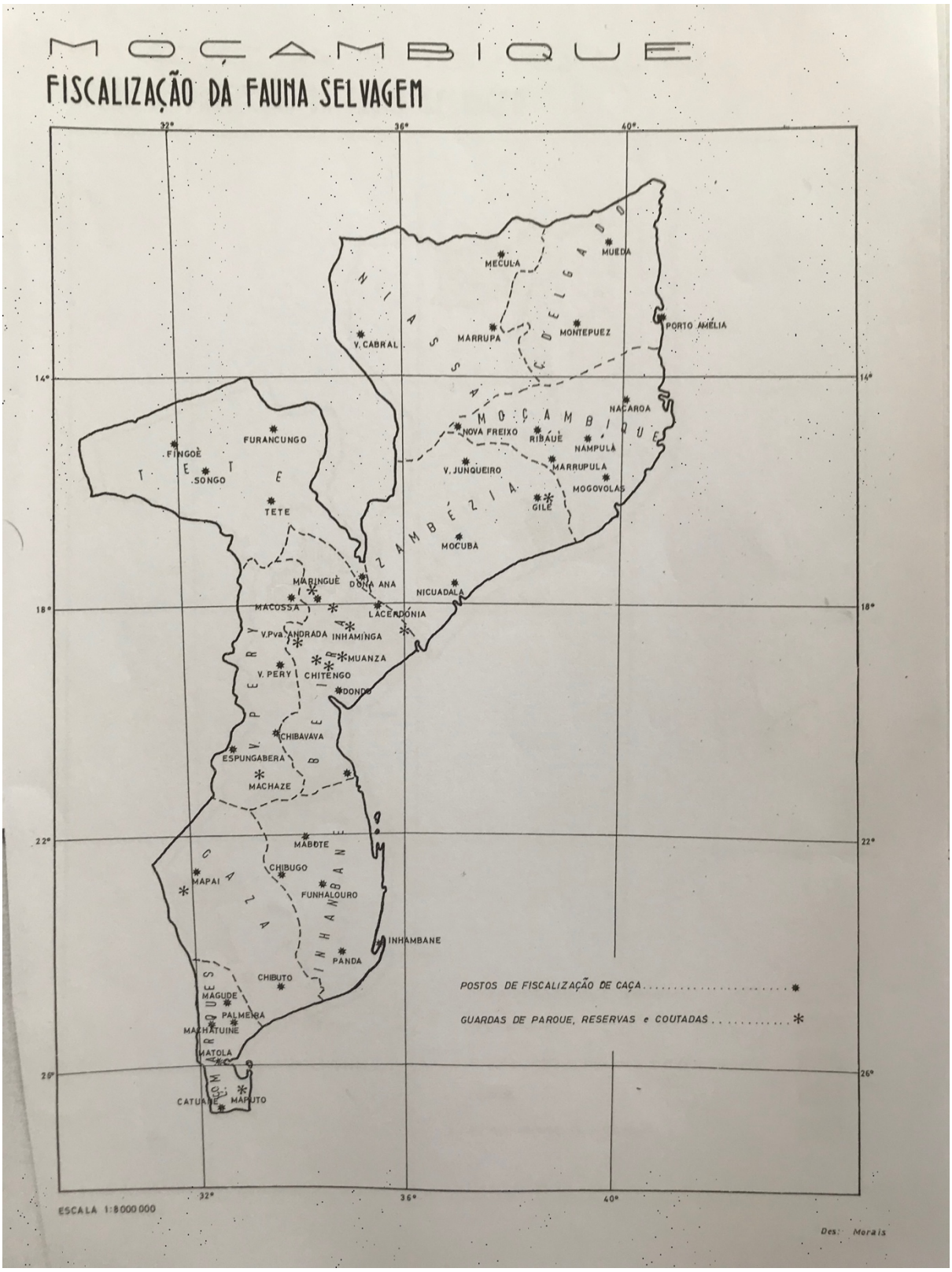


Figure 4-6 – Hunting enforcement points and guards within and outside protected areas in Mozambique prior to independence. Source: Farinha (1972)

4.3 Quirimbas: from strategic location to pristine landscapes

As mentioned in the introduction, this chapter explores the ways in which 'nature' or Mozambique's landscapes were perceived, approached and manipulated by the Portuguese, focusing on a specific historical timeframe covering the late 1800s up to independence in 1975. This section however covers a wider historical period and serves to, on the one hand, briefly contextualise the area in which the Quirimbas is inserted and, on the other, to trace landscape readings by the *conquistadores*, adventurers, and explorers, particularly considering the Portuguese initiated their occupation/exploration of Mozambique in this archipelago.

Prior to the arrival of the Portuguese in 1498, the Quirimbas archipelago[31] was occupied by a relatively small Muslim population, with a prominent cotton fabric manufacturing industry (Newitt n.d.) which, together with coir, ivory, and other products, was traded both locally and regionally, but also further afield (Bento 1989; Newitt n.d.). According to Bento (1989), the Quirimbas islands were mainly inhabited by the Mwani, a subgroup of the Swahili people, as well as other groups from Indonesia, Persia, Arabia, India, and China, who established political, economic, social, and personal relations with the Mwani over the years. Sousa's (1960, p. 128) historical account of the Quirimbas region during early Portuguese occupation describes this coastal landscape as "repulsive here and attractive there", offering limited security against the 'natives', perceived and described as 'savages', 'anti-Christian', 'lost' and 'converted to Islam' (Sousa 1960, p. 128). Following the assassination, eviction, and/or subjugation of locals, the islands became important places for refuge and residence by the Portuguese, as they were considered safe places away from the 'hostile' peoples and moors who inhabited the coastline (Sousa 1960).

While some of the islands already had formal settlements upon the arrival of the Portuguese, most constructions, many of which architecturally decorated with windows, doorways, and carved columns, were destroyed by the Portuguese upon their occupation of the islands (República de Portugal 1969) as a response to local people's refusal to cooperate and trade with them (Bento 1972; Newitt n.d.). The Quirimba and Ibo Islands deserve particular attention from a colonial-historical-architectural perspective, given that the former was Cabo Delgado's first district capital and an important trading settlement (Newitt n.d.), having been transferred to Ibo soon after due to its protected port, serving as a perfectly positioned stopover for vessels from Europe on their way to the East (República de Portugal 1969; Sousa 1960). The Quirimbas

[31] The archipelago consists of a group of between 28 and 32 islands, as some are classified as sandbanks instead of islands by some. Twelve of these islands form part of the Quirimbas.

archipelago in general, and these two islands in particular, are therefore extensively documented in Portuguese historical manuscripts given their association with Portuguese colonial occupation and memories/imaginations of bravery, expansion, and discovery.

Throughout the history of occupation of these two islands between the 1500s and 1600s, the Portuguese erected a number of churches, forts, and stone houses for habitation and the protection of whites against the 'savages' and other potential 'invaders' (Bento 1972; Newitt n.d.). By the 1700s, the islands served as important commercial slave stopovers for different colonial powers (Bento 1972), as well as for the export of turtle shell, mana, ivory, coconuts, rice, and millet (Newitt n.d.). The importance of the region led to the elevation of Ibo to a town in 1761, where a formal municipality, customs, a military garrison, and a vicar were established (República de Portugal 1969; Sousa 1960). The islands suffered several attacks from the French, as well as people from Madagascar and Nyasaland between the late 1700s and late 1800s and, in 1894, the *Companhia do Niassa* took over the management of the Nyasa territory and, along it the Cabo Delgado District and Quirimbas archipelago (Cabral 1975). The district capital of Cabo Delgado moved from Ibo to Porto Amélia in 1902 (modern day Pemba), Cabo Delgado's provincial capital (Bento 1972).

Following a trip to the Quirimbas archipelago in the 1950s, Sousa (1960) describes it as a stimulating and complex field of study for 'naturalists' due to its rich and distinct corals, seagrass beds, as well as diversity of molluscs, sponges, fish, and other marine fauna. Depictions of wilderness landscapes or purely natural environments in which locals are either integrated as 'savages', romanticised as a group of people 'from the sea', or entirely removed from the landscape to provide peace and quiet to travellers (as discussed in *Chapter 2*) abound in Sousa's (1960) narrative of the Quirimbas. The 'casuarina-dotted beaches' are described with a sense of nostalgia of 'what could have been', while 'Eden' islands and their dense forests offer the perfect conditions for solitude, silence, and the possibility of spending one's entire life in quiet reflection, away from human civilisation. Besides being pictured as people 'from the sea or beach', the Mwani are also pictured in these landscapes as 'excellent sailors', however with 'fragile boats dotting the Indian Ocean' (Sousa 1960). The Quirimbas are also represented as an excellent tourist destination due to outstanding sport fishing possibilities, sea turtles, conchs and exceptional beaches (Sousa 1960). These depictions demonstrate that, while the Quirimbas region was never identified as an important hunting ground by the Portuguese prior to independence, historical research suggests that the archipelago was very early on recognised as an 'untouched', 'Eden-like landscape destination', which may in turn have been

projected outwards in such a way as to inform the decision to establish a conservation area there.



Figure 4-7 – Eden-like landscapes of the Quirimbas archipelago. Source: Bram Naidoo (2018)

4.4 Conclusions

This chapter has explored the ways in which nature in Mozambique has been imagined, approached, and manipulated by the Portuguese colonial power, and what this meant for local people. Whether commodified and exploited for hunting, wildlife viewing/tourism and the extraction of natural resources or idealised as untouched and pure environments waiting to be discovered, external nature readings in essence resulted in the territorial organisation of the

country, where ‘nature’ was largely set aside from ‘culture’, or people. Mechanisms of separation between nature and culture introduced in the country by the Portuguese are therefore examined in the chapter, including legal and land use planning instruments leading to the establishment of *coutadas*, reserves, and parks for nature, and *reservas indígenas* for locals. One of the key objectives of the chapter was to investigate whether protected areas in Mozambique have been historically created based on colonial/external imaginations of nature, which would in turn enable the exploration of continuities/lack thereof with the way in which post independent Mozambique perceived and approached these same landscapes, which is the focus of the next chapter.

5. Wildlife conservation in the post-independence period: lack of resources, instability, and the international agenda

5.1 Introduction

In view of the ways in which the Portuguese perceived and managed 'nature' in Mozambique between the late 1800s up until independence in 1975 (*Chapter 4*), this chapter engages with conservation approaches adopted by post-independent Mozambique to investigate continuities with (or the replication of) the colonial project. The focus of the analysis relates to attempts made by the Mozambican government to strengthen nature conservation activities in the country through the development and enactment of new policies and legislative frameworks, as well as territorial planning instruments that conformed with international conservation agendas. In this regard, the chapter explores the way in which pressure from the international community, coupled with hegemonic views, perceptions and/or narratives on nature, have resulted in unintended consequences for park residents with natural resource-based livelihoods. The consequences of these approaches to conservation on poor and vulnerable communities are discussed, with a particular focus on the criminalisation, exclusion, and marginalisation of people living in and dependent on protected areas across the country.

5.2 Early years post-independence: Weakened capacity and the replication of colonial legacies

Mozambique's struggle for independence, spearheaded by Frelimo starting in the 1960s, ended with independence in 1975 under the leadership of president Samora Machel (Young 2012). Frelimo's aspiration of "building a nation out of diverse groups kept separated and divided by colonialism" was one of the newly independent nation's primary aims (Hall & Young 2003, p. 13), with Samora emphasising that "for the nation to live, the tribe must die" (Machel cited in Machel 2014, p. 55). Frelimo initially adopted a socialist framework or Marxist-Leninist ideology, and the country's first constitution was enacted in 1975. Land and natural resources were nationalised, as were other sectors, including health, education, property, and most companies, which were brought under direct state control and management in favour of the people (Hanlon 2017; RdM 1975; Soto 2009; Young 2012).

Upon independence, most Portuguese administrative staff and trained professionals fled the country, frightened by the propaganda from both the colonial government and the Catholic church, that the 'communists' and 'blacks' would nationalise everything and thereby ruin the

country (Hanlon 2017). This resulted in significantly weakened national capacity in all sectors, including natural resource management (Hatton, Couto & Oglethorpe 2001), which, while placed under the direct responsibility of the state, was generally side-lined given that most of the country's investments and efforts, as was the case in much of newly independent Africa, were focused on modernisation and industrial and agricultural development, leaving little capacity to deal with sectors such as wildlife and forestry (Schafer & Black 2002).

Early on, Mozambique attempted to revise part of its inherited colonial legislation including that pertaining to land and natural resource use. With the main objective of enabling natural resource use for the benefit of its people and providing local communities with legal rights to hunt – not 'trophy' hunting, an activity still perceived and associated with the "conservation minded white hunter" (Neumann 2004, p. 826), but rather subsistence hunting for bushmeat, an activity representative of 'pre-modern' subjects – wildlife related legislation was partially revised in 1977 (Soto 2009). Under this revised legislation, local communities were allowed to hunt for subsistence if organised into 'cooperatives'[32] and charged minimal hunting fees (Soto 2009). Despite this early attempt by the state to enable local people to formally use wildlife resources, the setting up of community cooperatives proved largely unsuccessful as a result of a series of bureaucratic and administrative constraints (Soto 2009). A new Land Law was also elaborated and enacted soon after independence in 1979 (Schafer & Black 2002), which, together with the first constitution, prohibited the sale, rent, or mortgage of land or any other type of land alienation (Lunstrum 2008), with the primary objective of protecting rural communities' subsistence base and improving agriculture production (Bowne 2000 cited in Lunstrum 2008).

A forest and wildlife sector (the *Direcção Nacional de Florestas e Fauna Bravia*) was established immediately after independence under the Ministry of Agriculture and Rural Development, with the mandate of managing forest and wildlife resources as well as 'educating' the people with regards to the value and use of natural resources (Matias 1992). The sector's key responsibilities included training of staff in wildlife management, enforcing hunting legislation, creating and managing protected areas, awareness raising with regards to nature conservation and the protection of wildlife resources, developing wildlife studies and reducing the incidence of forest fires in the country (Matias 1992).

[32] Cooperatives were established as collective production units soon after independence and linked to the development of agrarian activities throughout the country (Maloa 2016a; McGregor 1998).

Although wildlife was generally viewed or approached as an asset for tourism and economic development (as was the case under the Portuguese colonial administration), a clear policy was never formulated until the end of Mozambique's civil war in 1992 (Soto 2009), as explored later in the chapter. Nature conservation activities in the immediate post-independence period therefore remained rooted in the inherited colonial legislation, as evidenced by the numerous wildlife culling programmes implemented between 1976 and 1981,[33] which, in line with the *caça utilitária* implemented by the Portuguese colonial administration and explored in *Chapter 4*, aimed to provide game meat to soldiers and local communities (Soto 2009) as well as open up 'wastelands' for development. Culling operations of waterbuck, nyala, impala, hippopotamus, and crocodiles were introduced in many parts of the country (Soto 2009), which illustrates continuities with the way in which wildlife and forested areas were viewed and managed by the Portuguese; i.e. as a hinderance to the nation's development, prompting the replication of colonial concepts, such as *caça utilitária* and the need to transform 'wastelands' into 'civilised' landscapes.

According to Bonito (1992), Mozambique's attention to natural resource management issues was linked to external influences and came into being after it adhered to international environmental conventions, such as the *African Convention on the Conservation of Nature and Natural Resources* and the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* or CITES in 1981. According to Ramutsindela and Büscher (2019), global environmental regimes – mostly set by the Global North to secure their own interests – also shape African states. In Mozambique, what this meant, at the time, was that the country was forced to (re)adopt goals that had been originally set out by the Portuguese and thus continue the colonial project, namely: (i) the declaration of national parks and reserves in order to conserve and protect wildlife (i.e. where hunting was forbidden); (ii) the establishment of *coutadas* to promote controlled hunting; and (iii) as a specific measure to avoid the extinction of elephants, the prohibition of hunting elephants with tusks weighing less than 8 kg each (Bonito 1992).

[33] The largest of which called the Marromeu 'buffalo operation' carried out under the assumption that the buffalo population was exceeding carrying capacity. Marromeu is a national reserve on the Zambezi River delta (Province of Zambézia), with the Ramsar wetland and the largest African buffalo population in the country (ANAC 2017).

5.3 Armed conflict and natural resource mismanagement

Not long after Mozambique's independence,[34] a military conflict erupted between Frelimo and Renamo, largely if not entirely sponsored by external forces, particularly from Rhodesia and subsequently, South Africa (Hall & Young 2003; Young 2012). Renamo's tactics were based on extreme violence aimed at civilian populations, as well as on the deliberate destruction and assault on economic infrastructure, particularly transport infrastructure serving neighbouring countries and development projects (Hall & Young 2003). According to Hatton, Couto and Oglethorpe (2001), over 50% of Mozambique's rural population was displaced to neighbouring countries and urban areas during this time, the economy stalled, and the natural resource management sector broke down completely. Approximately one million Mozambicans died and the damage to the country is estimated to have exceeded USD 20 billion (Hanlon cited in Hanlon 2017).

Particularly with regards to natural resource management, the state lost control over large areas of land as a result of the war, including many protected areas, while government priorities shifted from development (including conservation issues or natural resource management), to security concerns (Schafer & Black 2002). Hatton, Couto and Oglethorpe (2001) document the way in which the 16-year conflict decimated Mozambique's natural resource base, particularly that of large mammal species, which were allegedly used for meat and trophies (i.e. elephant tusk and rhinoceros' horn). They note the drastic reduction in wildlife populations, both within and outside conservation areas, but particularly near sites where troops were stationed for longer periods of time, such as in the vicinity of the Gorongosa National Park. In fact, there are several accounts of the way in which the armed conflict affected Mozambique's first and most popular national park, mainly since Renamo's armed forces used mount Gorongosa as their base and relied on ivory to purchase guns and ammunition, and meat to sustain troops (Quammen 2019; Richardson 2019). Exceptions to this included more isolated protected areas, such as the Niassa Reserve on the border with Tanzania, as well as marine reserves such as the Bazaruto National Park in Inhambane (Hatton, Couto & Oglethorpe 2001). Beilfuss et al (cited in Soto 2009) also briefly assess the effects of the war on wildlife populations by documenting that some species were either dramatically reduced by as much as 95% (buffalo, waterbuck, reedbuck, hippo, and zebra) or became locally extinct (rhino, cheetah, and giraffe). Besides the

[34] There are different accounts with regards to the year the war officially started, varying between 1976 and 1981.

effects of the war on wildlife, most infrastructure within protected areas was destroyed during this period (Hatton, Couto & Oglethorpe 2001).

In the 1980s, Frelimo was placed under severe pressure as South African incursions and support to Renamo were rapidly destroying the country, with devastating consequences, ultimately leading to the signing of the Nkomati Peace Accord in 1984 (Saho 2011). In exchange for promoting talks with South Africa in 1984, Mozambique was forced therein to join the IMF, and by 1987, had accepted structural adjustments in lieu of debt relief, and lenders and donors started imposing policies in the country that were to shift Mozambique from a socialist to a neoliberal capitalist state (Hanlon 2017). New negotiations with Renamo took place in 1990, ending with the Rome Peace Accord of 1992 (Hanlon 2017). International environmental agendas and the neoliberal model of conservation were likewise introduced in Mozambique during this time, as discussed below.

5.4 Natural resource management in the post armed conflict and external environmental agendas

In 1992, the status of wildlife conservation in Mozambique was described as "chaotic" (Rosinha 1992; no pagination), mainly due to the prolonged civil war, which had physically destroyed most protected area infrastructure, paralysed all hunting-related activities, decimated wildlife, and hindered all government's natural resource management efforts (Black & Watson 2006; Child 2009; Hutton et al 2001; Soto 2009). In addition, the country lacked updated information/data regarding the state of its wildlife and other natural resources, and most wildlife management services were disorganised and understaffed (Hatton, Couto & Oglethorpe 2001; Rosinha 1992). Moreover, there were indications of unrestrained natural resource exploitation in the country, particularly wildlife and forest resources (Hatton, Couto & Oglethorpe 2001), with Rosinha (1992) suggesting widespread, indiscriminate, and clandestine hunting networks linked to the commercialisation of ivory, rhinoceros' horn, and valuable skins.

With an understaffed and under-resourced *Direcção Nacional de Florestas e Fauna Bravia* on the one hand, and four national parks (Gorongosa, Zinave, Banhine and Bazaruto), four reserves (Marromeu, Maputo, Gilé and Niassa) and 17 *coutadas* (Rosinha 1992) to administer

in 1992,[35] the management of natural resources was severely compromised. However, 'nature conservation' was gaining prominence in the development programmes of various multi- and bilateral donor agencies such as the USAID and the World Bank (Anstey cited in Virtanen 2005), and international NGOs such as the Ford Foundation, the International Union for Conservation of Nature (IUCN), and the Endangered Wildlife Trust (EWT), all three with experience in nature conservation in Southern Africa, were 'eager' to provide support to Mozambique in the form of technical expertise and financial resources, provided that specific concepts and nature conservation based solutions were adopted based on the neoliberal discourse to natural resource management typical of the time (Virtanen 2005).

What this meant was that global environmental agendas orchestrated by powerful actors from the Global North, including donors, states, NGOs, businesses, institutions, and scientists were imposed on governments from the South (Ramutsindela, Matose & Mushonga 2022), including Mozambique, through lobbying and pressure over states to adopt particular environmental objectives, policies, strategies and plans. With regards to conservation, dominant models and approaches to protected area management based on historical, colonial and racist legacies were adopted, which perpetuated and strengthened exclusionary forms of conservation that not only separate people from nature, but marginalise local people from their lands and violate human rights (Eichhorn 2022; Kashwan et al 2021). To demonstrate commitment to these green agendas and, at the same time gain international recognition as well as access to benefits, Southern governments were forced to mould their approaches to conservation in line with these agendas, be it in the form of policy or protected area management (Ramutsindela, Matose & Mushonga 2022).

The way this was manifested in Mozambique was that, in terms of policy, for the first time, explicit reference to ecological issues was made in the second, post-war Constitution of 1990 (Ferraz & Munslow cited in Schafer & Black 2002), following which a number of natural resource management policies were adopted and legislation enacted, including the Environmental Framework Law, the new Land Law, the Forestry and Wildlife Law, and the Law on Traditional Authorities (Schafer & Black 2002). As mentioned, this policy shift was largely the result of dependency on, and international pressure from bilateral and multilateral donors and NGOs (Schafer & Black 2002) to reform natural resource policies, which was

[35] Information regarding the number of protected areas in the country in 1992 differs according to different sources. Matias (1992), for example, suggests that there were four parks, five reserves, seven areas under special surveillance, and 13 *coutadas* in 1992. The exact number and type of conservation areas could not be confirmed.

accompanied by institutional strengthening and a general improvement in the natural resource management sector (Hatton, Couto & Oglethorpe 2001; Schafer & Black 2002). In general, most policy developments in Mozambique during this period were influenced by the 'win-win' discourse of the 1990s, which, while still having biodiversity conservation as a primary concern, also promoted aspects such as benefit sharing, local participation, development and compensation. This was, however, implemented within a neoliberal framework (Benjaminsen & Svarstad 2010) that has been largely criticised from both a sociological and ecological perspective for bringing little to no benefit to local/poor people and in fact leading to many negative trade-offs, while at the same time failing to adequately address natural resource protection (Blaikie 2006; Kashwan et al 2021; Shackleton et al 2010).

In terms of conservation objectives, international pressure resulted in the forest and wildlife sector prioritising the rehabilitation of protected areas throughout the country, and restocking them with wildlife, while recognising the role of local communities and embracing several donor funded Community Based Natural Resource Management (CBNRM) projects (Hatton, Couto & Oglethorpe 2001; Soto 2013). This period also coincided with the 1992 UN Conference on Environment and Development in Rio de Janeiro, which placed significant focus on community-based management systems (UN 1992) and adopted them as preferred solutions to environmental conservation problems in the Global South by leaders, policymakers, the private sector, and donor agencies (Adams & Hulme cited in Virtanen 2005). In particular, the Forest and Wildlife Policy of 1997 committed to the empowerment of local communities throughout Mozambique by affirming customary rights and access to natural resources, as well as allowing for the sustainable commercialisation of natural resources for the benefit of communities (RdM 1997; Soto 2009). However, and once again in line with neoliberal conservation agendas, customary or inherent rights to forest and wildlife resources were not recognised, except in some limited ways, such as, for example, subsistence use rights (De Wit & Norfolk 2010).

Additional efforts were made during this time to revitalise protected areas and nature-based tourism in Mozambique, particularly by the then president Joaquim Chissano who, together with Nelson Mandela, laid the ground for the establishment of transfrontier conservation areas or 'peace parks' to attract tourism into the country and appease historical conflicts (Pringle 2017). Due to the lack of funding and structural constraints to meet conservation targets, a number of NGOs, multilateral development agencies, development banks and donors also

provided monetary aid for conservation and other environmental initiatives (Francisco 2008), or what Hamilton et al (2021) describe as the exercise of soft power (Hamilton et al 2021).

International lobbying for CBNRM initiatives in Mozambique took off in 1994 with the establishment of the Tchuma Tchato Project in Tete Province, with funding from the Ford Foundation (Nhantumbo & Anstey 2009) and, soon thereafter, Mozambique approved the Transfrontier Conservation Areas Project (TFCA) funded by the Global Environmental Facility through the World Bank, which was the first significant proposal for conservation areas since independence (Virtanen 2005). The TFCA comprised three transfrontier conservation areas in Central and Southern Mozambique linked to South Africa, Swaziland, and Zimbabwe (Virtanen 2005), in addition to other CBNRM projects, the majority of which were initiated by government and/or external agents (i.e. international NGOs) (Matkala & Mushove cited in Virtanen 2005), with local communities not having participated and often inadequately informed or included in the management of said areas (Virtanen 2005) as seen in other parts of the world (Dawson et al 2021).

Changes in the sector continued being felt due to international pressure in the 2000s, with the national protected area management body transferred from the Ministry of Agriculture and Rural Development to the Ministry of Tourism in 2001, with the aim of promoting tourism in conservation areas, where a new/specific directorate was established, the *Direcção Nacional de Áreas de Conservação* or National Directorate for Conservation Areas (DINAC). According to Soto (2009), however, *coutadas* and licensed hunting activities remained under the management of the Ministry of Agriculture and Rural Development, which created some ambiguity with regard to the roles each institution played in conservation management. From the time conservation areas were transferred to the Ministry of Tourism in 2001 up until 2008, about US$1.2 million per year were allocated to the management of protected areas in the country (Soto 2009). He further remarks that, in an effort to prevent corruption, donor contributions during that same period were about two times that of government, but directed at specific protected areas and/or programmes, rather than budget support.

Financial and capacity constraints at the time, associated with international pressure, also forced the promotion of partnership arrangements in many conservation areas throughout the country. By 2009, there were several partnerships in place; the Gorongosa National Park was being co-managed by the Carr Foundation; the Banhine and Zinave National Parks, the Maputo Special Reserve and the Chimanimani National Reserve were being supported by the Transfrontier Conservation Areas and Tourism Development Project; and the Quirimbas and

Bazaruto National Parks, both marine protected areas, were managed in partnership with WWF-Mozambique and funding from the Agence Française de Dévelopement (Soto 2009). At the time of writing, public-private partnership arrangements were actively promoted under Mozambique's Conservation Policy and Implementation Strategy of 2009 as well as the Conservation Law of 2014 (discussed later in the chapter). Administratively, the Conservation Policy was also a precursor to the establishment of a new institutional structure to oversee and manage protected areas in 2011, the National Administration for Conservation Areas (ANAC). Unlike DINAC, an ordinary government department within the Ministry of Tourism, ANAC is an autonomous institution under the tutelage of the Ministry for Land and Environment with its own board and the ability to generate and manage its own revenue.

5.4.1 Decentralisation attempts, hybridisation and the marginalisation of local communities

As discussed above, most natural resource management policies drafted in the 1990s in line with international green agendas, attempted to change the way in which the state delt with resource management by devolving some power and resources to local groups and/or institutions. These included the Land Law, which forms the basis of natural resource use and access rights in Mozambique, the Environment Law, the Forest and Wildlife Law, the Municipalities Law and the Law of Traditional Authorities, all of which included aspects of decentralisation (Schafer & Black 2002). However, local communities and institutions remained, for their most part, dependent on central authorities, in a system which, to this day (i.e. 2020s), largely operates in a top-down manner.

5.4.1.1 The Land Law of 1997 and access to natural resources

Neoliberal reforms in the late 1980s led to debates over the land-tenure system in Mozambique, particularly in terms of access to land and natural resources (Lunstrum 2008; Norfolk & Tanner 2007; Tanner & Durang 2004). While the World Bank, USAID and other donors argued that state ownership over land and natural resources was harming community rights to land, several authors have argued that what they were ultimately pushing for was a market-based trajectory and improved conditions for foreign investment in the country (see for example Durang & Tanner 2004; Lunstrum 2008; Norfolk & Tanner 2007). Through a widely disseminated and openly debated process that included civil society, government officials, and international

donors, a new Land Law was approved in 1997 which allowed for the allocation of land rights – i.e. Land Use and Benefit Rights (DUAT) – to non-state entities, while simultaneously recognising customary land rights by also giving communities full legal equivalence to the DUAT (Durang & Tanner 2004; Lunstrum 2008; Norfolk & Tanner 2007; RdM 1997). However, and despite the legal recognition and protection of community land rights through the Land Law, the Forest and Wildlife Law of 1999, which was, at the time, the main piece of legislation regulating the country's forest and wildlife sector, maintained 'state ownership' of forest and wildlife resources, and restricted resource use by local communities to non-commercial subsistence use (Johnstone, Cau & Norfolk 2004). This meant that rural communities were placed on the same playing field as private forest and wildlife investors, as they were required to develop detailed management plans and follow bureaucratic procedures should they wish to use forest or wildlife products commercially (Johnstone, Cau & Norfolk 2004; Negrão 1999), thereby ultimately 'forcing' them to remain subsistence users, given the lack of resources/capacity and opportunities when compared to the private sector. This new legal arrangement regarding access and rights over natural resources by rural communities echoes Mamdani's (1996) argument on communal reserves established during colonialism, with the intention of placing Africans in rural areas where they permanently belonged, legally forcing communities to remain 'rural' and with subsistence based livelihoods to save or protect 'nature'.

Furthermore, "the land law does not protect communities' land rights based on prior occupancy inside national parks" (Lunstrum 2008, p. 350) as it defines these areas as Total Protection Zones, where legal land rights cannot be acquired unless special licences are granted for specific activities (RdM 1997). As a consequence, even if communities have lived for extended periods of time within conservation areas (a land law provision that entitles communities to DUATs), they cannot legally acquire such rights (RdM 1997; World Bank cited in Lunstrum 2008). De Wit and Norfolk (2010) do note, however, that community lands have been delimited in areas adjacent to conservation areas, as well as land rights registered over core and buffer zones of the Gorongosa National Park, in an attempt to increase community accountability in the management of fragile ecosystems and natural resources within protected areas.

Today, and despite the progressive land legislation, land access and use by elite groups and other vested interests in agriculture, tourism, mining, etc., is said to be "shaping new landscapes" at the "expense of the poor", who are being dispossessed and pushed further away from fertile land/their homes (Filipe & Norfolk 2017, p. 9).

5.4.1.2 The shaping or categorisation of local communities

The Land Law describes communities as:

> A group of households or individuals living in a defined area smaller than a locality[36] who wish to safeguard common interests by protecting their living areas, farming areas whether cultivated or fallow, forests, sites of socio-cultural importance, pasture, water sources and areas of expansion (RdM 1997, p. 1).

Critiqued by some for being vague and overly broad (Hanlon 2004a), the concept of 'community' has also been widely challenged as it denotes a pre-defined, homogeneous, and non-evolving group of individuals who are branded as such as a reflexion of activities (or resources) taking place close to them (such as mining, hunting, conservation, etc.) (Blaikie 2006; Bocarejo & Ojeda 2016; Fairhead, Leach & Scoones 2012; Vihemäki 2005).

Blaikie (2006, p. 1943), for example, argues that the concept has been "constantly shaped and reshaped by different outsiders through time (from colonial government-generals, political advisors, European settlers, and more recently rural development consultants and academic writers)" and in relation to activities that label them as 'local communities', whilst Vihemäki (2005) claims that communities are often perceived as natural resource 'beneficiaries' instead of decision makers. These representations of communities as a fixed group of individuals or a group placed within a fixed landscape, not only simplify people's lived experiences and ecologies, but end up restricting their access to resources (Bocarejo & Ojeda 2016).

This means that communities are exogenously classified into flexible categories to suit the prevalent needs of various actors other than the communities themselves, while at the same time it creates a specific language or narrative that describes communities as either "environmentally destructive, backward and disordered needing reconstruction to conform with modernist visions of sustainable development" (Fairhead, Leach & Scoones 2012, p. 251), as incapable of making informed decisions on their own behalf due to the lack of 'scientific knowledge' (Blaikie 2006), or even as some kind of 'mystical treasure' which should be protected in its current or 'original' state. While the thesis makes reference to 'communities' throughout, it acknowledges and reflects on the way in which communities, particularly those from the Global South, have come to be externally defined, replicated, as well as imagined. In particular, and in line with Spivak's (1988, p. 79) analysis of the subaltern subject as "irretrievably heterogeneous", the thesis makes use of the word 'community' cautiously, by

[36] Locality is the lowest administrative rung of State administration in Mozambique, under which come villages.

avoiding the imposition of a homogeneous view, but rather acknowledging that communities are a diverse conglomeration of individuals and subjects with different opinions, positions, and voices.

5.4.1.3 Decentralisation and natural resource use

Following the Peace Agreement in 1992 and from finance from the USAID and the Ford Foundation, the role of traditional structures in local government or *régulos*[37] – who had been abolished on independence as Frelimo attempted to dismantle the bifurcated colonial system of governance where citizens were governed by civic law in urban areas, whilst 'natives' were ruled by customary law in rural areas (Mamdani 1996) (further discussed in *Chapter 4*) – was highlighted as essential to democratisation, decentralisation, and reconciliation in Mozambique (Buur & Kyed 2006). This change was largely linked to Renamo's successful reinsertion of traditional chiefs into those rural areas they controlled during the war, and its use as a 'traditionalist' narrative, as opposed to Frelimo's more socialist and modernist agenda (Kyed 2009). Buur and Kyed (2006) further contend that the rebirth of traditional institutions in Mozambique was related to the international donor community's primary aim of seeing decentralisation happening at the national level. As Mozambique lacked a "vibrant civil society", particularly in rural areas due to Frelimo's centralist model of governance, traditional institutions were increasingly identified as the "only surviving form of rural organisation capable of filling the representational gap" (Buur & Kyed 2006, p. 7).

Whilst the move towards democratic decentralisation was initiated in 1997 with the approval of a system of locally elected *municípios* or municipalities, rural areas in Mozambique remained largely excluded from the process (Buur & Kyed 2006). Instead, decentralisation in rural areas had been confined to the re-inclusion of 'community authorities' i.e. traditional chiefs, secretaries, and other leaders in local government as per Decree 15/2000, with the first piece of legislation officially recognising traditional authorities in Mozambique (Kyed 2009; RdM 2000). The Decree delegated some state administrative tasks such as "policing, taxation, population registration, justice enforcement, land allocation and rural development" to traditional authorities (Buur & Kyed 2006, p. 1), where the 'sacred', 'unchanging' and 'singular' idea of 'traditional or customary chiefs' created under Portuguese colonial rule as the crucial contact between the administration and the rural population was reinstated as the

[37] Instead of *régulos*, Frelimo sought to promote its authority locally through party secretaries and *grupos dinamizadores* who were used to engage local communities in state affairs (Black & Watson 2006).

'authentic African tradition' in present-day Mozambique (Mamdani 2005). In other words, while the post-colonial state was democratised and deracialised, rural government structures re-emerged as despotic in nature, although democratic (Mamdani 2005; Matose & Salomão 2007). Kyed (2009, p. 11), however, argues that rather than having distinct 'traditional' and 'state' forms of authority, present day Mozambique has "hybrid forms of authority" that are explained by everyday interactions between the two, where, while attempting to co-opt and reshape chiefs to fit ('modern') state demands, local ('traditional') authorities also reshape state practices, in a process similar to what Bayart (2007) describes as the 'subjectivation' of both the coloniser and the colonised.

While the supposed 'shift' towards decentralisation, coupled with national legislation acknowledging customary rights and mechanisms for community participation in natural resource management were in theory to result in substantial benefits to local communities, including poverty alleviation, the opposite has materialised. In practice, Cunguara and Hanlon (2010) argue that the neo-liberal development model promoted and structural adjustments aggressively imposed by the international community, focused on the improvement of human capital and infrastructure development, while leaving economic growth, rural development, and poverty alleviation to the private sector or the market. As is clear from Hanlon's interview with a former Minister of Agriculture and Rural Development Hélder Muteia, the main objective of the Government of Mozambique was to facilitate investment, being able to meet investors for two hours in an office, and having them leave 90% sure that they will have the land they need (Hanlon 2004b).

5.5 Forced or imposed conservation

In the early 2000s, global debates around the Anthropocene and associated climate change effects, biodiversity loss and other environmental crises resulted in new efforts "to mobilize the global community to respond to environmental challenges" (Ramutsindela & Büscher 2019, p. 3), which in practice included the adoption of policies and plans linked to the CBD, such as the revised strategic plan for biodiversity in 2010 (CBD 2020), the UN's Reducing Emissions from Deforestation and Forest Degradation (REDD+) in 2013, the Economics of Ecosystems and Biodiversity (TEEB) initiative in 2010 (Kashwan et al 2021) among others (Ponte 2019). With specific regards to conservation, the Aichi Biodiversity Targets adopted at

the tenth Conference of the Parties in 2010 (Target 11)[38], and more recently Target 2 of the post-2020 Global Biodiversity Framework[39] have set up new bold targets and deadlines which have resulted in the establishment of new protected areas in several countries, despite the lack of financial, social, and political capacity to deal with existing ones (Pringle 2017). At the same time, and in line with this growing global environmental agenda, influential actors or Western countries started handling financial disbursements to poorer ones (Hamilton et al 2021) without acknowledging and/or investigating further how poor, vulnerable, and marginalised people from the Global South can be affected (Kashwan et al 2021).

In Mozambique, these new developments manifested in many different ways, including policy enactments and the elaboration of new conservation strategies, penal code revision, agreements and the signing of Memorandums of Understanding with bi-lateral and multi-lateral agencies as well as NGOs, and the expansion of the country's marine and terrestrial protected area network, which are all discussed in the following sections.

5.5.1 The Conservation Policy and Implementation Strategy

The first piece of conservation legislation in Mozambique, the Conservation Policy and Implementation Strategy, was approved in 2009 (resolution 63/2009 of 2nd November 2009), reflecting a meaningful change to the country's overall approach to nature conservation (RdM 2009) that was more in line with the global environmental agenda. Until then, conservation in the country was managed according to a number of laws, particularly the Forest and Wildlife Law of 1999 (Law 10/99 of 7th July 1999), but also the Land Law of 1997 (Law 19/97 of 1st October 1997), the Environment Law of 1997 (Law 20/97 of 1st October); the Tourism Law of 2004 (Law 4/2004 of 17th June); and the General Marine Fishing Regulation of 2003 (Decree 43/2003 of 10th December 2003) (MICOA 2009; RdM 1997a; 1997b;1999; 2003; 2004; 2009).

The overall objective or intention of the Conservation Policy and Implementation Strategy was to ensure the development, consolidation, rehabilitation, and reorganisation of protected areas in the country, as well to develop 'innovative' and participatory protected area management

[38] Stipulating that "by 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes" (CBD 2020, no pagination).

[39] Stating the following: "Ensure that at least 20 per cent of degraded freshwater, marine and terrestrial ecosystems are under restoration, ensuring connectivity among them and focusing on priority ecosystems" (CBD 2021; p. 7)

models based on the needs and interests of the public and private sectors, park residents, and adjacent communities (MICOA 2009), all in line with neoliberal approaches to conservation. Equally important objectives were to ensure the sustainable use of natural resources, and the provision of developmental benefits to the country and those of local communities (MICOA 2009).

Besides contextualising Mozambique's nature conservation in terms of background and setting, the Policy identifies threats and opportunities, as well as essential activities and tasks required to improve nature conservation and protection in the country (RdM 2009; Silica 2015). More importantly though, it served as an important precursor to legislative amendments, which in turn resulted in the enactment of the first Conservation Law in 2014 (Law 16/2014 of 20th June, as amended by Law 5/2017 of 11th May), which partially revoked the applicability of the Forest and Wildlife Law within conservation areas.

Prior to the enactment of the Conservation Law in 2014, the Forest and Wildlife Law of 1999 classified protected areas into three categories, namely: 'national parks', 'national reserves' and 'areas of historical/cultural value', all of which based on the concepts of 'core protected areas' or 'Total Protection Zones' which "reflects the continued legitimacy of exclusionary areas-based approaches to conservation" (Kashwan et al 2021, p. 8), where human habitation and/or farming/natural resource use are explicitly forbidden, except under special circumstances and/or licences granted in accordance with the said protected area's management plan (MICOA 2009). Park management plans governed the use and management of natural resources within conservation areas in the country, and were legally equivalent to environmental management plans for private sector projects and territorial and spatial plans at the national level (RdM 1999; 2014).

Given that most conservation areas in Mozambique are inhabited, with some having significant and sizable populations, such as the Quirimbas, the 2009 Conservation Policy and the 2014 Conservation Legislation proposed a new protected area classification system that would legally allow for resident communities (as opposed to the Forest and Wildlife Law that prohibited habitation within protected areas), albeit according to a set of 'conditions' outlined in individually drafted protected area management plans. In other words, the new Conservation Law adopted the principle of 'allowing' communities to reside within protected areas as long as the conservation objectives and management plans of said (particular) area were respected and adhered to (RdM 2014). However, where the presence of local communities is considered to be incompatible with a given protected area's legal status and/or management plan, the state

reserves the right to resettle communities outside park boundaries through adequate resettlement frameworks that are legally required to provide similar or improved livelihood conditions to resettled households (RdM 2014). In line with these new provisions, the law reclassified protected areas into two broad groups, namely: 'total conservation areas' and 'sustainable use conservation areas', whose primary differences relate to land use rights as well as access to, and use of natural resources.

'Total conservation areas' are areas within the public domain primarily aimed at conserving ecosystems and species, and where resource extraction (such as hunting and fishing) is prohibited, but where the indirect use of natural resources is permitted, such as the use of resources without consumption, collection, damage, or destruction (RdM 2014; 2017). This includes activities such as recreation, ecological tourism, scientific research, environmental education, and so on (MMA n.d.). From a local community perspective, this means that, while legally allowed to live within total conservation areas under the new Conservation Law, residents have their livelihoods severely restricted, particularly when it comes to natural resource access and use. This is again linked to the way in which global conservation groups have historically aided processes of marginalisation of poor rural communities considering that, instead of reinforcing local people's rights which are already protected by national legislation, these are violated instead (Kashwan et al 2021). A clear example is the fact that residents are no longer allowed to, should they wish to, obtain land use titles within protected areas, while residents with formal land titles automatically lose their rights in such case that total conservation areas are established in the area where they happen to live (MICOA 2009). A number of livelihood strategies are also no longer allowed within total conservation areas, as is the case for important subsistence-based activities linked to natural resource use. Over and above these national legal restrictions, park management plans contain a set of locally applicable rules and regulations that further prohibit and regulate natural resource activities. The new Conservation Law has therefore effectively created new norms that not only marginalise and exclude communities with natural resource-based livelihoods from protected areas, but, more dangerously, has legally criminalised a number of subsistence activities as well as undermined and/or removed a series of acquired rights (to land in particular and natural resources in general) without compensation, or the provision of alternatives.

Total conservation areas are further divided into three subcategories, namely 'undivided (contiguous) natural reserves', 'national parks' and 'cultural and natural monuments'. The Quirimbas National Park falls under this broad group i.e. 'total conservation areas' and the

'national park' subcategory, where human habitation is allowed, albeit under 'controlled' conditions as stipulated in the park's management plan, and provided it does not constitute a risk to the park's biodiversity (*Chapter 6* provides more detail on the Quirimbas' management plan and zoning system) (RdM 2014). Except for scientific ends or management reasons, resource extraction is prohibited within national park boundaries, as are a series of activities including hunting, forest use, farming, cattle rearing, and any activity likely to change local ecological processes (RdM 2014).

'Sustainable use conservation areas', on the other hand, are areas of public and/or private domain intended for conservation and subject to an integrated management plan that allows for the extraction of resources according to sustainable limits set out in its management plan. Subcategories include 'special reserves', 'environmental protection areas', 'official *coutadas*', 'community conservation areas', 'sanctuaries', 'game farms' and 'municipal ecological parks' (RdM 2014). Of these subcategories, sanctuaries, which form part of the Quirimbas (as discussed in *Chapter* 6) are areas of public or private domain designed for the reproduction, shelter, feeding, and research of specific species of flora and fauna (RdM 2014). These can be established either within or outside a protected area, and its resources used with the exception of specifically protected species and according to 'special licenses', yet to be regulated (RdM 2014).[40] Sanctuaries in the Quirimbas, however, correspond to 'total protection zones', and access is therefore forbidden under the park's management plan (MITUR 2010a).

5.5.2 Continued pressure from the international community and the criminalisation of natural resource use

5.5.2.1 The discrediting of conservation in Mozambique

Kashwan et al (2021, p. 11) argue that "racialized imageries of war, conflicts, and other types of "crisis" situations" in the Global South have been used to justify the rise in militarised conservation as the best and only option to protect nature from destructive practices and conflicts. This has led to the adoption of a number of (violent) policies, such as the shoot-on-sight and shoot-to kill which are practically employed through cooperation agreements between park guards and national armies, the military, the police, and private military companies Kashwan et al 2021; Lombard & Tubiana 2020; Lunstrum & Ybarra 2018; Massé 2018; Verweijen 2020) and, not only dehumanise natural resource users (Eichhorn 2022;

[40] At the time of writing, no regulation had been published with regards to sanctuaries.

Ramutsindela, Matose & Mushonga 2022) and reinforce racial stereotypes, but also lead to serious human rights violations (Eichhorn 2022; Kashwan et al 2021). Neoliberal approaches to conservation (discussed earlier in the chapter) coupled with an increasing militarisation of conservation areas (discussed below), meant that protected area management in Mozambique in the twenty first century shares continuities with the Portuguese colonial administration in terms of expropriation and spatial exclusion, violence against black people and the silencing of local voices (Kashwan et al 2021).

According to Interviewee 23, a Mozambican lawyer specialising in environmental law (Interview 24, Scholar, 18 December 2018) and one of three coordinators of the *Investigation and Criminal Proceedings Manual against Wildlife Crime* (PGR 2018), two key factors informed the 2014 Conservation Law, namely: the lack of significant conservation efforts since the publication of Mozambique's Conservation Policy and Implementation Strategy in 2009; and the absence of a single piece of legislation under which all protected areas (i.e. terrestrial and marine) and conservation activities were regulated. Perhaps more importantly, however, was the pressure from international environmental groups when a series of investigations and media articles suggested that poaching and environmental degradation in Mozambique were reaching distressing levels (PGR 2018), as illustrated from the following headlines at the time:

> Central Mozambique: Illegal hunting and bushmeat trade (Lindsey & Bento 2012)
>
> Mozambican poachers get 25 years in South Africa court (BBC 2012)
>
> Mozambique's role in the poaching crisis (Save the Rhino 2013)
>
> Mozambique rhino 'extinct' again (Sapa-Ap 2013)
>
> Mozambique poaching has regional effects (DeCapua 2013)
>
> Ivory poaching in Mozambique (Oxpeckers 2013)
>
> Elephant killings in Mozambique happening on 'industrialised' scale' (Smith 2014)
>
> Urgent international action needed following elephant poaching statistics in Mozambique (WWF 2014)

Besides the international exposure of Mozambique's illegal hunting trade and 'dire' wildlife 'crisis', local news were equally alarming, as noted by Interviewee 23: "in two or three months alone, substantial amounts of ivory, several animal trophies, cheetah and lion skins, rhino

horns, pangolins, etc were caught" (Interview 24, Scholar, 18 December 2018) and Interviewee 3: "most elephants in the Quirimbas National Park were poached within a year or so" (Interview 3, Independent Consultant, 05 September 2016; AFP 2015). These newscasts generated and seemingly entrenched a deleterious image of Mozambique's approach to nature conservation amongst the international community and donors, who quickly linked the lack of conservation efforts with the fact that the Forest and Wildlife Law of 1999 (the main piece of legislation regulating protected areas at the time) did not criminalise wildlife poaching.

5.5.2.2 'New' environmental crimes and penal code amendments

Mozambique's penal code dates back to the colonial period (more specifically to 1886), with only minor revisions having been made in 1990, and again in 2004 (RdM 2014a). In light of the 'poaching crisis' and the fact that the penal code did not criminalise sufficient environmental crimes, a number of new offenses were added to the Conservation Law of 2014, with varying levels of sanctions ranging from fines equivalent to between one and 1,000 times Mozambique's minimum salary,[41] depending on the type of infringement committed. The unauthorised storage, transportation, and commercialisation of natural resources and the 'illegal transportation of wildlife were subject to fines of between one and 10 times the minimum salary; the 'illegal' use of natural resources within conservation areas, the import or export of natural resources without a license, and any activities that may potentially 'disturb' natural resources within conservation areas were subject to fines of between 11 and 50 times the minimum salary; and the 'illegal' exploitation, storage, transportation and commercialisation of nationally protected species and the violation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) were subject to fines of between 50 and 1,000 times the minimum salary (RdM 2014).

Aggravating circumstances were also set up in the Conservation Law, including, amongst other aspects, infractions committed during closed seasons, against protected species, and/or during night-time, Sundays, or public holidays; infractions committed by rangers or community collaborators; the use of violence against, or opposition to legal enforcement; the use of 'illegal' practices, tools, methods, and techniques; and infractions committed by organised groups

[41] Minimum wage in Mozambique is defined/amended on an annual basis and specific to sectors. In this context, the current minimum wage in the agriculture, forest and hunting sector is 4,829.00 Meticais per month (CCT 2021), equivalent to approximately USD 75 (Oanda 2021).

(RdM 2014). In addition, recidivism was subject to heavier fines and sanctions, depending on the type of crime committed in the first place.

Accessory sentences were likewise established, including but not limited to the confiscation of wildlife and flora species, as well as tools used to commit the 'crime'. Minor (up to two years) and major (between eight and 12 years) prison sentences were also set up, the former being associated with the illegal use of firearms and mechanical traps as well as acts of recidivism, and the latter with the use of forest fires, the killing of protected species without a license, and the use of 'illegal' fishing methods, such as explosives and toxic (or equivalent) substances (RdM 2014).

According to Interviewee 23, the objective of criminalising natural resource use was to "disincentivise" certain activities (Interview 24, Scholar, 18 December 2018) perceived to harm the environment, particularly by local communities, considering the fact that natural resource use within conservation areas, the use of forest fires, as well as specific forms of hunting and fishing, were all criminalised, which constitute essential livelihood strategies and practices adopted by park residents and, in-fact, throughout rural Mozambique.

In addition to the Conservation Law of 2014, a new Fishing Law was also enacted in 2013 (Law 22/2013 of 1 November 2013) to protect, conserve and ensure the sustainable use of aquatic biological resources (RdM 2013). Article 16 indicates that both marine and terrestrial areas throughout the country can be classified and declared 'conservation zones for fishing resources' in order to protect and regenerate these resources, while articles 98 through to 109 outline fishing offences (divided into 'very grave', 'grave' and 'simple') and associated sanctions (RdM 2013). Among very grave offences are included: (i) the transport, use or attempting to use explosive or toxic substances or electrocuting instruments to catch fish; (ii) fishing or attempting to fish without a license, while grave offences include, among others; (i) the use of nets with small mesh sizes; (ii) fishing within prohibited areas (such as sanctuaries) and during the restricted fishing period; as well as (iii) catching prohibited species defined within the law (RdM 2013). Simple offences include, among others, contravening the terms of conditions of fishing licenses, the lack of cooperation with park/enforcement rangers and research officials, underwater fishing with non-authorised breeding methods, the sale or purchase of fish collected in prohibited zones or during prohibited periods. Associated sanctions for these offences include more than half of Mozambique's public sector minimum wage for very grave and grave offences, to half the wage for simple offences; in addition to the expropriation of all catch, fishing gear, and equipment from the offender (RdM 2013). Once

again, all these ‘offences’ constitute common livelihood practices and strategies adopted by artisanal fishermen and women in Mozambique, including those residing in the Quirimbas National Park.

Mozambique’s penal code was thus reformed and amended in 2014 to accommodate or reflect new offences set out in recently enacted legislation, with a particular focus on poaching-related crime (PGR 2018; RdM 2014a). In line with these developments, Mozambique’s Office of the Attorney General (equivalent to the National Prosecuting Authority) also strengthened its mandate and capacity to include the policing and prosecution of so-called ‘environmental crimes’. To this end, public prosecutors throughout the country[42] now have an expanded role, and are responsible for addressing environmental and environment related crimes which, prior to these recent legislative changes and the revision to the Penal Code in 2014, were relatively minor and excluded poaching-related incidents. At the same time, and specifically as a response to increased poaching episodes on the one hand, and the new legislative developments on the other, a new Natural Resource and Environmental Protection Police Unit was established in 2015 (Júnior 2015; MINT 2011). The unit collaborates directly with the National Administration for Conservation Areas (ANAC) by assigning specialised police force units to protected areas which, according to Júnior (2015), has resulted in significant increases in apprehensions/charges since 2015. Following these legislative amendments, the Office of the Attorney General has been documenting the number and type of environmental crimes committed in the country on an annual basis since 2015, which have shown substantial increases throughout the years (PGR 2015; 2018; 2019; 2020). From 75 criminal cases registered in 2015, a total of 624, 639 and 480 have been registered in 2018, 2019, and 2020 respectively, mainly consisting of poaching, traffic of protected species, ‘illegal’ use of forest resources, and ‘illegal’ fishing (PGR 2015; 2018; 2019; 2020).

[42] Administratively, Mozambique is divided into provinces, districts, administrative posts, localities, and villages, and prosecutors are posted at both the provincial and district levels.

5.5.2.3 Nature agreements and memorandums

After the passing of the 2014 Conservation Law and the amendments to the penal code also in 2014, the Attorney General's Office signed a memorandum of understanding (MoU) with WWF-Mozambique[43] in 2015. The aim was to create a platform for cooperation between the two institutions to help combat the "illegal use, trade and trafficking of natural resources, including terrestrial and aquatic animal and plant species…" (WWF 2015, p. 3). The MoU sets out seven general areas of cooperation, ranging from support in addressing criminal cases against environmental and natural resource degradation; exchange of intelligence related to ongoing investigations on 'illegal' and corrupt acts linked to the exploration/use of natural resources; information sharing on studies and approaches to combat the 'illegal' exploration and trade of natural resources; as well as the conception and implementation of biodiversity and conservation training programmes for magistrates including seminars, direct technical support; and the exchange of experiences with other national and international bodies (PGR & WWF Moçambique 2015). The MoU further outlines specific areas of cooperation, including magistrate training and capacity building in: (i) natural resource management legislation (including forest, wildlife, aquatic and mineral resources); (ii) the identification of products derived from, and of protected species; (iii) traffic and safety of protected species; as well as (iv) the establishment of a database with poaching crimes and the 'illegal' commerce of protected species' products (PGR & WWF Moçambique 2015). Collaboration with international bodies and destination countries on judicial issues linked to the prevention and combat of 'illegal' activities is also mentioned, as is the distribution of relevant communication material on protected species legislation within border posts, airports, hotels, and other public spaces (PGR & WWF Moçambique 2015).

In 2017, another cooperation agreement for the implementation of a Wildlife Crime Prosecution Support Programme was signed between the office of the attorney general and the United States Agency for International Development (USAID) (Price 2017) in order to build local prosecutors' capacity in tracking 'wildlife criminals' as well as provide support to field prosecutors in doing so (USAID 2017). The overall objective of this two-year programme was to improve Mozambique's capacity in the prosecution of wildlife crimes, in particular those perpetrated by transnational organised criminal syndicates (USAID 2017) who have, according

[43] This must be considered in relation to the fact that, whilst Mozambique has a long history of donor (bi-lateral, multilateral, and civil society) collaboration, with numerous agreements and MoU's having been signed with bi-lateral and multi-lateral institutions/agencies, it is uncommon for government agencies to sign agreements and/or MoU's with international non-governmental organisations.

to USAID (2018), purportedly used Mozambique as a major source and hub for the procurement and transport of illicit wildlife products in recent years, resulting in a substantial decline in the country's wildlife population. Soon after this cooperation agreement was signed, the Office of the Attorney General drafted the *Manual for the Investigation and Penal Procedures of Crimes Against Wildlife* (PGR 2018) and, together with members from the National Criminal Investigation Police Unit and ANAC's provincial officials, received capacity-building and training courses/sessions in the prevention and fight against poaching in 2018, both of which were financed by the USAID (Embaixada dos EUA 2018; Muaves 2018; PGR n.d.). This marked a clear commitment and intensification in the fight against wildlife crimes in the country, particularly when the deputy attorney general publicly declared it a *prioridade inadiável e urgente* or an "unavoidable and urgent priority" in 2018, requiring joint efforts from both magistrate's court, and criminal investigators (PGR n.d., para. 4).

Despite the fact that donor commitments to Mozambique in the form of state budget support and sector-wide support have all but stopped since 2015 due to concerns over allegations of corruption, mismanagement, the debt scandal, and lack of fiscal transparency (Rasmussen 2010; Sapa-Ap 2014), support to conservation initiatives and programmes continued pouring in, and appear to be growing, not only from WWF and USAID, but also from the World Bank (World Bank 2014), the UN (MITADER 2015), and bi-lateral donors including France, Italy, Denmark, Portugal, and the EU (Odamoz n.d.). The justification provided for this continued support in a moment when support to health, education, and poverty alleviation has all but dried up, is that the need is 'vital' and that the financing/funds are not managed directly by the Government of Mozambique (i.e. 'corrupt officials'), but are, rather, earmarked for specific protected areas/activities and biodiversity in particular, which also, incidentally, forms part of, or is perceived to be, a global public good (Interview 24, Scholar, 18 December 2018).

5.5.3 Mozambique's landscapes under legal protection

5.5.3.1 Current network of conservation areas

In 2015, Mozambique's protected area network covered 25% of the country and included national parks, national reserves, *coutadas*, forest reserves, community reserves and environmental protected areas (ANAC 2015). Specifically, there were seven national parks, nine national reserves, 20 *coutadas*, three community conservation areas and 50 game reserves (ANAC 2015) (see Figure 5-1 below illustrating main conservation areas in the country in

2015). Some parks and reserves fall within, or are otherwise in close proximity to originally proclaimed hunting spaces, in particular the so called *coutadas* (SANParks 2015), as is the case of Limpopo, Gorongosa, Banhine and Zinave National Parks, as well as the Niassa Reserve.

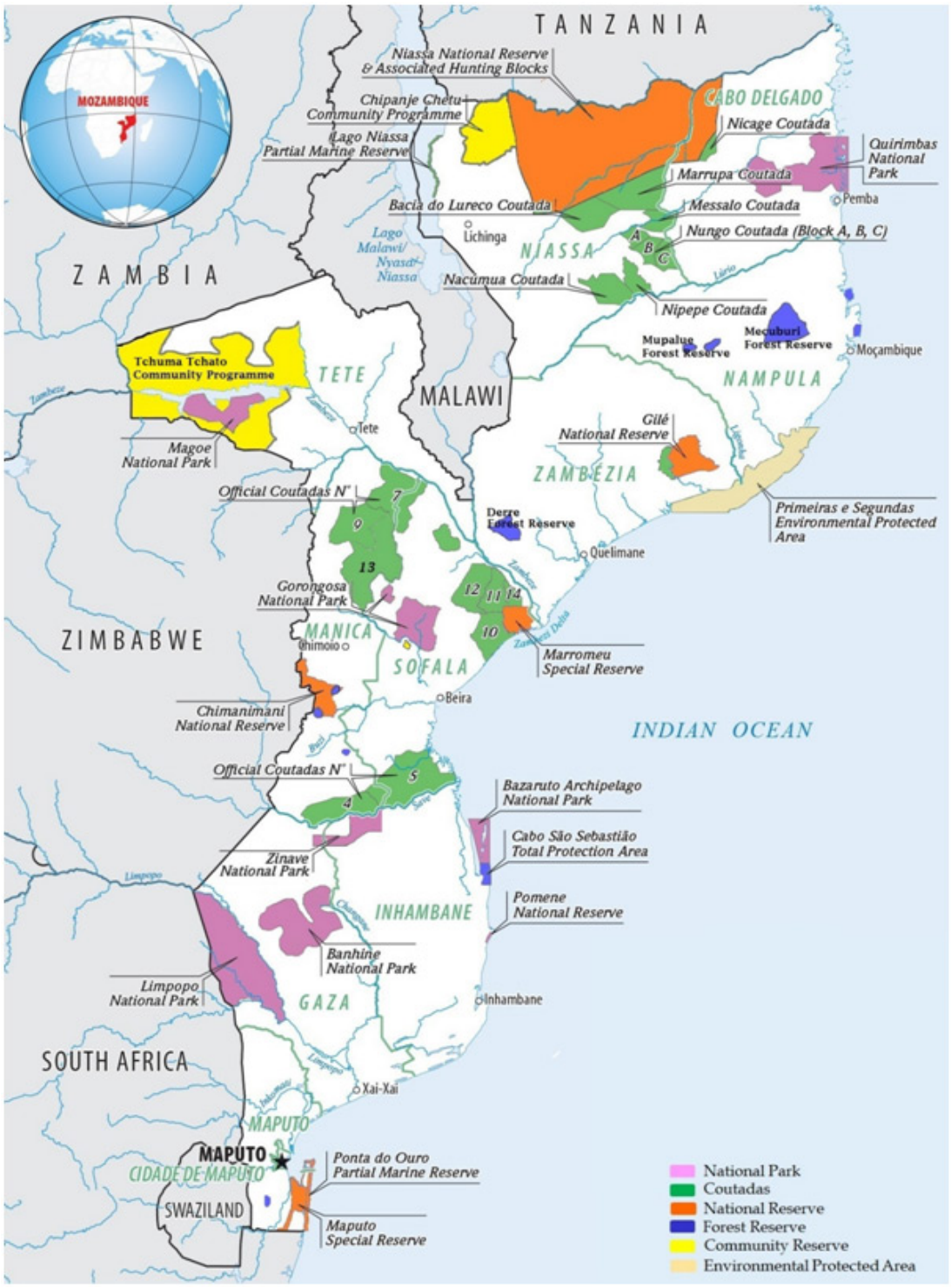


Figure 5-1 – Network of conservation areas in Mozambique in 2015. Source: ANAC (2015)

According to the ANAC (2015), all protected areas in Mozambique are under severe human pressure, particularly from natural resource use/exploitation by rural communities in the form of 'illegal' hunting and 'illegal' fishing, forest clearing through slash-and-burn techniques, as well as the collection of firewood, other wood, and non-wood forest products. In fact, it is ANAC's conviction that 'pressure' from local communities – much like black and indigenous people are pointed out as the main threat to protected areas and natural resources in the South (Baines 2021; Blaikie 2006; Branch et al 2022; Brondízio et al 2021; Cañete, Oyanedel & Gelcich 2022; Cruz e Silva n.d.; Dar & Singh 2022; Domínguez & Luoma 2020; Ekpo 2021; Júnior et al 2021; Meher 2022; Munro 2009; Neumann 1995; Olson & Jardel-Peláez 2022; Ramutsindela, Matose & Mushonga 2022; van Uhm & Grigore 2021; Welch et al 2022; Wondu & Wube 2022) – is resulting in the fragmentation and alarmingly rapid degradation of important habitats, particularly those associated with large mammals, which constitute an important landscape feature for tourism development. By 2015, it was estimated that a total of 270,000 people nationwide lived within the boundaries of protected areas (ANAC 2015), which excludes communities residing along the periphery or even outside such areas but who likewise utilise the same resources within them. The large number of people living within protected areas in the country today, is a testament of how these spaces are, in essence, contested landscapes as they have, on the one hand, been historically designed and established by external actors or powerful groups in society (i.e., Portuguese colonial administration, the state, international NGOs and donors, scientists) who attempt to reproduce landscapes devoid of people or spaces for nature and not culture. On the other hand, these landscapes are the homes of local communities who tend to live under conditions of poverty and natural resource dependency, and therefore perceive and utilise that same environment differently. These contested views result in processes of violence against locals or the subalterns which, according to Ramutsindela, Matose and Mushonga (2022) has become "a permanent feature of conservation in Africa" (p. 4).

According to ANAC (2015), all protected areas in the country face severe shortages in terms of financial and human resources, including infrastructure and tourism services. Furthermore, there is insufficient research being conducted on protected areas, which means that local conditions are poorly understood, and that adequate management plans are rare. Financially, protected areas are managed through state budget allocations, with park revenues being generally insignificant when compared to operational costs. For example, in 2014 alone, 83% of the budget assigned to protected areas originated from donor support, with park revenue

covering only about 17% of its operational costs. Given the lack of funds and the substantial investment needs required within protected areas, the Mozambican government actively encourages and promotes management partnerships between park authorities and the private sector as well as donors and cooperation partners (ANAC 2015; RdM 2014).

5.5.3.2 The focus on the marine environment

Whilst the majority of conservation areas in Mozambique are terrestrial, there are a number of marine and coastal protected ones, of which two are national parks (the Quirimbas[44] and the Bazaruto Archipelago National Parks); one is an environmental protection area (the Ilhas Primeiras e Segundas); and the remaining are reserves i.e. the Inhaca and Portuguese Island Reserve, and the Ponta do Ouro Partial Marine Reserve.[45] Although two of these marine parks were established prior to independence i.e. the Inhaca and Portuguese Island Marine Reserve in 1965, and the Bazaruto National Park in 1971, it was only after 2001 that Mozambique expanded its marine and coastal protected area network (Motta 2009) through: (i) the expansion of the Bazaruto Archipelago National Park's surface area from 600 km^2 to 1,430 km^2 so as to include the entire archipelago in 2001 (BANP 2017); (ii) the establishment of the Quirimbas National Park in 2002, covering a marine surface area of 1,185 km^2; (iii) the establishment of the Ponta do Ouro Partial Marine Reserve in 2009; and (iv) the creation of the Primeiras and Segundas Environmental Protection Area in 2012 (RdM 2012), which is the largest marine protected area in Africa (WWF 2012).

According to Rosendo (2011), Marine Protected Areas (MPAs) worldwide have been driven by conservation goals grounded on the 1992 Convention on Biological Diversity (CBD) in general and ecological criteria in particular, with social aspects having been largely ignored (Walker & Robinson 2009). The CBD, in fact, set a series of targets envisioning the establishment of a network of MPAs covering 10% of each of the world's marine and coastal and ecological regions by 2010 (Carr et al 2020; CBD 2011), such as the Eastern Africa Marine Ecoregion (EAME), which occupies the shallow marine and coastal areas along East Africa, covering more than 480,000 km^2 from Somalia to South Africa (WWF n.d. a). Given its ecological importance and in line with the CBD, the EAME has been the focus of growing

[44] The Quirimbas constitutes both terrestrial and marine and coastal components.
[45] While the Pomene and Marromeu national reserves are located on the coast, they were initially created to protect ecosystems and/or wildlife other than coastal and marine ones (República de Portugal 1960; 1972). In addition, the limits of these protected areas end at the high tide water mark (Motta 2009), thereby excluding the marine environment.

attention, where a number of transboundary marine conservation efforts have been promoted, particularly by the UN, the WWF, and the World Bank (Chircop et al 2010).

Within Mozambique alone, nine priority sites have been identified as important for conservation of the EAME, two of which considered to be of global importance i.e. the Bazaruto Archipelago and the Mtwara-Quirimbas Complex (WWF n.d. b), both forming part of the existing MPAs at the time of writing. The Bazaruto Archipelago is located in the Province of Inhambane, and forms the Bazaruto Archipelago National Park, while the Mtwara-Quirimbas Complex refers to a regional area that includes Mnazi Bay in Tanzania, the Rovuma Delta between Tanzania and Mozambique, all the way to the Quirimbas archipelago and Pemba. Only part of the latter has been declared a conservation area i.e. the Quirimbas.

According to Rosendo et al (2011), all MPAs in Mozambique are supported by international organisations, particularly WWF and the World Bank through the Global Environment Facility. The WWF's support is linked to its wider EAME initiative to establish MPAs in Kenya, Mozambique, and Tanzania, and has resulted in support to the creation of the Bazaruto National Park, the Quirimbas National Park and the Primeiras e Segundas Islands Environmental Protection Area (EAME 2004; WWF EAME 2004). The World Bank, on the other hand, funded the Coastal and Marine Biodiversity Management Project between 2000 and 2007 with the objective of creating a network of protected areas in Northern Mozambique, having also supported studies for the establishment of the Rovuma National Reserve, north of the Quirimbas, which is, however, yet to be declared a conservation area (Rosendo et al 2011) and is also, coincidentally, where significant gas and oil discoveries have been recently confirmed. In addition, World Bank funded projects have also assessed a potential transboundary MPA between Mozambique and Tanzania linking the Mnazi Bay Ruvuma Estuary Marine Park in Tanzania with the proposed Rovuma National Reserve and the Quirimbas National Park (Rosendo et al 2011).

In an assessment of individual efforts made by Kenya, Tanzania, and Mozambique to establish MPAs since 1992, Wells, Burgess and Ngusaru (2007) suggest these countries have shown remarkable progress with regards to marine conservation. Since the first MPA was created in Mozambique in the 1970s (i.e. the Bazaruto National Park), by 2007, 4% of the country's continental shelf was protected, with significantly larger conservation areas than those established earlier (Wells, Burgess & Ngusaru 2007). By 2017, 23% of Mozambique's marine environment had been declared an MPA, covering all five areas mentioned earlier which have been outlined in Table 5-1 below (UN 2017).

Table 5-1 - MPAs in Mozambique in 2017. Source: UN (2017)

MPA	Year of establishment	Total area (in km^2)
Inhaca and Portuguese Island Reserve	1965 and 1967	n/a
Bazaruto Archipelago National Park	Created in 1971 and expanded in 2001	1,430
Quirimbas National Park	2002	7,500
Ponta do Ouro Special and Partial Reserve	2009	678
Primeiras and Segundas Islands Environmental Protection Area	2012	10,409

5.5.3.3 The exclusion and criminalisation of park residents

To further explore the exclusion and criminalisation of natural resource users in Mozambique's protected areas in general, and the Quirimbas National Park in particular, unstructured and semi-structured interviews as well as focus group discussions were carried out with a number of actors including park residents, government and park authorities, NGOs, the private sector, finance institutions, as well as individuals who have either directly or indirectly worked with the Quirimbas Park or within the conservation sector in Mozambique (see *Chapter 3* for more detail on sample selection and methodology).

The dominant theme emanating from the interviews held with 'external actors' (i.e. non-park residents), and which is directly related to the criminalisation of natural resource use, is that of how to approach and manage 'local communities' (the definition of which has been explored earlier in the chapter), who reside within and around protected areas. The underlying assumption is that these communities, by their continued existence in protected areas, constitute a 'risk' to conservation objectives in the country, and, to justify land use restrictions within these spaces, 'humanised', 'social', or 'cultural' landscapes are portrayed as illegal, wrong and/or immoral, and therefore not belonging or fitting into the 'natural landscapes' that characterise national parks (Norgrave & Hulme 2006; Prochaska cited in Holmes 2007). In this context, it is worthwhile noting once again that all protected areas in Mozambique, with the exception of two national reserves[46] are inhabited by rural communities, with some being more populated than others; with the Quirimbas National Park being the case in point followed by

[46] While these two reserves have no resident communities within their borders, adjacent communities make use of natural resources within the Gilé Reserve (DINAC 2012). Malhazine, on the other hand, has no resident communities or natural resource users, given that it was created with the decommissioning of an old military arms facility in 2012 (RdM 2012).

the Niassa Reserve and the Lago Niassa Reserve (see Table 5-2 below for an estimated number of residents per protected area in the country).

Table 5-2 – Estimated number of residents per conservation area in Mozambique. Source: Biofund (2021)[47]

Protected Area	**Estimated number of residents within core areas or Total Protection Zones[48]**
National Parks	
Banhine	3,000
Bazaruto	23
Gorongosa	Not available
Limpopo	26,250
Mágoè	Not available
Quirimbas	**95,000**
Zinave	5,776
National Reserves	
Chimanimani	240
Gilé	0
Marromeu	4,376
Niassa	40,000
Pomene	38
Lago Niassa	38,733
Ponta do Ouro	Not available
Malhazine	0
Special Reserves	
Maputo	604
Environmental Protected Area	
Ilhas Primeiras e Segundas	Not available

Rural communities in Mozambique are predominantly poor, and are affected by extreme levels of vulnerability, given that their livelihoods are almost entirely subsistence based and dependent on locally available natural resources, in particular land for subsistence agriculture, forests for the collection of wood and non-wood forest products as well as hunting, and

[47] Excluding neighbouring communities to protected areas and/or natural resource users.
[48] Core park areas with the highest level of natural resource protection.

fishing/collection of products from the sea, intertidal areas, mangroves, and surrounds. All these activities are primarily performed for household consumption/subsistence, with sales taking place if/when surplus exists (*Chapter 6* provides an analysis of poverty, vulnerability, and livelihoods of the Quirimbas Park residents).

Imaginations or perceptions about the way in which conservation areas ought to look or be comprised of proved to be quite similar amongst most interviewees, particularly among individuals who have either worked for or are currently involved in Mozambique's conservation sector, from departmental employees to NGO officials, and independent consultants. In general, the majority agreed that 'people' and 'nature' should not share/inhabit/occupy the same spaces, and that this constitutes the main risk to conservation in Mozambique. While the resettlement of residents to areas outside park borders was not openly discussed or presented as a potential solution during the interviews, with the main reasons provided being the prohibitive costs and social challenges associated with such large-scale resettlements, it was clear from the interviews that alternative solutions and national efforts are perceived as urgent if conservation in Mozambique is to succeed (Interview 8, Independent Consultant, 12 April 2018; Interview 1, NGO Official, 30 August 2016; Interview 14, Park Official, 03 August 2018).

Part of these alternative solutions and efforts to improve conservation in Mozambique are imbedded in the new Conservation Law of 2014, in the sense that they are associated with policy provisions which bring about new norms and regulations that exclude local communities from 'nature' by disrupting, limiting, restricting and altering local people's livelihoods as well as challenging their rights through processes of displacement and marginalisation and, particularly, criminalisation. In other words, by restricting the geographical spaces that park residents can utilise (e.g., instituting 'no-go' areas or Total Protection Zones), limiting the type and amount of natural resource use allowed (e.g., prohibiting access and use of forests, mangroves, wildlife, fishing) and, particularly by criminalising activities that are commonly practiced and form part of local livelihood strategies (e.g. the use of specific fishing methods, catching of protected species and/or the use of closed-off fishing grounds) without providing or enabling appropriate alternatives, the law serves not only to sever the links between people and environment/resources by legal means, but also significantly limits households' abilities to sustain themselves and their families whilst remaining within the confines of the law.

As explored in *Chapter 2*, this form or method of criminalisation is entrenched within the history of conservation globally, and is particularly prevalent when it involves vulnerable,

impoverished and/or marginalised communities and peoples. In Africa in particular, and as Neumann (1998) demonstrates, this type of conservation approach is primarily linked to colonial legacies of injustice and dispossession of people from their homelands. From the eviction of people from 'nature', to controlling people's use and access to natural resources – such as limiting fishing quotas, establishing 'no-take zones', restricting the use of certain types of fishing gear and materials, prohibiting forest fires, and banning hunting for bushmeat, to the introduction of wildlife into areas where people live, are all examples of how the state uses legal mechanisms to amend and ultimately cut-off links between people and resources, which forms part of a wider process of interrupting or detaching people from nature.

5.6 Conclusion

The chapter presented a discussion of the ways in which approaches to conservation and protected area management in post-independent Mozambique have perpetuated colonial imaginations of nature and nature narratives. Through the replication of policies based on hegemonic views and perceptions of nature, as well as pressure from the international community and its global environmental agenda, the chapter illustrates how mechanisms of separation between people and the environment adopted by the Mozambican government have resulted in unintended consequences for park residents with natural resource-based livelihoods. The consequences of these approaches to conservation on poor and vulnerable communities have also been discussed, with a particular focus on the criminalisation, exclusion, and marginalisation of people living in protected areas across the country.

6. Conservation in the Quirimbas: Interrupting the link between people and nature

6.1 Introduction

This chapter explores the ways in which approaches to protected area management in the Quirimbas have disrupted the link between 'nature' and 'culture'. It does so by investigating how external and hegemonic imaginations of 'nature' have been historically imposed or projected on local landscapes, and subsequently formed the basis for the creation of the park. This analysis is followed by an overview of the park's management and finance, local socio-cultural setting, poverty and vulnerability of its residents as well as biodiversity and tourism values assigned to the park. Alleged threats to the park, as well as key management approaches are also discussed, particularly with regards to the way in which conservation in the Quirimbas has introduced processes of violence, exclusion and criminalisation of park residents, neighbouring communities, and other natural resource users. The chapter argues that conservation in the Quirimbas has resulted in the reorganisation or restructuring of local landscapes according to a system that not only dispossessed local residents from their land and access to resources, but created fixed, rather than fluid boundaries separating people/culture from nature, criminalising local livelihood strategies, and ultimately blaming residents for local environmental challenges and resource degradation.

6.2 The Quirimbas as a socio-cultural landscape

6.2.1 How the Quirimbas came to be imagined/established

Unlike other protected areas in the country that have been declared over *coutadas,*[49] archival research appeared to confirm that, while the entire Cabo Delgado District had been identified and mapped as an important hunting area by the Portuguese in the 1900s for its excellent game, including elephant, buffalo, hippos, lions, leopards and antelope (Antero 1952; Martinho 1934) (see *Chapter 5*), the boundaries of the Quirimbas National Park did not coincide with any *coutadas* or other hunting areas established there during colonial times (Andrade 1960; Farinha 1965; Martinho 1968). In fact, and despite a few attempts by the Portuguese (Antero 1952), no

[49] Such as, for example, the Limpopo, Gorongosa, Banhine and Zinave National Parks, as well as the Niassa Reserve (Andrade 1960; Farinha 1965; Martinho 1968).

formal *coutadas* were ever established in Cabo Delgado (Farinha 1972) and, as a result, hunting was carried out freely by licensed individuals (Martinho 1968).

In combination with interviews (e.g. Interview 2, Independent Consultant, 01 September 2016; Interview 3, Independent Consultant, 05 September 2016; Interview 1, NGO Official, 30 August 2016; Interview 4, NGO Official, 25 October 2017), archival work confirmed that the Quirimbas was primarily created in 2002 as a marine rather than a terrestrial park. Although no links were established between the current borders of the Quirimbas and old/colonial hunting spaces, archival research confirmed that the Quirimbas region was in fact perceived and constructed as an 'untouched', 'exotic', and 'raw' landscape destination by the Portuguese. Specifically, it was the Quirimbas archipelago's 'outstanding landscapes' (Bento 1972; Sousa 1960) that constituted the initial focus of conservation attention since the 1950s and 1960s (Andrade 1960; Bento 1972; Sousa 1960) with conservation recommendations drafted in the early 1970s (Interview 6, Independent Consultant, 10 November 2017; MITUR 2010b; RoM 2017; Tinley 1971; Tinley et al 1976).

By tracing the history of the archipelago, the study confirmed that conservation interest on the Quirimbas was associated with the history of Portuguese imperialism and expansion, as imaginations of 'tropical', 'intact' and 'abundant' environments occupied by 'savages', were early on imposed on these landscapes (Grove 1995; Sousa 1960). This is evidenced by historical descriptions of the archipelago as both a "repulsive" and "attractive" destination, occupied by "hostile", "anti-Christian" "savages" (Sousa 1960, p. 128) which is essentially linked to historical constructions of Southern landscapes by the Portuguese/Europeans as Purgatory and/or Eden, inhospitable and/or luxurious environment (Grove 1995), as well as the way in which locals were placed in the landscape (explored in *Chapter 2*).

From the 1950s onwards, and in line with the international move towards nature conservation and conservation-based tourism (*Chapter 4*), imaginations of the archipelago were transformed into 'outstanding' and 'magnificent' landscapes offering 'scenic' white sandy and 'empty' beaches, extensive mangroves, corals and abundant fish and seafood (Andrade 1960; Sousa 1960). Overall, the Quirimbas became known as a landscape that was conducive to absolute rest and relaxation, finding god and muse, away from civilisation, offering sumptuous seafood feasts and the perfect conditions for the development of tourism and sports fishing (Figure 6-1 illustrates the Quirimbas landscapes) (Andrade 1960; Bento 1972; Sousa 1960). These imaginations were reproduced by the Portuguese colonial administration throughout the years, leading up to the establishment of the Ibo Tourism Zone in Ibo Island in 1972, one of 26

strategic tourism zones established in the country between the 1960s and 1970s (Interview 6, Independent Consultant, 10 November 2017; RdM 1995). Although Mozambique gained independence from Portugal in 1975 (*Chapter 4*), the Quirimbas is still nostalgically remembered by the Portuguese in the twenty first century as an 'idyllic' archipelago, where 'nature's perfection' is found, as well as a product of Portuguese 'bravery', 'majestic' and 'enchanting' history (Obadia 2010).



Figure 6-1 – The 'outstanding' and 'magnificent' landscapes of the Quirimbas archipelago (Bram Naidoo 2018)

Despite Portugal's interest in the archipelago, the Quirimbas National Park only came to be formally established in 2002 through Decree 14/2002 of 6th June, being the second protected area established in post-independent Mozambique[50] (MITUR 2010a), and the third marine

[50] Out of a total of six protected areas, of which the remaining four are the Limpopo National Park created in 2001 (RdM 2001), the Chimanimani National Reserve created in 2003 (RdM 2003), the Ponta do Ouro Partial Marine Reserve created in 2009 (RdM 2009), and the more recent Lago Niassa Partial Reserve established in 2011 (RdM 2011) and the Primeiras e Segundas Environmental Protection Area in 2012 (RdM 2012).

protected area in the country[51] (RdM 2009; RdM 2012). Conservation interest in the Quirimbas in the post-independence period re-emerged in the 1990s, particularly through the 1995 National Policy and Strategy for Tourism Development which identified the archipelago as a priority area for tourism development, although no specific tourism development activities were implemented then (RdM 1995).

According to Interviewee 2, an American consultant working in Northern Mozambique between the 1990s and early 2000s (Interview 2, Independent Consultant, 01 September 2016) and Interviewee 4, WWF-Mozambique country coordinator at the time (Interview 4, NGO Official, 25 October 2017), the process leading up to the establishment of the Quirimbas National Park was managed by the *Gestão Comunitária dos Recursos Naturais* or Community Natural Resource Management (GECORENA), a locally registered coalition of about 12 institutions involved in natural resource management and conservation issues in Cabo Delgado, including national and international NGOs as well as the provincial departments for environment, forest and wildlife, tourism, and sea (Harari 2005). As the archipelago was located within the EAME region, one of WWF's priority areas for conservation (Interview 4, NGO Official, 25 October 2017) (see *Chapter 5*), and based on the WWF's experience in the management of Marine Protected Areas in Mozambique,[52] it assumed leadership in the 'assembly' or constitution of the park and, later on, in its administration and management.

According to the interviews conducted as part of the research, the initial drivers leading to the establishment of the Quirimbas National Park were twofold; on the one hand, 'local' fishermen (i.e. 'natives' from the Quirimbas and not other fishermen from outside the park who made use of the archipelago) were increasingly complaining about fish catch declines in the archipelago; on the other, there were growing concerns, particularly among conservation consultants, regarding the threats overfishing was posing to the subsistence of 'local' fishers/communities (Interview 2, Independent Consultant, 01 September 2016). At the time, a number of locations for the establishment of a marine protected area in the archipelago were assessed, one of which matching current park borders with the exception of its terrestrial section (Interview 2, Independent Consultant, 01 September 2016; Interview 4, NGO Official, 25 October 2017). During this same period, a community-based elephant conservation/reserve project was being

[51] After the Inhaca and Portuguese Islands Biological Reserve established in 1965 and 1967 respectively, and the Bazaruto Archipelago National Park created in 1971 (República de Portugal 1971). As previously mentioned, two additional marine protected areas have been created since the Quirimbas, namely the Ponta do Ouro partial marine reserve in 2009 (RdM 2009) and the Ilhas Primeiras e Segundas environmental protection area in 2012 (RdM 2012).
[52] Particularly the Bazaruto Archipelago National Park.

planned by GECORENA in the inland District of Meluco, not far from the archipelago (Interview 2, Independent Consultant, 01 September 2016; Interview 4, NGO Official, 25 October 2017). The project, which never came to be implemented, was linked to local community allegations of human-wildlife conflicts, particularly with elephants (Interview 4, NGO Official, 25 October 2017). Subsequent field assessments of the proposed Quirimbas Park borders by WWF therefore included Meluco as a potential protected area (Interview 4, NGO Official, 25 October 2017) which, together with other wildlife corridors and habitats, were integrated in the Quirimbas as part of its 'Specific Land Use Zones' (described later on in this chapter) (Harari 2005; Interview 2, Independent Consultant, 01 September 2016).

In terms of civil society engagement, the park was allegedly established based on an "extensive", six-month consultation process involving both local communities and several government departments (Interview 2, Independent Consultant, 01 September 2016; Interview 4, NGO Official, 25 October 2017). In fact, most interviewees and, particularly WWF, pointed out that local community support was the main reason the park was established in the first place (Interview 2, Independent Consultant, 01 September 2016; Interview 3, Independent Consultant, 05 September 2016; Interview 1, NGO Official, 30 August 2016; Interview 4, NGO Official, 25 October 2017; Interview 23, NGO Official, 16 August 2018; MITUR 2010a). Linked to this, Interviewee 2 (Interview 2, Independent Consultant, 01 September 2016) recounted how vital local community claims were in the establishment of the park, particularly those related to fish stock declines and complaints about increasing numbers of 'foreign' fishermen from Nacala and Tanzania making use of the archipelago. Moreover, he emotionally recalled having realised the importance of sanctuaries for local residents following a meeting with communities from Ibo in 2000 as well as a one-on-one conversation with an elderly fisherman also from Ibo. According to the elder, Interviewee 2 reported, 'foreign' fishermen had been destroying the archipelago and particularly Ibo's bay, which was once known to have plenty of fish 'for everyone', due to a sanctuary established there by the Portuguese prior to independence. Through a few interviews with local residents, Interviewee 2 inferred that a sanctuary established by the Portuguese colonial administration had in fact benefited the 'entire' Ibo community – not only the white settler community, but also the *indígenas* – and wanted it replicated without adequately investigating local ecological and fishing conditions of the Ibo bay sanctuary on the one hand, and, more importantly, ignoring the history of fishing and resource use in the Quirimbas. Research material collected as part of the research thesis suggests that the Ibo bay sanctuary was in fact established by the Portuguese colonial

administration, however as a tool to protect Ibo's port against attacks from the inland 'savages' as well as ensure safe navigation to and from the island, and not as a tool to safeguard fish stocks in the Quirimbas (Interview 21, Community Elder, 06 August 2018; Interview 11, Local Government Authority, 02 August 2018), let alone for locals.

Interviewee 2's understanding of 'local problems', coupled with historical landscape imaginations imposed on the Quirimbas archipelago were, however, key determinants in the establishment of the park (Interview 2, Independent Consultant, 01 September 2016):

> When I turned 40 years old, I took my boat sailing out to the islands to spend the weekend there. On the day of my 40th birthday, I woke up in the morning and saw a Western osprey sitting on the main mast of my boat. I put a fishing rod in the water and picked up plenty of xareu[53] and we had a lovely breakfast. We started sailing out again and we saw dolphins; I hung myself off the boat mast, put my hand in the crystal-clear waters, a dolphin came to the boat and I touched him. It was then that I swore I would create a park here (Interview, 01 September 2016).

These accounts by Interviewee 2 illustrate how conservation concepts and/or ideas are subject to or shaped by colonial ideologies, projects and/or Western/hegemonic imaginations of nature. In other words, a sanctuary created by the Portuguese colonial administration to protect Ibo and its white population from the *indígenas* has not only been replicated as a conservation tool within a protected area 25 years following Mozambique's independence, but also ignored or failed to adequately investigate local livelihood practices and strategies associated with those same spaces.

Interviewee 2's dreamy imagination of the Quirimbas islands, coupled with some sort of self-glorification or vanity for having managed to protect a 'public' good (i.e. biodiversity/fish/marine life), while at the same time providing assistance to 'poor and ignorant' local fishermen who are also, coincidentally, unable to help themselves and protect nature 'scientifically', in fact suggests that the park was inspired by external imaginations of the way in which local landscapes ought to look. In other words, Interviewee 2's romantic interpretation/view of the Quirimbas landscapes and predicament of local fishermen is deeply rooted on imaginations of Southern 'idyllic' landscapes offering 'adventurous' travel opportunities as well as 'peace and quiet' away from civilisation. Because these landscapes were perceived to be 'at risk' from resource degradation, it became urgent to protect nature

[53] Xareu is a fish from the Carangidae Family, which is commonly caught in Mozambique.

first and foremost, without acknowledging and/or including local understandings and uses of 'nature' in the Quirimbas, not only by 'local' park residents, but also neighbouring communities and other groups who have been historically utilising the same landscapes and natural resources.

As mentioned earlier, the establishment of the Quirimbas followed a 'bottom-up' consultation approach never experienced before in the history of conservation in Mozambique (Interview 2, Independent Consultant, 01 September 2016; Interview 3, Independent Consultant, 05 September 2016; Interview 1, NGO Official, 30 August 2016; Interview 4, NGO Official, 25 October 2017; Interview 23, NGO Official, 16 August 2018; MITUR 2010a). Whilst interviews with park residents from Ibo[54] as part of this research thesis confirmed that several community consultations were in fact implemented prior to the establishment of the park, and that the community was generally in favour of its proclamation (e.g. Interview 22, Community Leaders, 07 August 2018; Interview 2, Independent Consultant, 01 September 2016; Interview 3, Independent Consultant, 05 September 2016; Interview 1, NGO Official, 30 August 2016; Interview 4, NGO Official, 25 October 2017), community support for the park in the late 1990s and early 2000s was linked to expectations regarding improved fishing conditions, reduced human-wildlife conflicts and alternative livelihood options linked to tourism opportunities (Group Interview 2, Bairro Cumuamba, 02 August 2018; Group Interview 1, Bairro Rituto, 02 August 2018; Interview 22, Community Leaders, 07 August 2018). However, according to high-ranking local government officials, the alleged large-scale community support for the park never really existed and, in fact, they feel the park was established "clandestinely", or "*só para inglês ver*",[55] as it failed to acknowledge and integrate local community needs as well as coordinate its activities with local government structures (Interview 21, Community Elder, 06 August 2018; Interview 11, Local Government Authority, 02 August 2018). "This is very clear today", they claim, as the park is effectively "meaningless" to local residents (Interview 21, Community Elder, 06 August 2018; Interview 11, Local Government Authority, 02 August 2018). Information collected through interviews at the local and national levels also indicate

[54] While community consultations held in Ibo Island were confirmed during field work, the extension of the initial consultations, particularly with regards to those communities located in the terrestrial section of the park, could not be confirmed. Community consultation reports were also unavailable, with WWF suggesting archives on the consultation process were either "too old" or "lost" (Interview 1, NGO Official, 30 August 2016).

[55] *Só para inglês ver* or 'For the English to see', is a common Portuguese expression used for a façade that is created artificially, visually, or on paper, for others (originally, the English) to see. It is apparently an expression that originated in Brazil in the 1800s, when the British put pressure on Brazil and the Portuguese Empire to draft anti-slavery laws linked to the abolition of slavery. These laws were drafted, but never implemented, and served only 'for the English to see', so as to curtail any meddling in Brazil's affairs, whilst slavery carried on as normal (Ciberdúvidas 2019; Significados 2015).

that investigations regarding local livelihood practices and strategies were either missing, poorly gathered, considered irrelevant, or overlooked entirely during the creation of the park, which is likely to have resulted in the marginalisation of its residents (further elaborated in *Chapter 7)*.

6.2.2 Current management and financing

Since its establishment in 2002, the Quirimbas has been managed by the state, with support from local and international NGOs, as well as international funds. Within the first two years of proclamation, the park was formally managed by Cabo Delgado's Provincial Directorates for Tourism and the Environment (MITUR 2010a) with support from local and international NGOs, in particular GECORENA and KARIBO, WWF-Mozambique and CESVI.[56] Formal conservation activities during this period were however scarce and based on voluntary work from NGOs and local community members (MITUR 2010a).

In accordance with Mozambique's conservation legislation requiring all parks to be administered through specific management plans that govern the use and management of natural resources (discussed in *Chapter 5*) (RdM 2014), the Quirimbas' first management plan was drafted by park authorities and WWF-Mozambique for the period between 2002-2008 (PNQ 2012). The first park ranger was appointed in 2004 with the approval of the plan (Nazerali 2019), when the Government of Mozambique signed an agreement with the *Agence Française de Développement*, the *Fonds Français pour l'Environnement Mondial* and WWF-Mozambique to implement the plan's first phase (MITUR 2010a). The second and current management plan was drafted in 2010 and covers the period between 2011-2021 (MITUR 2010a).

The Quirimbas has its own management and administrative body, but receives support from the French and the Italian governments, as well as a few NGOs including WWF-Mozambique, Instituto Oikos and Fundación Ibo[57] (Interview 9, International Development Agency, 13 April 2018; Interview 1, NGO Official, 30 August 2016; Interview 23, NGO Official, 16 August 2018). Whilst a consultative co-management arrangement was initially adopted by the park, including the park administrator and the Quirimbas Development Committee (responsible for providing technical assistance to the park and made up with representatives from the provincial

[56] An Italian NGO.
[57] Both European NGOs.

and local district government, NGOs and local communities) (MITUR 2010a), it was never actually implemented. Changes proposed by the 2009 Conservation Policy (*Chapter 5*) resulted in a new protected area management arrangement in the form of a council, which substituted the previous consultative co-management arrangement. Instead of providing technical assistance, the council assumed responsibility for supervising the park's administration and included representatives from government, the private sector, NGOs and local communities, locally represented by natural resource management councils and community fishing councils. Like the consultative committee, however, the management council was never implemented in practice.

6.2.3 Socio-cultural setting

The Quirimbas lies within the Northern Province of Cabo Delgado and spans an area of 9,130 km^2 including marine and coastal (1,185 km^2) as well as terrestrial environments (7,945 km^2) (MITUR 2010a). The park's buffer zone is a strip of 10 km around its limits, with an area of 5,704 km^2 (MITUR 2010a) (see Figure below).

Administratively, the park covers the entire surface areas of the Districts of Ibo and Quissanga Districts, and parts of the Districts of Meluco, Pemba-Metuge, Ancuabe, Macomia and Montepuez. The marine section of the park covers 11 islands: Ibo, Matemo, Quisiwe, Quirimba, Quipaco, Mefundvo, Quilalea, Sencar, Quirambo, Fion and Rolas Island, as well as the Banco de São Lázaro, a biodiverse rich underwater coral located about 42 nautical miles East of Ibo Island (GRNB 2010).



Figure 6-2 – Location of the Quirimbas (Compiled by Miguel Nazareth 2021)

According to the latest park management plan (MITUR 2010a), the Quirimbas was home to about 154 villages and towns in 2010, of which 102 within park boundaries and 52 in its buffer

zone. There were approximately 166,000 residents in the park in 2010,[58] of which 95,000 (57%) within park boundaries, and 71,000 (43%) in its buffer zone (see Figure 6-3 below). This excludes neighbouring communities and/or people who live outside park boundaries but make use of the park and its natural resources. Human settlements are generally concentrated along the coast and islands, as well as along roads and within administrative district capitals and administrative post seats, particularly those of Macomia, Quissanga and Meluco (MITUR 2010a).

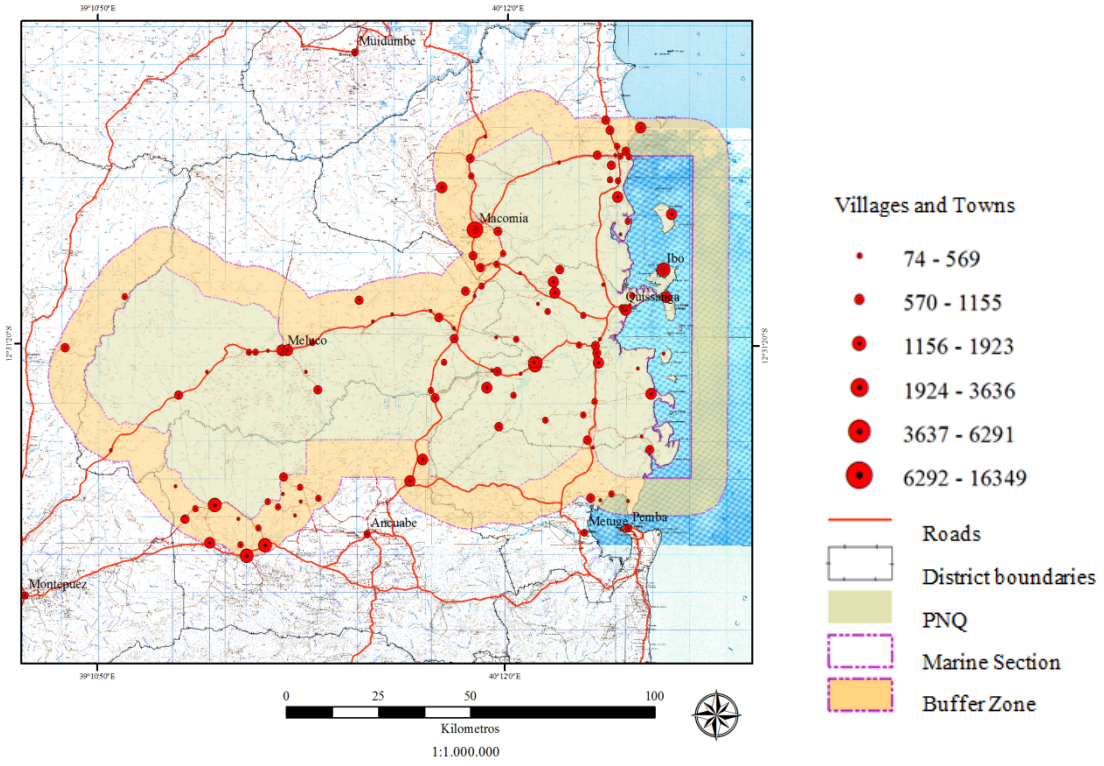


Figure 6-3 – Population density in the Qurimbas in 2010. Source: MITUR (2010a)

Population distribution per district and administrative post in the Quirimbas National Park is presented in Table 6-1 below, indicating higher population numbers in the districts of Macomia, Quissanga and Ancuabe, respectively.

[58] Based on the 2007 national population census and growth projections. Population censuses are carried out every 10 years in Mozambique. Whilst the latest census was carried out in 2017, final results had not been published at the time of writing other than a few national population parameters. However, considering Mozambique's current population growth rate of 3.5% (Feijó & Ibraimo 2018), the actual population numbers in the Quirimbas could be substantially higher than the ones presented here.

Table 6-1 – Administrative division and resident population in the Quirimbas. Source: MITUR (2010b)

District	Administrative Post	Quirimbas	Buffer Zone	Total	% of Admin. Post	% District
Macomia	Chai	-	2,062	2,062	1.2	27.2
	Macomia	3,142	21,765	24,907	15	
	Mucojo	10,642	7,639	18,281	11	
Quissanga	Bilibiza	16,984	-	16,984	10.2	26.1
	Mahate	19,066	1,855	20,921	12.6	
	Quissanga	5,402	-	5,402	3.3	
Ancuabe	Ancuabe	2,762	8,376	11,138	6.7	19.7
	Meza	3,98	17,693	21,673	13	
Meluco	Meluco	12,871	569	13,44	8.1	14.6
	Muaguide	7,896	2,907	10,803	6.5	
Ibo	Ibo	7,726	-	7,726	4.6	6.3
	Quirimba	2,689	-	2,689	1.6	
Pemba	Metuge	2,202	2,968	5,17	3.1	3.1
Montepuez	Nairoto	-	2,615	2,615	1.6	3
	Namanhumbir	-	2,374	2,374	1.4	
Total		95,362	70,823	166,185	100	100

Whilst the park's villages tend to be rural in character, towns are small 'semi-urban' centres typically surrounded by rural/peri-urban areas and villages. Most of these towns display both rural and urban features typical of Portuguese colonial towns designed with 'modern' core areas reserved for the settler population or the *cidade de cimento* (cement city), and surrounded by informal areas with precarious living conditions for blacks (Maloa 2016b; Pinsky 1982), also called the *cidade de caniço* or reed city. Generally, these towns have a small consolidated central area with a road network, water supply system, electricity, phone network (UNICEF 2015), religious facilities, hospital/health centre, schools, commercial areas, and public services as well as restaurants and bed and breakfasts. Peri-urban areas, on the other hand, generally consist of unplanned settlements with low cost-housing and limited to no public services (UNICEF 2015). Outside of these towns (i.e. beyond the peri-urban areas) are typically dispersed rural villages that vary in size, and lag behind in terms of access to services and infrastructure.

Although most conservation areas in Mozambique have resident populations within their boundaries,[59] the Quirimbas is the most densely populated park in the country[60] (Biofund 2021), in addition to having a considerable number of neighbouring communities and/or people who make use of natural resources within its boundaries. From the perspective of park authorities, this makes the Quirimbas a particularly 'complex' park to manage, given the widespread human-wildlife conflicts linked to large numbers of people and wildlife 'competing' for the same land and resources (rather than viewing rural communities 'coexisting' with non-human life) (Interview 7, Independent Consultant, 26 March 2018; Interview 14, Park Official, 03 August 2018; MITUR 2010a), which in essence emanates from a Western-based, binary approach to conservation that dichotomises 'nature' and 'culture' or 'society' (Kashwan et al 2021; West & Brockington 2006; West, Igoe & Brockington 2006).

Like most protected areas in the Global South, and despite being a socio-cultural and populated landscape, the Quirimbas was conceived based on the concept of territories or landscapes for 'nature' and 'wilderness', and not for people. With the establishment of the park, common land uses became classified or rather redefined as 'criminal' or 'inappropriate', particularly those of local/rural/poor communities with natural resource-based livelihoods (Holmes 2014; MITUR 2010a). According to Ingold (2005), this protected area management approach involves the demarcation of fixed borders or fences (which can be abstract or non-physical barriers) around a given area to set it apart from human interaction, and thereby to enclose 'nature'. According to this approach to protected area management, the Quirimbas has been subdivided, reorganised and compartmentalised into 'blocks' or 'containers', some of which for the exclusive protection or enclosure of nature, as is the case of the Total Protection Zones (the landscape compartmentalisation of the Quirimbas is discussed later in the chapter, and has been briefly reviewed in *Chapter 3*). Additional and separate nature blocks are also created under the pretence of allowing other uses (i.e. Specific Use Zones and Community Development Zones), however they function as mechanisms that carefully control and separate land uses in the park, with the ultimate objective of protecting 'nature', to the detriment of rural communities with subsistence-based livelihoods (also explored further below).

[59] With the exception of the Gilé and the Malhazine National Reserves (Biofund 2021).
[60] Followed by the Niassa and Lago Niassa Reserves, respectively (Biofund 2021).

6.2.4 Poverty, vulnerability, and local livelihoods

Poverty is exceptionally high in the Province of Cabo Delgado as a whole, but particularly stark in rural areas such as those of the Quirimbas. Whilst the province shares many similarities with other provinces in the country, it has not managed to reduce poverty at the same rate as the Southern and Central provinces. In fact, the most recent national household survey (MEF 2016) shows that, unlike the Southern and Central provinces, Cabo Delgado is one of three in the country where poverty has actually risen quite significantly between 2009 and 2015, while national poverty levels have decreased from 51.7% in 2009 to 46.1% in 2015 (World Bank 2018). This Northern province remains primarily rural (where poverty rates in Mozambique as a whole are significantly higher than in urban ones[61]) (World Bank 2018), with 76% of its population living within rural communities or villages (GPCD 2016), much like the majority of the Quirimbas' residents. Similar to the rest of the country, rural communities in Cabo Delgado are considered poor, or living in conditions of poverty, when World Bank standards of USD 1.90 per person per day are applied (World Bank 2018).

Rural and urban populations' living conditions tend to differ rather significantly in the Province of Cabo Delgado, as they do in all provinces in the country. Whilst population groups across the country are demographically fairly similar, in terms of human capital, nutrition, access to social infrastructure and services, housing conditions, ownership and access to durable goods, sector and type of employment, connectivity and migration patterns, rural populations lag significantly behind in all these aspects and improvements seem to have stalled (World Bank 2018). Poor, rural households are generally larger than urban ones, and access to basic services and critical infrastructure such as water and sanitation, electricity, transportation, and markets are also significantly lower in rural areas across the country (World Bank 2017a). Only 46.6% of rural households have access to safe water sources, 7.6% have access to sanitation and only 15.1% are connected to the electricity network (World Bank 2017a). In terms of education, most rural schools only offer primary education, and there is a 47.8% lower probability of rural children attending school than urban children (World Bank 2017a). In addition, the World Bank' poverty assessment report (2018) also suggests that a majority of households in the country are likely to be chronically poor (i.e. households who are unable to afford basic food and non-food baskets and are also deprived of at least three of the following human welfare

[61] According to World Bank (2018), nearly 85% of the poor in Mozambique live in rural areas.

measures: access to basic services, education, housing conditions, and ownership of basic assets/goods) live in rural areas (84.9%).

Despite the higher incidence of poverty in Cabo Delgado, living conditions amongst rural communities, however, appear to be fairly consistent with those living in other rural areas across the country (World Bank 2018). This seeming contradiction suggests that poverty indices fluctuate cyclically and are affected by the extreme levels of rural vulnerability in the country as a whole. This vulnerability emanates in part from the fact that rural communities are wholly or largely dependent on subsistence activities/livelihoods, with formal employment in the rural areas being virtually non-existent. In fact, subsistence farming is the predominant activity followed by subsistence fishing, both supported and reinforced by diverse livelihood strategies which make use of locally available resources for food, energy, and income. These include the collection and use of natural/forest resources for consumption such as medicinal plants, grasses, bamboo, vegetables, fruits, tubers, fuelwood, and use in other income generating activities such as the production of honey, handicrafts, charcoal, medicine, and traditional beverages (Nhancale *et al* 2009). Charcoal and firewood, for example, are perhaps the most widely used forest product in the country, as most rural and urban households rely on charcoal for daily energy needs. The 'fuelwood market' in Mozambique is in fact extensive and involves a chain of actors from production, transport, and sale (Ribot 1998) with rural community members usually at the bottom of the profit chain as wood cutters and collectors.

Particularly within the Quirimbas' terrestrial zone, the vast majority of residents are subsistence farmers, utilising small scale, rainfed agriculture with limited to low levels of productivity (MAE 2014a; 2014b; 2014c; 2014d; 2014e; 2014f; 2014g). The lack of diverse and surplus production (main crops grown include cassava, maize, beans, and sorghum) can be partially explained by the fact that small scale farmers are hampered by extreme levels of vulnerability and opt primarily for production linked to sustenance and alimentation (MAE 2014a; 2014b; 2014c; 2014d; 2014e; 2014f; 2014g). Surplus and marketable production is often secondary, and a risk families and communities are less willing or able to take. Whilst productive agriculture in rural Cabo Delgado is impeded by a number of additional structural factors, such as low utilisation of inputs and modern technology (primarily due to lack of availability and high costs); lack of support services, technical assistance, and research; distance to markets, producers geographically dispersed, and separated by poor transportation networks; lack of energy and storage facilities; limited access to finance (GPCD 2016) in addition to declining soil fertility, crops and livestock diseases, insect infestations, volatility of regional price shifts

and natural hazards such as droughts and floods (Norfolk 2004), it is also a prohibited activity within the park's limits, as indicated in its management plan (MITUR 2010a). As such, rural communities are subject to and significantly affected by a whole host of external risks, including environmental factors, and recession and/or economic stagnation at the national level.

Artisanal fishing is the second most prevalent activity among park residents, particularly among coastal communities. It consists of subsistence fishing and gleaning or the collection of a variety of products from the sea, intertidal area, mangroves, and other nearshore areas (AMA & PNQ 2007; MITUR 2010a; Riddell 2017). The most commonly caught resources include fish and octopus, followed by mangrove resources such as prawns, crabs and mollusc species (AMA & PNQ 2007), which are primarily used for household consumption with surplus sold or traded locally if and when available. Other sea products include oysters, sea turtle and shark, which are, however, mainly used for household consumption and, according to AMA and PNQ (2007), may denote a lack of local markets on which to sell these resources, or alternatively, may also be linked to the criminalisation and catch restrictions of turtle and shark with the establishment of the park. More recently, fresh fish and octopus have been increasingly traded, particularly in areas of the park with access to electricity where fresh produce can be conserved in ice as is the case of Ibo Island, which has been connected to the national electricity grid since 2011 (Interview 22, Community Leaders, 07 August 2018; Riddell 2017). Fish is also sold to local lodges, as well as traded in informal markets to both local traders and outsiders, particularly Tanzanians, but also to the *Nacalenses*, migrant fishermen from Nacala in Nampula Province, south of Cabo Delgado (Riddell 2017). According to Riddell (2017), there is usually high demand for fish, octopus, and squid, predominantly by Tanzanian traders, while for sea cucumber and cowries, the market is less frequent.

Most fishermen and women tend to use rudimentary fishing techniques such as homemade harpoons, small nets (seine and gill nets), mosquito nets, lines and hooks, spear guns, traps as well as catch by hand (Wosu 2018). It is mostly women who collect invertebrates in nearshore shallow waters, using a combination of hand gleaning and simple gear such as iron rods, mosquito nets, gill nets (Wosu 2018), as well as buckets and baskets, while men tend to collect deeper water invertebrates using spear guns, lines and hooks, fence traps, beach seine nets, gillnets, and baited traps (Hara & Deru 2001; Capaina 2021). Their fishing radius from the coast is relatively narrow (i.e. up to three nautical miles), and most boats consist of *casquinhas* (small, unmotorised canoes powered by wind), and dhows (RdM 2020). Targeted resources

include a variety of fish as well as crabs, prawns, squid, lobster, and sea cucumber by men (Loureiro et al 2008), while women tend to collect octopus, oysters, and pen shell (Wosu 2018).



Figure 6-4 – Example of an artisanal spear gun (left); local fisherman transporting his catch for sale (centre), and children collecting intertidal products in Ibo's sanctuary, Ibo Island (left and right: Author, 2018; centre: Ana Rodriguez 2017)



Figure 6-5 – *Casquinhas* and dhows typically used by artisanal fishermen in the Quirimbas, Ibo Island (Author 2018)

A number of structural issues inhibit or constrain the growth or transformation from subsistence fishing to productive fishing in the province, such as the lack of appropriate fishing tools and techniques, lack of adequate infrastructure (such as refrigeration and processing and other downstream constraints), a weak market, and difficulty in accessing finance (GPCD 2016).

In terms of employment, according to the most recent household survey (RdM 2018), it is estimated that between 70 to 80% of the Mozambican labour force works in the informal sector. In fact, approximately 40% of Mozambique's GDP is currently produced in the informal private sector, which is one of the highest shares in Sub-Saharan Africa (World Bank 2017). In addition, those working in the informal sector, which constitute the bulk of those actively working in the Province of Cabo Delgado and the Quirimbas, are extremely vulnerable to external shocks, lack access to legal protection, social security, and/or pension benefits. Due to the informal nature of their businesses, they also have no access to formal finance and might find it difficult to recruit skilled labour. These factors limit their ability to grow their activity and contribute further to economic growth and means that their businesses are somewhat precarious.

According to GMSC (2010), employment opportunities in the Quirimbas are extremely scarce, and limited to public sector jobs, the park itself, and the tourism sector. This is fairly typical of rural Mozambique where secure and decent employment with adequate labour conditions are almost non-existent, and where gainful employment exists, wages are often not high enough to enable household members with fixed employment to cover basic household needs (World Bank 2017). Therefore, most park residents adopt a number of additional strategies to supplement household needs, and act as a buffer to lessen the impact of potential shocks. In fact, it is important for most households that members still perform auxiliary functions such as livestock breeding, boat construction, carpentry, small commerce, tailoring, etc. (Riddell 2017) to enable them to sustain themselves and diversify their consumption. Despite this, however, most households remain highly vulnerable and susceptible to shocks.

The low socio-economic status of the rural people of Cabo Delgado Province in general and the park in particular, translates into relatively weak or limited levels of participation in formal governance, with the voices of park residents rarely being heard or having a significant impact on local (including park-level) or national politics. There are limited avenues available for local people to put pressure on government to deliver social services and infrastructure, such as hospitals, schools, roads, etc., particularly into the most remote areas of the province/park . An example of this is the fact that the local community resents the park for not having delivered on their initial promise of improving the main road leading to the provincial capital of Pemba, where people can access better health care, education, markets, etc. (Interview 22, Community Leaders, 07 August 2018; Interview 16, Park Resident, 05 August 2018).

6.2.5 Biodiversity and tourism values

The Quirimbas has been recognised as an area of global priority for conservation due to high levels of coastal, marine, and terrestrial biodiversity (GRNB 2010). Regionally, the park falls under Mozambique's Inhambane-Zanzibar Costal Mosaic Eco-region,[62] which is known to contain high plant species diversity, many of which locally endemic (MITUR 2010a). The park has six key vegetation types, the most extensive of which are miombo woodlands,[63] covering approximately 41% of the park's surface area (MITUR 2010a). At least 46 species of mammals have been reported in the park, including all the 'Big Five' with the exception of rhinoceros (MITUR 2010a), with some registered under Mozambique's list of protected species. The coastal and marine environment has extensive mangrove areas, seagrass beds, and coral ecosystems, with diverse marine fauna including fish, molluscs, sea turtles and marine mammals such as dolphins, whales and dugongs (GRNB 2010), many of which globally or nationally protected.[64] Marine turtles known to occur in the park include the green turtle, but also the olive ridley and hawksbill turtles (Costa et al 2007), all of which protected in Mozambique (RdM 2002) and classified as either endangered, vulnerable or critically endangered by IUCN (2020). With regards to marine mammals, the dugong is also a nationally protected species (RdM 2002) as well as vulnerable under IUCN's red list of threatened species (IUCN 2020), as are all species of dolphins and whales (RdM 1999). The Banco de São Lázaro is considered a well-preserved underwater coral with high fish species diversity and therefore important for tourism, particularly for sports fishing and scuba diving activities (Ibo Island Lodge 2014; RoM 2018).

According to MITUR (2010a), the park's key attributes include: (i) habitat diversity; (ii) excellent/world-class tourism potential; (iii) important fishing grounds for local communities and the Province of Cabo Delgado as a whole; (iv) flagship resident species such as the dugong, marine turtles, and elephants; as well as (v) historical and cultural heritage values. The park's tourism potential is perceived as an important revenue generator and essentially linked to its

[62] The Inhambane-Zanzibar Costal Mosaic Eco-region borders the EAME to the East (WWF 2006), which is discussed in *Chapter 5*.

[63] Miombo forests are the largest tropical woodland in Africa, having high plant diversity and endemism as well as important avifauna and larger mammal diversity (Frost 1996).

[64] Protected species in Mozambique are listed under national laws and regulations as well as international agreements. The Forest and Wildlife Regulation of 2002 lists protected species as well as applicable fines, and makes reference to Appendix I and II of CITES (RdM 2002). The Recreational and Sports Fishing Regulation of 1999 also provides a list of species subject to catch restrictions, as well as protected species. Whilst a more consolidated and updated list of protected species is planned for 2020 (Manjate 2019) as noted in article 46 of the 2014 Conservation Law, this wasn't published at the time this thesis was drafted.

marine and coastal habitats, particularly by international travellers seeking 'remote' and 'pristine' destinations, breath-taking landscapes, white sandy beaches as well as diving and fishing opportunities (Interview 20, NGO Interns, 06 August 2018; Interview 19, NGO Official, 06 August 2018; RoM 2018). In fact, one of the park's key objectives is to stimulate the growth of this sector by developing socially and ecologically sustainable tourism, with a few sites having been identified as potentially suitable for tourism development, particularly along the coast (MITUR 2010a; RoM 2018).

Tourism facilities in the Quirimbas are, however, scarce, and largely concentrated in the archipelago, with high-end tourism lodges in the islands of Quilálea and Matemo[65] as well as mid-range lodges in Ibo. High-end tourism seems to be the focus of the park's strategy, as suggested by Sean Nazerali in Allen (2011, p. 70): "what we want is to bring in visitors who spend a lot but have a limited environmental footprint." The common but misleading association between 'high-end' and 'low impact' tourism assumes that wealthy visitors staying at exclusive five-star hotels/resorts automatically result in reduced pressure over a protected area's resources, and has been generally encouraged throughout Mozambique's island destinations, including the Bazaruto Archipelago National Park (Oceanographic Research Institute 2008).

6.2.6 Perceived threats to the park

Recent research suggests that the Quirimbas National Park is facing severe environmental degradation from human pressure, particularly from resident communities, resulting in reduced fish stocks, loss of important marine and coastal habitats, increased human and wildlife conflicts and loss of forest cover (MITUR 2010a; RoM 2018). Specifically, it has been reported that local community use is critically threatening local mangrove ecosystems due to the extensive collection of wood as building material and firewood for cooking; coral reefs due to the use of improper/'illegal' fishing methods as well as overfishing; and seagrass beds, due to the circulation of an increasing number of boats, use of nets, fishing traps, and the collection of invertebrates (GRNB 2010; MITUR 2010a). Further inland, forest cover and associated wildlife are likewise allegedly being decimated by local communities through forest fires used to clear fields for subsistence agriculture and/or hunting of small mammals, the collection of

[65] The Matemo Lodge has however been closed for refurbishment.

firewood, and 'illegal' hunting for household subsistence (GRNB 2010; MITUR 2010a; 2010b; RoM 2018).

Reports such as these essentially blame local communities or park residents for natural resource degradation in the Quirimbas, pointing them out as a fundamental threat to sound environmental conservation. As explored in *Chapter 2*, narratives such as these are common throughout the Global South, where local/poor/rural communities, who happen to have natural resource-based livelihoods are blamed for the destruction of protected areas and pointed out as the main culprits of environmental degradation (Baines 2021; Blaikie 2006; Branch et al 2022; Brondízio et al 2021; Cañete, Oyanedel & Gelcich 2022; Cruz e Silva n.d.; Dar & Singh 2022; Domínguez & Luoma 2020; Ekpo 2021; Júnior et al 2021; Meher 2022; Munro 2009; Neumann 1995; Olson & Jardel-Peláez 2022; Ramutsindela, Matose & Mushonga 2022; van Uhm & Grigore 2021; Welch et al 2022; Wondu & Wube 2022). Besides being blamed for environmental and natural resource decline, residents of the Quirimbas are also accused of being 'environmentally illiterate' for having or making use of what are perceived to be inadequate and/or unsustainable livelihoods and practices such as the use of mosquito nets or small mesh-sized nets and poisonous plants during fishing, the use of slash and burn agriculture, the use of forest fires and other 'indiscriminate' forms of hunting, hunting for bushmeat, etc. *Sensibilização*, meaning to sensitise the 'ignorant' population to, in this case, environmental matters and the protection of nature, has therefore been adopted as an essential tool by both the park and, in fact, nationwide, and is now part of most natural resource management strategies in the country and individual protected area management plans. This type of discourse or rhetoric and approach to protected area management is very much rooted in colonial views of indigenous people as groups of individuals who are not only ecologically or environmentally destructive, but also lack scientific knowledge to manage resources properly.

While the park has implemented a number of so-called 'win-win' solutions (such as no-take zones which are discussed later in the chapter), it is evident that these rarely involve real devolution of authority to local residents, nor do they provide empowerment or long-term benefits. In fact, the rights of local communities are either removed (e.g. not allowed to fish, hunt or farm anymore) or become ambiguous or precarious (e.g. allowed to fish, hunt or farm if done 'sustainably', for 'subsistence' or 'traditionally'), and they are marginalised both politically and economically from park related affairs (Benjaminsen & Svarstad 2010). Despite the global 'win-win' discourse, in practice, biodiversity conservation gets prioritised over

poverty reduction in cases where the two processes are perceived as being in contradiction or conflict with one another (Benjaminsen & Svarstad 2010). This is also evident throughout the Global South, where protected areas are prioritised by conservation NGOs as a means to maximise the protection of what are "perceived as public goods", that is, wildlife populations or forest cover, "at the expense of other values such as good governance, local rights to land and resources, and poverty alleviation" (Benjaminsen & Svarstad 2010; p. 397). As a result, local communities globally, including throughout Mozambique, are increasingly adopting new livelihood strategies and approaches to either replace lost income from natural resource-based activities (Shmelev 2000), or supplement existing, but considerably weakened ones, which are introduced below and further investigated in *Chapter 7.*

6.3 The containerisation of nature in the Quirimbas

According to Holmes (2014), protected areas in the South "tend to be demarcated and managed in a centralised and top-down manner by a distant authority, mainly the state, but increasingly with involvement from international conservation NGOs and aid agencies" (p. 7). This management approach is applicable to the Quirimbas, which, despite being managed by the state, has had direct (and substantial) involvement from international NGOs (in this case WWF-Mozambique, Instituto Oikos and Fundación Ibo), consultants and aid agencies, who tend to perceive nature/biodiversity at the local levels as something requiring protection for its "intrinsic value on behalf of all humanity", or otherwise for the economic and sustainable development of the country (Holmes 2014, p. 7). According to Grandia and Ojeda (cited in Holmes 2014), this implies that protected areas are demarcated and managed by external actors, which in turn further suggests that the ownership and control of natural resources theoretically resides with them, and not with local/ park residents. This (common) approach to conservation tends to result in protected areas as bounded spaces with fixed borders and rigid management plans conceived externally, instead of "complex, overlapping, and flexible spatialities" that recognise local land uses and the relationships people have with the land they inhabit and the resources they use (Holmes 2014, p. 8).

Most protected areas globally have been designed to create separate/isolated spaces for animals/nature or non-humans and others for humans based on the classic national park model (where a central bounded area prohibits human habitation/use within its limits) or the buffer zone model (where a second bounded zone, in addition to the central one, marks the transition

into human habitation). The Quirimbas has adopted characteristics from both models as it was designed with a series of 'exclusion zones' or 'blocks', which separate humans from nature, in addition to a buffer zone, likely because of the associated mass relocation requirements a classic or buffer model would entail (Interview 8, Independent Consultant, 12 April 2018; Interview 1, NGO Official, 30 August 2016; Interview 14, Park Official, 03 August 2018; Roth 2008). Based on the same principles of disallowing human-cultural environments in a protected area, or separating nature and people, the Quirimbas landscapes were reorganised or containerised according to local biodiversity values as well as human population numbers and distribution. Accordingly, three main 'nature blocks' or zones, in addition to a buffer zone were demarcated, each with a set of legally defined land use categories in areas that may have previously had diverse and overlapping uses, thereby forcing the separation between 'nature' and 'culture'/'society'. With decreasing levels of natural resource protection, the park's zones or blocks are as follows (MITUR 2010a) (see Figure 6-6):

1. Total Protection Zones (TPZ) or core protected areas covering 46% of the park's surface area, and where less than 1% of the park's population live; These blocks are separated into strictly Marine and Terrestrial TPZ;
2. Specific Use Zones (SUZ) covering 13% of the park's surface area with no park residents/human settlements;
3. Community Development Zones (CDZ) covering 41% of the park's surface area and where the large majority (99%) of the park's population live; and
4. Buffer Zone with an extension of 10 km beyond park borders.

Regardless of the resident population per zone, all three blocks and buffer area are used by both park residents and neighbouring communities, in addition to other, more distant users, some of which from Nacala, a district from the Province of Nampula, south of the Quirimbas, and Tanzania, as will be explored later in this chapter.

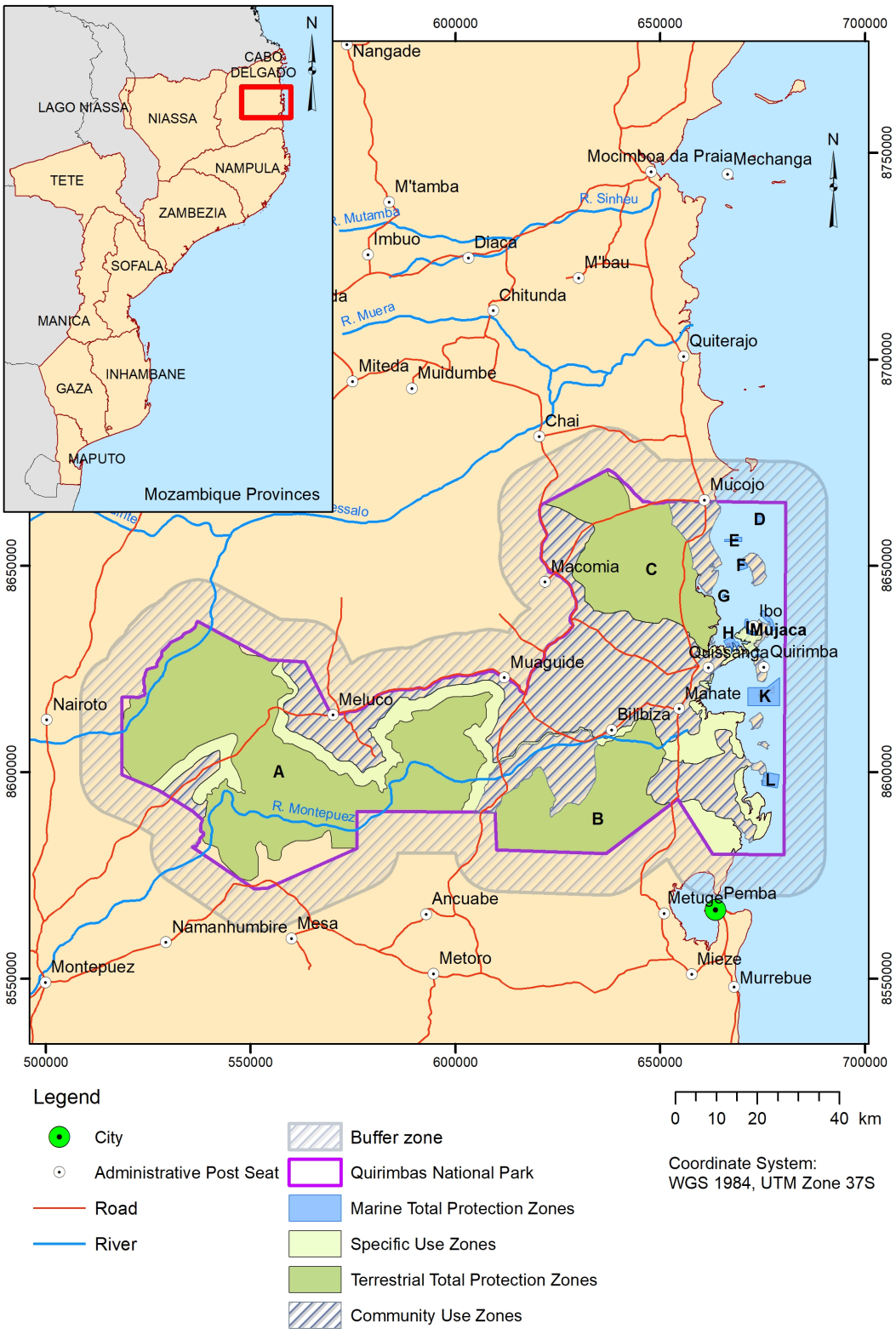


Figure 6-6 – Quirimbas' exclusion zones or blocks (Compiled by Miguel Nazareth 2021)

More specifically, the three blocks and buffer zone are administered according to a set of 'regulated', 'licenced' and 'prohibited' activities that control the use of resources/safeguard natural resources in the park in decreasing order of protection from the TPZ to the CDZ and buffer zone (see Table 6-2).

'Prohibited' activities refer to banned or criminalised activities/practices within park boundaries under all circumstances; 'licensed' activities, on the other hand, require a license issued by park authorities or other relevant government body prior to implementation,[66] and, while no authorisation from the park is required to implement 'regulated' activities, these must abide by specific management instruments such as the park management plan, the park's internal regulation or specific community development strategies and district plans. While the CDZ (where most residents live) are subject to less restrictions when compared to the SUZ and the TPZ, all three blocks have adopted mechanisms that significantly restrict and control local communities' access and use of natural resources including land, forests, mangroves, wildlife, rivers, and fisheries, as well as limit people's possibilities in terms of income generation and growth. Moreover, local livelihood strategies and common practices have become redefined with the establishment of the park; hunting and fishing, for instance, have become redefined as 'poaching', natural resource use has become redefined as 'stealing', park access or access to the Total Protection Zones has become redefined as 'encroaching', and socio-cultural landscapes redefined as 'wilderness' areas, 'wildlife corridors' or 'sanctuaries' (Holmes 2014).

As argued by Roth (2008), this type of protected area zonation is rooted in 'abstract space' where external actors, in this case NGOs, consultants and the state attempt to reorganise local landscapes to conform to a model of idealised or 'abstract' landscapes or land use that not only dispossess communities from their land and access to resources, but create fixed boundaries that separate people from nature/their livelihoods and opens up space for conflicts between local residents and the park administration/state/NGOs. Roth's analysis is also in line with Ingold's (2005; 2006) argument that protected areas are designed as enclosed spaces that organise nature or landscapes into blocks, prisons, or containers with set boundaries, instead of horizons, thereby resulting in the disconnect or disassociation between nature and society.

[66] According to the park management plan, licensing processes are to be implemented according to specific internal park regulations (MITUR 2010a), which are, however, yet to be developed by the park.

Table 6-2 – Permitted activities in the TPZ, SUZ, CDZ and buffer zones. Source: Quirimbas (2013); RoM (2018)

Decreasing levels of control and protection	Decreasing levels of control and protection			
	Total Protection Zones	**Specific Use Zones**	**Community Development Zones**	**Buffer Zone**
Prohibited Activities	• All activities generally prohibited in a national park[67] and not expressly included in the regulated and licenced activities below	• Same as for TPZ, in addition to sports hunting, logging/use of logs by local communities for sale; agriculture; sale of bush meat; forest exploration; mineral resource exploration; medium and large-scale industrial facilities; housing and human settlements; hunting with arms, traps and forest fires	• Sports hunting, forest exploration, exploration of mineral resources and hydrocarbons, medium and large-scale industrial facilities; industrial and semi-industrial fishing; fishing of protected species of whales, dolphins, rays, marine turtles; hunting with prohibited methods such as arms, traps and forest fires; building of housing for non-residents	• Large scale mining; fishing of all protected species of whales, dolphins, rays, marine turtles; industrial and semi-industrial fishing; hunting with prohibited methods such as arms, traps and forest fires; medium and large-scale industrial facilities; surveying and exploration of hydrocarbons
Licensed Activities	• Ecotourism facilities; scientific research and non-extractive carbon sequestration	• Ecotourism facilities; scientific research; wood extraction for community use or carpentry (wood processing); sustainable mangrove use; use of rock for construction by local communities; subsistence hunting for traditional ceremonies/medicine	• Ecotourism facilities; scientific research; wood extraction for community use or carpentry (wood processing); sports fishing; subsistence hunting for traditional ceremonies/medicine; use of rock for construction by local communities; small and micro-scale industrial facilities	• Ecotourism facilities; scientific research; artisanal fishing with appropriate gear and respect for protected species; wood extraction for community use or carpentry (wood processing); sustainable extraction of non-wood forest resources; sports hunting and fishing; use of rock for construction by local communities; small scale mining and logging

[67] Activities prohibited in Mozambique's national parks other than for scientific or management reasons, include: (a) hunting, forest, agricultural and mineral exploration, animal rearing; (b) mineral prospecting and surveying; (c) any work that may change local terrain, vegetation characteristics or result in water pollution; (d) any act that may disturb ecological processes, flora, fauna and cultural heritage; e) introduction of zoological species (RdM 2014).

	Decreasing levels of control and protection →			
	Total Protection Zones	**Specific Use Zones**	**Community Development Zones**	**Buffer Zone**
Regulated Activities	• Non-extractive ecotourism activities (e.g. foot safaris, birdwatching, photography, swimming, scuba diving, snorkelling, etc.); park management activities (e.g. patrolling and monitoring 'illegal', regulated and licensed activities, etc.)	• Same as for TPZ, in addition to the sustainable use of non-wood forest resources such as fruits, mushrooms, medicinal plants, among others	• Same as for TPZ in addition to subsistence agriculture and cattle rearing; subsistence and artisanal fishing with recommended fishing gear and respect for protected species; sustainable use of non-wood forest products; development of social infrastructure; housing for park residents	• Same as for TPZ in addition to scientific research; subsistence agriculture and cattle rearing; development of social infrastructure; housing

6.3.1 Total Protection Zones as landscapes of exclusion and fear

According to the park management plan, Total Protection Zones were demarcated based on the following criteria: (i) 'intact' and representative habitats; (ii) areas with high biodiversity values; (iii) areas with rare, threatened or endangered species; (iv) marine areas with mangrove, seagrass beds and coral ecosystems; (v) important areas for wildlife migration and vegetation; (vi) important areas for endemic, rare and threatened species; (vii) areas requiring protection and reintroduction of wildlife; (viii) areas with no permanent human settlements; and (ix) suitable areas for ecotourism development (MITUR 2010a).

In line with these values, TPZ are core conservation areas where no human activities are allowed other than for scientific, ecotourism and park management reasons, and therefore subject to the highest level of natural resource and ecological protection from 'human disturbance' (MITUR 2010a). Common livelihood subsistence strategies/practices such as hunting, forest use, farming and animal rearing, fishing and the collection of seafood products are strictly prohibited and criminalised in these core areas of the park, as are human settlements and any activity deemed to 'disturb' ecological processes and biodiversity values (Group Interview 2, Bairro Cumuamba, 02 August 2018 Group Interview 1, Bairro Rituto, 02 August 2018; Interview 14, Park Official, 03 August 2018; Interview 18, Park Officials, 06 August 2018; MITUR 2010a; RoM 2018). Licensed activities, on the other hand, are restricted to ecotourism facilities, scientific research, and carbon sequestration projects, while regulated ones include ecotourism activities such as foot safaris, birdwatching, photography, snorkelling, etc., and management activities by park authorities. Monitoring, policing, and patrolling practices are theoretically more stringent in these areas of the park where resource protection is also the highest (Group Interview 1, Bairro Rituto, 02 August 2018; Group Interview 2, Bairro Cumuamba, 02 August 2018; Interview 14, Park Official, 03 August 2018; Interview 18, Park Officials, 06 August 2018; MITUR 2010a; RoM 2018).

There are 13 TPZ in the park, of which three are terrestrial and ten are marine. Terrestrial TPZ are large nature blocks named A (the largest of the three), B and C (the latter covering a small coastal section apart from the terrestrial environment) (refer to Figure 6-6 above) which, all together, cover three villages with a total of 700 inhabitants or less than 1% of the park's population (MITUR 2010a). Given that no human settlements are allowed in these blocks, it is the park's intention to resettle resident households into the Community Development Zones through the provision of incentives such as transport, social infrastructure, housing, and farming plots (MITUR 2010a). To date, however, no resettlement activities have been

implemented in the Quirimbas. Although varying in size, marine blocks are generally smaller than their terrestrial counterparts, and mostly located in the District of Ibo. In these TPZ, also known as 'marine parks' or more commonly as 'sanctuaries', fishing and natural resource collection/use is prohibited, irrespective of whether practiced for subsistence or commercial purposes (RdM 2013). Although no communities live directly within the marine blocks, they have functioned historically as essential areas for subsistence fishing and the collection of seafood products for local communities living in the SUZ, the CDZ, buffer zone and outside park borders.

From a conservation perspective, the management approach adopted in the TPZ suggests that these blocks should ideally consist of 'empty lands' (i.e. without resident communities or natural resource users) set exclusively aside for 'nature' to be enjoyed and consumed by tourists, scientists and conservationists. Whilst these blocks are the most scarcely populated areas in the park (thereby suggesting lower levels of conflict between conservation objectives and local uses), a large number of residents are in fact dependent on these areas for subsistence fishing, farming, hunting and the collection of forest products and other natural resources. This was confirmed by both park officials and local residents alike, who complained that most areas declared as TPZ with the establishment of the park – such as wildlife corridors in the terrestrial section of the park and marine sanctuaries in the marine part – were in fact important/key farming and fishing areas for local residents and other natural resource users (Group Interview 2, Bairro Cumuamba, 02 August 2018; Group Interview 1, Bairro Rituto, 02 August 2018; Interview 22, Community Leaders, 07 August 2018; Interview 14, Park Official, 03 August 2018), as is explored below.

6.3.1.1 The case of sanctuaries

According to the Conservation Law of 2014, sanctuaries are either public or private areas intended for the reproduction, shelter, feeding, and research of fauna and flora species (RdM 2014). They may be established either within or outside protected areas, and their resources exploited under a special license (albeit still to be formally regulated), except for protected species, and provided they are in accordance with the management plan of said protected area as well as the Conservation Law (RdM 2014). According to the Quirimbas management plan, however, marine sanctuaries correspond to or are classified as 'Total Protection Zones', where no fishing is allowed throughout the year under any circumstance (Interview 14, Park Official,

03 August 2018; MITUR 2010a; RoM 2018). Specifically, their main purpose is to protect threatened or endangered species from direct catch, prevent damage to habitats, allow for the recovery and restoration of ecosystems and fish stocks (Interview 14, Park Official, 03 August 2018; MITUR 2010a; RoM 2018) in addition to enabling top-class, international diving/snorkelling experiences for tourists (MITUR 2010a). Associated benefits include the protection of spawning sites and consequent yield maintenance and/or improvement of fishing grounds, both within sanctuaries and adjacent areas (Costa Pires 2013).

Whilst nine marine sanctuaries (named blocks D to L)[68] were initially established in the Quirimbas in the early 2000s (see Table 6-3 below for a list of sanctuaries in the park), research material indicates that new areas have been gradually added to the park's TPZ, albeit in the form of 'co-management' or 'win-win' arrangements with local residents. These include not only *zonas de veda* or 'no-take zones', but also *santuários comunitários* or 'community sanctuaries'. Although conceptually different to sanctuaries, these new areas (13 no-take zones and one community sanctuary in total) in essence serve the same purpose as any regular marine TPZ given that community access is restricted, albeit temporarily for the case of *zonas de veda* (see below for a discussion on how no-take zones compare to sanctuaries), but permanently within 'community sanctuaries'.

Table 6-3 – Interpretation of current/active sanctuaries in the Quirimbas in relation to the originally established 'blocks', main purpose and year of establishment. Source: Interview 22, Community Leaders, 07 August 2018; Interview 15, NGO Official, 04 August 2018; Interview 23, NGO Official, 16 August 2018

Current sanctuaries	Corresponding block	Year of establishment	Purpose
Sencar and Quilálea Islands	K	2001	Generic
Ibo's mangroves (between Tandanhangue on the mainland and Quirambo)	H	2002	General, but particularly mangroves
Ibo Port	I	2002	General
Matemo Island (an area West of the island)	F	2003	General
Mussemuco (part of the coastal habitat in Mussemuco locality)	G	2003	General, but particularly oysters and crabs

[68] Sanctuaries were termed D to L back in 2002 when the park was created, but had different denominations at the time of writing.

Current sanctuaries	Corresponding block	Year of establishment	Purpose
Arimba	L	2003	General
Quirimba Island	J	2002	General
Rolas Island	E	2004	General
Zala Bank	D	2007	General
Mujaca or Golfinho	N/a	2015	General, but particularly dolphins and established as a 'community sanctuary'

A WWF initiative, the Mujaca/Golfinho[69] is the only 'community sanctuary' in the park established primarily as a tourist attraction/dolphin spotting site (Muaves 2018; Muaves & Gobo 2017a; Muhamade 2018). While created in 2015 with the help of the community and specifically for the community to assume management, no trickle-down effects have been experienced at the community level (Interview 22, Community Leaders, 07 August 2018). In fact, the community has been excluded from the initially agreed co-management arrangements with the park, and the sanctuary is now under the direct supervision of the park alone (Interview 22, Community Leaders, 07 August 2018; Muhamade 2018). In other words, although initially established as a project under the auspices of providing benefits to the local community, the Golfinho sanctuary is now officially part of the park's network of TPZ[70] and the community has lost permanent access to yet another historically important/productive fishing ground in the Quirimbas, in a process of encroachment (of the park on community zones) through duplicity.

As TPZ or 'exclusion blocks', the only activities allowed within sanctuaries are ecotourism and scientific research projects, with subsistence livelihoods (e.g. fishing and the collection of seafood products) essentially criminalised. This is reflected in most sanctuaries within the archipelago, where tourists can enjoy recreational activities such as swimming, snorkelling, canoeing and finding muse, while local residents are excluded and their utilisation criminalised, in part to enhance the experience of external actors, as clearly explained by a local NGO official: ''tourism is linked to dolphins, mangroves and habitats, so we need to ensure these areas [sanctuaries] are well taken care of <u>for tourists</u> [emphasis added]'' (Interview 17, NGO Official, 05 August 2018). In fact, roughly within a year following the creation of the Quilálea and Matemo sanctuaries in 2001 and 2003 respectively, high-end tourism lodges were established adjacent to them (Expert Africa n.d.), precisely to enhance the tourist experience

[69] Golfinho in Portuguese means 'dolphin', which is regularly spotted in this sanctuary (Folha de Maputo 2016).
[70] Albeit not mentioned in the park's management plan (MITUR 2010a).

of 'nature' and 'idyllic landscapes' devoid of people. Furthermore, the park's first management plan from 2004 lists the Mujaca/Golfinho sanctuary as a key area for tourism development (MITUR 2010a), while Zala Bank, Matemo, Rolas, Ibo and Quilálea islands, all of which with established sanctuaries at the time of the study, are listed as the best diving sites in the Quirimbas archipelago (Mozambique 2021), once again suggesting they were planned based on their potential to offer recreation and 'purely natural experiences' for tourists.

According to park residents, all 10 sanctuaries in the Quirimbas have been identified and demarcated by WWF and park authorities through direct consultation with local fishermen and, particularly, the Community Fishing Councils (CFC) (Interview 22, Community Leaders, 07 August 2018; Interview 2, Independent Consultant, 01 September 2016), which are community-based organisations that assist the government in the management of fishing resources at the local level[71] (RdM 2006; World Bank 2019). What this means is that local knowledge systems or forms of local ecological knowledge regarding fish resources and fishing grounds were used or relied upon by external actors to identify and set up sanctuaries in the Quirimbas, with (false) promises of improved catches for local residents (Group Interview 1, Bairro Rituto, 02 August 2018; Interview 22, Community Leaders, 07 August 2018). Although not all sanctuaries are demarcated with buoys, participant interviews in Ibo confirmed that the entire community (and in particular fishermen and women), is well aware of their location and boundaries. The reason, as explained by the *Secretários de Bairro* (Interview 22, Community Leaders, 07 August 2018) and most local interviewees, is that "these areas [sanctuaries] would not have been identified in the first place if it weren't for us, the community." However, and despite community support for the park, local residents have been excluded from the same spaces they not only helped create in the first place, but have also historically managed, as seen in many conservation areas globally and, particularly in the South, as explored in *Chapter 2* (Neumann 1998; Robbins 2012). Ethnographic research at the community level on Ibo Island further indicated that despite community cooperation in setting up sanctuaries, no formal compensation for the loss of rights to fish or make use of sanctuaries was ever provided by the park[72] (Group Interview 1, Bairro Rituto, 02 August 2018), despite the effects this might have

[71] There are several CFC along Mozambique's coast and 13 in the District of Ibo alone (IDEPA 2018).
[72] According to park officials – and although refuted by local residents – household compensation linked to the closure of fishing grounds was in fact provided in the form of temporary food dispensation (Interview 18, Park Officials, 06 August 2018), which in any case is an unjust form of compensation for the type of loss incurred by local residents.

had in terms of reduced food security, loss of power and alienation from natural resource management and increased poverty.

Focus group discussions with park residents also suggested that the community feels or senses that sanctuaries in the archipelago are increasingly 'expanding' or 'encroaching' into their lands/spaces, and that there is a growing number of fishermen in the park (Group Interview 2, Bairro Cumuamba, 02 August 2018; Group Interview 1, Bairro Rituto, 02 August 2018; Interview 22, Community Leaders, 07 August 2018). According to the community, this not only decreases available areas in which to fish, but also lowers overall catches per unit effort, placing a significant strain on their ability to sustain themselves and their families (Group Interview 2, Bairro Cumuamba, 02 August 2018; Group Interview 1, Bairro Rituto, 02 August 2018; Interview 22, Community Leaders, 07 August 2018). Common grievances with regards to sanctuaries denote a distinct disassociation or disconnect between the park/conservation objectives and resident communities: "the park is attacking our fishing grounds" (Group Interview 2, Bairro Cumuamba, 02 August 2018), or

> When we heard about this meeting,[73] we got scared because we thought that it was the park coming to take away the remaining areas that we still have available to fish. We thought they were calling us to inform us that more sanctuaries would be established (Group Interview 2, Bairro Cumuamba, 02 August 2018).

The way in which local residents expressed themselves during the interviews clearly suggests that they perceive this space/landscape as their home and their land, while the park comprises something else detached from their reality and, in fact, imposed on them. In other words, it is a park for others – tourists, conservationists, the government but not for local residents, as they feel neither included nor genuinely listened to regarding park-related concerns.

Figure 6-7 below provides a closer look at the park's sanctuaries or spaces that have been "fenced off" to local residents (i.e. sanctuaries), in an attempt to visually demonstrate the way in which the "the park is attacking [or violating local residents'] fishing grounds", as verbalised by community members (Group Interview 2, Bairro Cumuamba, 02 August 2018). The disconnect between local people's needs and conservation objectives is significant and seemingly unrecognised by park authorities and local/international NGOs, who believe that the reason why locals continue to fish 'illegally' in sanctuaries is not because of necessity, but

[73] Referring to the focus group discussion organised during fieldwork as part of this research thesis.

because they are greedy: “they just want to catch bigger fish and have higher returns, it is not because they lack places in which to fish” (Interview 17, NGO Official, 05 August 2018).

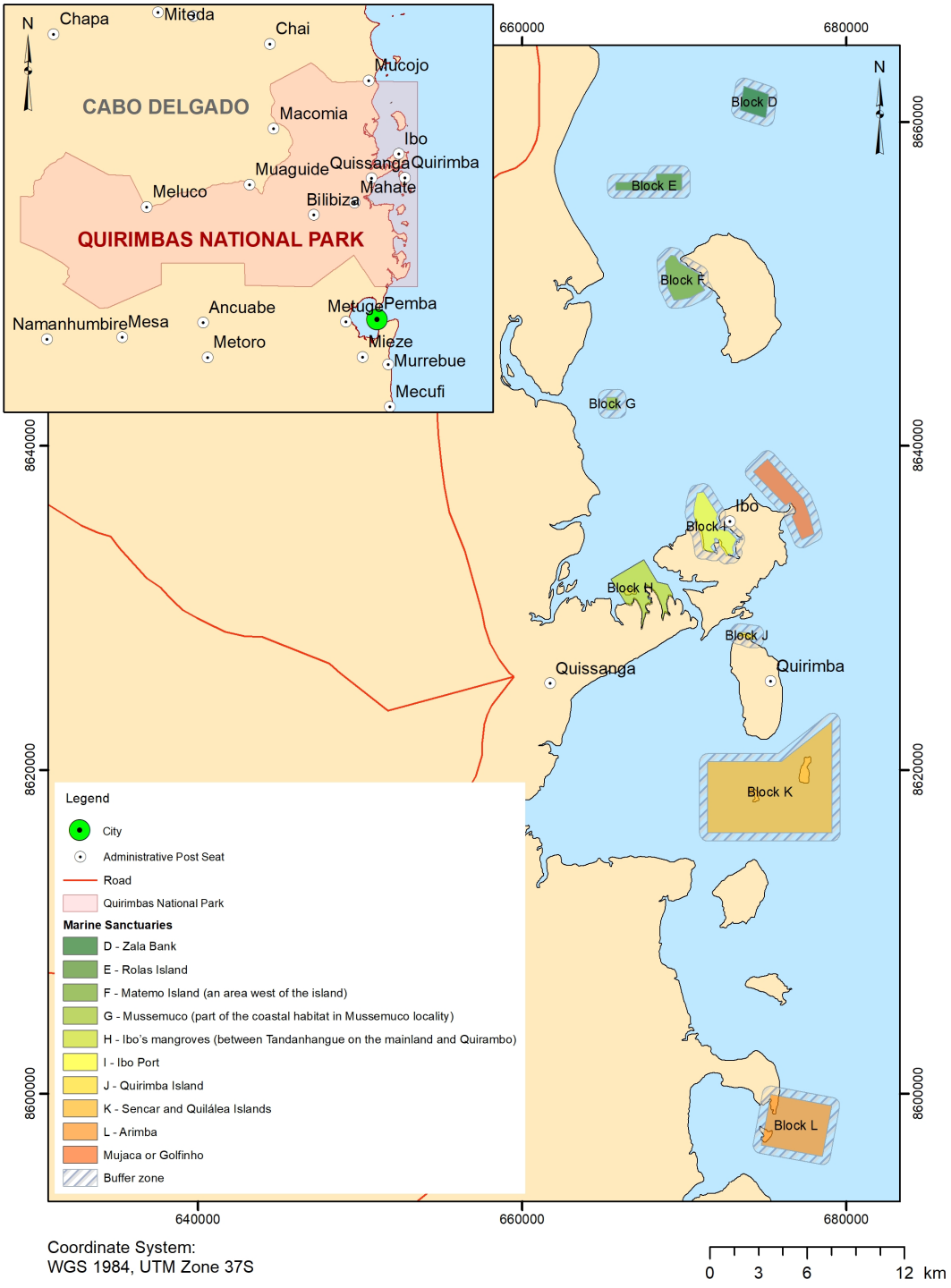


Figure 6-7 – Park’s ‘attack’ or encroachment on local residents’ fishing grounds (Compiled by Miguel Nazareth 2021)

6.3.2 Specific use zones as confined landscapes

Specific Use Zones (SUZ) are the smallest of all three key zones and have an intermediate level of resource protection when compared to TPZ and CDZ (MITUR 2010a). There are no resident communities in the SUZ, and human habitation is prohibited. Criteria used by park authorities to demarcate SUZ included, *inter alia*: (i) relatively 'intact' areas with representative habitats; (ii) areas with important levels of biodiversity; (iii) mangrove areas; (iv) important areas for meso and megafauna; and (v) areas where specific levels of resource use are considered viable, as long as the ecological integrity of the park is maintained. According to park authorities, the main conservation goal in the SUZ is "to maintain ecological conditions", which requires robust policing and patrolling practices to rapidly act upon "illegal activities and eventual human invasion" (p. 40).

Essentially, SUZ are subject to land use and livelihood restrictions perceived to be a threat to the park's integrity and include, among others, farming, forest exploration, logging and the sale of wood, non-'traditional' forms of hunting (i.e. through the use of arms, traps and/or forest fires), sale of bushmeat and housing/human settlements. Subsistence activities perceived to be 'particularly important' to local community needs are allowed in the SUZ, albeit subject to licensing arrangements by the park. These include the use of wood forest products (albeit only for domestic use by resident communities of the CDZ – thereby excluding neighbouring communities – and/or for wood processing prior to sale);[74] 'traditional' forms of hunting[23] (understood of as small-game hunting and foraging for use in 'traditional' ceremonies and 'traditional' medicine, through the use of 'traditional' hunting gear such as spears, bow and arrow and nets and traps made with natural materials), as well as the use of mangrove trees/forests for the construction of houses and boats for park residents and/or clearing to maintain existing accesses. Regulated activities are comparable to those allowed in the TPZ, in addition to the collection of non-wood forest products such as honey, firewood, medicinal plants, etc., by local/park residents (i.e. excluding neighbouring communities and/or other 'foreign' natural resource users).

Despite the reduced levels of patrol and natural resource protection in the SUZ when compared to the TPZ, these areas are still subject to restrictions that physically and economically displace as well as criminalise local communities/natural resource-dependent livelihoods, in addition to

[74] And according to specific quotas set by the park.

fostering divisions by excluding neighbouring communities and/or other natural resource users, who are identified as 'foreign' and therefore 'illegitimate' park users.

6.3.3 Community development zones as controlled and fixed landscapes

Unlike the SUZ, which are mainly terrestrial, Community Development Zones (CDZ) cover both terrestrial and marine environments. Terrestrial CDZ are areas located around villages, towns, roads, and all inhabited islands in the Quirimbas, while marine CDZ cover an area ranging from 3 to 20.5 km from the coastline. Ninety-nine percent of the park's population live in the CDZ where, according to the park management plan, people are required to live "in harmony with nature" and use resources "sustainably" and/or "for subsistence" only (MITUR 2010a; p. 42; RoM 2018). Although a wider range of regulated and licensed activities are permitted, including subsistence farming and cattle rearing, subsistence and artisanal fishing, sustainable extraction of non-wood forest products, housing for local residents, subsistence hunting, wood extraction for community use and/or carpentry/wood processing, subsistence hunting for 'traditional' ceremonies/medicine, among others, the CDZ are still subject to similar restrictions to those in the SUZ and TPZ.

Prohibited or criminalised activities in the CDZ include, among others, the use/catching of marine protected species (including whales, dolphins, rays, marine turtles and certain species of fish), the use of common/locally available fishing and hunting techniques and gear (such as forest fires and prohibited fishing gear)[75] and, in an effort to curb the influx of people into the park, so is the establishment of housing infrastructure for 'non-residents' (RoM 2018). Other criminalised activities that prevent local residents from growing economically include sports fishing and hunting, forest concessions or logging, as well as industrial and semi-industrial fishing activities (RoM 2018). These restrictions, in essence, mean that local livelihoods are severely eroded, and park residents marginalised and prevented from potentially growing their businesses and/or improving their living standards, as no suitable alternatives are provided. According to the land use requirements within the CDZ, local fishermen and women and/or farmers, for example, are not allowed to develop their activities beyond 'subsistence' by investing in larger/better equipment and gear should they wish to, and/or have the opportunity to develop their fishing or farming businesses. Besides restricting and controlling the way in

[75] Which includes small mesh size nets, shark nets, beach seining, use of poisonous substances during fishing, fishing with explosives and other gear which can break coral, use of nets over coral bottoms and prawn fishing with small mesh sizes (MITUR 2010a).

which local residents carry out their lives, communities are also placed on the same playing field as private investors, as they are required to, according to the park management plan and other legal instruments pertaining to natural resource use, develop 'business or management plans' to prove the 'sustainability' of their activities, in addition to having to pay a number of fees for licenses, should they wish to use natural resources 'commercially'.

Given that the majority of park residents live in the CDZ, it is here that activities related to the dissemination and enforcement of legal provisions regarding natural resource use are generally concentrated (RoM 2018) which, in the park's coastal and marine area, relates specifically to crimes and punishment with regards to the use/catch of protected species, use of marine sanctuaries and prohibited fishing gear. Ethnographic research at the local level also determined that processes of violence and criminalisation through discourse (explored in *Chapter 2*) are particularly salient in these zones of the park, where local residents (in addition to 'foreign' fishermen, as discussed in *Chapter 7*) are targeted and criminalised through language and rhetoric for having 'unsustainable' livelihood practices. 'Ignorant', 'primitive', 'thieve', 'poacher', 'illegal' and 'criminal' are all frequent terms employed by park guards, NGO officials and conservationists when referring to local residents, which reflects a continuity with the historical and social construction of local/black communities as 'environmentally destructive', 'unscientific' and therefore 'ungenuine' residents of protected areas.

6.3.4 Buffer Zone

The buffer zone corresponds to a 10 km strip of land around park borders, where land use practices are restricted to activities perceived to protect and maintain biodiversity within the park's core areas. While restricted activities are less stringent than those in the other three zones, the use/catch of protected species and hunting with non-'traditional' gear/means are still prohibited and criminalised. Sustainable farming and animal rearing, as well as non-extractive ecotourism activities and housing, are subject to specific management instruments, such as the park management plan, while licensed activities include artisanal fishing with allowable gear, sustainable use of non-wood forest resources, as well as wood for local community use and carpentry.

Overall, what this landscape reorganisation of the Quirimbas has effectively created, is that communities now find their homelands and/or ancestral homes as limited or no longer able to

support their continued existence, and their legal rights to land and natural resources withdrawn or, at best, made ambiguous, depending on the level of natural resource protection in the park's 'nature blocks'. They are no longer legally allowed to farm, fish, or hunt freely within the best farming and fishing grounds in the Quirimbas, and are forced to travel further afield (specifically outside the TPZ, but also the SUZ, CDZ, buffer zone and even outside park boundaries) in order to re-establish fields for subsistence farming, fish and utilise forests,[76] or else risk being sent to prison and/or fined. In addition, local residents are no longer legally permitted to expand their homes or homesteads and/or construct new homes/structures for their family members (children, husbands/wives, elderly, etc.) in some areas of the park, while 'non-residents' are entirely excluded from the landscapes, which they rely upon for subsistence.

6.3.5 The ongoing compartmentalisation of the Quirimbas landscapes

In an ongoing process of 'containerisation' of nature, the latest park management plan (2011-2021)[77] makes reference to two additional (sub-)zones to be integrated in the marine section of the Community Development Zones. These include: i) Rotational Extraction Zones; and ii) Periodical Extraction Zones, which can be seemingly established at the request of local communities with the objective of benefiting local residents, albeit with the support of the park and, if relevant, other local authorities (RoM 2018). As opposed to the TPZ, where access is permanently restricted, access to these subzones is temporarily and spatially restricted; in other words, they can be periodically opened and closed to resource extraction (temporal restriction), or alternatively have both opened and closed sections within the same zone (spatial restriction).

A number of such subzones, locally known as *zonas de veda* or temporary no-take zones (discussed below) have been recently established in the park. Research conducted as part of the study suggests they have been randomly demarcated and established by different interested parties – in this case local NGOs, the park itself, or the community – with no formal registration procedures nor coordination regarding their location and boundaries (RoM 2018). Furthermore,

[76] It is important to note that the Mozambican Constitution and Land Law entitles all Mozambicans to occupy and utilise land not under title, as long as the land is utilised in good faith. This means that – in theory – communities living in the TPZ should have been granted land use rights and/or titles outside the TPZ (still within the park) for their continued subsistence as their rights to utilise the land within the TPZ have been rescinded. This process should have been followed through in accordance with the legislation and policy framework on resettlement. It is evident, however, that no land has been granted.

[77] Although the current park management plan has expired (i.e. in 2021), information collected at Biofund in 2022 suggests that a new management plan for the next 10 years is not yet under elaboration given the current situation in northern Mozambique.

local interviews and focus group discussions in Ibo suggest a lack of understanding (by both residents and park guards/NGO officials) with regards to the way in which these areas are or should be implemented and managed (Group Interview 2, Bairro Cumuamba, 02 August 2018; Group Interview 1, Bairro Rituto, 02 August 2018; Interview 15, NGO Official, 04 August 2018; Interview 17, NGO Official, 05 August 2018; Interview 18, Park Officials, 06 August 2018). In practice, this means that, while approached as replicas of TPZ or sanctuaries, particularly with regards to applicable crimes and punishment, *zonas de veda* are also accompanied by a 'win-win' or 'community ownership and benefit' narrative, as further explored below.

6.3.5.1 Replicating exclusionary spaces for the 'benefit' of park residents: the case of temporary no-take zones

In spite of the violent restrictions sanctuaries have had on local residents, their replicas, or *zonas de veda*, have been established in the park since 2017 based on reportedly successful outcomes of similar arrangements in the coastal area of Quiwia[78] (AMA & PNQ 2007; Samoilys 2016). In the Quirimbas, no-take zones are temporarily closed-off to fishing for a period that varies between four and 12 months, and then reopened for periods of between three and 30 days (Costa Pires 2013; Interview 23, NGO Official, 16 August 2018; Muaves 2018), as opposed to sanctuaries which are permanently closed. In theory, they are identified, established, and managed by the community itself (while sanctuaries are established by the park, albeit identified with the help of the community), with the park providing patrolling during closed off periods in collaboration with local community members, and NGOs their expertise and knowledge on the technical feasibility of these zones (Group Interview 2, Bairro Cumuamba, 02 August 2018; Group Interview 1, Bairro Rituto, 02 August 2018; Interview 22, Community Leaders, 07 August 2018).

According to Blue Ventures (2016), a UK-based conservation organisation working with coastal communities in the tropics to develop locally suitable marine conservation approaches and initiatives, the temporary closure of fishing grounds – particularly for certain species with fast reproductive rates such as the octopus, a key source of income and subsistence for local residents in the Quirimbas and specifically caught by women – can result in increased catches

[78] Located north of the Quirimbas, where a *zona de veda* was established by Blue Ventures in partnership with a local NGO in 2015 (AMA & PNQ 2007; Samoilys 2016).

per fisher per day, provide higher return in investments and, ultimately, increased village income. Within Mozambique's context, Muaves (2018) documents the way in which temporary no-take zones specifically demarcated for octopus in the Quirimbas have resulted in double catch-sizes in one single day after reopening, oftentimes extending for periods of up to 30 days. She further suggests that, in addition to improvements in octopus catches, other unrelated species reappear during closure, thereby improving local biodiversity values. Temporary no-take zones are also said to work better in areas where a given resource is fished widely and is economically important to the community (such as octopus in the case of the Quirimbas and Madagascar, where Blue Ventures mainly operates), as well as where declines in catches have been experienced and the community recognises the need for closure (as is the case in the Quirimbas, where local communities have complained about decreased octopus catches and have 'agreed' to close off certain areas to improve catches) (Blue Ventures 2016).

As opposed to sanctuaries, whose primary objective is to protect threatened marine species and ecosystems in general, no-take zones aim to protect and control resources used and/or valued by local residents which, in the Quirimbas include mainly octopus, fish, and crab. Given that the objective of *zonas de veda* is to devolve management responsibilities to local communities (albeit with the help of the park, NGOs and Community Fishing Councils), they have been established near or in close proximity to villages to facilitate community supervision/patrol (Interview 14, Park Official, 03 August 2018; Oliver et al 2015).

During interviews and focus group discussions, it became clear that perceptions regarding temporary no-take zones differed substantially among 'internal' (i.e. resource dependent groups or local residents) and 'external' actors (i.e. NGO officials, park guards and conservationists) (concepts explored in *Chapter 2*). For example, while a distinction between sanctuaries and no-take zones seemed clear to park guards and NGO officials,[79] in the sense that the latter were perceived to be something that belonged to the community (Interview 14, Park Official, 03 August 2018; Muaves 2018; Muaves & Gobo 2017a), it was less so for local residents who seemed to perceive the two interchangeably, by referring to both as 'sanctuaries'.

Zonas de veda have recently become one of the park's key priorities for conservation and promoted as an important tool to improved community well-being. However, community support for *zonas de veda* appears to be (mis)interpreted by the park and conservation consultants/NGOs as locals wanting to "offer land to conservation" (MITUR 2010a, pg. 46)

[79] At least in theory, considering that most interviewees had difficulty identifying and distinguishing sanctuaries from no-take zones on maps.

given the 'excitement' over the 'outstanding' benefits these bring about (Samoilys 2016). As expressed by a park guard:

> This year alone, we recently closed an area in Matemo Island, which is a temporary no-take zone for octopus. And another one in Ibo Island because community members who used this fishing zone started feeling uncomfortable due to many migrant fishermen. So, they alone thought: how can we resolve this? And then they contacted the park to create a temporary no-take zone for fish. As if this wasn't enough, we established two more no-take zones, one for fish and crab in Mussemuco, also in the District of Ibo and another one in Arimba, south from here, in the District of Quissanga. This is a positive indication that the community already knows and there is no need for further explanation (Interview 14, Park Official, 03 August 2018).

Fieldwork data suggests[80] that there were at least 13 no-take zones in the Quirimbas in 2018, in addition to four planned ones[81] as listed in Table 6-4 below. Figure 6-8 illustrates current sanctuaries and no-take zones in the park based on existing geographical data.

Table 6-4 – Interpretation of current temporary no-take zones in the Quirimbas in order of year of establishment. Source: Interview 17, NGO Official, 05 August 2018; Interview 14, Park Official, 03 August 2018; Interview 15, Park Official, 04 August 2018

Temporary no-take zone	Location	Year of establishment	Purpose
Songossawe	Between Ibo and Matemo	2017	Octopus
Tchamba	Quirimba	2017	Octopus
Kipaku	Arimba	2018	Octopus, fish and other seafood resources
Palussança	Matemo	2018	Octopus
Riweculo	Matemo	2018	Octopus
Mussemuco-Natibela	Mussemuco	n/a	Crab
Mussemuco-Payesse	Mussemuco	n/a	Crab
Quirambo	Ibo	n/a	Fish, prawn and crab
Mucojo	Macomia	n/a	Octopus, fish and other seafood

[80] The exact location and number of *zonas de veda* in the Quirimbas could not be confirmed, as the park lacks a formal registry system.
[81] This means that 17 no-take zones have been planned for and/or implemented within a year or so, which is an outstanding number, particularly considering the general lack of funds and conservation activities in the park.

Temporary no-take zone	Location	Year of establishment	Purpose
Mwembe	Ibo	n/a	n/a
Jimpia	Metuge	n/a	Octopus, fish and other seafood
Ruela	Pemba	n/a	n/a
Ilha de Fiõ	Ibo	Planned but not yet formally established	Fish
Mefunvo	Quissanga	Planned but not yet formally established	n/a
Situ	Metuge	Planned but not yet formally established	n/a
Namavi	Metuge	Planned but not yet formally established	n/a

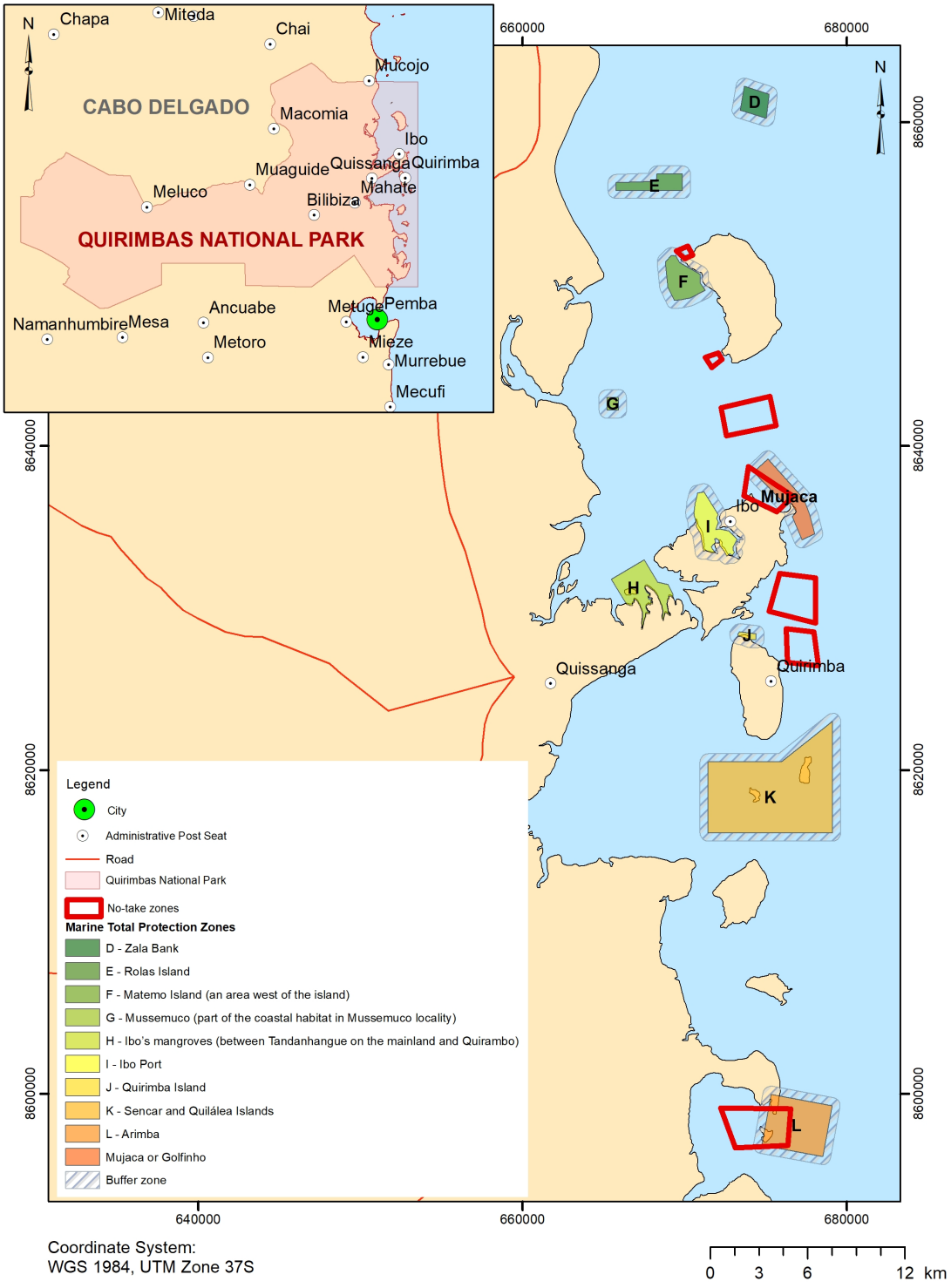


Figure 6-8 – Location of formal sanctuaries, the Golfinho 'community sanctuary' and seven of the 13 temporary no-take zones in the Quirimbas (Compiled by Miguel Nazareth 2021)

From a community perspective, however, *zonas de veda*, as for sanctuaries, reduce available fishing grounds and displace fishermen and women from the islands where they live and fish. Despite being consulted during the establishment of temporary no-take zones, local residents claim it is the park, in direct collaboration with local/international NGOs, which assumes responsibility for the design and management arrangements of these spaces (Interview 22, Community Leaders, 07 August 2018; Interview 18, Park Officials, 06 August 2018; Interview 14, Park Official, 03 August 2018; Muaves & Gobo 2017a), without devolving any real power to the community. Local residents further claim that, although temporary no-take zones are more inclusive of local needs, at least on paper, they are legally the same as sanctuaries when it comes to applicable crimes and punishment. The lack of community support for *zonas de veda* became evident during interviews with NGO officials and park rangers:

> It has been extremely difficult to patrol the no-take zones because even though it is the community that chooses these areas, it is the same community that then breaks the law and fishes within them (Interview 17, NGO Official, 05 August 2018).
>
> Despite the success of these areas, the community does not understand what the no-take zone is actually producing, so they don't respect the rules in these spaces (Interview 18, Park Officials, 06 August 2018).

Fishing within the *zonas de veda* must be considered in the context of generalised poverty and subsistence fishing in the Quirimbas, where residents/households make their living primarily off their catch. Improved catch for a period of three to 30 days is therefore unlikely to reasonably compensate for the reduced catch and difficulties in sustaining themselves for the remaining months of the year. In fact, closed off periods can easily result in no household income, particularly considering the lack of livelihood alternatives for park residents, while excessive fish caught on opening days can provide little added value given the lack of access to fish processing methods, markets on which to sell such high quantities of produce (Muaves 2018; Muaves & Gobo 2017a), as well as the fact that they are not permitted to commercialise. Furthermore, as documented by Wosu (2018), no-take zones (and sanctuaries) in the Quirimbas can have severe implications for fisherwomen in particular, should it mean that they have to travel greater distances to access fishing sites, given they generally have more limited means/time and resources (e.g. transport and equipment) as well as multiple roles such as collecting water, taking care of children, agriculture, etc. to fish off the islands, further away from where they live. These challenges are compounded by the fact that these fishing restrictions have been established in the park without providing communities with any

consistent or structured form of alternatives[82] or compensation, which means that livelihoods have been substantially affected and their future possibilities compromised.

6.4 Conclusion

While mechanisms of disruption between 'nature' and 'culture' in the country have historically been devised by the Portuguese colonial administration (discussed in *Chapter 4*), and then replicated in post-independence Mozambique as a result of pressure from the international community and environmental agendas and motivations (*Chapter 5*), this chapter engaged with mechanisms of separation adopted or enforced by the Quirimbas National Park in the twenty first century. Whether in the form of newly devised mechanisms e.g. through the reorganisation of local landscapes according to a set of zones or nature blocks to suit conservation objectives, or displaying continuities with past mechanisms of separation e.g. by blaming local communities for resource degradation in order to justify separation/evictions/restrictions in resource use, or through legal means, the chapter discussed locally adopted disruption mechanisms that have been historically informed by dominant nature readings and which also interrupt the link between people and nature.

[82] A number of international NGOs implement small and diverse projects on the Islands including training in hospitality, mechanics, carpentry, etc. The tourism industry likewise implements community development projects such as sending aspiring young Spanish chefs – currently undertaking culinary studies in Spain – to cook for high-end tourism hotels located on the islands of Quilálea and Matemo, or mid-range ones in Ibo, and also volunteer and help out in schools, the hospital, and 'educate' the local communities on nutrition, health and sustainable food etc. (Interview 20, NGO Interns, 06 August 2018; Interview 19, NGO Official, 06 August 2018). However, there seems to be no trickle-down effect from tourism into the local community. For example, tourism operators don't buy fish from locals on a regular basis, nor have opportunities been created for local people to take tourists on boat rides.

7. Societal dynamics in the Quirimbas

7.1 Introduction

This chapter explores feedback and interchange loops between constructed 'natures', changing social realities and livelihood strategies in the Quirimbas National Park, as a means to address the thesis' key research question, which is to understand how societies are reconfigured or restructured by prevalent nature readings. It does so by investigating the way in which the reorganisation or 'containerisation' of the Quirimbas' landscapes (*Chapter 6*), coupled with approaches to conservation that have been largely informed by the nature-human dichotomy (*Chapter 2*), disturb and/or disrupt socio-ecological relations, resulting in new arrangements and processes of construction within society.

Research findings are predominantly linked to processes of criminalisation of, and violence over natural resource-based livelihoods which force park residents to reorganise prevalent ways of using and relating to 'nature'. Whether transformed into public offenders, or subject to labels/categories such as 'environmental predators' and 'endogenously primitive subjects', the criminalisation and stigmatisation of local practices without the provision of alternatives ultimately dispossesses and excludes communities from their homes and delegitimises them as 'rightful' park residents. Furthermore, the adoption of conservation approaches informed by external green agendas that are neither supportive, nor cognisant of local realities and contexts, further leads to the reconfiguration of society, as it introduces and/or enhances divisions among groups of residents/natural resource users, forces residents to explore and engage in new and overwhelmingly 'illegal' livelihood activities, and ultimately transforms local communities into voiceless and powerless groups in society.

7.2 Violence in the name of nature

Despite the many forms and understandings of 'criminalisation', three specific processes have informed, or have been historically applied to the criminalisation of natural resource users/park residents, and are therefore used in this chapter's analysis of how society in the Quirimbas has been reconfigured by nature. Whether applied independently or concomitantly, processes of criminalisation through policy, history, and discourse are generally linked to violence in protected areas globally, having been legitimised and normalised in Southern Africa from colonial to independent states, in the name of 'nature conservation' (Büscher & Ramutsindela

2016; Duffy 2016; Marijnen 2017; Neumann 2004; Ramutsindela 2016) (see *Chapter 2*). Whilst violence in conservation areas – forced not only onto 'poachers', but most communities who live within and around protected areas and happen to have natural resource-based livelihoods (Mushonga & Matose 2020) – has been historically legitimised and normalised (Ramutsindela 2016), there has been a growing focus or promotion of the militarisation of conservation areas in the twenty first century as the "only realistic way forward to save" biodiversity (Büscher & Fletcher 2018; p. 106). This has, in turn, resulted in a general rise in conservation violence, particularly in the Global South (Mushonga & Matose 2020; Ramutsindela, Matose & Mushonga 2022; Verweijen 2020).

According to Bocarejo and Ojeda (2016, p. 178), violence in this context is understood of as a process which has become a "regular and natural occurrence in everyday life" for protected area residents, and can take the form of physical, structural, or symbolic violence, or a combination of all three.

Physical violence involves the material or physical and economic dispossession and marginalisation of park residents and neighbouring communities from protected areas, as well as policing and patrolling practices often employed by para-military guards, leading to punishments, arrests, executions and confiscation of goods and materials (Bocarejo & Ojeda 2016; Brockington 2002; Büscher 2012; Duffy 2010; Marijnen 2017; Massé 2019; Ramutsindela, Matose & Mushonga 2022). Structural violence, on the other hand, may relate to restrictions in, or erosion of livelihood strategies, such as limiting access to natural resources and/or banning/affecting park residents' mobility through the landscape, whilst examples of symbolic violence relate to verbal abuse of or the use of aggressive rhetoric towards park residents (Bocarejo & Ojeda 2016; Brockington 2002; Büscher 2012; Duffy 2010; Marijnen 2017; Mushonga & Matose 2020). The latter may include the shaping of park residents as 'environmental destroyers', 'primitive or uneducated subjects' and/or 'incapable of protecting nature', and framing them in relation to nature, or the local 'fragile ecologies' in which they live. Symbolic violence may also entail the general delegitimisation of local communities/peoples as 'rightful' residents of protected areas. Overall, these forms of violence against park residents fall under Spivak's "epistemic violence" (1988, p. 76), which entails a form of violence imposed over the subaltern through rhetoric, thought, and literature. According to her, this is a form of violence that erases oppressed peoples' voices, history, contributions, and place in the world which, in essence, she argues, is a colonial production.

7.2.1 Physical violence and the criminalisation of park residents

Although to date, no communities have been physically removed or relocated from the Quirimbas (see *Chapter 6*), park residents have been subjected to physical violence from park authorities whom, in collaboration with the *forças armadas* (national defence force), the navy, the police, the public prosecuting office, NGO officials, and community collaborators (Interview 14, Park Official, 03 August 2018; MITUR 2010a), exercise policing and patrolling practices, leading to fines, arrests, confiscation of goods and materials, as well as physical harm, in a process that ultimately transforms park residents into public offenders. As explored in *Chapter 6*, some of the most common/relied upon livelihood practices such as hunting, farming, fishing and the use of forest and wildlife resources have become criminalised in the park, particularly within the Total Protection Zones, but also in the Specific Use Zones and Community Development Zones.

7.2.1.1 Criminal offences and fines in the Quirimbas

Criminal offences in the park are registered by both park authorities and WWF (the latter in the marine and coastal section of the park only), albeit inconsistently, and seemingly incorrectly. According to interviews conducted as part of the research study, park data regarding criminal offenses is generally unreliable, mainly due to surveillance constrains in terms of both human and financial resources (Interview 15, NGO Official, 04 August 2018; Interview 18, Park Officials, 06 August 2018). In fact, the park not only lacks a formal system for the registration of offenses, but coordination between its terrestrial and marine departments are dysfunctional (Interview 15, NGO Official, 04 August 2018; Interview 18, Park Officials, 06 August 2018). What this means is that official park data is generally disparate and unreliable.

Table 7-1 below shows official surveillance data for the entire park (marine and terrestrial sections)[83] between 2010 through to 2020, indicating that the use of traps during hunting, 'illegal' logging, poaching, the use of firearm ammunition, and 'illegal' mining are the most common registered offences.

[83] Offences are individually registered by the marine and terrestrial sections of the park, after which, in theory, they are integrated and assessed by the park's headquarters.

Table 7-1 – Park surveillance results between 2010 – 2020, including both marine and terrestrial sections. Source: PNQ (2020)

Park patrols	Year											Total
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Deactivated hunting traps	246	750	1,130	631	1793	1,464	364	0	161	387	335	7,261
'Illegal' loggers apprehended	0	0	54	10	13	21	19	0	215	8	845	1,185
Poachers apprehended (marine and terrestrial)	30	24	10	20	32	67	101	0	247	99	17	647
Firearm ammunition apprehended	0	0	470	33	42	0	5	0	85	6	4	645
'Illegal' mining material apprehended	0	0	312	0	0	46	127	0	37	73	28	623
'Illegal' wood apprehended (in m^3)	12.6	45.5	30	50.2	140	73.2	85.6	0	15	25	62	539
'Illegal' miners apprehended	0	10	15	0	35	95	73	0	232	4	0	464
Fines emitted	4	17	10	12	27	14	26	0	19	15	10	154
Poachers Detained (marine and terrestrial)	0	0	8	0	2	3	9	0	4	90	15	131
Elephants killed	2	19	16	11	9	5	3	0	0	0	0	65

Separate data for the marine section of the park was also collected, although only covering the period between 2015 and 2017[84]. The data lists a total of 58, 85 and 48 offences per year in 2015, 2016 and 2017 respectively, as listed in

Table 7-2 below (PNQ 2015; 2016, 2017) based on criminal enforcement activities in nearby sanctuaries only, i.e., those located close to Ibo, Matemo and Quirimba islands, given the lack of resources by the park to patrol the entire marine section, such as boats and money for petrol (Interview 18, Park Officials, 06 August 2018). In decreasing order of occurrence, registered

[84] The only data available at the time fieldwork was carried out in 2018.

offences included (i) the use/catch of protected species, particularly sea turtles; (ii) fishing within sanctuaries and night-time fishing; as well as (iii) the use of prohibited fishing techniques and gear, in particular mosquito nets[85] and so-called 'toxic' substances[86] (Interview 23, NGO Official, 16 August 2018; Interview 14, Park Official, 03 August 2018; Muaves & Gobo 2017b). No offences within no-take zones were registered during this same period (PNQ 2015; 2016; 2017), which is likely linked to lower levels of patrol in these areas (thereby resulting in less crimes being registered), the transitory nature of no-take zones (between four and 12 months), the lack of community reports to the park (i.e. lack of community collaboration with the park),[87] a sense of ownership by local residents, or because they have been recently established (i.e. since 2017).

Table 7-2 – Registered offences in the park's marine and coastal zone between 2015 – 2017. Source: PNQ (2017)

Type of offences	Frequency of offences		
	2015	2016	2017
Use/catch of protected species	27	45	21
Fishing within sanctuaries/night-time fishing	27	33	20
Use of 'illegal' fishing techniques and gear	4	7	7
Total number of offences	**58**	**85**	**48**

With the objective of supplementing park monitoring and enforcement activities, WWF has likewise been implementing a management-oriented monitoring system in the marine and coastal section of the Quirimbas since 2006. Although covering a very short period (i.e. 2016[88])

[85] Mosquito nets are distributed throughout Mozambique as part of the national health programme to tackle/reduce malaria cases (INS 2018). Mosquito nets are, however, used instead as fishing gear, particularly by poor and vulnerable fishermen and women who lack alternative livelihood strategies. While the use of mosquito nets has been widely criticised as a risk to biodiversity and food security mainly due to indiscriminate fishing, Short et al (2020) suggest that it may in fact be a relevant livelihood contributor to food security, and should not therefore be labelled 'unsustainable' prior to additional research being conducted, particularly according to the 'balanced harvest theory', which posits that the catching of different species and life stages can be beneficial to fishers who employ a range of gears and lack the resources, as well as the time to look for additional/complementary forms of income.

[86] According to local interviews, the main toxic substance used in fishing is the sap of a local plant mixed with water. While travelling through the water column, the mixture is said to kill fish as well as 'everything' around it (Interview 22, Community Leaders 07 August 2018).

[87] Given that the surveillance of *zonas de veda* falls under the responsibility of community collaborators, albeit in liaison with local NGOs and park officials as opposed to park authorities alone.

[88] Despite the fact that the WWF has been allegedly implementing a management-oriented monitoring system in the Quirimbas since 2006 (Interview 15, NGO Official, 04 August 2018; Interview 23, NGO Official, 16 August

WWF's park surveillance data shows a total of between 10 and 84 offenses committed per month[89] alone, and registered over the same geographical area covering the sanctuaries of Ibo, Matemo and Quirimba islands (see Table 7-3) (Muaves & Gobo 2017).

Table 7-3 – Frequency of offences in Ibo, Matemo and Quirimbas Islands in 2016. Source: WWF (2016)

Frequency of offences/month/sanctuary		
Ibo	**Matemo**	**Quirimba**
29-84	10-51	28-51

Whilst the type of offences registered by WWF are identical to those recorded by the park (listed in Table 7-3 above), the poaching of protected species, in particular sea turtles, is emphasised by WWF as the most recurrent and disturbing crime in the Quirimbas.[90] In addition, and contrary to the park who has no record of offenses in community no-take zones, WWF registered a total of three but 'significant' infractions in 2017, mostly committed by 'poachers' which included children, all of whom were 'fortunately apprehended and fined' (Muaves 2018).

Irrespective of incongruencies in the data, what registered offences indicate is that park residents are subject to processes of criminalisation, as well as structural and symbolic, but particularly physical forms of violence, that not only exclude and marginalise them from the park, but also restrict, erode, and control access to natural resources and people's mobility through the landscape. These forms of criminalisation and violence are administered through the reorganisation and restructuring of local landscapes into spaces of exclusion and fear for local residents e.g. by transforming the best/most used/relied upon fishing grounds into 'no-go' areas without the provision of alternative livelihoods; or by legally turning common practices and livelihood strategies into crimes e.g. prohibiting the use of certain fishing gear and use of species; or even by shaping rural communities into 'ignorant' and 'environmental predators' e.g. blaming them for biodiversity loss in the park.

2018), data could only be obtained for the year 2016. The remaining years, according to WWF, were unavailable in either raw or processed forms.

[89] Again, despite numerous attempts, no additional monitoring data was made available.

[90] It is important to note, however, that sea turtle conservation is one of WWF-Mozambique's key programme areas (WFF-Mozambique) and that the emphasis on sea turtles may therefore be linked to their programme objectives, as well as efforts to collect funding for sea turtle protection/conservation.

7.2.1.2 From residents to criminals

> In the beginning [of the establishment of the park], they [park authorities] told us that the sanctuaries would be opened once every year, but this never happened and, if we are caught in the sanctuary, we get a fine… (Group Interview 1, Bairro Rituto, 02 August 2018).

At the time of the study, residents caught using sanctuaries were not only fined, but incriminated and blamed for "stealing fish from sanctuaries" (Interview 14, Park Official, 03 August 2018; RoM 2018). This is a saying that has become all too frequent in the Quirimbas i.e. that if you fish in the sanctuaries, you are not fishing, but are, in fact, *stealing*, which also implies that one is no longer a fisherman but a thief, in the same way the Batwa people from the Bwindi Impenetrable Forest National Park in Uganda have become "beggars, thieves, and prowlers" on their own land (Dowie 2009, p. 69) (see more in *Chapter 2*).

'Theft' in the park is subject to a fine, as well as the confiscation of produce (e.g. catch), fishing gear (e.g. nets) and equipment (e.g. canoes), of which only the latter two are returned to the offender following the payment of a fine for those offenders subject to 'attenuating circumstances',[91] as prescribed in the Conservation Law of 2014, or alternatively, burnt in front of the community as part of environmental education/awareness programmes, particularly when the offense involves 'aggravating circumstances,[15] as is the case when 'illegal' fishing techniques and gear are employed: "We often burn mosquito nets in front of the offender and the community, so this offence is slowly dying down" (Group Interview 1, Bairro Rituto, 02 August 2018; Interview 14, Park Official, 03 August 2018).

The extreme levels of poverty and vulnerability of fishing households, coupled with the lack of formal employment opportunities and reliance on subsistence-based livelihoods, means that fishermen are rarely able to pay fines, which vary depending on the type of infringement committed and the applicability of aggravating *versus* attenuating circumstances. Within the park's marine and coastal zone, a combination of charges prescribed under the 2013 Fishing

[91] The Conservation Law of 2014 defines 'attenuating' and 'aggravating' circumstances for environmental offenders. Attenuating circumstances lead to lower fines, and are applicable to primary offenders, where offenders reporting directly/voluntarily to enforcement officers, as well as offenders who are 'genuinely' uninformed with regards to the crime(s) they have committed. Aggravating circumstances, on the other hand, lead to stricter sanctions as well as heavier fines and include, amongst others: committing offences during closure periods or against protected species; offences committed by an official or community enforcement officer; committing an infraction at night, on Sundays or public holidays; the use of violence against (or threatening of) enforcement officers; and use of prohibited tools, practices and/or gear (RdM 2014).

Law and the 2014 Conservation Law[92] are applied by park rangers, which in practice means they can vary anywhere from half the national minimum wage (for 'simple' offences under the Fishing Law, including contravening the terms and conditions of fishing licenses, the lack of cooperation with park/enforcement officials and research officials, underwater fishing with unauthorised breeding methods, the sale or purchase of fish collected from prohibited zones or during prohibited periods), to between 1,000 times the national minimum wage (for the use/catch, storage, transport or sale of protected species according to the Conservation Law). Although this corresponds to fines of between USD 37.5 or MZM 2,414 (half the national minimum wage) to USD 75,360 or MZM 4,829,000.00 (1,000 times the national minimum wage),[93] in practice, and when dealing with park residents, the lower fines prescribed under the Fishing Law are generally emitted by the park (Interview 14, Park Official, 03 August 2018). Irrespective of the application of less severe fines by the park, fishermen are hardly ever able to afford them and are therefore forced to spend additional time, resources, and effort in looking for alternative livelihood options as well as in purchasing, assembling, and building new fishing equipment when theirs gets confiscated by the park. "Our [the park's] storage area is full; we have a lot of equipment and boats that haven't been collected because people just don't pay their fines" (Interview 14, Park Official, 03 August 2018).

The general feeling amongst the community is that the park is 'everywhere', and affects too many aspects of their lives/livelihoods:

> We don't even need to be caught fishing in the sanctuaries to be penalised because there are other restrictions even outside the sanctuaries. It is forbidden to catch crabs, marine turtles, ray, whale, dugong, grouper, and others. We are tired of this park, and we are hungry (Group Interview 1, Bairro Rituto, 02 August 2018).

[92] Even though the Conservation Law theoretically precedes the Fishing Law in terms of applicable sanctions within conservation areas, fines applied at the local level in the Quirimbas are a combination of those prescribed in each of these two laws. This may be due to the fact that the Fishing Law was enacted prior to the Conservation Law, or alternatively because Fishing Law fines are more in line with local realities (i.e. varying between half to more than half of the minimum salary, as opposed to the Conservation law which has unrealistic fines varying between 1 – 1,000 times the minimum salary) (RdM 2014; RdM 2013).

[93] Mozambique fixes minimum salaries every year according to different types of industries/activities. Although minimum wages have been set for industrial and *kapenta* fishing in 2021, artisanal fisheries has been excluded. According to Capaina (2021), this is in part due to the fact that artisanal fishing remuneration is linked to specific parts of the year only, and that fishermen and women have other income generating activities in the remaining parts of the year, mainly in subsistence agriculture and animal rearing. Therefore, the minimum wage used for artisanal fishing is the same as for agriculture and animal rearing, which is set at MZM 4,390 or USD 62,36 (Capaina 2021; CCT 2021).

7.2.1.3 Increased household vulnerability and the disconnect between the park and its residents

Whilst subject to many restrictions with regards to natural resource use, the criminalisation of sanctuary use is by far the most violent prohibition the park has implemented from the perspective of local residents, which may be linked to the ways in which it has affected household income, subsistence, and food security, as indicated by residents:

> Every day we must fish in the same areas because so many areas have been closed off to us. We only have a small space where we can fish. This means that all of us fish in this small space yesterday, today, and tomorrow, so there is no longer any more fish. In fact, it is common for us to go out to sea for three consecutive days without catching anything (Group Interview 2, Bairro Cumuamba, 02 August 2018).

Women likewise blame the park and, particularly sanctuaries for changes in household diet: "while we used to cook fish every day, nowadays we can go one week without even eating fish" (Group Interview 2, Bairro Cumuamba, 02 August 2018; Interview 16, Park Resident, 05 August 2018).

On the other hand, and according to park officials, 'illegal' fishing methods and the poaching of protected species have shown decreasing trends over the years which, they claim, is due to improved park patrols as well as the result of awareness campaigns with regards to associated punishments among the community.

> People here are now more aware that they cannot carry out these acts because of prison. Before there was no prison, you only got a fine and that was it, but now with prison, people are more conscientious. And they also know that other institutions other than us [the park] protect nature and park related matters. They know that we now have a public prosecuting officer here in the district just to protect nature. So basically, people know this is no joke. You can steal, but if you are caught, you know your sanctions (Interview 14, Park Official, 03 August 2018).

Park guards and NGO officials are also 'confident' these practices are being gradually understood of by locals as genuinely 'backward', 'primitive' and 'destructive' which, they claim, is largely the objective of the *campanhas de sensibilização* regularly promoted by the park, Government, and NGOs (NGO Official, 06 August 2018; Interview 14, Park Official, 03 August 2018).

The fact that sanctuaries are the main topic of discussion among park residents may suggest that communities believe there is still space for the management arrangements of these areas to change and, therefore, feel they should invest more time complaining/verbalising their discontent around the sanctuaries and the prohibition of fishing within them, as opposed to the other two 'crimes' (i.e. the use/catch of protected species and the use of prohibited fishing gear and techniques), which may be perceived by the community as 'irrevocable' conservation measures. The heavier punitive measures associated with these two crimes (i.e. jail sentences of up to 12 years), linked to the fact that both the police and the public prosecuting office, in addition to the park board (i.e. three powerful actors) are involved in prosecuting and sentencing offenders, may also imply that the community is resigned to accepting these park restrictions as 'final'/permanent, as they feel their voices in this regard have been genuinely silenced.

Angst and fear among focus group participants when discussing 'illegalities', in particular fishing within sanctuaries, was a clear indication that the community feels excluded from the park. Residents feel these areas should be managed differently and, particularly, be more inclusive and cognisant of local realities and contexts. It was clear from both focus groups that alternative forms of use and management have been considered and discussed among the community, as a common suggestion raised by both groups was for the park to allow community access to sanctuaries, even if temporarily (for example, by allowing fishing for six months of the year followed by a full year of closure, or by providing a few individual fishing quotas per sanctuary) (Group Interview 1, Bairro Rituto, 02 August 2018; Interview 2, Bairro Cumuamba, 02 August 2018). However, from the perspective of park authorities and conservation consultants, community access to sanctuaries is non-negotiable, as sanctuaries are 'sacred' spaces for fish and nature and not people, particularly the 'subaltern' who, besides being environmentally destructive, is also ignorant when it comes to managing these fragile ecosystems scientifically.

Ethnographic research on Ibo Island also confirmed that, from a community perspective, the loss of fishing areas to the park (i.e. establishment of sanctuaries), coupled with the recurrent imprisonment of residents and loss of fishing gear and catch to the park, have all resulted in increased levels of vulnerability amongst the community. This is important to note, as Ibo's households tend to invest a substantial part of their earnings in fishing gear and equipment, while fishing efforts are high when compared to catch which, coupled with the loss of a family

member to prison – even if temporarily – is likely to result in decreased household income and higher levels of poverty and vulnerability.

7.2.1.4 Aggravating circumstances and imprisonment

Although seemingly uncommon,[94] residents reported occasional episodes of physical/bodily harm by park guards during interviews and focus group discussions. According to Kilomba, in her interview with Bento (2019), this form of violence is often justified by the associations we, as a society make between alleged 'criminals' and the 'danger' they pose to society, which in turn gives us the right to punish, arrest, shoot, beat or kill (discussed in *Chapter 2*). Within protected areas, this form of violence is further linked to legislative but particularly discursive and historical processes of criminalisation that frame natural resource users/indigenous/black people as 'villains', 'poachers', etc., particularly in relation to 'nature' and natural resources, which are generally assigned higher societal values than people.

Whilst local district authorities confirmed allegations from fishermen being injured by park rangers, they seemed genuinely confused and hesitant in providing further comment: ''It is very difficult to know the truth. Fishermen claim park officials are violent, and I've heard and seen claims of stabbings with harpoons. However, it is difficult to know because, as I said, there is complete lack of coordination between the park and us [district administration]'' (Interview 11, Local Government Authority, 01 August 2018). Park surveillance data from 2015 through to 2017, however, indicate patrols are carried out by guards armed with AK47s, and that physical violence is sometimes 'necessary' (PNQ 2017), as illustrated by the following records: "We were forced to fire into the air because we saw a few youngsters entering the sanctuary" (PNQ 2017, no pagination);

> In the Sencar sanctuary, we [park officials] saw four shining torches. We got closer and saw four poachers who ran away because of us. We were forced to shoot four times, but without any luck of neutralising them (PNQ 2017; no pagination).

According to the Conservation Law, 'aggravating circumstances' lead to heavier punishments and include prison sentences, another form of physical violence to which park residents are subject, as expressed by fishermen and women from the Rituto and Cumuamba

[94] Based on the outcome of interviews conducted in Ibo Island as well as park monitoring data from 2015-2017.

neighbourhoods: “Besides giving us fines, they [park authorities] take us straight to Macomia” (Group Interview 2, Bairro Cumuamba, 02 August 2018).

Located on the mainland, Macomia is the closest prison to Ibo where most offenders are admitted when charged with an ‘environmental crime’. Applicable sentences are either ‘minor’, leading to prison sentences of up to two years for ‘repeat offenders’ or for ‘activities involving the use of firearms or mechanical traps’, or ‘major’, leading to jail sentences of between eight and 12 years for the ‘poaching of protected species’, the ‘use of illegal fishing techniques/gear, particularly explosives and toxic substances’ as well as ‘forest fires’ (RdM 2014). This serves to illustrate how violent punitive measures are imposed on local residents without due consideration for local livelihood practices and strategies, poverty levels and household vulnerability, nor the provision of suitable livelihood alternatives. As a result, park residents feel disconnected and just wish “the park would disappear” (Group Interview 2, Bairro Cumuamba, 02 August 2018).

The Nacalenses, who are generally less vocal and more apprehensive of openly discussing how their livelihoods have been affected by park policies, possibly because they are seen as ‘outsiders’ and not entitled to residency in the park (see more below), reported more violent encounters with park officials than the Rituto community, which is largely made up of ‘local’ households:

> If park officials find us in the sanctuaries, they immediately tell us to board their boat. If we refuse, gunfire is sometimes used, they remove our equipment by force and apprehend it until we pay a fine, or we go to prison for a few days (Group Interview 2, Bairro Cumuamba, 02 August 2018).

Although significantly less common, fisherwomen are also subject to fines and imprisonment, but not children who cannot be detained as they are underaged and who, therefore “just get a pair of slaps” from park officials when caught “stealing” (Group Interview 1, Bairro Rituto, 02 August 2018). Field observations confirmed children do in fact collect molluscs and crustaceans in sanctuaries during low tide, and are occasionally reprimanded by park guards as they cannot be formally charged: “we only pull their ears and tell them not to do so if we happen to catch them” (Interview 14, Park Official, 03 August 2018).

Notwithstanding accounts of a generally decreasing trend in the number of offences committed in the park (Interview 22, Community Leaders, 07 August 2018; Interview 14, Park Official, 03 August 2018), ‘crimes’ are still relatively common, particularly fishing within sanctuaries,

the use of 'illegal' methods and 'poaching' of protected species (particularly sea turtles), which is a clear indication that local residents can live to break the law in order to avoid starvation, falling into extreme poverty and/or becoming destitute, whilst recognising the risks associated such as the loss of the breadwinner, compromising their livelihoods, and becoming destitute, should they have to pay a fine they cannot afford or be sent to jail.

7.2.2 Structural violence and the dispossession and exclusion of park residents

Besides the criminalisation and subjugation of park residents to physical forms of violence in the name of 'nature' (investigated above), communities in the Quirimbas have also been subject to structural forms of violence that not only dispossess and marginalise them, but also erode essential livelihood strategies. In other words, park residents have become conditioned to specific rules that not only prohibit and criminalise the use of resources, but also limit resource use and their mobility through the landscape. This has, in turn, pushed local residents further into extreme poverty and vulnerability, as they have been forced to stop using important natural resources for household sustenance (e.g. protected species, forest resources, land for agriculture, etc.) and employ modes of resource use they cannot afford to ensure 'sustainability' (e.g. specific fishing gear) (RdM 2010). Furthermore, park residents have been forced to remain 'traditional', as natural resource use is limited to 'customary' or 'traditional' forms, which effectively places them 'permanently' in the bush/rural areas and shows continuities with the way in which the indígenas were historically perceived and placed by the Portuguese (Mamdani 1996; 2005) (*Chapter 4*). This form of violence is linked to "political, economic and social practices" that prevent "people from fulfilling their basic needs, resulting in different forms of suffering" (Galtung cited in Mushonga & Matose 2020, p. 6).

In the Quirimbas, these structures are represented by policies (i.e., the 2009 Conservation Policy and Implementation Strategy, the 2013 Fishing Law, the 2014 Conservation Law, the Penal Code amendments of 2014 and the park's management plan), institutions (i.e., park authorities, the state and conservation NGOs) as well as practices by rangers (i.e. enforcement of conservation law and instruments as well as the policing of protected spaces) with the objective of securing or protecting nature and biodiversity on the one hand and, on the other, discouraging people from illegally using protected areas and/or punish/neutralise those that do (Massé 2019; Mushonga & Matose 2020). In other words, the Quirimbas' management plan, in conjunction with the 2013 Fishing and the 2014 Conservation Law, act as barriers for

resource access by local residents, who are at the same time perceived and approached as destructive (Mushonga & Matose 2020) or "natural enemies" (Dlamini 2020, p. 35).

These barriers imposed by the park with regards to natural resource use are felt throughout the Quirimbas landscapes, albeit with varying degrees of protection and control according to the park's 'exclusion zones'(see *Chapter 6*). Essential subsistence-based livelihoods such as fishing and the collection of seafood products, the use of mangrove resources, farming, the collection of wood and non-wood forest products, hunting and the sale of bushmeat, for example, have all been criminalised within the park's Total Protection Zones and everyone 'caught' transgressing these rules/areas "is treated as a dangerous poacher regardless of their motivation", including residents accessing resources for subsistence (Mushonga & Matose 2020; p. 5). In other words, while the park claims that locals are permitted to fish 'anywhere' as long as it is outside sanctuaries and no-take zones (Interview 14, Park Official, 03 August 2018), local residents suggest that they struggle to meet household needs in terms of both food and income on a daily basis due to park policies and associated violence. Wosu (2018), for example, also documents how the establishment of sanctuaries and no-take zones, in combination with the ban on trade introduced by the park, affected over 90% of fishermen and women who used these higher catch zones for fishing before the park was established. According to her, these structural forms of violence imposed on local residents not only reduced the number of local traders and those from Tanzania and Nacala who offered transport options for locals, but also reduced the type of marine resources that could be traded, thus reducing income options and limiting it to subsistence.

The same livelihood strategies have been further eroded within the park's Specific Use Zones, with the exception of the sustainable use of mangrove resources and subsistence hunting for traditional medicine, which are both subject to licensing arrangements by the park. Within the Community Use Zones, park policies have also controlled and restricted resource-dependent livelihoods/people, with the exception of activities perceived to be 'subsistence-based' and/or performed according to 'sustainable' levels of resource use that are subject to a number of licensing and regulatory arrangements by the park. Park residents have therefore been either excluded from, or had their mobility, access and use of local landscapes severely compromised, through instruments that have not only created fixed boundaries within the landscape to set 'nature' aside from human social interaction (i.e. 'nature blocks'), but also limited and restricted the type of activities allowed to those perceived to 'fit in' a protected area which, in the case of the Quirimbas National Park, are restricted to environmental education, scientific

research, and ecotourism activities in the TPZ and 'sustainable' and 'subsistence' resource use in the remaining two zones (Bocarejo & Ojedo 2016; MITUR 2010a).

Park residents now find themselves with severely limited economic possibilities, given that they are no longer allowed to use most of the park's landscapes (i.e. TPZ, SUZ as well as the so-called 'Community' Development Zones) to grow economically, should they wish to, for example, develop a fishing, hunting, forestry or farming business, as these activities have to be recognised and authorised by the park as 'sustainable' prior to implementation, which requires communities to develop management plans for park approval (MITUR 2010a), something park residents are unlikely to be able to develop and/or afford. Park residents face additional restrictions in terms of establishing houses for themselves and their families throughout the Quirimbas landscape, as this is criminalised in the Total Protection Zones and Specific Use Zones, while the Community Development Zones allow 'locals' but exclude and dispossess neighbouring communities or anyone perceived as 'foreign' or a 'non-park resident', who might wish to move into these areas, as is the case of the *Nacalenses*, despite the fact that they are Mozambican citizens, who have been using the Quirimbas for generations, as will be discussed later in the chapter.

Like Mushonga and Matose's (2020) assessment of the corollaries of violence in the Zimbabwean Sikumi Forest Reserve, the containerisation of the Quirimbas's landscapes or zonation system designed to protect nonhuman life (Massé 2019) and enforced by park policies, institutions and practices, are also considered an embodiment of structural violence in the same three ways suggested by them. First, structural violence is expressed by the application of a zonation system with a number of regulated and licensed activities that not only control, but also punish resource-dependent groups (Dressler & Guieb cited in Mushonga & Matose 2020). From a local perspective, sanctuaries have not only resulted in the loss of productive/important fishing grounds to the community (with associated increased levels of vulnerability in terms of household income and food security), but, more importantly, have also generated no real benefits in terms of improved catches and overall livelihood conditions and living standards, as initially promised by the park. While the park argues that sanctuaries and no-take zones are meant to benefit local communities, Matose cited in Matose 2020 (p. 8), argues that these kinds of practices are planned to "appropriate people's everyday needs into territorial conservation models bent on exploiting and alienating resource-dependent people". In the Quirimbas, there is a general sense of community resentment towards the park, as it has blocked off access to fundamental sources of income and subsistence for park residents:

> Despite promises of increased catches [by the park] back in 2001, these sanctuaries have only restricted our access to fishing resources and seafood products including octopus, crab, and oysters (Group Interview 1, Bairro Rituto, 02 August 2018).

Furthermore, local residents are now forced to "travel far in order to catch fish" (Group Interview 1, Bairro Rituto, 02 August 2018), something that takes extraordinary effort in terms of both time and resources spent fishing, which could have been used instead in the development of complementary (and much needed) household income generating activities. Despite the suffering that such boundaries cause on an already impoverished community, local people tend to adhere to them because of the associated punishment (as discussed earlier in the chapter).

Secondly, the zonation system or sanctuaries and no-take zones embody structural violence through its repercussions (Mushonga & Matose 2020). Besides being accused of 'stealing' (also explored earlier in the chapter), park residents also feel their mobility has been, overall, severely compromised, as they fear sailing through sanctuaries either on their way out fishing or returning home from a day at sea, something that fishermen, who rely on wind powered and tide dependent canoes or *casquinhas* and *dhows* to get to fishing sites, find essential as the added burden of circumventing sanctuaries is significant. In other words, the fact that local fishermen and women have to circumvent sanctuaries and no-take zones on a daily basis whilst looking for essential resources, means that time and effort spent fishing and distances sailed or walked have increased substantially. According to local accounts, if caught crossing a sanctuary, particularly on their way back from sea with fish (even if caught outside the sanctuaries), fishermen are apprehended by park rangers, have their catch and/or equipment confiscated, and are, at times, subject to arrests, injuries and suffering (Group Interview 1, Bairro Rituto, 02 August 2018; Interview 22, Community Leaders, 07 August 2018).

Sailing restrictions through sanctuaries were confirmed by residents from both fishing *bairros* interviewed, as the groups became quite boisterous and agitated whenever this was mentioned/brought up (Group Interview 1, Bairro Rituto, 02 August 2018; Interview 22, Community Leaders, 07 August 2018). However, the crossing of, or sailing through sanctuaries is relatively common in Ibo given the fact that fishermen, logically, and in terms of their safety and time,[95] look for the quickest/safest way home on their way back from fishing, rather than

[95] It is common for artisanal fishermen in the Quirimbas (as well as throughout Mozambique) to spend long hours away from the household while fishing. Hara and Deru (2001), for example, report that artisanal fishermen usually spend at least 60% of their time fishing.

spending/assuming additional effort/time/risk sailing around the sanctuaries, along unnecessary routes in their unmotorised canoes.[96]

Thirdly, the zonation and resource access system in the Quirimbas is based on the inherited colonial legacy of natural resource use generally adopted in Africa, which not only forces boundaries between people and nature, but also prioritises the protection of non-humans over the poor (Benjaminsen & Svarstad 2010; Mushonga & Matose 2020). According to the *Secretários de Bairro*[97] from Ibo, who are all park 'collaborators' (as will be seen later in this chapter), sailing restrictions through sanctuaries are linked to the fact that park patrols are no longer carried out with a community member onboard (as was done in the past, which suggests the park has reduced community involvement in conservation management over the years and is becoming more authoritarian) to help mediate and resolve potential misunderstandings (i.e. whether someone is fishing within, or simply sailing through the sanctuary; or what are the actual socio-economic conditions of the 'offender') between the park and the 'offender' (Interview 22, Community Leaders, 07 August 2018). Park officials, however, deny apprehending fishermen caught crossing or sailing through sanctuaries, claiming instead that fishermen are only arrested and their equipment, material and catch confiscated if caught 'stealing' from sanctuaries (Interview 18, Park Officials, 06 August 2018). Local fishermen, not tourists/hotels or those with luxury speedboats, are targeted when within the sanctuaries, as they are generally perceived as 'educated' and 'conscious tourists'. Through the reproduction of historical imaginations of the 'white hunter', who is considered 'conservation minded', versus the 'black indiscriminate poacher', who lacks scientific knowledge (Neumann 2004), wealthy tourists are welcome in the sanctuaries and local communities excluded. Imaginations of environmentally 'conscious' or 'educated' tourists, who require a place to rest, relax and enjoy nature/escape civilisation, are clear from park surveillance reports:

> it was dawn and very dark in the sea, but when we [park rangers] crossed Quirimba, we saw lights close to Quilálea [sanctuary]. However, when we arrived there, we found a yacht with South Africans on board and were told that they were resting to leave in the morning to Situ Island (PNQ 2017).

[96] According to AfDB (2001), wooden boats used by artisanal fishermen in Mozambique are usually made of poor-quality softwood, requiring constant maintenance which in turn greatly reduces fishing time, security and makes it difficult for them to venture beyond shallow waters to fish.

[97] In Mozambique, *Secretários de Bairro* are community leaders at the neighbourhood level. Their main role, together with other traditional authorities, is to act as mediators between the state and the community (Forquilha 2009; RdM 2005). There are three *Secretários de Bairro* in the Island of Ibo, one in charge of each of the three neighbourhoods: Rituto, Cumuamba and Cimento.

Community complaints regarding sailing restrictions through sanctuaries were generally refuted by park rangers. However, most park officials also acknowledged that because circumstances at sea are often uncertain and confusing, fishermen found in the vicinity of sanctuaries are caught and fined, regardless of whether fishing or sailing precisely, because "no-one can differentiate between fish that has been caught inside or outside sanctuary borders" (Interview 18, Park Officials, 06 August 2018). To avoid violent punitive measures, this means that, in practice, local fishermen are prevented from traversing the sanctuaries. The fact that these areas are now off-limits to them means that, should they have the desire to appreciate (snorkel, swim and/or enjoy/experience 'nature'), they are effectively excluded from this. Likewise, and unlike those who manage bed and breakfasts/lodges and backpackers on the Island of Ibo, local fishermen are also effectively excluded from the potential of generating income from taking budget travellers (backpackers, etc.) to the sanctuaries and reefs, for fear of being apprehended.

By limiting and controlling natural resource use, these structural forms of violence inflicted on park residents not only erode local livelihoods and people's mobility through the park, but more importantly, reinforce the levels of poverty and deprivation already experienced in terms of substandard access to social infrastructure and services, inadequate housing conditions, low human capital, deficient nutrition, lack of access to formal employment opportunities/alternatives, among other aspects (discussed in *Chapter 6*).

7.2.3 Symbolic violence: Park residents as irrational, primitive and destructive

Verbal abuse of park residents, particularly in relation to local natural resource use practices and livelihood strategies is relatively common in the Quirimbas, and mostly evident from NGO officials, conservationists, and park authorities. This symbolic form of violence against park residents is associated with processes of criminalisation through history and discourse, which have portrayed local rural communities as the key environmental destroyers or a risk to protected area management or nature conservation (*Chapter 2*). As already mentioned in *Chapter 4*, 'illiterate', 'ignorant', 'irrational', and 'primitive' are all frequent labels used when discussing rural/local communities and/or their practices in Mozambique, suggesting that significant education efforts are required if conservation in the country is to succeed. The same applies to the Quirimbas, where locals are not only perceived as 'environmentally backward' and 'primitive', but also as conniving crooks:

It is difficult to correct [local] people's mentalities; the irrational use of resources means that those resources will end, and the park combats this by educating and banning, educating and banning (Interview 14, Park Official, 03 August 2018).

This marine zone [of the park] used to have dugongs, but I've never seen them. Locals have tasted it in the past and said dugong was sold here in the local markets in the 70s. But I've never seen one. And why is there no more? Because it was badly used by locals. It was seen as a tasty, first-class type of meat which meant the dugong was massively killed, just like fish, because people think that the sea is vast (Interview 14, Park Official, 03 August 2018).

There is a tendency for local communities to do what comes easier to them. For example, why would they produce chickens when hunting provides free meat? With chickens one must invest in them, feed them, look after them, etc., but with game you don't, it's free! This means that if there are no serious consequences, people will continue to do what is forbidden (Interview 1, NGO Official, 30 August 2016).

The first threat to the Quirimbas National Park is its population. The human, resident population of the park. It is the main threat because it is growing and there are no measures in place to control population growth. It is the highest threat because, unfortunately, the much-needed environmental education component is not sufficiently strong (Interview 7, Independent Consultant, 26 March 2018).

Communities do not value forests… Communities have difficulties in valuing what they take from the forest and therefore require significant awareness and education campaigns. What they value is fertile land, and therefore there will always be a tendency for conflicts with elephants, who use the same fertile areas (Interview 3, Independent Consultant, 05 September 2016).

Communities may be illiterate, but they are not dumb. They know how to talk to outsiders and always think ahead 'how can this person benefit me?', 'we're poor and yet we're being reprimanded by the park', 'the park never brought us benefits'. This is very common among communities in the Quirimbas, and the objective is to show you that they are poorer than other communities, that they are ostracised so that their village gets help instead of other villages. There is a lot of contempt among communities and all of them act as if they are poor and need help (Interview 3, Independent Consultant, 05 September 2016).

In a similar way to Munro's (2009) assessment of environmental problems in Freetown's Peninsula as well as Bocarejo and Ojeda's (2016) analysis of the Tayrona Natural Park in Colombia (discussed in *Chapter 2*), most individuals interviewed as part of the research thesis agreed that natural resource depletion in the Quirimbas is rampant and that local communities are to blame. In both these studies, as in the Quirimbas, a number of external actors including government representatives, NGO officials and park guards blame the 'inept' and ''destructive' actions of the largely illiterate, poor, and rural population/communities, for the inadequate use of natural resources and unsustainable livelihood practices (Blaikie 2006; Bocarejo & Ojeda's 2006; Munro 2009) such as slash-and-burn agriculture, use of forests, artisanal fishing, hunting, and the sale of bushmeat, among others. An example of this is linked to the ways in which park 'collaborators' in the Quirimbas are perceived as 'good citizens' by the park board and provided support and incentives for direct collaboration, while those who criticise or fail to collaborate with park officials are labelled 'criminals', 'thieves' or plainly 'problematic' (Interview 22, Community Leaders, 07 August 2018; Interview 15, NGO Official, 04 August 2018).

Campanhas de sensibilização da população (or awareness campaigns to 'sensitise the people' to environmental matters or to protect 'nature') have therefore become an important component of natural resource management strategies and plans at the national and local levels. In fact, a series of *campanhas de sensibilização* have been implemented throughout rural Mozambique by the Office of the Attorney General, specifically directed at protected area residents such as the fishing communities of the Quirimbas National Park, in order to, on the one hand, educate them with regards to the 'protection' and 'sustainable' use of resources (PGR 2020) and, on the other, disincentivise 'non-local' fishermen (i.e. the *Nacalenses*) from entering, making use of, and settling in the park (Interview 15, NGO Official, 04 August 2018). As announced by a park guard during the research trip:

> we are here to teach them [the 'uneducated' communities], tell them what is and is not allowed, and basically control <u>everything</u> [emphasis added] that exists within this park (Interview 18, Park Officials, 06 August 2018).

Remarkably, the park lacks resources to patrol and monitor open sea or ocean environments,[98] where a significant number of industrial and semi-industrial fishing fleets operate illegally and,

[98] Due to the lack of physical and financial resources such as boats and money for petrol (Interview 18, Park Officials, 06 August 2018).

therefore, focuses on patrolling, accusing, educating, and arresting artisanal fishermen and women and other residents with natural resource-dependent livelihoods for the loss of biodiversity in the park.

Another form of symbolic violence in the Quirimbas, which has also been explored by Poppe (2013), Mushonga and Matose (2020) and Verweijen (2020), is linked to the uniforms typically worn by park rangers. According to the authors, the use of uniforms that resemble the military, coupled with the use of guns and ammunition, is something that is easily associated with images of war, conflict, danger and death, reflecting symbolic forms of violence. In the Quirimbas, park guards are dressed in green, camouflaged uniforms and boots that resemble the military, and carry AK47s when during patrol operations in both the terrestrial and marine section of the park, oftentimes in collaboration with the police, the national defence force and/or the navy (Interview 1, NGO Official, 30 August 2016).

These forms of symbolic violence against park residents are linked to historical and discursive processes of criminalisation (explored in *Chapter 2*), which associate or imagine protected areas as 'wilderness' spaces with 'unspoiled natures' for use/enjoyment by (white and/or environmentally conscious) visitors, and needing protection from the unsustainable practices of (black/indigenous) communities, thereby ignoring or silencing human agency or the multiple ways in which local inhabitants may have helped build or create these officially recognised parks in the first place (Castree 2005; Cosgrove 2006; Bocarejo & Ojeda 2016; Ingold 1992). At the same time, it creates a fixed 'place' for locals within the landscape (i.e. 'endogenously primitive' and/or 'environmentally destructive' subjects, who lack scientific tools to manage the Quirimbas), which is based on colonial and neo-colonial categorisations of indigenous/black people and the global/Western based narrative that attributes environmental degradation in the Global South in general and Africa in particular, to the 'primitive', 'tribal', and 'wild' attitudes or modes of living of indigenous/African people. As opposed to the modern and enlightened (white) conservationist, locals are denied any form of knowledge or agency in shaping and managing ecosystems, which, is in turn adopted or self-imposed by Mozambicans as 'factual', even though it is based on external imaginations and accounts as well as non-empirical research, much like McCann's (1999) postulation of Ethiopia's 'degraded' landscapes (discussed in *Chapter 2*).

7.3 The vilification of the Nacalenses and enhanced divisions in society

7.3.1 The Nacalenses as the main destroyers of the Quirimbas archipelago

As explored earlier in the chapter, park residents are generally blamed for natural resource depletion and environmental degradation in the Quirimbas. However, 'foreign' fishermen, fish traders and forest loggers from Tanzania, China and Mauritius, but predominantly fishermen and women from Nacala, a district in the Province of Nampula located over 400 km south of the Quirimbas, have been the focus of particular attention and criticism with regards to natural resource depletion in the Quirimbas. Known locally as *vindouros,* or people from 'another place or city' in Portuguese, the *Nacalenses* are migrant artisanal fishermen who are aggressively blamed for the decline in fish stocks in the Quirimbas archipelago, and the main reason a marine protected area was needed there in the first place (Interview 2, Independent Consultant, 01 September 2016; Interview 7, Independent Consultant, 26 March 2018; Interview 14, Park Official, 03 August 2018).

Although the history of fisher migrations along Mozambique's coast is difficult to determine,[99] some scholars suggest that general fisher migrations along the Eastern coast of Africa may have initiated as early as the 1940s (Wanyonyi et al 2016). The same authors assessed key migration drivers applicable to the *Nacalanses* moving from Nacala to the Province of Cabo Delgado in general, and the Quirimbas archipelago in particular, having concluded that, in decreasing order of importance, these included (i) escaping "hardships at home"; (ii) in search of "better fishing" conditions/grounds"; (iii) to "improve life"; (iv) to "earn more money"; (v) as a "tradition or habit"; or (vi) to "join family and friends" (Wanyonyi et al 2016, p. 95). In essence, these drivers indicate that, although the *Nacalenses* migrate primarily in search of improved livelihood conditions, they also do so out of habit or tradition, which suggests that migrating may be part of their identity as a people. Irrespective of the reasons for migrating, escaping poverty and vulnerability is certainly a key determinant, whether this is linked or not to a depleted resource/fishing base at home as a result of the unsustainable fishing methods of the *Nacalenses*, as argued by many interviewees (Interview 22, Community Leaders, 07 August 2018; Interview 14, Park Official, 03 August 2018).

Locally, the *Nacalenses* are grouped into either 'migrant' or 'seasonal' fishermen, depending whether they have moved to the Quirimbas 'permanently' (i.e. migrant fishermen), or whether

[99] With a number of interviewees suggesting they have been fishing in the Quirimbas archipelago since at least the 1990s (Group Interview 2, Bairro Cumuamba, 02 August 2018; Interview 22, Community Leaders, 07 August 2018; Interview 2, Independent Consultant, 01 September 2016).

they travel to the Quirimbas 'temporarily' every year for a period of about three months (usually between May and July) and then return home just before the start of the rainy season to engage in subsistence farming activities (i.e. seasonal fishermen) (Interview 22, Community Leaders, 07 August 2018; Issufo 2018; Wanyonyi et al 2016). Upon arrival in Ibo after a journey of about three or four days at sea, the *Nacalenses* settle in Bairro Cumuamba, sending for their family members later on to assist in general fishing and other domestic activities. *Nacalenses* households live in either permanent or temporary housing depending on whether they have moved to Ibo as 'migrant' or 'seasonal' fishermen (Issufo 2018), and likely because housing for 'non-residents' is criminalised in the park.

Whilst park residents describe the *Nacalenses* as "very resilient fishermen" with "excellent fishing expertise" in a tone of apparent praise, they also now increasingly blame them for "destroying the park" (Group Interview 2, Bairro Cumuamba, 02 August 2018; Group Interview 1, Bairro Rituto, 02 August 2018; Interview 22, Community Leaders, 07 August 2018), replicating a common narrative used and actively promoted by the park as well as local NGOs since the late 1990s. Motorised boats or dugout canoes allow the *Nacalenses* to travel longer distances looking for fish, including the open sea where allegedly 'bigger' fish and improved fishing grounds are found, while local fishermen, with their artisanal dhows or *casquinhas* are restricted to fishing within Ibo's shallow waters and nearby islands (Interview 22, Community Leaders, 07 August 2018). According to park residents, the *Nacalenses* also have different fishing rules and practices to fishermen from the Quirimbas. While the latter go out to sea during outgoing tides and return with rising tides, which is locally seen/agreed to as a way of "allowing the sea to rest" (Interview 22, Community Leaders, 07 August 2018), the *Nacalenses* fish throughout rising tides and go out fishing more than once per day: "They do not rest. They fish daily, be it high or low tide, and can even go out to fish two or three times per day (Interview 22, Community Leaders, 07 August 2018).

The exclusion of the *Nacalenses* from the Quirimbas landscape is pervasive. Despite numerous claims of a comprehensive community participatory approach leading up to the establishment of the Quirimbas park in 2002 (also discussed in *Chapter 6*), research conducted at the local level suggests instead the *Nacalenses* were intentionally excluded from the landscape as an interested and affected party, predominantly by 'external' actors including NGO officials and conservation consultants, despite the fact that they had been historically utilising natural resources/fishing in the archipelago and were, therefore, a key stakeholder (Wanyonyi et al 2016). Omitting this group from the park is, on the one hand linked to perceptions of the

Nacalenses as being 'external' or 'foreign' to the Quirimbas archipelago and therefore 'undeserving' of 'local' conservation benefits and, on the other, associated to the way in which powerful groups in society (in this case NGO officials and conservation consultants) are able to manipulate landscape readings to serve their own interests. In other words, and in line with common external agendas and approaches to conservation that have been informed by the "politics of indigeneity" (Brockington, Igoe & Schmidt-Soltau 2006, p. 251), the 'rightful' residents and/or 'key' conservation beneficiaries of the Quirimbas have been clearly (and externally) defined as those individuals/households perceived to be 'originally' from this region, while excluding neighbouring communities and/or other users of the park, that is, the *Nacalenses*, who are, at the same time, vilified when it comes to natural resource use. This, in turn, may have resulted in, or otherwise enhanced divisions and/or conflicts between 'locals' and the *Nacalenses* (and possibly other neighbouring communities and park users perceived as 'undeserving' and/or 'outsiders') over the rights over the park's resources.

7.3.2 Nature as a conduit for enhanced divisions in society

The effects of park conservation policies on individual households over the years are likely to have varied depending on household characteristics such as levels of poverty, vulnerability, natural resource dependency, etc. This, in turn, may have resulted and/or otherwise enhanced divisions, albeit unintentionally, between 'locals' and those perceived as foreigners, such as the *Nacalenses*. A clear example is the way in which the establishment of sanctuaries and associated fishing restrictions imposed by the park have affected residents differently, with the *Nacalenses* being able to, in theory, adapt and explore alternative fishing grounds located further into the open sea, while fishermen from Ibo would be restricted to fishing within shallow waters and, therefore, resent the *Nacalenses*.

On the other hand, the park management plan clearly indicates that the Quirimbas belongs to 'local' communities, which automatically excludes the *Nacalenses,* as well as neighbouring communities and other natural resource users, as 'rightful' owners, residents and/or users of the park and its resources. However, it is worthwhile emphasising the fact that the *Nacalenses* are Mozambican and, prior to the establishment of the park, as any citizen, would have been legally entitled to settle and fish in the Quirimbas. As residents and users of the park, they should therefore still be legally entitled to conservation benefits as well as included as key stakeholders. To this day, however, the *Nacalenses* are narrated as "outsiders", "aggressive"

fishermen and "destroyers" of the sea (Interview 22, Community Leaders, 07 August 2018; Interview 2, Independent Consultant, 01 September 2016; Interview 5, Tourism Sector, 01 November 2017; Issufo 2018), with park guards and NGO officials in particular assertively excluding them from the Quirimbas landscape: "yes, we are all Mozambicans, but there are house rules that must be abided by. If they finished [all fish resources] in Nacala, they cannot come here and affect local people" (Interview 14, Park Official, 03 August 2018).

When examined from Samora's perspective or vision of having to 'kill' the tribe for the nation to live (Machel cited in Machel 2014) (*Chapter V*), what conservation has effectively done in the Quirimbas is to flip this on its head, given that, for 'nature' to survive, the tribe must live (and the nation must die) as park residents have been forced to turn their brothers, sisters, wives, nieces, and grandfathers into invaders.

The concept of 'free riders' *versus* 'local natural resource stewards' is another conservation approach that excludes the *Nacalenses*, as well as any other neighbouring community, from the Quirimbas landscape. Actively promoted by WWF and other NGOs, the concept is based on the premises that neighbouring communities to a specific *zona de veda* (which has been implemented by a 'local' community) have sacrificed nothing during closure, yet can still benefit from increased catches during opening days, thereby harming the implementing community (Blue ventures 2016). New and/or enhanced cleavages/divisions among communities and/or groups of residents in the park are likely to ensue from these conservation measures in an attempt to safeguard and control natural resources. As explained by the head of the park's enforcement department:

> on opening days of the *zonas de veda*, only the implementing community can fish there and no one else; if there is anyone there from another community, they will have to properly negotiate with the local community to gain access as they have the power to decide (Interview 14, Park Official, 03 August 2018).

Besides creating divisions in society that may not have necessarily existed before, the fact that more communities are now actively seeking to establish no-take zones in the last couple of years (*Chapter 6*) could be an indication that each village or community in the park is looking to 'map', 'protect' and have 'control' over their 'own' resources, which is a direct consequence of the processes of violence enforced on park residents such as restrictions on mobility, access and use of resources (explored earlier in the chapter).

Whilst interviews with park residents (which, as explained in *Chapter 3* included the *Nacalenses*) confirmed that all three forms of violence, namely physical, structural and symbolic are common in the Quirimbas (as discussed earlier in the chapter), ethnographic research at the local level indicated that the *vindouros* may experience somewhat higher levels of violence from park authorities than 'locals'. Forms of violence against the *Nacalenses* in the Quirimbas include evictions, higher restrictions than 'local' residents in terms of access and use of resources (particularly fish and seafood products), poorer housing and living conditions, banned access and use of community no-take zones, accusations of being the primary environmental 'predators' in the park and therefore the target of more *campanhas de sensibilização*, and the consequent marginalisation of this group from Ibo's society. As defended by a conservation consultant:

> The park management plan was a crucial instrument that banned the entry of *vindouros* into the park… throughout the years, they [the park] have managed to remove hundreds and hundreds of temporary fishermen [*Nacalenses*] who used the Quirimbas for three or four months a year and destroyed <u>everything</u> [emphasis added] with the use of hammers and dynamite to break coral (Interview 3, Independent Consultant, 05 September 2016).

According to the park management plan, whether in Ibo as migrant or seasonal fishermen, the *Nacalenses* are not allowed to build homes in the park as housing and human settlements are generally criminalised, with the exception of housing for 'local' residents within the Community Development Zones. 'Non-residents' are therefore barred from settling in Ibo (MITUR 2010a) as well as collecting natural resources in the park, which have been reserved, albeit with a number of restrictions, to 'local' residents. This, coupled with the fact that many *Nacalenses* are seasonal fishermen who travel to the Quirimbas for short periods of time, may be the reason their housing conditions in Ibo are generally precarious,[100] as adequate housing would likely entail substantial investment costs they cannot afford.

[100] Most homes of seasonal fishermen in Ibo consist of small huts constructed from coconut and palm tree leaves and sticks, as well as plastic bags and cardboard (Issufo 2018).

7.4 The adoption of alternative but largely 'illegal' livelihood strategies

7.4.1 Informal partnerships

The reorganisation of the Quirimbas's territory into 'landscapes of exclusion' or bounded spaces with rigid borders and fixed spatialities, where communities no longer have access to 'nature' and natural resources nor a voice in the park have, on the one hand, forced its residents to engage in banned activities, and thus become criminals (discussed earlier in the chapter) and, on the other, explore and adopt a number of (mainly 'illegal') alternative livelihood strategies to circumvent the restrictions imposed by the park without falling deeper into poverty and destitution.

As discussed above, the *Nacalenses* (and to a lesser extent the Chinese and the Tanzanians) are still locally regarded as 'foreign' and 'evil' fishermen, a perception originated and promoted by external actors in the late 1990s prior to the establishment of the park. However, the 'evil outsider' narrative when referring to the *Nacalenses*, Tanzanians and/or the Chinese, is more evident among white and/or foreign stakeholders including tourist operators, conservationists and NGO officials, who frequently describe them as 'avid', 'ruthless' and 'persistent' fishers, akin to the plague, as mentioned by a local tour operator:

> The problem is, they [the Nacalenses] don't leave. While they used to come up during the dry season and when the rainy season came, they would go home, they don't do that anymore. They are migrants so they'll work in one area, fish it all out, the community will revolt and chase them out and then they go to another area. There's pressure on them, but there are still lots of them around (Interview 5, Tourism Sector, 01 November 2017).

Likewise, Interviewee 1 (NGO Official, 30 August 2016), WWF-Mozambique country director at the time of the interview in 2016, blames resource depletion in the archipelago particularly on the *Nacalenses* and the Chinese who, in collaboration with 'local' communities (who, according to her are equally responsible for resource depletion) have "completely decimated crab, lobster and prawn stocks as well as coral fish populations in the park" (Interview, 30 August 2016).

Interviews and ethnographic research in the Island of Ibo, however, indicate that for the local community, the presence of 'foreign' fishermen in the park, particularly the Chinese and the Tanzanians, is not necessarily perceived as 'incorrect', 'criminal' or 'unwanted'. As a direct response to the park's reorganisation of local landscapes into closed spaces with rigid borders,

and consequent community disenfranchisement, dispossession, delegitimisation and, ultimately, increased levels of poverty and despair, park residents are adopting new livelihood strategies such as commercial and other fishing arrangements with 'foreign' fishermen. Given that foreign fishermen are not legally entitled to fish in the park (albeit doing so nonetheless), informal partnerships with local fishermen are used instead, where fishing gear/material/resources are provided to locals (which they cannot afford), in order for foreign fishermen to then buy their catch for resale abroad (Interview 1, NGO Official, 30 August 2016). From the perspective of local fishermen and women, these partnerships enable them to sustain higher, marketable catches which can be sold to foreigners, as opposed to the local (much smaller) market. Furthermore, foreign buyers are generally relied upon as an important source of income generation from the sale of local produce, with Tanzanians commonly consuming/buying or exchanging octopus with locals for scarce goods such as for example mattresses and chairs (Interview 10, Park Resident, 01 August 2018), and the Chinese purchasing crabs and other seafood products, such as sea cucumbers (Interview 1, NGO Official, 30 August 2016).

7.4.2 The 'use' of children in illicit activities and night-time fishing

Besides relying on informal arrangements with foreign fishermen and buyers to diversify household income, children are also 'used' to engage in livelihood activities that have become criminalised by the park. Given that they are underage and cannot be fined nor detained by park officials, children are regularly seen collecting molluscs and crayfish in Ibo's sanctuaries and mangrove areas during low tide. This strategy is important to note as, on the one hand one can reasonably assume that the children collecting in the mangroves are aware that what they are doing should be hidden from park officials and, on the other hand, most of the children witnessed are of school going age, suggesting that they are not attending or do not attend school as a result of performing an essential function associated with sustaining the livelihoods and food security of fishing households.

Despite being listed as an 'aggravated offence' in the Conservation Law and, therefore, subject to heavier fines (RdM 2014), night-time fishing within sanctuaries has also become a relatively common practice in the Quirimbas since the establishment of the park (Group Interview 2, Bairro Cumuamba, 02 August 2018). According to local fishermen, this is a risk they are willing to take, particularly considering the lower levels of park patrols during the night

(Interview 10, Park Resident, 01 August 2018)[101] and possibly because of the 'cover' darkness provides for 'illegal' activities (Doleac & Sanders 2015). Whilst acknowledging that these actions are 'illegal', most park residents, and not just fishermen, justify them as essential survival mechanisms to sustain themselves and their families. In fact, all residents interviewed supported or showed compassion for local fishermen who fish in the sanctuaries or at night:

> This park has turned into crap. Park officials have no respect or consideration for fishermen. They have no manners when dealing with fishermen. Because even when one commits an error, you don't treat people like that (Interview 16, Park Resident, 05 August 2018).

7.4.3 Park officials as accomplices and the use of power and privilege

Ethnographic research at the local level indicated that alternative livelihood strategies are not only sought by park residents, but also park officials who, despite being formally employed, experience similar levels of poverty and vulnerability linked to, amongst others, low levels of education and high natural resource dependency. In fact, most park officials posted to the Island of Ibo are from the Quirimbas archipelago and, like most park residents, are part of artisanal fishing households (Interview 14, Park Official, 03 August 2018; Interview 18, Park Officials, 06 August 2018). According to Interviewee 13 (Independent Consultant, 02 August 2018), this is one of the main reasons approaches to nature conservation in the park are failing dismally. Part of the problem, he claims, is the fact that the park lacks leadership, particularly in its coastal and marine environment, and this is precisely because park guards understand and relate to the challenges local people face on a daily basis and become complicit in 'illegal' activities and livelihood strategies.

> They [park officials] become complicit because they think, 'well, they [locals] are hungry, so let them go fish', and it cannot continue like that. There needs to be a stronger controlling hand here (Interview 13, Independent Consultant, 02 August 2018).

Based on the provisions of the Conservation Law as well as the Quirimbas management plan, 'illegal' fishing activities are subject to fines and the confiscation of fishing equipment and catch, and can ultimately result in imprisonment (discussed earlier in the chapter). According

[101] While park residents perceive the park as a powerful institution with 'too many guards', they also know that, in general, they don't often work at night (Interview 10, Park Resident, 01 August 2018).

to park officials, confiscated catch is generally distributed amongst the community, particularly at the local hospital, police, schools, and government institutions (Interview 14, Park Official, 03 August 2018; Interview 18, Park Officials, 06 August 2018). However, park residents suggest that instead, the park distribute the confiscated catch amongst the guards and their families (Group Interview 1, Bairro Rituto, 02 August 2018; Interview 22, Community Leaders, 07 August 2018; Interview 10, Park Resident, 01 August 2018; Interview 16, Park Resident, 05 August 2018). Although denied by park officials, they also admitted that 'part' of the confiscated catch is given to the guards who actually "do the work" (i.e. catch 'criminals') in the first place as a "reward" (Interview 18, Park Officials, 06 August 2018), which may be linked to the generally low salaries, lack of incentive, and others. Observations and interactions with residents from Ibo further suggest that park officials make use of their positions of power in the park as well as privilege in terms of access to, for example, boats and information regarding the best tourist attractions in the archipelago to take tourists around the islands in return for a fee. These alternative yet 'illegal' livelihood strategies by both park residents and park officials, in essence indicate the extreme levels of poverty and disenfranchisement experienced at the community level.

7.4.4 In search of imaginary livelihood alternatives

According to local interviews, employment opportunities within the park are actively sought after by local residents, not only because of the formal nature of employment provided by the park, but because of the associated benefits one gets from working with the most 'powerful' institution in the Quirimbas. "Many people flock to the park's offices on the few occasions the park announces job vacancies locally", the most recent of which in the marine and coastal zone: "We had such a long queue of people wanting to submit CVs, something we've never seen before, it basically filled the entire centre of town" (Interview 14, Park Official, 03 August 2018). Besides a monthly salary and the position of power one assumes by working for the park, associated benefits abound, particularly within the context of poverty and vulnerability felt locally, as substantiated by community collaborators. From the 20 community collaborators working with the park at the time of the study, most were members of the local Community Fishing Councils of Ibo, Matemo and Quirimba Islands (suggesting they already hold some position of power with regards to natural resource management) (*Chapter 6*) (Interview 15, NGO Official, 04 August 2018), and receive a monthly incentive of 1,500 MZM

or 23 USD, almost a third of Mozambique's public sector minimum wage,[102] in addition to bicycles, manuals, t-shirts, hats, smart phones, GPS, and training in sea turtle monitoring (Interview 15, NGO Official, 04 August 2018).

A number of international NGOs have been implementing small, diverse and random projects in some of the islands, including training programs in hospitality, entrepreneurship, electrical engineering, information technology, mechanics, carpentry (Fundación Ibo 2019; Interview 19, NGO Official, 06 August 2018), tourism, handicraft, business management, cooking (Instituto Oikos n.d. a; n.d. b) and small-scale farming (Interview 19, NGO Official, 06 August 2018), with the objective of creating community livelihood alternatives that are less reliant on natural resource use. However, the lack of employment opportunities, coupled with the history of fishing in the archipelago, means that fishing is still perceived by many as the 'preferred' profession. Whilst a few fishermen and women have adopted different occupations, such as working as guards, carpenters, bread makers, selling in markets, or just implementing *biscates* (a variety of odd/small jobs here and there), most claim they have not yet attempted to change profession, even though fishing has become an unreliable source of subsistence and income (Group Interview 2, Bairro Cumuamba, 02 August 2018; Group Interview 1, Bairro Rituto, 02 August 2018; Interview 16, Park Resident, 05 August 2018). According to park residents, this is related to the lack of formal employment alternatives on an island environment like Ibo, but also because they are fishermen "by birth and training" and consider fishing to be the one thing they know how to do well, as well as a part of their identity as a people (Group Interview 2, Bairro Cumuamba, 02 August 2018; Group Interview 1, Bairro Rituto, 02 August 2018). Most fishermen in Ibo are therefore still hopeful that things will change for the better, i.e. that the park will change its current fishing restrictions, particularly within sanctuaries, and that fishing conditions will somehow improve (Group Interview 2, Bairro Cumuamba, 02 August 2018; Group Interview 1, Bairro Rituto, 02 August 2018; Interview 13, Independent Consultant, 02 August 2018), which is why subtle resistance activities are employed (explored below).

7.5 'Park almighty' and the transformation of local society into a powerless and voiceless community

Resistance activities (see *Chapter 2* for forms of resistance against protected areas) in the marine section of the Quirimbas are generally rare and, when adopted, take the form of subtle,

[102] In the agricultural, forest and hunting sector, as mentioned in *Chapter 5*.

passive, and disorganised acts of resistance which allow people to still maintain their basic livelihoods and much needed income (Holmes 2014; Norgrove & Hulme 2006). These methods of resistance, according to Holmes (2007), require little planning and resources while avoiding confrontation. Resistance activities employed by park residents are discussed here, as it is argued that dominant constructions of nature imposed on the Quirimbas landscapes have slowly transformed park residents into a generally powerless and voiceless group in society. For instance, despite the significant livelihood implications that the establishment of sanctuaries has had in terms of fishermen having to abandon the most reliable fishing grounds in the archipelago, park residents have 'accepted' them without much resistance given that, on the one hand, they perceived compensation for lost livelihoods and guaranteed improved catches in the future (as promised by the park) as a positive aspect. On the other hand, however, local residents became fearful of the park as a new (and powerful) institution with its own guards, rules, regulations and own area of jurisdiction, something that was still observed at the time of the study among Ibo's society and also confirmed by the local district administrator and local community: "The park thinks and acts as if it has all authority here, even though it falls under the jurisdiction of the District" (Interview 11, Local Government Authority, 02 August 2018). "We're scared of the park's powers" (Group Interview 2, Bairro Cumuamba, 02 August 2018). "We fear the park [...) and cannot enter into discussions with park guards as they may drown us in the sea." (Group Interview 2, Bairro Cumuamba, 02 August 2018). "Park officials do come and speak to the community sometimes, but our problems never get solved because, when and if anything gets written, it simply disappears" (Group Interview 2, Bairro Cumuamba, 02 August 2018).

In essence, the park is perceived by the community as a powerful structure that is unaccountable to local challenges and needs, which in turn makes resistance somehow futile. As put by one of the communities interviewed:

> We feel that we don't have access to the park. There are a few people [from the community] who communicate with the park, but the park <u>does not hear us</u> [emphasis added] (Group Interview 1, Bairro Rituto, 02 August 2018).

Whilst park residents feel marginalised, there is also a general sense amongst the community that the park has a moral obligation to them, precisely because they have sacrificed so much (e.g. stopped making use of the most productive fishing grounds in order to enable the creation of sanctuaries/the park itself), without having received compensation nor benefits. In fact,

residents feel it is the park's obligation to at least coordinate with them regarding the way in which sanctuaries are managed, and feel strongly that these should not be permanently closed, but rather opened for at least a couple of months every year (Group Interview 2, Bairro Cumuamba, 02 August 2018; Group Interview 1, Bairro Rituto, 02 August 2018), something they know, however, is unlikely to happen. Because they feel excluded and ostracised by the park, residents continue implementing banned practices (e.g. fishing within sanctuaries, catching protected species, fishing at night, etc.) not only out of necessity, but as a form of statement that these activities should in fact be allowed in the Quirimbas, and that local people have the right to implement them or, at the very least, have a say about them, as argued by Holmes (2007). These forms of resistance are 'implicit' rather than 'explicit', in the sense that the main motivation for the act is not resistance in itself (for example, local residents do not fish in the sanctuaries, nor catch protected species to then abandon or let the produce rot in order to make a statement, but rather use the 'illegally' caught produce as food/form of income), but a mixture of necessity/livelihood and political statement (Holmes 2007).

The lack of resources by park residents when compared to the park as an institution, which has access to park guards, legal processes and mechanisms, financial resources, and the ability to mobilise discourses at a much larger scale (Holmes 2014), means that common resistance activities also include petty forms of resistance such as non-cooperation with park authorities and the removal of official markers that delineate sanctuaries' borders (Interview 22, Community Leaders, 07 August 2018; Interview 14, Park Official, 03 August 2018). For example, local communities are unlikely to be able to spread their own discourse on the injustices they experience in the park such as loss of livelihoods, destitution, marginalisation, etc. beyond their own community, for lack of power and influence mainly, but also for fear of reprisal (Holmes 2007).

In Ibo, sanctuary markers or buoys are frequently removed by park residents, requiring replacement as often as every two days (Interview 22, Community Leaders, 07 August 2018; Interview 14, Park Official, 03 August 2018). This type of resistance activity and/or strategy against the park is used by local fishermen not only to object against the sanctuaries, but also in the hope of being able to fish within the sanctuaries without being caught and/or punished. In other words, it is an attempt to renegotiate sanctuary boundaries (e.g. make sanctuaries smaller) and meaning, as well as their operational rules with the park, which was clear from the interview held in Bairro Rituto:

> We think that the park should coordinate the opening of sanctuaries with local communities. For example, the park could close them for one year, and then open them for six months. Or else provide a few fishermen with licenses to fish in these sanctuaries (Group Interview 1, Bairro Rituto, 02 August 2018),

and in Bairro Cumuamba as well: we would really like them [the park] to open up some of the sanctuaries, even if just the one located between Ibo and Matemo" (Group Interview 2, Bairro Cumuamba, 02 August 2018).

Given the generally low levels of education among park rangers as well as the fact that they have been trained based on Western and exclusionary approaches to conservation, it is likely for them to misinterpret local resistance activities, such as for example fishing within sanctuaries or removing sanctuary markers and label them as 'crimes' which, on the one hand ignores the political struggles of park residents and, on the other, results in tighter protection mechanisms by the park, with additional consequences for local communities (Peluso 1993). Furthermore, the misinterpretation of local struggles may also result in increased discourses on biodiversity loss at the national and possibly international levels, with the aim of obtaining additional resources to fight against increasing levels of encroachment and 'illegal' acts by 'primitive' park residents. Ultimately, this leads to the further marginalisation and disenfranchisement of local communities as the rightful residents of the Quirimbas archipelago.

7.6 Conclusion

By exploring mechanisms of separation at play in the Quirimbas National Park, this chapter investigated the way in which local society has been restructured or reconfigured by nature. Whether linked to the reorganisation or 'containerisation' of local landscapes, processes of criminalisation through policy, discourse and history or even different forms of violence – structural, physical, and symbolic – the links between nature and culture are disturbed and/or disrupted, forcing park residents to reorganise ways of using and relating to 'nature' and therefore leading to new arrangements and processes of construction within society. Societal shifts of interest detected in the Quirimbas included the criminalisation of park residents, as well as the introduction and/or enhancement of divisions among groups of residents/natural resource users who have historically made use of the same landscapes. Furthermore, nature has also forced local residents to engage in new and overwhelmingly 'illegal' livelihood activities,

and essentially transformed local communities not only into environmental destroyers and/or primitive subjects, but more importantly, into voiceless and powerless groups in society.

8 The reorganisation of socio-ecological relations in the Quirimbas

8.1 Introduction

By exploring the ways in which historical imaginations of 'landscapes', 'wilderness' and 'national parks' have been instrumental in the social construction of nature (Castree 2005; Cosgrove 2006; Cronon 1995; Ingold 1992; Proctor 1998) on the one hand, and by drawing on the assemblage theory and notions of nature arrangements (Deleuze & Guattari 1987; Escobar 2008; Ingold 1993; 2005; 2006; 2015) on the other, the study sought to understand how 'nature' has been used as a vehicle for the reorganisation or restructuring of society in the Quirimbas National Park over the *longue durée*.

The study adopted an interpretivist approach based on intensive qualitative research techniques including ethnography, interviews, focus group discussions and archival research, which enabled the investigation of the political and historical context of the Quirimbas and surrounding communities, particularly by paying attention to how Western/European/Portuguese/hegemonic imaginations, interests and assumptions of nature have been projected onto Mozambican landscapes in general and the Quirimbas in particular, and what that meant for local residents/communities. Key actors involved in the creation of the park were also identified, and their historical perceptions of the Quirimbas landscapes explored. Lastly, key societal changes at the local level (Ibo Island) were identified and investigated.

This concluding chapter revisits the theories, concepts and ideas explored in *Chapters 2* through to *6* and draws key insights on how prevalent nature readings have resulted in the reconfiguration of society in the Quirimbas National Park. Three main findings or insights have emerged from the study, which are further elaborated in the following sections. Firstly, mechanisms used to separate or disrupt the links between 'nature' and 'culture' tended to fluctuate over time, but essentially maintained the same goal, which was to interrupt the connectivity between people and the environment. Secondly, the disruption of 'nature' and 'culture' led to the placing of locals into different categories that changed over time, in function of colonial interests/perceptions of nature and/or conservation narratives. In other words, locals were either perceived as 'belonging in nature', excluded and removed from the landscape, or put back in nature to serve the interests of external actors. Thirdly, when mechanisms of separation disturb the links between people and the environment or socio-ecological relations,

society is forced to reorganise itself. That is, while people's lives are not necessarily stopped in the process of separation, they are reconfigured in the process or forced to reorganise themselves and/or their livelihoods every time there is a disruption.

8.2 Key findings or insights

8.2.1 Mechanisms of separation between 'nature' and 'culture'

This finding explored the ways in which mechanisms used to separate 'nature' and 'culture' in Mozambique – as seen in other protected areas in the region and generally in the Global South – have changed over time, but essentially maintained the same goal, which was to cut the links or continuity between people and the environment. By investigating how landscape readings were historically manipulated and controlled by the Portuguese, *Chapter 4* discusses the ways in which colonial approaches to, or imaginations of nature, resulted in the separation of humans and non-humans/the environment. Whether perceived as Eden or exciting spaces for colonial adventures and exploratory journeys, or as wastelands requiring domination and civilisation, or as commodified for hunting, the extraction of natural resources and nature-based tourism, Mozambican landscapes have been subject to several mechanisms of separation introduced by the Portuguese over the years by means of legislative arrangements or territorial planning tools. Whichever the end result was for the landscape or physical environment in itself i.e. *coutada*, nature reserve, free hunting areas, etc., locals were either allowed in but categorised as 'savages'/non-humans/part of the local flora and fauna, exploited as guides, trackers and slaves, evicted and persecuted for being primitive and damaging to nature, or placed back into the landscape as a product of consumption for tourists (Dias 1968).

Chapter 5 explored processes of separation between nature and culture following Mozambique's independence in 1975, where it was argued that colonial constructions, perceptions, and narratives on nature were essentially replicated by the new government, having resulted in unintended consequences for poor/rural communities with natural resource-based livelihoods. Mechanisms of separation in the post-independence period included legal provisions rooted in the inherited colonial legislation, as well as new legal provisions on natural resource management and nature conservation decisions informed by international environmental agendas and the neoliberal discourse on conservation of the 1990s (Blaikie 2006; Benjaminsen & Svarstad 2010; 2021; Hatton, Couto & Oglethorpe 2001; Shackleton et al 2010). Whilst part of the newly enacted legislation, particularly the Land Law of 1997,

recognised and empowered local communities throughout the country by affirming customary rights and access to nature/natural resources, forest and wildlife resources were limited to subsistence use by the Forest and Wildlife Law of 1999 (De Wit & Norfolk 2010), illustrating once again how global conservation groups or agendas led to the violation instead of reinforcement of the rights of local communities, through processes of "othering" and the monetisation of nature (Kashwan et al 2021, p. 9). During this same period, national parks were also redefined as 'Total Protection Zones' according to IUCN's categories of protected areas, where legal land rights could not be acquired and where human habitation and a number of other livelihood strategies were forbidden (RdM 1999).

Global environmental agendas based on historical, colonial and racist legacies of natural resource use have continued to inform policy developments in Mozambique in the twenty first century, leading to the enactment of the 2009 Conservation Policy and Implementation Strategy, the 2013 Fishing Law, the 2014 Conservation Law and Penal Code amendments in 2014, all of which effectively bringing about new mechanisms of separation that marginalise and exclude communities from protected areas even further. These mechanisms are administered through instruments that disrupt, limit, restrict, and alter local people's livelihoods, as well as challenge their rights through processes of displacement and marginalisation and, particularly, violence and criminalisation. By restricting the geographical spaces that park residents can utilise, limiting the type and amount of natural resource use allowed and, particularly by criminalising activities that are commonly practiced and form part of local livelihood strategies without providing or enabling appropriate alternatives, the law serves as a violent mechanism by means of which to cut off links between people and the environment, which forms part of a wider process of interrupting or detaching nature from culture.

At the local level in the Quirimbas, current mechanisms of separation between people and the environment that have been informed by imaginations of nature imposed on the Quirimbas archipelago by both the Portuguese and international environmental agendas and motivations, include the partition of local landscapes into a series of 'exclusion zones' or 'nature blocks' (i.e. Total Protection Zones, Specific Use Zones and Community Development Zones, in addition to buffer zones as discussed in *Chapter 6*) which mirror protected area zoning models determined by international conservation bodies such as the IUCN, in addition to a regulatory framework on how to manage each of these blocks. The containerisation of nature in the Quirimbas essentially results in a series of enclosed spaces with permanent boundaries,

managed through a set of regulated activities conceived externally, instead of complex, overlapping, and flexible 'spatialities' that recognise local land uses and the relationships people have with the land they inhabit and the resources they use (Grandia & Ojeda cited in Holmes 2014). From a local perspective, what this means is that the Quirimbas has been transformed into landscapes of fear, where park residents are subject to physical, structural, and symbolic forms of violence in order for the park to guarantee the separation of people from the environment and, therefore, ensure the preservation of nature in its 'ideal' state.

8.2.2 The placing of locals

Historically, processes of separation between 'nature' and 'culture' have also led to the placing of locals into flexible and/or unstable and often contradictory categories, all of which in function of colonial and/or conservation interests. *Chapter 4* discusses how categories have changed over time as a function of the value assigned to landscapes by the Portuguese administration. Whether perceived as 'noble savages' and therefore an integral part of the landscape, or removed for being 'backward' and 'primitive', park residents were constantly categorised and 'placed' according to colonial interests. Initially perceived as wildlife or 'wild people' with 'beastly' customs and appearances that 'belonged in nature', the *indígenas* were often placed in the vicinity or within hunting reserves to be used/exploited as guides, trackers, and slaves during hunting expeditions (Martinho 1934), as well as a source of excitement for hunters, adventurers, *descobridores* and the like. During this time, it was important for the *indígena* to remain in 'nature' to enhance the white man's adventure and sense of danger and mystery. Whilst perceived as 'belonging in nature' (i.e. part of fauna and flora) or otherwise useful to the *conquistador* if in the 'wild', the *indígena* was also excluded from the landscape, due to practices and livelihoods perceived by the Portuguese to be inadequate or irresponsible towards 'nature', such as hunting and the use of natural resources which were, by then, perceived and appropriated as a produce of the colonial government.

Following Mozambique's independence, Frelimo attempted to revise its inherited colonial legislation with the objective of enabling the use of natural resources for the benefit of its people and providing local communities with legal rights to natural resources (*Chapter 5*). However, 'nature' was still largely perceived and approached as an asset for tourism and economic development, as was the case under the Portuguese colonial administration. Dependency on, and international pressure from bilateral and multilateral donors and NGOs to

reform natural resource policy agendas in the 1990s resulted in a number of natural resource management policies being adopted and legislation enacted, which were largely influenced by the 'win-win' neo-liberal model of that time (Benjaminsen & Svarstad 2010; Blaikie 2006; Shackleton et al 2010). During this period, locals or people from rural areas throughout Mozambique became 'classified' as 'local communities' and, whilst empowered by mechanisms that affirmed customary rights, they were prevented or prohibited from settling within conservation areas or Total Protection Zones and forced to remain subsistence natural resource users (De Wit & Norfolk 2010; RdM 1997; Soto 2009).

Although park residents were eventually allowed to legally reside within protected areas after the Conservation Law was passed in 2014, local communities are still perceived and categorised in the twenty first century as having 'incompatible' practices with protected areas and national conservation objectives (RdM 2014). They are therefore not only marginalised and excluded from nature/protected areas/their homes, but legally criminalised or categorised as 'thieves' and 'public offenders' for having natural resource-based livelihoods, without having been provided compensation nor suitable alternatives. The way in which natural resource users are subject to processes of exclusion and violence illustrate how Mozambique (like other countries in the region and the Global South) continues to be forced to mould its approaches to conservation in line with external green agendas which are not only based or informed by historical perceptions and stereotyping of indigenous/black communities as inferior to non-humans or nature, but also to show its commitment to green agendas and, in the process, gain international acceptance and benefits, despite the fact that this ends up further prejudicing and oppressing park residents and other natural resource dependent groups who already live in conditions of poverty and suffering (Ramutsindela, Matose & Mushonga 2022)

The categorisation of locals in the Quirimbas is evident. Besides being excluded and marginalised from the landscape, they are regularly classified as 'ignorant' and unable to help themselves and protect nature 'scientifically'; 'criminals' due to activities and livelihood practices that have been 'redefined' as 'illegal' by the park; 'encroachers' from attempting to build homes or use areas that were previously available to them; 'foreigners' or 'park destroyers' for being perceived as 'outsiders' and, therefore, not eligible to settle in or use the Quirimbas. The classification of locals goes hand-in-hand with the reinvention of nature in the Quirimbas following the park's proclamation, as what was once perceived as a mosaic of socio-cultural landscapes has been redefined as a series of 'no-go' areas for locals (i.e. 'wilderness' areas, 'wildlife corridors' and/or 'sanctuaries').

8.2.3 The reconfiguration of society

The third key finding is linked to the way in which mechanisms of separation or disruption between people and the environment force society to reorganise itself. While people's lives are not necessarily stopped in the process of separation, they are reconfigured or restructured, or forced to reorganise themselves and/or their livelihoods.

In the Quirimbas, the reconfiguration of society is essentially linked to the way in which the park's physical environment/landscapes have been reorganised into nature 'blocks' or 'containers', which have in turn resulted in, or otherwise forced local communities to restructure themselves. The study identified four key societal changes at the local level as a direct result of the disruption between 'nature' and 'culture', which have been summarised below.

The first change relates to the ways in which park residents, particularly natural resource users such as fishermen and women, have become criminalised in their own homes for what is now considered to be 'stealing' of natural resources, using 'illegal' methods of natural resource collection and 'poaching' of protected species, with park authorities, conservation NGOs and the state actively criminalising natural resource use throughout the park, but particularly within its 'exclusion blocks' (discussed in *Chapter 6*). At the time of writing, regulatory, discursive, and historical processes of criminalisation (*Chapter 2*) associated with structural, physical, and symbolic forms of violence against park residents (*Chapter 2*) were all at play in the Quirimbas, which in essence restrict, limit and criminalise local livelihood practices without providing or enabling appropriate alternatives. The result is that local residents are forced to act outside of the law and become 'illegals' in order to survive; for example: fishing within sanctuaries; no-take zones or night-time fishing; catching legally protected species such as marine turtles; or using 'illegal' fishing methods such as mosquito nets, or locally available 'toxic' substances.

A second societal change explored in *Chapter 6* relates to the ways in 'nature'/'culture' disruptions in the Quirimbas have created and/or enhanced divisions between residents, with some groups pointed out as 'foreigners' or 'not belonging' and, therefore, 'undeserving' of local conservation benefits, and others perceived as 'criminals', 'thieves' or just 'problematic' for openly criticising, resisting or refusing to collaborate with the park. As a result, these groups are generally excluded and disempowered, while other groups have gained considerable power in local politics and social arrangements. A case in point is the park board which, as an institution, now acts above local government structures, alongside park rangers who are feared

by residents, and community collaborators who are perceived as 'good citizens' and provided support and incentives.

These reconfigurations are effectively linked to the way in which nature conservation activities, policies and/or tools in the Quirimbas have introduced new power dynamics within society. Examples include the application of the 'free-riders' and/or '*vindouros*' concepts when referring to the *Nacalenses* or 'outsiders', which have, in essence, determined who classifies as 'local' or 'rightful' natural resource owners, *versus* 'foreign' and/or 'destroyers of the park'. Besides excluding the *Nacalenses* from the landscape, this also ignores and silences the history of resource use in the Quirimbas.

The adoption of new, but essentially 'illegal' livelihood arrangements by park residents is the third example of how disruptions between people and the environment in the Quirimbas have forced local residents to explore and adopt alternative livelihood strategies to circumvent the restrictions imposed by the park without falling deeper into poverty and destitution. Coupled with the lack of employment opportunities and a depleted resource base, 'nature'-'culture' disruptions have forced local community members to engage in 'illegal' or 'banned' activities, which include informal commercial/fishing agreements and partnerships with fishermen from Tanzania and China, as well as 'using' children to perform household activities that have become criminalised, such as the collection of molluscs and crustaceans from sanctuaries, or no-take zones given that they are underage and cannot be fined nor detained by park officials.

Lastly, the transformation of local communities into a generally voiceless and powerless group in society is presented as the fourth and final finding in *Chapter 6*. This finding explores the ways in which local communities have responded to conservation activities they do not agree with by resorting to resistance activities, albeit implemented explicitly, i.e. where the main motivation for the act is not only resistance, but a combination of basic needs (e.g. hunger and the need to sustain the household) and a political statement that access and use of the park and its resources should be renegotiated or at least discussed with the community. Given the lack of resources by local residents, however, such as the ability to spread their discourse on the injustices they experience in the park (e.g. criminalisation, loss of livelihoods, marginalisation and exclusion, etc.) on a larger (e.g. national) scale, resistance activities are understood by both park rangers and NGO officials as 'crimes', rather than an attempt to resist something that the community experiences as unjust, which not only ignores the political struggles of park residents, but also results in tighter protection mechanisms by the park, with additional (and more severe) consequences for local communities. The misinterpretation of local struggles can

in turn result in increased discourses on biodiversity loss at the national and international levels by external actors, with the aim of obtaining additional resources to fight against increasing levels of 'encroachment', 'pressure', 'threats', 'destruction' and 'illegalities' against the park by local residents. Ultimately, this can further marginalise and disenfranchise park populations and exclude them as the 'rightful' residents of the Quirimbas archipelago.

8.3 Concluding remarks

Through a political ecology framework, the thesis has explored constructions of nature that have been historically imposed on Mozambican landscapes in general and the Quirimbas National Park in particular, to understand how nature-culture disruptions have forced the reconfiguration of society. It has made two contributions to the debates around the social construction of nature and protected area management. Firstly, it demonstrates that approaches to conservation are informed by prevalent ideas/imaginations/viewpoints on nature as rigid systems with fixed borders. Within this approach to nature, connectivity or permeability between humans and the environment is rejected, and local perspectives/ontologies on nature and natural resource use are neglected and/or suppressed. To explore how dominant nature readings disrupt nature-culture links, the thesis engaged with mechanisms of separation between people and the environment applied throughout the history of colonialism and conservation in Mozambique and the Quirimbas. Based on imagined natures, legal provisions, territorial planning tools and protected area management instruments have been used to redefine local socio-cultural landscapes into 'nature blocks'. Throughout the history of separation between nature and culture, the way in which locals were placed within the landscape, particularly in function of colonial interests and/or conservation narratives and practices, is also examined. Whether classified as belonging in the wilderness (i.e. non-human), removed from the landscape for being primitive and irresponsible towards nature, or put back as a product of consumption to Europeans, locals have been historically placed according to the interests of the Portuguese administration. In the post-independence period, and based on inherited colonial legacies and pressure from international environmental agendas and motivations, locals were once again (re)placed in the landscape as 'local communities' with 'subsistence' modes of living, or otherwise as 'criminals', 'thieves', 'primitive' and 'ignorant'.

Secondly, based on the concept of nature arrangements, as well as the assemblage theory, the analysis provided here also contributes to an improved understanding of how society is forced

to reorganise itself following disruption of the nature-culture connection or continuity. By investigating the history of the Quirimbas region as a socio-cultural landscape rather than a mosaic of (imagined) 'pristine' or 'idealised' landscapes on the one hand, to how separation mechanisms have been applied to the park on the other, the thesis demonstrates that, while people's lives have not necessarily come to a standstill during the process of disruption, society has been forced to reconfigure or restructure itself. At the local level, this is engaged with by exploring how park residents have become 'criminals' instead of citizens; have been forced to engage in 'illegal' or 'banned' activities subject to heavy penalties such as fines and imprisonment; or have been 'divided-and-ruled', in the sense that some groups have been excluded from society while others have been favoured and embraced. Finally, the thesis documents how the community has become a functionally voiceless and powerless group in society.

9 References

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Appendix A – Guiding interview questions for key informants

Info on interviewee

Name (Optional):

Job position:

What does your work specifically involve?

What is special about the Quirimbas?

How long have you been working in this area?

Park creation

Why was the Park created?

- explore historical reasons;
- search for links with *coutadas* in the region;
- search for historical associations between the Quirimbas Region and imaginations of wilderness and landscapes
- explore political context/reasons

Who were involved in the creation of the Park?

- Explore exclusion/inclusion of local communities
- Explore pressures from international community

How was the Park's Management Plan drafted? And how is this Plan implemented?

Communities

Who are the inhabitants of the Quirimbas Region? And where do they come from?

Who lived in the area in which the Park was established? And what happened to them?

Have there been any resettlements since the Park was created? If so explore who, where, when.

How did people respond to the removal? (if there was any resistance it will come out here).

Are there any communities involved in the co-management of the Park? Which ones?

Explore which geographical areas I should focus my research on

Are there any communities or groups of communities that oppose the creation of the Park?

Are resistance activities (e.g., forest fires, illegal hunting, etc.) against the Park common?

What types of anti-conservation activities (e.g., forest fires, illegal hunting, etc.) are common in the region? Are these more common in certain areas of the Park? Which areas?

How do you deal with resistance activities?

Explore what they do during education campaigns

Park perceptions

Personally, which words or ideas do you associate with the Quirimbas National Park?

In your opinion, what are the main threats to the Quirimbas National Park?

In your opinion, what kind of activities/solutions could enhance the sustainability of the Park (e.g., fencing, improved surveillance, etc.)?

Do you believe that the Park can survive without separating it from humans? Why / Why not?

How do you think local communities perceive the Park?

Explore whether local perceptions are seen as ‘less knowledgeable’, ‘ignorant’, etc.

Appendix B – Research Ethics Approval

UNIVERSITY OF CAPE TOWN
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6 February 2019

Vera Ribeiro
Department of Environmental and Geographical Sciences

Dear Vera Ribeiro

RE: Quirimbas: A society reconfigured by nature

I am pleased to inform you that the Faculty of Science Research Ethics Committee has approved the above-named application for research ethics clearance, subject to the conditions listed below.

- Implement the measures described in your application to ensure that the process of your research is ethically sound; and
- Uphold ethical principles throughout all stages of the research, responding appropriately to unanticipated issues: please contact me if you need advice on ethical issues that arise.

Your approval code is: FSREC 11 - 2019

I wish you success in your research.

Yours sincerely

A/Prof Rachel Wynberg
Chair: Faculty of Science Research Ethics Committee

Cc: Prof Maano Ramutsindela - Supervisor