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Article

Failure by Design? Revisiting Tanzania's Flagship Wildlife Management Area Burunge

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Abstract

In this paper, we revisit the on-the-ground reality of Burunge Wildlife Management Area (WMA) that is celebrated as one of Tanzania's best examples of community-based conservation (CBC). We find Burunge WMA rife with conflict and contestation over grievances that remained unsettled since its establishment a decade ago. These grievances have been accentuated by growing land pressure resulting from increasing human, livestock, and elephant populations, in combination with infrastructure improvements and support for agriculture-led development. The WMA governance regime has little to offer the residents and village leaders of Burunge member villages who appear hostages in a situation where interests in human development and conservation are pitted against each other, making a mockery of the notions of CBC. By re-examining this exemplary WMA case and compare our findings with the way it is being portrayed by supporting agencies, we pinpoint the tendency of the actors promoting conservation in Tanzania to misrepresent or ignore the realities on the ground that defy official policy promises. In doing this, we hope to call upon the many empathetic and hard-working individuals to end the collective failure to address this detrimental discrepancy between reality and representation, and start supporting affected residents in their struggles for self-determination.

Keywords: WMAs, conservation, politics, participation, community, East Africa, community-based conservation

INTRODUCTION

Wildlife Management Areas (WMAs) denote a community-based wildlife conservation approach whereby a number of villages set aside part of their village lands for wildlife protection (URT 1998). Ideally, WMAs provide a legal opportunityfor local communities to participate in wildlife management and are designed to address issues related to wildlife habitat fragmentation, disjointed conservation and rural poverty (URT 1998; WWF 2014). Proponents ofWMAs present them as 'win-win' solutions to conservation and poverty challenges as they generate revenues for participating local communities whilst conserving large and interconnected landscapes for wildlife protection.

> [The] growth of the WMA movement from an initial 16 pilot WMAs to 17 gazetted, with more in progress (involving about one million rural people), indicates the popularity of the approach across the country and the wide acceptance it has received among communities as a promising approach for conservation and community development. […] WMAs have the potential to enhance livelihoods of their [associated] communities and secure valuable areas for wildlife protection. (WWF 2014: 39).

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Financial and so-called technical support to WMA implementation comes from a number of aid agencies and NGOs such as Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), World Wildlife Fund for Nature (WWF), African Wildlife Fund (AWF), PAMS foundation, and Honeyguide Foundation (HGF), among others. These institutions, along with the responsible ministry, also form partnerships with wildlife tourism companies that invest in WMAs in the form of land leases for hunting and photographic tourism as well as the establishment of lodges etc. Such investments form the economic underpinning of revenues to WMAs. community-based conservation (CBC) is, thus, thoroughly embedded in larger projects connecting them to the industries of conservation, tourism, and development.

In practice, this embedding appears to have led to processes that defy the theoretical assumptions of meaningful participation. Rather, a picture emerges of de facto centralised and top-down management approaches that facilitate private investments and favour conservation under a thin veil of win-win rhetoric (Igoe and Croucher 2007; Nelson and Agrawal 2008; Noe 2009; Benjaminsen and Svarstad 2010; Benjaminsen et al. 2013; Humphries 2012). McShane et al. (2011), for example, argues that the win-win rhetoric, such as that illustrated in the quote above, is used instrumentally by implementing institutions to garner support from local people and politicians, who would most likely reject CBC if the likely trade-offs are fully revealed. Later on, however, as the trade-offs of the imposed conservation unfold, community frustrations build (Loveless 2014; Bluwstein et al. 2016). As a result, many WMAs are rife with natural resource-related conflicts and locally-perceived grievances, and the WMA-concept has been severely criticised (Benjaminsen and Svarstad 2010; Loveless 2014; Homewood et al. 2015; Noe and Kangalawe 2015; Bluwstein et al. forthcoming).

Yet, the WMA implementation train rolls on with 21 WMAs fully operational and another 17 underway (MNRT 2015). Together, these 38 WMAs are estimated to cover approximately 7% of Tanzania's total surface area, or an area the size of Sierra Leone. Given this speed of implementation alongside critique of how local concerns are overheard and ignored, we wish to re-examine Burunge WMA. Re-examine, because Igoe and Croucher (2007) almost 10 years ago wrote about how its initiation involved manipulation and coercion.

Burunge WMA is in many ways an interesting and paradoxical case. It is often highlighted as the best example of CBC in Tanzania (WWF 2014; AWF n.d.). It is located at the centre of northern Tanzania's wildlife tourism circuit, which constitutes ideal conditions to realise the WMA promises of garnering local benefits and development opportunities through wildlife-related tourism. Thus, it is in some senses a 'white swan'–or best scenario–case (Flyvbjerg 2006). Yet, it is rife with conflict; one of its five original member villages has never acknowledged its legality and there have been several recent instances of violent confrontations between village residents and village game scouts (Bluwstein et al. 2016). The apparent dis-juncture between how this WMA is both, portrayed as an exemplary of CBC and seen as rife with old and new grievances and conflicts is the starting point for the present study. In revisiting Burunge and its portrayals, we hope to contribute to a movement towards ending the collective failure to address this discrepancy between reality and representations.

METHODOLOGY

The empirical work underlying the present article employed what can broadly be called an ethnographic approach. The first author spent several months in and around Burunge villages over two periods in 2014 and 2015. The second author has done research on agriculture in the area for more than five years. The third author spent approximately four weeks over two periods in 2014 and 2015 doing field work in different Burunge villages, including accompanying a group of M.Sc. students who were doing a field course. Neither of these field activities were coordinated, yet the first author has spent time in Burunge WMA with both the second and third author. Multiple methods have been applied by us during the course of these different immersions in Burunge, including focus group discussions, semi-structured interviews and informal discussions with individuals and groups, and participant observation at meetings and village assemblies. The empirics gathered through these methods are recorded in the form of field notes and audio clips. Prior to any interviewing and audio recording, informed consent was sought from interviewees after explaining the purpose for which the information was sought.

In constructing the present article we have drawn on our collective knowledge and sought to create a coherent representation of events through triangulations for convergence and divergence (Ahlborg and Nightingale 2012). Thus, the present article can be seen as flowing from a collective process of drawing upon multifarious impressions to come up with our representation of Burunge WMA.

BURUNGE WMA

Burunge WMA is situated in Babati district, Manyara, Tanzania. The WMA has 10 member villages[1] that are situated between Lake Manyara and Tarangire National Parks and Manyara Ranch (Figure 1).

The almost 35,000 people residing in the 10 member villages are dominated by the ethnic groups of Mbugwe, Waarusha, Maasai, Barbaig, Iraqw, Nyaturu, and Nyiramba. Other ethnic groups include Safwa, Hehe, Bena, Manda, and Nyakyusa from the southern part of the country, and Jaluo and Kisii from Kenya, and Rundi from Burundi.

People in the villages depend on agriculture and livestock-keeping for their livelihood. The main agricultural crops include maize, finger millet, sorghum, and beans cultivated primarily for subsistence, and rice, sunflower, onions, garlic, sesame, and cotton cultivated as cash crops. Livestock are kept in large numbers by people from the Waarusha, Maasai, and Barbaig ethnic groups. Other ethnic groups also often keep smaller herds of cattle. The Burunge villages are accessible

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by road throughout the year, except for Manyara village where a seasonal river blocks road access to the village during the rainy season. Whereas all the 10 member villages have a village government office and a primary school, only eight have a health centre.

The WMA was formally initiated in 2006, and since, the village land areas that were designated for the WMA have been managed by a community-based organisation (CBO) known as Burunge Authorised Association (JUHIBU). The CBO has assumed the member village councils' powers to negotiate contracts, redistribute revenues, resolve conflicts, and allocate user rights on the WMA lands. The CBO governance structure includes the CBO general assembly with a board of trustees attached, executive committee, and the CBO secretariat. The CBO general assembly is the highest body of decision-making, and its participants include three representatives from each member village and one member of board of trustees from each member village, village officials (village chairpersons and village executive officers), ward officials (ward executive officers and ward councillors), divisional secretary, and district officials, including, district game officer, district land officer, district cooperative officer, and the district legal officer. Only village representatives hold voting rights; village, ward, and districts officials' participation in the general assembly is meant for provision of legal and technical advice to representatives to make informed decisions. The general assembly has a total of 66 members and meets at least three times each year. The assembly receives and deliberates on issues raised by village councils and village assemblies, elects 10 people among the CBO village representatives to form an executive committee, and employs staff and experts whenever deemed necessary.

The executive committee is responsible for day-to-day management of the CBO, such as negotiating investment contracts, distribution of revenue to member villages, and leading efforts to prevent and resolve conflicts. The CBO secretariat is an administrative unit, which maintains records and manages the CBO office. This secretariat comprises the CBO secretary, treasurer, office secretary, and an attendant. The CBO employs 30 village game scouts who conduct patrols and enforce the rules governing the WMA as well as seek to assist farmers in dealing with wildlife nuisances, in particular crop damages. Burunge CBO has both managerial and advisory relations with many other institutions and private individuals. However, whilst distant institutions, e.g., the Wildlife Division under the Ministry of Natural Resources and Tourism of the government of Tanzania, have direct supervisory powers over the CBO, e.g., approval of management plans, the institutions close to local people, namely, village assemblies, which have power to hold elected village representatives accountable (URT 1982), have only advisory and consultative relations (Figure 2).

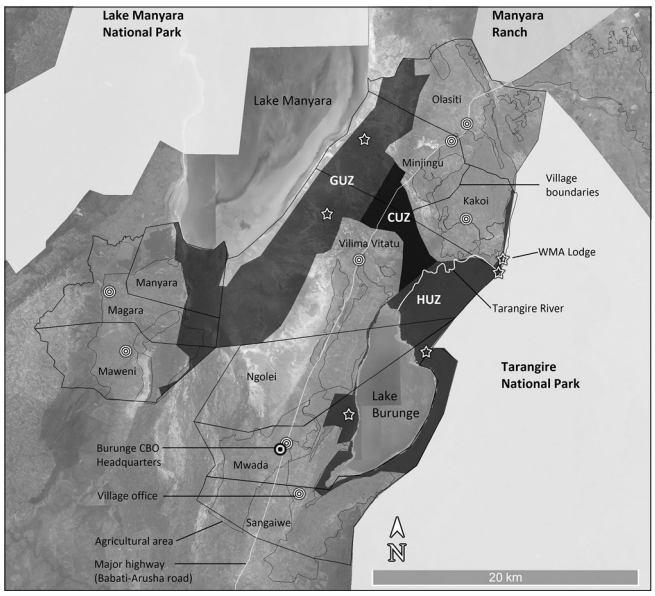

Figure 1
Burunge WMA[16] General use zone (GUZ), Corridor use zone (CUZ) and Hunting use zone (HUZ)

WMA INITIATION: OFF TO A BAD START

In the process of joining Burunge WMA, the present-day 10 member villages agreed to set aside 24,319 ha or around 31% of their total village land area for the WMA (Table 1). The process has been described as externally driven and ridden with manipulation and coercion (Igoe and Croucher 2007; Baha and Chachage 2007; Sachedina 2008). This impression was confirmed by our field work in the present-day Burunge, 10 years after the events.

The initiation campaigns were led by the District Wildlife Officer with support from the African Wildlife Foundation, among others. It targeted six villages located within an area that had become known as part of the Tarangire-Manyara wildlife corridor, namely Mwada, Sangaiwe, Vilima Vitatu and Magara that quickly accepted the idea, and Minjingu and Mayoka that were sceptical. The four villages that readily accepted the WMA had vast tracts of land readily available for their relatively low populations at the time and perceived the areas proposed for the WMA as marginal lands. In Magara village

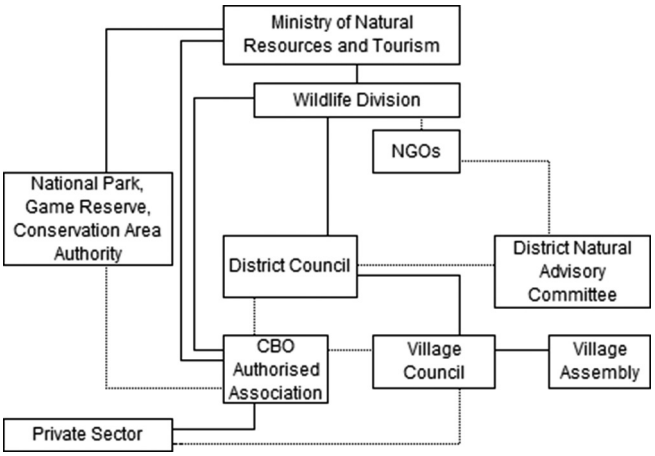

Figure 2
Burunge CBO interaction with WMA stakeholders, Source: Modified from WWF (2014), Notes: __ Administrative relations, ….. Consultative/ Advisory relations

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Table 1

Burunge WMA villages and their individual land contributions

Ward name	Original village	Year of secession	Names of villages after secession	Total village land before secession (ha)	Land designated for WMA	
					ha	In %
Nkaiti	Minjingu		Minjingu	23,860	3,747	16
		2005	Olasiti			
		2009	Kakoi			
	Vilima Vitatu		Vilima Vitatu	19,800	12,830	65
Mwada	Mwada		Mwada	10,824	3,039	28
		2004	Ngolei			
	Sangaiwe		Sangaiwe	9,200	2,445	27
Magara	Magara		Magara	15,808	2,258	14
		2005	Maweni			
		2005	Manyara			
Total				79,492	24,319	31

Source: Burunge WMA office notice board in 2014

(the area that now comprises the villages of Magara, Manyara and Maweni, see Table 1), for instance, swampland areas that were regarded marginal for agriculture were proposed for the WMA by facilitators. In Mwada, Sangaiwe, and Vilima Vitatu, facilitators proposed lands that were situated along the border with Tarangire National Park and wildlife migratory routes that were also seen by residents as less valuable for agriculture due to risks of crop damage by wildlife. In Vilima Vitatu, the Barbaig ethnic minority was wilfully ignored by the village government in the initial land-use planning processes, and their settlement and livestock grazing area close to Lake Manyara was suggested to be included for Burunge WMA. The perceived low land pressure around the time is reflected in the land price: one acre of fertile agricultural land in this area could be bought for USD 10-20 (1 USD ≈ TSH 1,000, in the early 2000s). In addition, not all residents were well-informed about the extent of lands set aside, which, later resulted in conflicts over access to grazing areas. Finally, these four villages had no prior income from wildlife-related sources. Therefore, the potential to obtain revenue from wildlife-related tourism promised a profitable use of 'marginal' lands.

The two sceptical villages were so, for different reasons. Mayoka suspected that the WMA was merely another attempt to include their (disputed) land into Lake Manyara National Park. Since 1984, Lake Manyara National Park authorities had claimed an area that Mayoka residents believed was their village land and prevented residents from using it. Minjingu, on the other hand, at the time generated about USD 30,000 per year from private wildlife tourism campsites operating on their village land. Minjingu residents were therefore, not interested in joining the WMA, if that entailed sharing this income with other villages. They decided to delay the decision until more information about income-sharing mechanisms and potential sources of income from other villages was availed. Yet, through manipulation and alleged forgery, facilitators succeeded in seeing Minjingu included in the WMA (Igoe and Croucher 2007). However, to this day, Minjingu village has not consented to be part of the WMA, and is actively seeking to withdraw from it (Bluwstein et al. 2016).

FROM BAD TO WORSE, 10 YEARS LATER

The contestations around Burunge WMA's establishment were just a pretext to the mounting challenges that would face its governance regime over the years to come. Bluwstein et al. (2016) describe how the WMA today is ridden with conflicts and contestation over its legality and the restrictions on uses of WMA land. The CBO appears unwilling to listen to demands and grievances from WMA communities that experience disproportionally high costs through the WMA. Instead, the CBO spends substantial financial resources in legal trials against Minjingu village that challenges its membership, and there have been several violent encounters between groups of villagers and village game scouts and/or the guards hired by the tourism investors in Burunge.

While there is little doubt that past grievances and present discontent with CBO management underlies these conflicts, the WMA is also structurally challenged on several accounts. Human, livestock and wildlife populations, and general socio-economic developments assert an increasing pressure on the WMA governance regime. According to national and local-level censuses, the human population in the villages that today comprise Burunge WMA has grown from around 17,000 individuals in 2000 (URT 2003) to 34,000 in 2012 (NBS 2012).[2] This development has contributed in a growing land pressure.

> In this village, many young people have completed primary, and some secondary school, but they have no jobs. They need land to start their own farms and have their own incomes. But the village has no land to distribute, not like 10 years ago, when we even gave land to people from town [outside the village] to farm. (Interview with a village chairperson, a Burunge WMA member village, 2015).

Further, the past decade has seen an increase in the potential for agriculture-led development in the area. Prices for agricultural crops have increased substantially in Tanzania over this period (Minot 2010; Adam et al. 2012), and the Burunge

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area has seen infrastructure improvements and State-led initiatives aimed at agricultural-led development. The Manyara regional government, the NGO Farm Africa, and the Selian Agricultural Research Institute (SARI), among others, have supported agriculture-led development in the area in various ways, such as promoting farming of cash crops, e.g., rice, onions and sesame, through extension services and education as well as direct marketing support. This has changed peoples' outlook with regard to many farmland areas. Swamplands that were previously considered marginal are now highly profitable agricultural lands. Today, the cost of leasing one acre of wetland suitable for rice production is estimated at USD 60-90 (1 USD ≈ TSH 2,000, in June 2015) per production cycle, and the selling price for such land at USD 600-700 per acre. In an interview, a male resident of a Burunge WMA member village said in 2015, "Land for our youth is a big problem. Few households still have land to give to their children. The prices show how valuable land is at the village. And with more people coming to the village for farming, land conflicts increase."

Elephants raiding peoples' farms add to the pressure on Burunge WMA governance. A recent census estimates that the elephant population density in the Tarangire-Manyara ecosystem has grown by more than 60% since 2009 to reach approximately 1 elephant per sq. km in 2014 (TAWIRI 2010; 2015). The census results are mirrored in the perceptions of people residing in the Burunge villages of Kakoi, Vilima Vitatu, Minjingu, Olasiti, and Sangaiwe who report increasing intensity of crop raids in the early harvesting season for maize, watermelons, and cowpea. The rampant destruction of near-ripe crops, and the feeling of insecurity and powerlessness when facing elephant herds in the agricultural fields at night, lead to anger and resentment against the CBO that is seen as one of the prominent faces of conservation in the area. In response to the elephant problem, and as a consequence of the support to agriculture-led development mentioned above, some farmers in elephant-prone areas are now growing sesame.[3] Yet, this has, in turn, increased the overall demand for agricultural land, as most people farming sesame also rent land further away to grow maize for subsistence.

Alongside the growth in human and elephant populations, the Burunge area has apparently seen an increase in overall livestock populations. Table 2 presents official statistics on the development in livestock populations since 2002 in Burunge member villages. While we are critical of these figures, there are other indications that livestock populations in the area have increased. A survey of 161 households among eight[4] Burunge member villages in 2014, for instance, indicated that since 2007 cattle ownership had grown by 4% and ownership of goats and sheep by 27%. This is a much lower growth rate than what is reflected in the statistics, but the survey excluded changes in livestock populations as a consequence of population growth. In sum, these 161 households reported ownership of a total of 3,048 heads of cattle and 4,026 sheep and goats in 2014. Extrapolating these numbers to the total sample population of the survey[5] gives 53,033 heads of cattle and 73,750 sheep and goats.[6] While this estimate only covers the survey population, which is a subset of the total populations of eight of Burunge's nine member villages, it appears to support the broader range of estimates in the official statistics report for 2010 and 2012.[7] While we cannot provide precise estimates of the growth in livestock populations, there is little doubt that such growth has taken place and that it is attributed as much to a growth in the number of resident households and outsiders coming to the area in search of pasture as it is to increase in livestock numbers kept individual households:

> Mbulu and Mang'ati migrants from Dareda [a highland division of Babati district] come with many cows. [Name of Mbulu migrant] alone has maybe 150 cows. Some villagers [residents] here own about 10 to 20 cows, grazing areas were enough for us, but now Mbulu graze even in our farms. (Interview with a village chairperson, a Burunge WMA member village, 2014).

Therefore, today, 10 years after it was established, the governance regime of Burunge WMA is severely challenged. Grievances associated with its manipulative initiation (Igoe and Croucher 2007) continue to haunt present-day governance efforts in the form of court trials and everyday challenges to the grazing restrictions by herdsmen who feel that they were not consulted during the initial land-use planning process (Bluwstein et al. 2016). In addition, the growth in human, livestock, and elephant populations, and in opportunities for agriculture-led development has added considerable pressure on the WMA governance regime. In the following, we examine how the governance regime responds to these challenges.

A FAILING GOVERNANCE REGIME

Wildlife-related tourism, and the revenues and labour opportunities it may give rise to, is the main tangible benefit that may offset or at least counter the costs for villages associated with joining into a WMA. Burunge is a leading income-generating WMA in Tanzania, second only to Ikona (WWF 2014). The WMA income sources include photographic tourism, fees from game hunting, fines, research fees, and NGO donations. The WMA receives 65% of non-consumptive revenues paid as tourist fees or commonly referred to as photographic tourism revenue while 20% and 15% are retained by the Wildlife Division and District council, respectively (WWF 2014). Our attempts at gaining an overview of the finances of Burunge CBO showed that the records are scattered and internally contradictory.[8] Yet, from the evidence available, our best estimate of the total WMA income over the past 10 years is USD 1,951,010. Annual incomes appear to have increased over this period from USD 29,997 in 2006-2007 to over USD 488,445 in 2014-2015 due to an increase in the number of tourist lodges paying revenues to the WMA over the period (Table 3).

The officially declared incomes are equally distributed between a share going towards WMA administration and management, i.e., CBO office expenses and village game

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scouts salaries and operational expenses, and a share that is distributed equally among Burunge's member villages. Over the 10 years USD 826,442 were used to pay for office expenses, administration and rule enforcement, USD 760,753 were shared among member villages. Around USD 360,564 were kept in four different CBO bank accounts, and about USD 3,250 remained unaccounted for in official records.[9]

The funding of village game scouts contributes to some degree towards alleviating problems with crop raiding by elephants. Yet, although appreciated by villagers, the efforts by village game scouts are seen as wholly inadequate to effectively reduce wildlife damages. A Burunge WMA member village resident said in a 2015 interview, "If they [village game scouts] are around when the elephants come, they bomb them [using chili bombs]. But many times we call they don't come, sometimes they came late, they have only one car."

On average, Burunge member villages have received USD 7,606 per year corresponding to roughly USD 2.2 per person per year (based on the 2012 census estimate of 34,000 people residing in the Burunge member villages). As Table 3 indicates, Minjingu village has never accepted its share of the revenues. Rather, its share from the periods 2009-2010 and 2012-2014 is held by the Burunge CBO.

The funds received by the villages have been invested in village development activities, such as construction and maintenance of public school classrooms, teachers' houses, village offices, and a ward health centre, which is yet to be completed. Burunge residents perceive that WMA incomes have resulted in fewer requests from the village councils for individual contributions to village development activities.

Table 2

Livestock trends in Burunge WMA

Name of livestock	Population		
Year	**2003**	**2010**	**2012**
Cattle	10,683	39,015	61,118
Goat	3,227	47,900	35,077
Sheep	2,781	9,623	20,090
Donkey	150	1,246	3,238

Source: Compiled from URT (2003), Burunge-GMP (2010b) and Babati district livestock census 2012[17]

Yet, many see this as wholly inadequate to compensate for forgone access to agricultural and grazing lands. The common sentiments from residents, especially those from the 'livestock villages' of Kakoi, Minjingu and Vilima Vitatu include statement from an interview of a Burunge WMA member village resident in 2015, "Yes we don't contribute anymore, but we still have to pay school fees and buy uniforms and shoes for our children. I have to sell a cow or may be two goats. We need to graze there [in a hunting block]." In another statement, an elderly man, participating in a focus group discussion in one of the Burunge WMA member village in 2014, said:

> Who is the community? They [CBO and district game officer] say it is a community conservation. Where do they get all the powers to push villagers not to graze in the community land? Livestock is our life, when a cow dies it is very painful."

WMA revenue is not used to compensate residents for damages caused by wildlife (WWF 2014). The government has no compensatory policy either. Rather it may decide to provide money to individuals as a consolation for their loss (URT 1998). Yet, such consolation is rarely offered in Tanzania. In Burunge for instance, residents complained that district officials would send someone to record their losses, but nothing follows after that: "They [district officials] write our names and acres of crops eaten by elephants, but we don't see money" (interview with a Burunge WMA member village resident, 2014).

The equality principle applied in the sharing of WMAs revenue between villages is contested. While revenues are shared equally, tourism investments that generate the revenue are located in a few villages, namely Mwada, Kakoi, Vilima Vitatu and Minjingu. Olasiti, and Sangaiwe villages, each has two campsites on land that is outside the WMA and, therefore, the full incomes accrue to the villages, not the WMA. The remaining villages, Magara, Maweni, Ngolei, and Manyara, are rarely, if ever, visited by the larger wildlife species of interests to tourists.[10] Thus, these three villages do not currently provide any wildlife corridor function. So, while revenue is distributed equally, the underlying 'production' of that revenue through

Table 3

Burunge WMA revenues and expenses in USD[18]

Financial Year	Reported Revenue	CBO Expenses	Shared with member villages	Number of villages	Revenue received by each village
2006-2007	29,997.59	6,637.13	14,998.80	9[#]	1,666.53
2007-2008	62,714.08	20,202.52	31,357.04	8[^]	3,919.63
2008-2009	53,534.91	26,316.16	24,840.53	9*	2,760.05
2009-2010	151,745.88	67,555.45	75,872.94	10[†]	7,587.29
2010-2011	244,662.35	93,953.24	122,331.17	10[†]	12,233.12
2011-2012	301,744.50	112,064.19	150,872.25	9[^]	16,763.58
2012-2013	293,015.00	128,570.64	119,875.50	10[†]	14,103.00
2013-2014	325,150.60	146,205.92	105,633.49	10[†]	12,427.47
2014-2015	488,445.58	224,937.10	114,971.40	10[†]	13,526.05
Total	1,951,010.49	826,442.34	760,753.12	10	84,986.72

Source: Burunge CBO office notice board in 2015 and audit reports. *Notes*: [#] Burunge WMA has 9 member villages; [^] Minjingu refuses to accept income share, and it was distributed to other villages; * Kakoi village is formed; [†] Minjingu income are being held by the CBO

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hosting of investments on village WMA-land and associated higher wildlife densities, and thereby costs of wildlife damages to crops and livestock, are not. In effect, some Burunge villages free-ride on others by receiving revenue they do not contribute to producing, and Kakoi, Olasiti, and Sangaiwe villages in addition to that, also reap full benefits from investments on their lands that are not part of the WMA.

Furthermore, some of the freeriding villages today perceive the restrictions on their WMA land as severely compromising their development opportunities. Wetlands within the Magara, Manyara, and Maweni villages WMA areas, for instance, are today seen as highly valuable agricultural land for rice production. Thus, the WMA restrictions have become 'real' constraints.

Elsewhere in Burunge, restrictions on the use of WMA land follow from the specifics of contracts made with investors. In Vilima Vitatu, for instance, a large tract of WMA land has become off limits for people and livestock due to the establishment of a luxury wildlife tourism business that requires a large tract of 'pristine' and undisturbed wilderness for its high end accommodation and game drives. Ironically, this lodge–which imposes high costs on the villages in terms of a large reduction in the area where grazing is permitted–brings in only small amounts of revenue. In another Burunge village, Mwada, another lodge that offers more modest accommodation and no game drives, but for a higher number of visitors, only takes up a fraction of the land and brings in much more revenue.[11]

Thus, the cost-benefit ratio of the WMA varies over time and space due to a number of factors that determine the restrictions on WMA land and the costs associated with such restrictions. These have not been constant over time, but have generally increased with the developments in populations of humans, livestock and elephants, and agriculture-led development opportunities described above. Unfortunately, the land-use planning done during the establishment of Burunge WMA and in subsequent negotiations with investors has not resulted in favourable cost-benefit ratios. The original land-use planning exercise did not anticipate a growing demand for land for grazing and farming and the contract made with the investor in Vilima Vitatu has imposed additional costs on villagers.

REALITY AND REPRESENTATION: WMAS IN TANZANIA

Burunge WMA is a story of unsettled past grievances and growing pressure on a governance regime that is unable or unwilling to respond (Bluwstein et al., 2016). To this date, Minjingu village rejects its status as a member and residents explore multiple ways of exiting and pursuing compensation for what they perceive as an illegal and coercive take-over of rights to their village land and the profits generated thereon. A mere 10 years following its implementation, the restrictions on land-use associated with Burunge WMA are seen as severely limiting peoples' development opportunities, and as adding insult to injury for the many people who never agreed to enter into the WMA in the first place. The meagre revenues–and their sharing across too many villages–do little to appease peoples' feelings of losses and injustice. Thus, on a closer look, one of the most celebrated WMAs in Tanzania–ideally situated in the midst of the northern wildlife tourism circuit–is rife with conflict and contestation.

Unfortunately, evidence from other, including much more recent, WMA establishment processes across Tanzania indicates that manipulative, haphazard, and illegitimate WMA implementation processes that result in villages losing rights to large shares of their village land territories remain the standard today (Loveless 2014; Homewood et al. 2015; Bluwstein and Lund, in review). This seriously contradicts the portrayal of WMAs and their implementation processes by the Government of Tanzania, donors, NGOs, and other actors involved in legislating, financing, and implementing this policy and clearly defies the notion of 'CBC'.

It takes little imagination to see how the situation could be changed in favour of more local support and legitimacy. Indeed, many of the ideas we will present below are also described in the recent WMA evaluations by United States Agency for International Development (USAID) and WWF (USAID 2013; WWF 2014). The Government of Tanzania could forfeit its share of the revenues to favour villages, for instance, by doing away with the 35% tax on non-consumptive tourism revenues[12]. Such an arrangement would be logical, because WMAs ostensibly serve as corridors between and/or buffer zones for protected areas and game reserves. Thus, the positive externalities rendered by WMAs support the generation of substantial foreign exchange earnings and revenue for central government through tourism in protected areas and game reserves managed by the Wildlife Division. At the WMA level, the sharing of revenues could be changed to favour villages that bear the brunt of the costs, and/or villages that do not contribute to corridor functions could be excluded. In Burunge, for instance, there seems to be agreement that the main rationale for its establishment was to maintain the area as a viable wildlife corridor (Igoe and Croucher 2007; Sachedina 2008; District game officer, CBO representatives and AWF staff. pers. comm. 2013). Yet, presently, Minjingu, Kakoi, Vilima Vitatu, and Olasiti village serve this function. The setup of Burunge WMA, thus, brings an unnecessary (from the point of view of the corridor function) element of conflict and illegitimacy to the WMA. Another possibility that could tilt the cost-benefit in favour of the WMA would be a greater allowance for grazing within the WMA. In Burunge, for instance, grazing is, in principle[13], allowed in the General Use Zone, while banned in the Hunting Use Zone, and Corridor Use Zone. While the business models of investors in photographic and hunting tourism may be incompatible with livestock grazing, there is less evidence to suggest that the corridor function of Burunge, and other WMAs, would suffer from a general allowance of grazing within the WMA. Evidence exists of close and peaceful co-habitation among livestock, pastoralists, and wildlife (e.g., Nepal and Webber 1995; Woodroffe et al. 2005; Goldman 2009; Odadi et al. 2011), and use of the WMA Corridor Use Zones for grazing would not imply changed land uses or the establishment

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of permanent settlements that could defy the purposes of the WMA. Finally, the Government of Tanzania could support the Burunge CBO (and other CBOs with similar problems) in rule enforcement against political and economic elites, such as district level civil servants, tourism operators, and wealthy individuals who today appear to more or less act with impunity (see also Homewood et al. 2015).

While it is not difficult to point to sensible policy measures that could support the legitimacy and long-term viability of WMAs, we are not optimistic with regard to the possibilities for change. Recent years have seen a recentralisation of wildlife-based revenue collection and a rise in repressive and militarised anti-poaching measures in Tanzania that do not bode well for the enfranchisement of village residents (Benjaminsen and Bryceson 2012; Homewood et al. 2015). Meanwhile, new WMAs are established at high pace and with deleterious consequences for rural residents who are subjected to haphazard and top-down planning processes without the due attention to process and consultation promised in official WMA implementation guidelines (Loveless 2014; Bluwstein and Lund, in review). And while villages, such as Sinya in Enduimet WMA and Minjingu in Burunge WMA, have struggled for years to regain rights over their village lands, there appears to be no responsiveness to their calls for justice.

This brings us to the question—that was posed already by Igoe and Croucher in 2007—of why the blatant differences between realities on the ground and the 'sacred simplified' descriptions offered by implementing agencies can persist? Relevant staff at the implementing agencies, such as the Wildlife Division, WWF, AWF, GIZ, Honeyguide Foundation, and Wildlife Conservation Society of Tanzania, are hardly unaware of the failure of the WMA policy to bring about the promises of improved rural livelihoods and its glaring lack of local legitimacy in many places. Yet, this evidence remains ignored or downplayed in reports. For instance, the cases of Sinya village in Enduimet and Minjingu village in Burunge that were coerced and manipulated into joining the WMAs (Igoe and Croucher 2007; Benjaminsen et al. 2013) is written off in recent WMA evaluations by USAID and WWF as a question of villagers being disgruntled with having to share wildlife tourism revenues that they would previously keep to themselves (USAID 2013; WWF 2014). Yet, this representation erases the processes whereby these two villages ended up being part of the WMA, processes that defy the notion of CBC as well[14]. While staff from these organisations acknowledge the existence of such fundamental problems in private conversation (see Transnational conservation NGO staff, pers. comm. 2013; Bluwstein and Lund, in review), there are no indications that such acknowledgement will lead to a serious rethinking of the WMA policy model or to the reopening of negotiations about existing WMAs (see PINGOs forum 2013; Bluwstein and Lund, in review). Rather, there are indications that WMAs are increasingly seen as strategic entities for increased anti-poaching efforts.[15]

So, resourceful actors continue to support and publicly celebrate the WMA policy. The Wildlife Division, and the host of NGOs and donor agencies thereby choose to ignore the evidence of fundamental problems for reasons we can only speculate about. From the point of view of conservation, WMAs have allowed conservation interests to gain a foothold on massive amounts of village land—the 38 WMAs will cover ~7% of Tanzania's total territory (WWF 2014; MNRT 2015). When viewed as such, the rush to establish WMAs has accomplished quite a lot in a decade—allowing conservationists a possibility to further affirm and consolidate conservation interests on village lands for years to come. Yet, we are fully aware that construing the observed discrepancy between public and private transcripts of the actors involved in funding and implementing WMAs as owing to a conservationist plot is too simplistic. Rather, we follow Benjaminsen et al. (2013: 7) who argue that the broader developments within wildlife policy in Tanzania owes to "a complex interaction of several factors, including neoliberal conservation, neo-patrimonial state practices, and foreign control of wildlife conservation discourse and practice." Yet, while we agree with Benjaminsen et al. (2013) that the policy, practice, and outcomes of WMAs, and the wider wildlife policy environment resonate with the interacting forces they identify, we do not believe that neoliberal ideology, profit, and rent-seeking are the only motives driving individual professionals within conservation in Tanzania. Rather, our impression is that many of the people working as professionals within the conservation-development industry in Tanzania—professionals within the Government of Tanzania, funders, conservation and research organizations—believe in the value of seeking to do better for both, people and wildlife in Tanzania. However, there is a collective failure to fully acknowledge and confront on the ground realities in public. As such, the discrepancy between realities on the ground and what can be gleaned from official evaluation reports by funders and implementing agencies as well as some research publications echoes findings from other critical studies of policy formation (Mosse 2004; Goldman 2007; Büscher 2014 Blundo 2015). These studies, often based on ethnographic work, show that staffs of development organisations and public bureaucracies manage multiple competing and contradicting logics and claims. The contradictions inherent in ends and means present professionals within the environment-development industry with a stream of dilemmas. Few can claim to be outside of that stream. Yet, acknowledging that our hands are not completely free does not absolve us from responsibility. People in the areas affected by the WMA policy are caught in the midst of a gross injustice that is unlikely to go away in the absence of concerted contestation. It is our common responsibility to see that injustice undone. This cannot be achieved in the same top-down manner that led residents (knowingly or unknowingly) into the WMAs in the first place. Yet, in many WMA areas contestation from below takes place. It is high time for those who fund, legislate, implement, and study WMAs to lend time and support directly to such efforts of people who seek to unravel themselves from an unwanted and unfair policy.

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NOTES

1. This number includes Minjingu village that, however, has never acknowledged its membership status and is currently pursuing its independence and land rights in a court case against the WMA.
2. The growth of the human population of the area over time is documented in various sources: approximately 22,500 people when the WMA was initiated in 2002 (NBS 2002); Approximately. 27,000 in 2010 (Burunge-GMP 2010a) and; Approximately. 34,000 in the 2012 national census (NBS 2012). The 2012 national census data were corroborated by checking contemporary census data held at the member village offices.
3. According to local residents, sesame is not eaten by elephants.
4. The 161 households were distributed among eight of Burunge's nine current member villages. Yet, the sampling was done on the basis of villages in existence in 2002. Thus, the households in the sample are divided as: 41 from the 2002 Minjingu village (only sampled within present-day Kakoi and Olasiti, as Minjingu village does not recognize being member of Burunge WMA); 40 from 2002 Magara village (present-day Magara, Manyara and Maweni villages); 40 from 2002 Mwada village (present-day Mwada and Ngolei villages); and 40 from Sangaiwe village (no village secessions since 2002). Selection was stratified random. Only households that were present in the village in 2007 were included in the sample frame. This implied, inter alia, that the sampling targeted older households and, therefore, likely households owning more livestock than the average household.
5. The total sample population included households that had been formed prior to 2007, i.e., it is a sub-sample of the total village population. We do not attempt extrapolation to the total village population due to our hypothesis that the sample population is different from the total population, i.e., likely to be older households owning more livestock.
6. The survey sample included one very large cattle owner. Excluding that household from the estimate changes the overall estimate to 29,098 heads of cattle and 68,267 sheep and goats.
7. Interviews with members of the pastoralists association of the village Vilima Vitatu–that is one of three member villages (Vilima Vitatu, Olasiti, Kakoi) having the majority of livestock among Burunge member villages—further corroborate the estimate. In 2014, a local census revealed around 15,000 heads of cattle in this village. The census implied that 4,000 heads were moved out of the village on grounds that they belonged to non-residents.
8. There were no well-kept records that show income and expenditure for early years of the WMA. We obtained annual incomes and funds distributed to village from the CBO office notice board, and for other expenditures, we gathered data from different meeting reports. A complete set of financial records were available for financial years 2012-2013, 2013-2014, and 2014-2015 only.
9. The amount in bank accounts include USD 44,540 owed to Minjingu village, unaccounted revenue is, therefore, more than USD 3,250.
10. We interviewed several villagers who all claimed that large wildlife did not pass through the villages, apart from the rare hippopotamus in the wet season. Monthly reports from village game scouts confirmed this as does the research done by Kikoti (2009) on wildlife movements in the area.
11. The lodge in Mwada village has 65 beds (i.e., can accommodate 65 tourist per night) and is estimated to generate about USD 268,800 per year i.e., four times more than the lodge which offer game drives on a large pristine land but accommodate only 12 tourists per night, bringing about USD 50,400 for the WMA per year.
12. This would bring WMAs in line with community-based forest management that is, in many ways, a parallel to WMAs only focusing on forests, rather than wildlife (Nelson and Blomley, 2010). Villages retain all revenues from products from community-based forest management, whereas the government waives all royalties and fees (Lund, 2007). Community-based forest management in Tanzania is not free of environmentalist-paternalistic oversight (Green and Lund 2015). Yet, the revenue sharing formulae does favour villages to a much higher degree than other CBC schemes in Tanzania, such as those of Joint Forest Management and Wildlife Management Areas.
13. Due to an agreement with investors operating in the General Use Zone down towards Lake Manyara, the WMA has agreed to ban grazing there too.
14. Sinya's case has been described by Benjaminsen et al. (2013). The village hosted wildlife tourism investments before the arrival of the WMA policy and did not wish to join a WMA. Yet, Benjaminsen et al. (2013) describe how the investor was pushed to relocate investments to a neighboring village that was WMA member and from then one only paid the government fees, while Sinya suddenly received no income from the continued use of its lands for game drives.
15. In 2015, for instance, USAID initiated two projects 'Promoting Tanzania's Environment, Conservation, and Tourism (PROTECT)' and 'Endangered Ecosystems - Northern Tanzania (EENT)' focusing on WMAs and anti-poaching efforts in Northern Tanzania with a total budget of app. 25 million USD over five years (USAID, 2015a, 2015b).
16. The map was graciously provided to us by Jevgeniy Bluwstein. It also features in Bluwstein et al. (2016). Importantly, this is not an official map. Many village boundaries are not official and might change in local negotiations. The boundaries have been estimated as best possible based on field presence and corroborated with preliminary maps from Babati District, Village Land Use Plans, GIS shapefiles (WWF, National Bureau of Statistics Tanzania) and Google Earth satellite images. Agricultural area is mapped based on 2014 shapefiles (Honeyguide Foundation).

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17. Livestock population data were compiled from the socio-economic baseline study for Burunge WMA in 2003, the general management plan that use information sourced from member villages in 2010, and the district livestock survey conducted in 2012 where village leaders collected information about livestock populations in their respective villages.
18. Income and revenue records were obtained in Tanzanian shilling, and changed to USD based on the annual exchange rate. Data for 2006-2007 to 2011-2012 were obtained from CBO notice board (posted as part of accountability and transparency agenda), between 2012-2012 and 2013-2014 from audit reports (audits conducted by a freelance certified auditor as part of capacity building program) and for 2014-2015 information was obtained from handover report for CBO leadership changes.

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