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# Territoriality by Conservation in the Selous-Niassa Corridor in Tanzania

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## SUMMARY

In this paper we argue that historically emerging frontiers of conservation pave the way for continuous top-down territorialization. Drawing on a concrete case in the Selous-Niassa Corridor in Southern Tanzania, we show how a frontier emerged in the form of community-based conservation. Decades of consecutive and continuous territorialization projects, based on mapping and boundary making, have ensured that conservation is beyond questioning, despite failures in the processes of demarcating, controlling, and managing this large-scale socio-spatial intervention. Although these failures produce territorial conflicts and confusions on the ground, we argue that in the context of a conservation frontier the gap between the envisioned ideal and the messy reality is used to legitimize continuous conservation interventions that rely on technical expertise rather than political dialog. While such top-down territorialization by community-based conservation inevitably remains partial and contingent, this is nonetheless a powerful and resilient project that gradually transforms communal landscapes into conservation territories with little room for public debate.

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#### 1. Introduction

The landscape of sub-Saharan Africa is strewn with protected areas, established throughout the colonial and post-colonial periods and resulting in a continental patchwork of national parks and game reserves. These core protected areas are conservation fortresses that separate people from wildlife through fences and fines (Brockington, 2002). They are seen by many as protecting Africa's remaining areas of "wilderness" (Neumann, 2001a). These notions of wilderness and authenticity legitimize their exclusive claims to space and render alternative imaginaries of the history, present, and future of protected areas virtually unthinkable. Today, struggles over the creation of iconic protected areas such as Serengeti National Park and Selous Game Reserve in Tanzania are a closed chapter of history. Few would question the view that the landscapes these areas protect are "meant for" the conservation of wildlife. Reopening policy debates over the present and future uses and purposes of the lands gazetted and territorialized as Serengeti or Selous appears a far-fetched idea.

However, every protected area has a history of unsettled attempts and negotiations to create a conservation territory through acts of territorialization. At the advent of such struggles, the spaces to be taken up by protected areas are inhabited by people with different ideas and stories—or imaginaries—about their values and purposes (Neumann, 1998; Shetler, 2007). The push to create a conservation territory implies the unsettling of existing socio-natural configurations by new orders, producing new regimes of access and authority. Rasmussen and Lund (2018) frame these processes as the emergence of a resource frontier. In such "frontier moments", the conditions of possibility emerge for the unsettling of existing orders. Thereby, frontier moments evoke the establishment of new orders that eventually become settled in landscapes and minds. In biodiversity and wildlife conservation, such double territorialization-of landscape and of mind-creates durable spatial orders. Under such conditions the future existence of presently protected areas is rarely questioned in public debates, although protected areas may be founded on past struggles and unsettled grievances, and the "fortress" existing in the present may even continue to be permeable.

With the onset of community-based conservation as a new paradigm for wildlife conservation—typically in buffer zones of protected areas—the notion of the connectivity of wildlife habitats through corridors has gained an important role in how wildlife conservation projects are planned and implemented (Borner, 1985; Goldman, 2009; Newmark, 1993, 2008). The patchwork of African protected areas is being transformed into a continental network of areas designated as wildlife habitats that transgress national borders through transboundary conservation (Büscher,







2010; Duffy, 2006; Ramutsindela, 2004; Wolmer, 2003)<sup>1</sup>. This is facilitated by a complex network of actors spanning public and private, global and local realms (Duffy, 2006), upscaling conservation to the international level (Noe, 2014).

Corridor-based conservation interventions seek to reorder the landscape according to equilibrium ecological models based on island biogeography (Goldman, 2009; Noe, 2014). Corridors constitute a key component of present-day large-scale landscape conservation, promising simple, structural solutions to a "complex problem of maintaining functional ecological connectivity" between several protected areas (Goldman, 2009: 335). The simplified corridor thinking does not necessarily result in better connectivity (Goldman, 2009), but it has the discursive power to mobilize various groups of people behind the idea of connecting protected areas. This power can translate into new territorial claims for conservation that are resilient against counter-claims to the same land for purposes other than conservation.

While the creation of protected areas has been largely associated with forceful and often violent displacement of people (Brockington & Igoe, 2006; Lunstrum, 2015; West, Igoe, & Brockington, 2006), projects of wildlife corridor establishment on communal lands seek to secure suitable spaces for wildlife movements in areas where human populations depend on the same spaces for their livelihoods. Hence, wildlife corridor projects seek to pursue conservation connectivity through a developmentalist agenda, often engaged in efforts to "change" people's lifestyles and livelihoods, "educating" them in "sustainable" land use, environmental protection, and conservation (Bluwstein, under review; Borner, 1985; Fletcher, 2010; Newmark & Hough, 2000).

In this paper we argue that while top-down territorialization in the context of community-based conservation inevitably remains incomplete and contingent, it is nonetheless a powerful and resilient project that transforms communal landscapes into conservation territories with little room for public debate. Drawing on a concrete case, we show how acts of territorialization follow frontier moments that emerge where existent institutional orders are undermined. We demonstrate how decades of consecutive conservation projects have continuously territorialized the landscape despite failures in the processes of demarcating, controlling, and managing conservation interventions.

#### (a) Territorializing the frontier by conservation

We study acts of territorialization as acts that are "about excluding or including of people within particular geographic boundaries, and about controlling what people do and their access to natural resources within those boundaries" (Vandergeest & Peluso, 1995: 388). Territorializing acts spatialize resource frontiers. Territoriality is the expression of these dynamics of spatial control (Rasmussen & Lund, 2018).

We understand territoriality by conservation as efforts to control land, people, and resources (Peluso & Lund, 2011), be it by the state or by international conservation interests, be it peacefully or through coercion and violence (Neumann, 2001b; Peluso, 1993). We conceptualize territorialization acts of boundary making and mapping as acts of claim making and "power relations written on land" (Peluso & Lund, 2011: 673), or "the power to name, to define, to locate, and to situate" (Rocheleau, 2005: 329). By studying the challenges associated with fixing and projecting boundaries (Corson, 2011) we aim to demonstrate the dialectical relationship between the shortcomings and contingencies of efforts to create new territories of conservation (Arlin, 2011; Mathews, 2011; Scott, 1998), and the power and resilience that such efforts have in establishing and legitimizing lasting conservation claims on the landscape and in the minds of people (Li, 2007).

Our starting point is that new territories are always configured in relation to existing territories (Lefebvre, 1991; Roth, 2008), which profoundly affects processes of territorialization. Where the reconfigurations unsettle existing institutional orders and produce new regimes of access and authority, a frontier emerges (Rasmussen & Lund, 2018). As Li shows, conservation and development interventions are legitimized through practices of problematization and rendering technical (Li, 2007). We concur with this analysis and add that legitimization is also produced through explicit and implicit referencing to a history of past claims and interventions (Massev, 1995). Initial conservation interventions in a given area establish the conservation frontier, where existing rules, rights, and imaginaries about place are suspended. Establishing the frontier lays the foundation for future interventions to territorialize it in the name of conservation. While often failing to achieve its stated goals, the presence of conservation projects and the debris they leave behind in the form of reports, memories, maps, etc. only legitimize continuous work. Thus, conservation is cultivated in a given place historically, at the project level and on the ground.

The very notion that a space has conservation value is established *historically* through the emergence of a conservation frontier. Such a frontier is produced when new policies of land control are implemented through conservation interventions. Under such conditions landscapes and minds are re-territorialized through acts of boundary making and mapping, capacity building and sensitization, scientific research and consultancy reports. Consequently the idea that conservation is integral to a given landscape is settled in landscape markers, maps, reports, minds, and institutional orders. From this point on it ceases to be a frontier, but becomes territorialized through continuous attention and interventions. Conservation takes root and restricts the political imaginary that sets the alternative values and purposes that a landscape can serve.

At the project level and on the ground the gap between the ideal (the plan, the map, the logframe) and the realized is often visible in conflicts over boundaries, land use, and authority. These conflicts are often products of past interventions and political contestations. At face value the gap between the ideal and reality appears to undermine the claims made by conservation. Yet the gap can also be used to legitimize continuous interventions to resolve boundary conflicts through boundary making and mapping, often by relying on technical expertise rather than political dialog. The dialectical relationship between an imperfect and problematized present and an ideal future is perpetuated by continuous projects that promise "change" and "improvement" (Lund, Mabele, Sungusia, & Scheba, 2017).

We study struggles over mapping and boundary making as an empirical entry point to understand the inherent tension in competing imaginaries of what a landscape is and should be. Empirically, we focus on territorializing practices that encompass obviously political acts of defining tenure and access, as well as more obscure acts of demarcation and mapping that may appear technical and apolitical on the surface. We see maps and cartographic processes as social practices by particular actors whose ideologies, world-views, and political interests are reflected in the cartographic objects that they create or promote (Crampton, 2001, 2011; Harley, 1988, 1989; Sletto, 2002). As lucidly noted by Bateson (1979: 30), "the Map is not the Territory". Maps are imbued with authority and power not by accurately or "objectively" depicting territorialized spaces, but by actors

<sup>&</sup>lt;sup>1</sup> Transboundary conservation is also often termed transfrontier conservation, where the frontier has an explicit empirical and spatial meaning and is synonymous to an international border. We use frontier to conceptualize unsettled institutional orders and regimes of access and authority over resources, see Rasmussen and Lund (2018).

seeking support for their claims through these maps. Whereas rural dwellers rarely draw maps but have an intimate connection to and understanding of the socially fluid (Kosek, 1998) land-scapes they live in, conservation practitioners may know little about the landscape that they try to fix and visualize in maps (Orlove, 1991).<sup>2</sup>

Our study focuses on the Selous-Niassa Corridor (SNC) in Southern Tanzania between two of the largest protected areas in Africa-the Tanzanian Selous Game Reserve and the Niassa National Reserve of Mozambigue. We seek to understand how contestation and conflicts are produced by and reproduce technical and political challenges, and how conservation, through acts of territorialization in the Selous-Niassa Corridor, nevertheless gains a foothold in minds and landscapes. To do this, we trace the history of post-colonial conservation interventions in this area since their beginning in the 1980s through a careful reading of available literature and interviews with some of the key actors who have been involved in the processes. We then illustrate boundary conflicts and contestations over access to land through a comparison of geo-referenced maps and GIS shapefiles of villages and conservation areas as well as reports and interviews with a staff of implementing agencies and affected villages.<sup>3</sup> In search of empirical validity and analytical closure, we have shared the results of our study-as represented in this paper-with key informants, and actively engaged in a debate with them where our analytical authority was challenged (Mosse, 2011b). Thus the final manuscript is the result of an extensive engagement with "the field"-one that extended into the stages of analysis and writing.

## 2. Community-based conservation in Tanzania

Over the last 15 years the Tanzanian government has worked with a handful of international conservation NGOs to establish Wildlife Management Areas (WMAs) across the country. With 38 WMAs operational or in the process of becoming so, these community-based conservation areas are, by official estimates, set to cover 13% of Tanzania's total surface area (Wambura, 2015). A WMA is created when several villages—typically located in buffer zones of core protected areas (e.g., national parks or game reserves) or so-called corridors between them—set aside parts of their village land<sup>4</sup> for wildlife conservation. A WMA thus spans multiple villages and is managed by a Community-Based Organization (CBO) led by a committee comprising elected representatives from the member villages. Underlying this wildlife policy is an idea of functional separation of village landscapes for settlements, agriculture, photographic and hunting tourism, livestock grazing, and wildlife. The goal is to reorder the socio-ecological space to ensure wildlife conservation through the prevention of habitat fragmentation, and to generate socio-economic benefits for the participating communities.

WMAs are usually established in rural areas where people depend on agriculture and/or livestock keeping and use natural resources. Conflicts over access to land (e.g., farming vs livestock grazing) and natural resources are common within and between communities as well as between communities and local government authorities, and are often expressed as conflicts over territorial boundaries. Since WMAs are often created in areas adjacent to protected areas, the resulting restrictions on land use and access to natural resources are added to already existing restrictions pertaining to land-use expansion and the utilization of natural resources applied to people living at the margins of protected areas.

It is in such settings that WMAs are established by a conglomerate of agencies such as the Wildlife Division of the Ministry of Natural Resources and Tourism, district government, international conservation NGOs, foreign governmental donor agencies and contractors, and village governments. These actors can have both shared and competing interests and visions over conservation in general and a Wildlife Management Area in particular (cf. Picard, 2010:7). Conservation NGOs and national media promote WMAs as participatory and community-based enterprises facing challenges on the way to financial sustainability and rule enforcement, while overall being on a path to success (AWF, n.d.; Salehe, 2014; Simbeye, 2011; WWF, 2013, 2014). Critiques of WMAs point to a conservation bias at the expense of rural development, and a continuation of top-down planning and management practices leading to a recentralization of control over key resources and access to land (Benjaminsen, Goldman, Minwary, & Maganga, 2013; Bluwstein, Moyo, & Kicheneri, 2016; Goldman, 2003; Igoe & Croucher, 2007).

#### (a) The Selous-Niassa Corridor

The SNC territory has been in the spotlight of a number of national and foreign agencies, since conservation interventions south of Selous Game Reserve (GR) were launched in the 1980s. Over the past three decades, a number of different organizations have implemented various conservation projects under the SNC umbrella, as illustrated in Table 1's historical overview.

With the overarching goal of securing free wildlife movements in the Selous–Niassa Corridor across national and protected area borders (Noe, 2010; Schuerholz & Baldus, 2012), five WMAs have already been established and four more are in the making. The various projects associated with the SNC (Selous GR buffer zones, the corridor, cross-border anti-poaching, infrastructure development) have been operating at different politico-jurisdictional scales; the common goal is to create zones for wildlife conservation amidst human settlements. This includes village-based interventions through the Village Land Use Plan process, across villages using WMA Resource Management Zone Planning, and across different protected areas, districts, and WMAs to consolidate the corridor by bringing the tools of project management to the conservation frontier.

Thus many efforts across time and scales have solidified the idea of conservation in this vast area, while also producing unresolved technical and political challenges. In the remainder of the paper, we will show how the SNC constitutes a frontier space that is continuously territorialized by conservation. Yet territorialization by conservation in this area is partial in the sense of contestations and conflicts over boundaries and tenure, while complete in the sense that today nobody within the conservation apparatus

<sup>&</sup>lt;sup>2</sup> Importantly, we are not seeking to engage in the debate on counter-mapping and the role of community construction (Harris & Hazen, 2006. Power of maps: (Counter) Mapping for conservation. *ACME*, 4(1), 99–130. , Hodgson & Schroeder, 2002. Dilemmas of counter-mapping community resources in Tanzania. *Development and Change*, 33(1), 79–100. , Peluso, 1995. Whose Woods are these? Counter-mapping Forest Territories in Kalimantan, Indonesia. *Antipode*, 27(4), 383–406. doi:10.1111/j. 1467-8330.1995.tb00286.x), but rather seek to understand the tension between different practices of territorialization by juxtaposing partiality and contingency of mapping by conservation with the narrowing of ideas about what purposes the landscape that is mapped should serve.

<sup>&</sup>lt;sup>3</sup> This paper is based on a combination of exchanges with village leaders and WMA representatives in the field (by first author in 2014), a continuous exchange with key project stakeholders in Dar es Salaam and through email (both authors involved), and a desk-based analysis of project documents and spatial data that were shared with us by several Tanzanian institutions involved in conservation planning. We recognize that our study does not capture differentiated perspectives on the reported conflicts at the village level with the risk of homogenizing heterogeneous fractions of various groups of people and ethnicities into "communities" (see Agrawal & Gibson, 1999. Enchantment and Disenchantment: The Role of Community in Natural Resource Conservation. *World Development, 27*(4), 629–649. doi:http://dx.doi.org/10.1016/S0305-750X(98)00161-2).

<sup>&</sup>lt;sup>4</sup> Village land in Tanzania is a legal category of land under the administrative rule by a democratically elected village council.

Project name	Funding and implementing actors <sup>2</sup>	Project area	Project period
SCP (Selous Conservation Program)	German Technical Cooperation Agency (GTZ)	Selous GR buffer zone	1988-2003
SCP-CWM (Selous Conservation Program–Community Wildlife Management)	GTZ	Selous GR buffer zone (Northern villages of Mbarang'andu and Nalika WMAs)	1991–2007
SNWC (Selous-Niassa Wildlife Corridor)	UNDP/GEF/GTZ	Southern villages of Mbarang'andu and Nalika WMAs	2005–2009
SNEC (Selous-Niassa Ecological Corridor), pre-feasibility study	German Development Bank (KfW)	5 WMAs between Selous GR and Niassa NR	2005
SNWPC (Selous-Niassa Wildlife Protection Corridor)	KfW/JV Gauff-WCST	5 WMAs between Selous GR and Niassa NR	2007-14
RLP (Ruvuma Landscape Program) corridor	WWF (with USAID funding)	5 + 4 <sup>3</sup> WMAs between Selous GR and Niassa NR	Since $\sim 2010$
REP (Ruvuma Elephant Project)	PAMS	5 WMAs between Selous GR and Niassa NR	Since 2011
<sup>1</sup> According to a SNWPC project-manager the next SNC project is Development Program, GEF: Global Environmental Facility, KfW: Ki	in the pipeline and will include KfW and WWF. GTZ: Gesellschaft für <sup>1</sup> reditanstalt für Wiederaufbau (German Development Bank), IV Gauff-	Technische Zusammenarbeit (German Development Cooperati -WCST: Joint Venture between H.P. Gauff Ingenieure GmbH &	ion), UNDP: United Nation & Co. KG (JBG) and Wildlif

Conservation Society of Tanzania, WWF: World Wildlife Fund, USAID: United States Agency for International Development, PAMS: Protected Area Management Support Foundation. ď

projects include a partnership with the Wildlife Division of the Ministry of Natural Resources and Tourism, Regional/District authorities, and WMA Community-Based Organizations (CBOs) if WMAs are involved. Eastern Selous-Niassa Corridor, containing 4 WMAs. Ruvuma Landscape Program distinguishes between Western Selous-Niassa Corridor, containing 5 WMAs, and All proje WWF's F seems to question whether the land mass between Selous GR and Niassa NR is a conservation space or not. Three decades of territorialization by conservation imply that contemporary territorial struggles happen under the premise that this is a wildlife corridor.

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The Selous-Niassa Corridor is premised on a longer history of colonial and post-colonial interventions. We start our narration of that history in 1886 when the colonial powers, Germany and Portugal, agreed that the Ruvuma River would be the border between German (in the north) and Portuguese (in the south) East Africa (Noe, 2010). In 1905 the German colonial government established two game reserves in the area, which under British rule became part of the Selous Game Reserve (Neumann, 2001a). In the 1940s, the British colonial government conducted a resettlement campaign-"Closer Settlement"-aiming to reorder the landscape to create separate territories for elephants and humans (Neumann, 1998, 2001a). During the 1970s, the area saw further reshuffling of people during the Uiamaa-based villagization and further expansions of the Selous GR. In the course of these expansion campaigns around 40,000 people were evicted from the area (Kjekshus, 1996: 74), creating the "wilderness" conditions that Selous is renowned for today (Kjekshus, 1996; Picard, 2010). Selous GR's expansion reached its peak in 1974 (Baldus, 2009b) and in 1982 the UNESCO declared it a World Heritage Site.

South of Selous GR, contemporary conservation efforts started in 1987, when the German governmental organization GTZ joined hands with the Wildlife Division under the Tanzanian Ministry of Natural Resources and Tourism to launch the Selous Conservation Programme (SCP) (Mpanduji, 2004; Noe, 2009). SCP was a pioneering community conservation project in Tanzania seeking to establish buffer zones around Selous GR on village lands bordering the reserve. The aim was to address conflicts between Selous GR authorities and bordering communities (Neumann, 1997) and to "reduce pressures on the [Selous GR]" (GEF, 2004: 6). Being responsible for the management of the Selous GR, the Wildlife Division also assumed the responsibility for managing SCP with advisory and financial support from GTZ (Noe, 2009).

In 1990–91 GTZ expanded the SCP under the "Community Wildlife Management" (SCP-CWM) advisory project, which aimed to "safeguard the ecological integrity of the [Selous GR]" (Hahn, 2003: 4) by establishing "community managed wildlife management areas" in villages bordering Selous GR in the districts of Songea<sup>5</sup> and Tunduru, respectively (Baldus, 2009a). Years later, these villages would become part of the WMAs Mbarang'andu (in Namtumbo District) and Nalika (in Tunduru District).

Until 1996, the SCP was mainly active in the area between Selous GR and the Tunduru-Songea road that runs east-west between Selous GR and Niassa NR (see Figure 1). Yet, in 1996-97 a group of expatriate consultants and staff from the Wildlife Division started debating what to do with the area south of the Tunduru-Songea road toward Mozambique. This resulted in reconnaissance trips and the elaboration of research agendas to study what was perceived as a potential wildlife corridor to connect Selous GR with Niassa NR. The research objectives were primarily concerned with the mapping of biophysical parameters (Picard, 2010). In 1998 the SCP sought funding for a corridor project from UNDP/GEF. That same year the first aerial wildlife census of the area was conducted with financial support from Frankfurt Zoological Society, <sup>6</sup> GTZ and the Ministry of Natural Resources and Tourism (MNRT). The Tanzania Wildlife Research Institute and SCP entered into an agreement with the MNRT to explore "the possibility of the Selous Niassa Wildlife Corridor" (Baldus, 2009a). In 1999, the SCP approached the Wildlife Division with a request to expand the

<sup>&</sup>lt;sup>5</sup> Songea District was later split into Songea District and Namtumbo District.

<sup>&</sup>lt;sup>6</sup> A German conservation NGO.

SCP model to the entire area between Selous GR and Niassa NR—what had now been framed by project stakeholders as the "Selous-Niassa Wildlife Corridor".

In 2000 SCP approached the district authorities of Songea and Tunduru with a request to establish WMAs in the wildlife corridor. The same year a research program was launched to monitor and map elephant movements in the corridor by use of GPS and radio transmitters (Mpanduji, 2004), supported by GTZ, the Institute for Zoo and Wildlife Research Berlin, the Messerli Foundation and the SCP, including the same key consultants who had been involved in conservation projects in the area since the late 1980s (Baldus, 2009a).

In 2001 SCP staff met representatives from UNDP, GTZ, the Wildlife Division, University of Dar es Salaam and affected District Game Offices to discuss the establishment of the Selous–Niassa Wildlife Corridor Project. Thereafter a two-day stakeholder work-shop was held in Songea to introduce the Selous–Niassa Wildlife Corridor project to district and village officials. The villages constituting the corridor submitted a signed application to be part of the project and signboards were put up along the Songea–Tunduru road "to demarcate the proposed corridor and wildlife management area boundaries. [...] to make the WMA boundary visible, and to prevent further agricultural development" (Baldus, 2009a: 6).

The SCP ended officially in 2003. In 2005 a UNDP/GEF-funded project, "Development and Establishment of the Selous-Niassa Wildlife Corridor", was launched to establish WMAs south of the Tunduru-Songea road comprising 12 villages (GEF, 2004; Picard, 2010). Also in 2005, the German state-owned development bank KfW commissioned a pre-feasibility study for the Selous-Niassa Ecological Corridor. The subsequent report outlined how the UNDP/GEF project would serve "as a basis for the proposed KfW interventions" (Schuerholz & Bossen, 2005: VII). The report authors further recommended that the KfW-led project produces "a corridor overview cover map in a scale of 1:250,000 based on Landsat imagery and corresponding ground truthing", and "land use maps and corresponding land use management plans in an operational scale of 1:20.000 for  $15^7$  villages to be involved in the establishment of the southern corridor section" (Schuerholz, 2005: VIII). Sensitization and training campaigns in the targeted villages followed in 2006, when the Selous-Niassa Wildlife Corridor project was officially inaugurated. In 2007, governments of Tanzania and Mozambique signed a Memorandum of Understanding on cross-border cooperation (GIZ, 2015), fixing the space between Selous and Niassa as a conservation territory under the auspices of GIZ and international relations.

Almost two decades after the SCP was launched in 1988, Mbarang'andu WMA (7 villages) and Nalika WMA (10 villages) were registered in 2006 and 2007, respectively (WWF, 2014). The Joint Venture H.P. Gauff Ingenieure (a German consulting and engineering firm) and the Wildlife Conservation Society of Tanzania (WCST) would implement the KfW-funded Selous–Niassa Wildlife Protection Corridor Project (SNWPC), which was launched in November 2007 with a focus on the establishment of an additional three WMAs south of the Tunduru–Songea road. The same year, village land-use planning exercises were conducted in the 12 southern corridor villages, facilitated by SNWC and InWent Germany.<sup>8</sup>

Today, almost thirty years after the launch of the SCP, the area between Selous GR and Niassa NR—in the districts Namtumbo and Tunduru—has been established as a wildlife corridor and, by extension, as an area of conservation value. It has been partitioned into five Wildlife Management Areas (Figure 1) spanning 29 villages with around 91,000 people (Picard, 2010, based on a 2008 estimate). Yet, despite the expertise, funding, and technology, the resulting territorialization is partial at best. The maps of the five WMAs in Figure 1 show that different actors involved in the process have very different ideas about the location and extent of the WMAs, and that the WMAs overlap with each other in maps held by one actor. This issue of partial and unsettled boundaries is known to the implementing agencies. According to a SNWPC project manager we interviewed "there are areas of conflict regarding the boundaries between [..] Chingoli and Nalika, as well as Chingoli and Kisunguli. It seems the coordinates of the different WMA maps sometimes overlap. I have the impression there is basically an error of the map projection based on the data which were collected." (Interview with SNWPC project manager, August 2014).

In the following section we zoom in on the case of Nalika WMA to explore how the repeated efforts at conservation-based territorialization have contributed to the reproduction of confusion and conflict over land and access to natural resources.

#### 3. Territoriality in present-day Nalika WMA

On May 18, 2012 a team comprised of officers from Tunduru District set out to conduct a "Village Land Use Plan Ground Truthing" exercise<sup>9</sup> among inhabitants of the villages in Nalika WMA. The exercise was commissioned by SNWPC and co-funded by KfW, the German state development bank. Its goal was "to address apparent discrepancies in the map and perceived realities on the ground" (personal communication with SNWPC project manager, February 2015), or, in the words of the District team, "to check whether the zoned area is used as intended or invaded and used for other human activities. It was time for making comparison from what was in the map to the actual situation on the ground; and it was also time to compare from what was in the map to what villagers know. This was done with the help of NALIKA WMA map." (Tdc, 2012: 5, capitals in original).

The Nalika WMA map (displayed in Figure 1 as a green GIS shapefile) is a representation of the village land areas set aside for the WMA by the 10 member villages (village borders in white in Figure 1). The GIS shapefiles were provided to us by the Tunduru District Urban and Rural Planning Officer, who was leading the ground-truthing exercise. The green shapefile was apparently produced by scanning and georeferencing the official Resource Management Zone Plan (RMZP) of the WMA from a printed copy (Nalika, 2008). However, there are several mismatches between the RMZP map and the green shapefile in Figure 1, which may be due to the limitations of manual georeferencing.

The district team comprised 7 officials and worked with socalled village ground-truthing teams that were formed for this specific purpose, comprising four village land-use committee members, four village game scouts, the village chairman, the village executive officer, and two representatives of the Nalika CBO.

Together, the district and village teams visited areas whose WMA status was contested by local people. The ground-truthing report indicates that the district team relied on matching GPS measurements taken on the spot with coordinates from the digitized Nalika WMA map (green shapefile, Figure 1) to determine the location of WMA boundaries. We can only speculate to what degree the report is representative of the different voices within the groundtruthing teams. However, we do know that the report was prepared by three district representatives (the urban and rural planner, the land officer, and the agricultural officer) without including Nalika CBO members in the writing process (Tdc, 2012) and represents the perspective of the District Officers.

<sup>&</sup>lt;sup>7</sup> Above we refer to 12, not 15, villages. The discrepancy is probably due to some of the villages dropping out from joining a WMA throughout the process.

<sup>&</sup>lt;sup>8</sup> Non-profit capacity building organization, since 2011 part of GTZ. In 2011 GTZ was renamed to GIZ, Gesellshaft für Internationale Zusammenarbeit.

<sup>&</sup>lt;sup>9</sup> "Ground truthing" is the attempt to compare geographical coordinates that are available on paper or digitally and provide an estimate of the location to the actual location on the ground by physically being there



**Figure 1.** The five Wildlife Management Areas (Nalika, Mbarang'andu, Kisungule, Kindamba, Chingoli) comprising the Selous–Niassa Corridor, seen through GIS shapefiles from different sources (in brackets). The borders of the 10 villages under Nalika WMA are shown in white and provided by Tunduru District Urban and Rural Planning Officer. Own compilation based on Google Earth Landsat Imagery.<sup>10</sup>

The ground-truthing report presents suggestions on how to align the WMA territory as represented by the shapefile held by the District Urban and Rural Planning Officer with the perceptions of residents in the 10 villages. The suggestions are visualized in a revised map of Nalika WMA that features prominently in the report (Figure 2). This revised map implies drastic changes to the WMA. With respect to the northern WMA villages the report suggests an expansion of Nalika WMA to include the prior "Village Wildlife Management Areas" that were demarcated within the scope of SCP in the 1990s-that is, years before the WMA was registered (see the area labeled as "Village WMA" in Figure 2). In the southern WMA villages, the report suggests deregistration (abandonment) of the WMA because the area that is WMA according to the shapefile is used for agriculture. These suggested changes imply a reordering of the WMA territory and in the following section we will examine how the WMA became such a contested space.

#### (a) Nalika's North: the legacy of past interventions

The northern villages of Nalika WMA presented conflicting perceptions of the spatial extent of the WMA due to the legacy of the Selous Conservation Program (SCP) that established "Village Wildlife Management Areas" in the area before the era of WMAs. According to the ground-truthing report, *"in some cases, the WMA boundary was found to be a bit far from what the Villagers know. Large portions of Village land zoned as Village Wildlife management areas [by the SCP] were not included in the registered NALIKA WMA map." (Tdc, 2012: 13, see Village WMA in light green color in Figure 2). The reported discrepancies between what is and what should be are due to past Village Land Use Planning exercises during the SCP era, which entailed the establishment of "Village Wildlife Management Areas". While Nalika WMA has a deceptively similar name, it was established independently of and years after the SCP. More importantly,* 

<sup>&</sup>lt;sup>10</sup> We use shapefiles from SNWPC and WWF, whereby SNWPC's data have been used by Tanzania Wildlife Research Institute (TAWIRI), the state-owned Tanzania Wildlife Research Institute that is in charge of conducting aerial wildlife counts in the SNC and relies on SNWPC shapefiles. WWF is one of the facilitating NGOs for the SNC WMAs.



**Figure 2.** Revised map of Nalika WMA and zoning of member villages (Tdc, 2012). We reproduced the legend for better clarity.

the Nalika WMA territory does not match the older SCP Village Wildlife Management Areas. The resulting state of uncertainty over the location of Nalika WMA boundaries led residents to believe that they were not allowed to cultivate inside the former Village Wildlife



**Figure 3.** [Kindamba village land with different land-use zones, Nalika WMA zone (in dark green), SCP-based Village WMA (in light green), and village boundaries (in black). Grazing area is bordered by Likuyu River in the north. All shapefiles from Tunduru District Town Planner. Own compilation. (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)

Management Areas (light green in Figure 2). Consequently, this had substantial impacts on local livelihoods, and could have been corrected by the ground-truthing team.

Instead, the report describes the confusion as an opportunity to annex more land for Nalika WMA. "This has to be considered as good chance to NALIKA CBO because it's possible to revise the boundary and add more land to the registered NALIKA WMA. [..] There is a need for NALIKA WMA map Review" (Tdc, 2012: 13). If realized, this *de facto* expansion of Nalika WMA would foreclose an expansion of the area of farmland in the villages. Present agricultural land use is mapped as directly bordering the "village WMA" land (former SCP territory) indicating that people in the villages are likely to need more land for farming in the near future, which has also been expressed to us in interviews with villagers.

Lacking agricultural inputs, capital, and technology, the villagers of Kindamba village, for instance, practice shifting cultivation, as do many communities in the Selous–Niassa Corridor (Picard, 2010). In the absence of support for intensification of land use or other livelihood options, availability of land for agriculture is likely to become a severe constraint on people's livelihoods. The following map shows the Kindamba village area including the different land-use zones (Agriculture, Livestock grazing, Village Forest, and WMA area) based on shapefiles provided by the District (Figure 3). The dark green area is the Nalika WMA territory according to the District ground-truthing report. It clearly does not match the zoning of the lighter green area, which demarcates the Kindamba WMA up to the Likuyu River and represents the SCP-based zoning of the "village wildlife management area".

The residents and village council of Kindamba perceive Nalika WMA (dark green, Figure 3) as extending to the Likuyu River. They wish to change the Village Land Use Plan to free up more land for farming. An interviewee from the village leadership narrates the origins of the disadvantageous Village Land Use Plan as follows: "At the time of allocation [of land use zones] people [Kindamba villagers] thought it's enough, but now people realize that the WMA area is too big" (Interview with Kindamba village leader, July 2014). Our interviewee indicated a flawed process whereby "people from the Ministry" came "to confirm the boundaries" that had been made in 1992 within the scope of the SCP. The villagers agreed with the request to confirm the existing boundaries, but "later villagers discovered that there are some things there that people need. People should have had more time to decide" (Interview with Kindamba village leader, July 2014). The Kindamba village leader described how residents had asked the "people from the Ministry" to move the boundaries for that reason, but that "Itlhe experts said that they are not here to solve conflicts, they are only here to confirm the boundaries that were made in the past." (Interview with Kindamba village leader, July 2014). The residents of Kindamba appeared to have had little say in the process of WMA boundary establishment. The "Ministry" claimed expertise, yet was either equally confused about the historical development of conservation planning interventions, or simply short on time and/or resources to do more than confirm past decisions.

Due to lack of farmland people started cultivating in a 1,000 m strip of land that was apparently agreed on as a buffer south of the Likuyu River, the perceived WMA boundary. The buffer strip is highlighted as a livestock-grazing area in Figure 3. Despite the official zoning of Nalika WMA (dark green WMA shapefile, Figure 3), Nalika CBO treats the entire area north of the Likuyu River as WMA land and has at least one occasion enforced the ban on farming in the buffer strip by destroying small constructions built by farmers. People have been fined for farming there, but keep coming back to cultivate in the strip. We were also told that the villages Twendembele, Kajima and Mbungalaji were in conflict with Nalika CBO for the same reason (lack of farmland) (Interview with Kindamba village leader July 2014).

To conclude, the contingencies of top-down territorialization resulted in conflicting perceptions about a conservation-based land-use regime. Yet, rather than using the opportunity to redress conflicting land-use decisions that were made in the past, the conflicting perceptions in people's minds and discrepancies in the maps were exploited for the consolidation of conservation in the villages.



Figure 4. Southern Nalika WMA territory (in green according to Tunduru District shapefile, in black according to SNWPC/TAWIRI and WWF) and village borders (in white, Tunduru District shapefile). The two circles represent GPS-based coordinates of village settlement centers of Darajambili and Ndenyende recorded by the first author. Own compilation based on Google Earth Landsat Imagery. (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)

#### (b) Nalika's South: where is the WMA?

The southern part of Nalika WMA (Figure 4) is also ridden with uncertainties about the location of WMA boundaries. The groundtruthing report sums it up as follows: "According to Registered NALIKA map [green WMA shapefile], The Wildlife Management Area start near the residential area south of Tunduru-Songea road to Nampungu River. But the Village Ground truthing team members, the Village Council Members and finally other Villagers through meetings, did not accept this boundary. They all said the WMA is after Nampungu River, and that Nampungu River is the WMA Boundary. The [village] Councilor, and NALIKA leaders [..] supported the Villagers that the WMA is after Nampungu River and not before Nampungu." (Tdc. 2012). The report concludes that "the southern Part of NALIKA WMA is used for human activities. [...] it will be so difficult to make people vacate from the area, because Villagers did not accept the WMA boundary. This means Ndenyende, Namakungwa, Namwinyu, and Darajambili Villages shall have no contribution of land to NALIKA WMA. For the case of Hulia, villagers denied the southern part, but accepted the western part of the WMA." (Tdc, 2012: 17). To support this, the report presents a revised map of Nalika WMA (Figure 2) with different land-use categories. The southern WMA territories are mapped in a different color and labeled "Agriculture Expansion". This implicitly suggests deregistration of the WMA in the southern Nalika villages.

Yet, when asked about this, a member of the Nalika CBO leadership rejected the notion that the area is not part of the WMA. He was aware that the residents have competing claims and continue farming in the area between the river and the Tunduru–Songea road. He blamed the District government and the District planner (who was leading the District Ground Truthing exercise) for creating a situation where the four southern villages dissent from the WMA. "It is known that the area belongs to the WMA. But the district government wants to give it back to the villages". To emphasize his position on the location of WMA boundaries, he referred to mapping technology, arguing that "[w]e know the WMA borders, we use GPS. There are no beacons though so people don't know where the boundaries are. So maybe with beacons and signs people will stop coming on WMA area" (Interview with Nalika CBO member, July 2014).

The position of the CBO member is in opposition to the conclusions proposed by the District-led ground-truthing exercise that suggests a *de facto* deregistration of the southern WMA area. CBO members in leadership positions have a vested interest in seeing the territorial integrity of their WMA protected. If other authorities—from District Council or village government—challenge a WMA on the ground of its territory, this will be perceived by the CBO leadership as undercutting its authority. However, the District officials may be more inclined to support villagers' claims than siding with the Nalika CBO leadership, because the WMA does not generate any revenues that could be captured by the District administration, while the land under WMA demarcation is visibly used for agriculture. In that case siding with the rural communities is a politically sound decision for District officials.

We explore the conflicting perceptions over boundaries in Southern Nalika WMA by focusing on the village Ndenyende. The 2012 Ndenyende village map (Figure 5) depicts the area south of Nampungu River as a WMA. In an interview a member of the village leadership stated that "no farming happens on WMA area in this village, even no trespassing, people accept the boundaries". We followed up by asking if everybody knows where the WMA boundaries are. "Yes, there is a river that is a boundary, people won't cross the river." (Interview with Ndenyende village leader, July 2014) Hence, our interviewee claimed that the WMA lies south of Nampungu River and that the farming areas north of the river do not represent agricultural use of WMA land. The Nalika CBO and Ndenyende village leadership thus simply disagree about the location of the WMA, and both rely on maps to ascertain their opposing perspectives. The Nalika CBO bases its claims on the Nalika WMA Resource Management Zone Plan report that indicates the location of the WMA north of the Nampungu River (even though it is mistakenly named Sasawala River (Nalika, 2008)). The Ndenyende village leadership has a village map that was prepared within the scope of the WMA-required Village Land Use Planning exercise in 2012 and depicts the WMA south of the Nampungu River (Figure 5). While this village map is merely meant to be indicative of communal land use, it does clearly point to the Nampungu River as the southern village boundary that also separates the village from Nalika WMA. We could not reconstruct the process of village land-use planning under which this map was created.

Ndenyende village leadership also has a village map from the Ministry of Lands, Housing and Human Settlement, that clearly



Figure 5. Ndenyende Village Land Use Plan, provided by the Village Chairman. We indicate where the WMA and the Nampungu River are located according to the map legend.

defines the Nampungu River as the southern Ndenyende village border. If Ndenyende village is to be part of the WMA, which is not contested by anybody, the WMA area would have to be between the Nampungu River and the village center. Yet, this area is presently used for agriculture.

## 4. Territoriality by conservation

Our empirical excursion into conservation interventions in the area now known as the Selous-Niassa Corridor illustrates the challenges facing territorialization by conservation. Rather than clarity and order, the series of projects spanning three decades of efforts to create stable conservation territories have resulted in confusion, conflict, and contestation. However, irrespective of these failures and shortcomings, the idea that this massive area is a conservation corridor that is in need of conservation interventions is now firmly entrenched among donors, bureaucrats, conservation NGOs, and WMA authorities. In the following section we will illustrate the tension that is created by the glaring gulf between conservation as reality for people affected in rural areas and as an idea among its proponents. In doing so we highlight how this gap between what is and what should be does not lead to abandonment or reconsiderations of conservation interventions despite widespread failures, shortcomings, and conflicts.

Community-based conservation interventions are premised on an ideal scenario in which the creation of territories with clear boundaries and tenure rules provides incentives for wildlife conservation by local people and opportunities for improvements in local livelihoods. This ideal is also prevalent among SNC partners who write in a feasibility assessment for the Selous–Niassa Ecological Corridor:

"Once all village boundaries have been mutually agreed upon by all concerned parties, these boundaries are demarcated." [...]"Apparently, village boundary conflicts are extremely rare and are generally resolved rapidly (one or two meetings using a seasoned mediator according to District officials in Songea and Tunduru)." [(Schuerholz, 2005: 16).] "Before doing [land use planning], when you want to make use of this area, you have to make sure that your boundaries are clean, you don't wish to have conflict with the neighbor. So [this] is also done".

[Interview with staff from WWF Tunduru office, July 2014]

Clearly, these statements are a poor reflection of realities on the ground. They resemble the *discursive blur* (Büscher & Dressler, 2007) associated with buzzwords like participation, capacity building, and sustainable development that allow development projects to maintain and market an image of success despite evidence to the contrary (Büscher, 2014). The conflicts and contestations observed by us reflect multiple challenges associated with territorialization processes. One of these is that of mapping, as illustrated by a SNWPC project manager:

"[...] you find villages with a different overall village area which have been given exactly the same area for different land uses, it looks like "a copy paste", "copy paste" exercise [...] [T]here are areas where there are these kind of conflicts and I have a feeling that, well likely in most of the cases there is a problem with the few data and the way they transferred coordinates into a map, we had the same problem when producing a map depicting the different land uses for the whole corridor area. As this map was produced to give an overview at corridor level only, we tried to fit the respective Village Land Use Maps and WMA maps as best as we could. [...] I know it's not perfect because we miss some data, [...]. In the framework of SNWPC we can't do it again so we try the best as we can, under the circumstances."

[(Interview with SNWPC project manager, August 2014).]

This view from a project manager illustrates the treacherous nature of maps. Far removed from the reality they purport to depict, the people drawing a map wield great power and can easily err. The complexity inherent in mapping is compounded by the fact that maps are never drawn on a clean slate (see Scott, 1998). Rather, and also in our case, they add to layers of existing boundaries (Noe, 2014)—debris from earlier attempts at territorialization—and thereby contribute to the ongoing production of a

layered terrain of conflict and contestation. This was most clearly the case in Ndenyende village in southern Nalika WMA, where the Nalika CBO and village leadership referred to different maps that supported their versions of reality, thus revealing the unequal power relations at play in conservation interventions (for a similar case see also Orlove, 1991). Many similar situations were described to us-maps lost when computers crashed, projections distorted in digitalization processes, and information junked at the end of projects. When a SNWPC project manager approached the Namtumbo District Planner to assemble a map of the entire corridor, for instance, he was handed PDF files. The District Planner excused himself by referring to a crashed computer, leaving the SNWPC project manager to recreate what was lost: "So we managed to transfer the file from the PDF format into a DWG [GIS] format. We matched Namtumbo [Mbarang'andu WMA] with that one and then we had to combine Tunduru [Nalika WMA]. There we had files in a different format. the raster [the matrix of cells] was different. Anyway. in the end we managed to produce a presentable map for the overview." (Interview with SNWPC project manager, August 2014). Similarly, the ground-truthing exercise for Nalika WMA started with the scanning and geo-referencing of a PDF image.

Projections to maps and charts imply simplification and unintended translations and transformations. These are selectively picked up or ignored, recognized or contested in struggles over territory. Actors at all levels enroll the artifacts created in past and present processes of territorialization, such as beacons, maps, and land-use plans to support their claims. Hence, acts of territorialization through boundary making and mapping are inherently political and contingent. The struggles to define and contest territories entail that clarity and stability of territories may only materialize temporarily and only when viewed from a distance, for example by producing an "overview map" of the Selous-Niassa Corridor. Looking at one of the WMA maps in the Selous-Niassa Corridor might convey a message of clarity and order, yet this image quickly dissolves into confusion, conflict, and contestation when other versions of the same map, other maps, and conflicting perceptions and realities on the ground enter into vision.

Concerns over the way Nalika WMA was established on the ground were also expressed by the SNWPC project manager. "Honestly I don't know the whole story but I have the impression that the process, the mapping which was done when Nalika WMA was established, I don't say it was done only behind the computer screen or in an office, but I have the feeling that the villagers were not very much consulted" (Interview with SNWPC project manager, August 2014).

The concerns expressed by the manager resonate with political ecological research on community-based conservation in Tanzania and beyond, showing that it is riddled with participatory rhetoric and paternalistic decision making when ideal-type conservation policy becomes embroiled in the practice of politics (Benjaminsen et al., 2013; Bluwstein, under review; Dressler et al., 2010; Goldman, 2011; Li, 2007; Nelson & Agrawal, 2008; Scheba & Rakotonarivo, 2016). Our case is in line with this tradition. When the need for revision of the WMA land-use plan arises in the eyes of the district ground-truthing team, the team suggests an expansion of Nalika WMA in the northern villages and how to go about it in practice: "The agreed individual Village wildlife management area[s] have to be marked and demarcated as the NALIKA WMA boundary [...] after re-sensitization, re-educating and reconvinc[ing] the concerned Villages which denied contributing part of their land to NALIKA CBO." (Tdc, 2012:19). Until the annexation of the "village WMA" land to the Nalika WMA can be completed, "it is suggested that, the Village land zoned as Village Wildlife Management areas, but not included in the registered NALIKA WMA map should be managed by introducing other projects which relate to environmental conservation such as Bee keeping or Forest projects. During NALIKA WMA boundary review, the concerned Village Wildlife Management areas should be included to the registered NALIKA WMA *map*" (Tdc, 2012:23). Hence, the district team sees only one way to conceptualize a land area at the village level that due to past territorializations ended up in a territorial limbo under a weak authority. In a conservation frontier this land is part of a largescale conservation project, instead of simply village land. The contested village land must become a territory under a conservation regime, thereby pre-empting any public debate. The suggested action plan ("re-sensitize, re-educate, re-convince") resonates with typical approaches to WMA establishment through sensitizationbefore-participation, effectively steering the community-based process in a certain direction (Goldman, 2003; Picard, 2010), and in doing so ensuring a particular outcome while maintaining the impression of a participatory, community-based, decision-making process (Noe, 2014). This strategy has been applied across Tanzania to establish WMAs without paving much attention to people's needs and demands (Benjaminsen et al., 2013; Bluwstein et al., 2016; Igoe & Croucher, 2007; Loveless, 2014; Picard, 2010; Ramutsindela & Noe, 2012; Trench, Kiruswam, Nelson, & Homewood, 2009).

There is indeed no lack of recognition among WMA project partners of the flaws of current boundaries and the shortcomings of the processes that led to their establishment. However, such recognition does not translate into a willingness to reopen the process. Instead, the fact that WMA interventions happen in the context of a history of conservation projects, and the very process of having made land-use plans and drawn lines on a map, appear to move the WMAs beyond the point of no return, producing a territorial lock-in. This is expressed by project partners, as the following quotations show:

"But I would be very careful; I would favor trying to find [a] solution without blowing the whole thing up. And I think that's possible, to be honest. [..] You cannot, in my opinion at least, question the WMA, the WMA was established, there are some issues, yes I admit, but the WMA is publicized [...]. If you want to re-do that process, it would be chaos."

[(Interview with SNWPC project manager, August 2014).]

"So if we revise [WMA] again, we'll be contradicting ourselves, losing a lot of resources. [...] Once you designate the land for WMAs, it is WMA forever".

[(Interview with WWF staff at the Tunduru office, July 2014)]

We understand the tension expressed here, between awareness of the flaws inherent in a project and the lack of will to rethink it, as reflective of the politics of conservation and development interventions (Mosse, 2011a). Such politics is driven by a combination of project budget lines, project design and dynamics (Lyons, 2013), national policies, and political goals and commitments up to the scale of international relations. All this-in the eyes of the project partners-renders the Selous-Niassa Corridor as simply too big to be allowed to fail, despite any technical and political challenges. Under the umbrella of this Corridor a territorial claim by and for conservation has been made-decades ago now-to a significantly large land area. Five WMAs were established through territorialization, achieved with beacons, maps, plans, reports, and digital projections. The village lands set aside for five WMAs established in the Selous–Niassa Corridor comprise an area of 8,300 km<sup>2</sup> (WWF, 2014). However, the total area affected by WMA-induced land-use planning doubles this to approximately 17,000 km<sup>2</sup> (own estimation), because every WMA village has to produce a village land-use plan within the scope of WMA establishment. Thus, in terms of territories dedicated to conservation vis-à-vis other land uses, the various corridor projects have come far.

Yet there are limits to the determinism of large-scale conservation. Competing land uses by village residents can obstruct territorialization by conservation and can generate support by local government officials against the claims of conservation authorities. In our case, the southern Nalika villages are practicing cultivation where the Nalika CBO claims the WMA to be. Having no personal interests in supporting a WMA that does not generate any revenues, the district ground-truthing team decided to side with the villagers against the claims of the Nalika CBO where it was politically expedient to do so. Thus, while the idea that the landscape is a conservation corridor is entrenched, the gaps and contingencies of territorializing practices imply room for maneuver for the actors involved.

## 5. Conclusion

We have shown how territoriality by wildlife conservation on communal lands unfolds as historically evolving project-based attempts to demarcate and map village land. The continuous reenactment of conservation happens in a space that emerged as a conservation frontier decades ago, and has laid a lasting claim to a particular spatial order. Today, this claim still attracts attention and provides legitimacy for continuous improvement (Li, 2007). The frontiers of the past reach into the present and future.

Empirically, we have shown how the paradigm of communitybased conservation emerged as a new frontier in buffer areas of Selous Game Reserve in the 1980s. That "frontier moment" produced the "conditions of possibility" (Rasmussen & Lund, 2018) for conservation to take hold of village lands outside of Selous GR through territorialization. Wildlife became a new resource that had to be protected in a new institutional order: the state, represented by the Wildlife Division, joined hands with conservation NGOs and consultants. The emergent frontier rendered the area as fit for conservation interventions into the present. While conservation projects repeatedly fell short of achieving their goals (clear land tenure and protected wildlife populations), they legitimized continuous interventions to improve the sociospatial order. In a context of double territorialization of landscapes and minds, neglecting to appraise challenges of boundary making adequately-in combination with politics of conservation and development interventions-produced a territorial lock-in that forecloses genuine participation and inclusion of local residents in decision making over land use and rules of access. This inevitably creates or exacerbates conflicts and contestation of projectbased interventions to the detriment of local livelihoods, and potentially poses a risk to the ambition of conservation in the area.

Yet our analysis also shows that territorializing practices have limits, are incomplete and contingent. The territoriality literature has many examples of successful territorialization from above where states reorganize the landscape in their image, often to the detriment of the marginalized, the poor, and the powerless (Blomley, 2003; Peluso & Lund, 2011; Scott, 1998). Other accounts stress the contested nature of territorializing as negotiations over (access to) land and resources (Roth, 2008; Sundar, 2001; Vandergeest & Peluso, 1995; Walker & Peters, 2001). Our case illustrates both of these aspects. Territorialization is imposed from above on people living in the Selous-Niassa Corridor, as evidenced by the 8,300 km<sup>2</sup> that are now demarcated for conservation in the five WMAs and by the notion that this is a landscape with conservation interests, which today appears firmly entrenched in the minds of donors, NGOs, government, and conservation authorities. Yet, the limits to this endeavor are expressed in the strategies used by people living in the affected villages in seeking to engage and to resist the territorialization of land by and for conservation, as well as in the political and technical challenges faced by the agents seeking to impose conservation territories.

We believe that our analysis is important, as it sheds light on conservation planning from above that can be at odds with the struggles for authority and land on the ground. It serves as a reminder of the complications and material challenges that shape territoriality by conservation. Creating and maintaining stable territories is challenging and demands technical skill and resources. However, resourcefulness is not enough. An abundant literature chastises projects of development and improvement for a repeated failure to achieve their goals (Ferguson, 1990; Li, 2007). Yet ideals of development and conservation prevail and continue to be enacted in new projects, precisely because they draw their legitimacy from past interventions and because the ideals they represent have been associated with the spaces they occupy. This is no different in the case we have presented here, where one conservation effort with its associated territorialization efforts follows another. And, as we demonstrate, the result can be conflicting perceptions and claims, not clarity of tenure.

The share of Tanzania's surface area that is targeted by conservation has grown steadily over the past decades. Today, estimates suggest that around 45% of Tanzania's terrestrial area is under some form of conservation-related protection (Arlin, 2011). Onethird of this is strictly protected as national parks and game reserves, while the rest is under various other forms of conservation designation where land can be taken out of public debate over whether it should be conserved for wildlife or used for other purposes. The result of ongoing territorializations by and for conservation is a steady increase in land under conservation regimes, squeezing a growing population in less and less space, exacerbating land conflicts, and at the same time increasing the pressure to reoccupy conservation territories. In recent years public discourse in Tanzania has been dominated by the perceived growing human pressure on core protected areas. While conservationists vested with public authority and conservation NGOs reject open and open-ended debates about land use, rural people and some parliamentarians seem to be trying to reopen public debates on conservation as one land use among several possible alternatives. We understand the growing pressure to re-occupy conservation territories and to reconsider the purpose of conservation as attempts to challenge coercive and top-down conservation inside and outside core protected areas by reopening a new frontier.

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