Conservation, Displacement and Social Injustice at the South African Section of Greater Mapungubwe Transfrontier*

NDIDZULAFHI INNOCENT SINTHUMULE | UNIVERSITY OF JOHANNESBURG

This study presents the case of the creation and expansion of Mapungubwe National Park and the Greater Mapungubwe Transfrontier Conservation area (GMTFCA) to highlight the paradoxes between biodiversity conservation and local livelihoods. The paper highlights the role played by the South African National Parks, wealthy individuals and powerful environmental organizations in supporting the creation and expansion of the park. Two broad questions structure this paper. First, what are the implications of the creation and expansion of Mapungubwe National Park and the GMTFCA on the lives and livelihoods of commercial farm workers and dwellers? Second, what is the future of commercial farm workers and dwellers who are still working on the farms in Mapungubwe? The study argues that the creation and expansion of Mapungubwe National Park and the GMTFCA depended on forceful management techniques that involved displacement of commercial farm workers and dwellers. To substantiate this argument, the study draws on fieldwork material from the South African section of the GMTFCA.

Keywords: biodiversity-human conflicts, displacement, social injustices, transfrontier conservation, South Africa

^{*}This work was supported in part by the National Research Foundation of South Africa under Unique Grant Number 99306.

Introduction

Displacement involves not only the physical removal from a dwelling, but also the imposed expropriation of productive lands and other assets to make possible an alternative use (Cernea 2000; 2005). Taken a step further, "restricting access" to resources that are vital for livelihoods is also considered as a form of involuntary displacement, even if the affected groups are not physically relocated (Cernea 2005; 2006). This definition broadens the understanding of displacement beyond its usual connotation as geographic relocation, to include also economic dislocation. Hence, displacement includes the forced removal of people from their homes or land and economic displacement, which is the exclusion of people from particular areas necessary for the pursuit of their livelihood (Brockington and Igoe 2006). Development projects are usually associated with the displacement of human populations. Cernea (2000) estimated that more than 10 million people are involuntarily displaced each year to make way for development projects. Development in nearly all its forms is essentially a spatial activity which is fundamentally about reorganising space. As a result, all development has the potential of causing displacement (Vandergeest 2003; De Wet 2006; Agrawal and Redford 2009; Terminski 2013). As Agrawal and Redford (2009) have noted, development projects typically generate winners and losers on a significant scale. The establishment and expansion of protected areas has been identified as one development contributing to displacement of people (Brockington and Igoe 2006; Rangarajan and Shahabuddin 2006; Cernea and Schmidt-Soltau 2006; Adams and Hutton 2007; Schmidt-Soltau and Brockington 2007; Mishra et al. 2007; Lasgorceix and Kothari 2009; Kabra 2009; Dowie 2009; Lam and Paul 2014; Lunstrum 2016).

The issue of displacement of people has remained a contentious one in the debates over the merits of biodiversity conservation. Literature suggests that studies on displacement in conservation areas have concentrated on the impacts of conservation projects on subsistence farmers (Schmidt-Soltau 2003; Sunseri 2005; Kabra 2009), and pastoralists (McCabe et al. 1992; Peluso 1993; Fratkin 1997; Mustafa 1997; Brockington 1999). Research on displacement in the name of conservation has not looked at the impacts of eviction on commercial farm workers. Unlike such previous studies, this article contributes to the literature on conservation and society by describing how commercial farm workers are affected by the establishment and expansion of protected areas and the implications of that on their lives and livelihoods. The paper draws on the experience at the South African section of Greater Mapungubwe Transfrontier Conservation Area (GMTFCA) to argue that conservation of biodiversity depends heavily on hostile management techniques, including, in this case, the forced removal of commercial farm workers and dwellers in pursuit of the establishment of wilderness conservation areas. In this paper, I term this forced removal of commercial farm workers as 'displacement without resistance' due to the fact that they were removed from the farms without opposing it. The paper shows that displacement of commercial farm workers is promoted by wealthy individuals and powerful environmental organisations who assisted the South African National Parks (SANParks) in acquiring land for the creation of GMTFCA. The main research questions are (1) What are the implications of the establishment of GMTFCA on the lives and livelihoods of commercial farm workers and dwellers on the South African side of the transfrontier conservation area (TFCA)? (2) What is the future of commercial farm workers and dwellers who are still working in the farms at the South African side of GMTFCA?

Conservation, displacement and livelihoods

From the inception, the establishment of protected areas has had severe and adverse impacts on local people. Displacement of human population (Beinart 1989; Adams 2004; Colchester 2004; Brockington and Schmidt-Soltau 2004; Lasgorceix and Kothari 2009), obsolescence of cultural values and social disintegration are among the major negative social impacts of establishing national parks (Nepal and Weber 1995; Rangarajan and Shahabuddin 2006; Agrawal and Redford 2009). Of relevance to the discussion of this paper is the displacement of people from protected areas to promote biodiversity conservation. This problem is not a new phenomenon, rather, it has deep historical roots. As Dowie (2009) has noted, displacement of resident people from protected areas dates back to the late nineteenth century during the founding of national park, pioneered in the United States of America. Literature suggests that in southern and eastern Africa, as well as in India, displacement of local people was a central feature of the twentieth century nature conservation (Carruthers 1995; Rangarajan and Shahabuddin 2006). In southern Africa, displacement of people from protected areas has been highly racialized particularly during colonial and apartheid era (Carruthers 1993; Ramutsindela 2003; Kepe 2004). White residents were positioned as property owners or managers whereas black residents were considered 'squatters' or illegal immigrants who did not have property rights over the land. As documented by many scholars, black communities were the victims of displacement (Carruthers 1993, 1995; Beinart 1989; Ramutsindela 2003; Wolmer 2003). This racialized displacement was built on very wrong assumptions that black people are only helpful as labourers (Carruthers 1993, 2009) and viewed as agents of environmental destruction who should be removed from protected areas at the earliest convenience (De Velliers 2008).

This model of separating humans from non-humans suggests that people and wildlife cannot coexist and, therefore, if natural areas are to be safeguarded, people will have to be removed from protected areas. As Bates (2002) has noted, protected areas without human habitation reflect a modern construction of "natural areas". The aim of displacing people is to create 'inviolates' or 'people-free zones' where natural processes can play out without 'human disturbances' (Mishra et al. 2007; Kabra 2009; Lam and Paul 2014; Lunstrum 2016). This approach to conservation, in particular, draws from the American idea of a national park as a pristine or wilderness area, and the British notion of an intensively managed nature reserve (Hutton et al. 2005; Watts and Faasen 2009). Displacement of people has been and continues to be the architecture behind displacement of populations, with negative consequences on the lives and livelihoods of the affected people. Affected people are those who stand to lose all or parts of their physical and non-physical assets as a consequence of establishment or expansion of a protected area (Downing 2002; Mishra et al. 2007; Lam and Paul 2014). This section explains the implications of displacement on subsistence farmers and pastoralists in protected areas which I then later compare to commercial farmworkers which is the focus of this paper.

The eviction of subsistence farmers to promote conservation contributes to loss of rights to residence, foreclosure of rights to future use and loss of non-consumptive use values such as access to places of religious or cultural value (Schmidt-Soltau 2003; Colchester 2004; Brockington and Schmidt-Soltau 2004; Adams and Hutton 2007; Kabra 2009). Displacement of human populations from conservation areas has a direct impact on livelihoods. For instance, displacement makes subsistence farmers to lose control over their agricultural plots and livestock grazing land, which has negative implications for their livelihoods (Saberwal et al. 1994; Colchester 2004; Rangarajan and Shahabuddin 2006; Adams and Hutton 2007; Lasgorceix and Kothari 2009). The move from well-drained, fertile, low-lying land inside the park to unirrigated and rocky upland farm plots at the relocation site introduces risks as well as a much higher element of uncertainty. The displacement of subsistence farmers also significantly affects monetary income (Kabra 2009; Lam and Paul 2014). An important reason for the decline in financial income of relocated farmers is attributed to the loss of productive land and its services leading to loss of earnings through sales of agricultural and nontimber forest produce (Schmidt-Soltau 2003; Cernea and Schmidt-Soltau 2006; Lam and Paul 2014). Forced resettlement exposes displaced people and those in receiving communities to a wide range of risks of hardships and impoverishment (Schmidt-Soltau 2003; Colchester 2004; Brockington and Schmidt-Soltau 2004; Cernea and Schmidt-Soltau 2006; Mishra et al. 2007). These include landlessness, joblessness, homelessness, alienation and marginalization, food insecurity, increased morbidity and mortality, loss of access to common property and services and social disarticulation (Schmidt-Soltau 2003; Cernea and Schmidt-Soltau 2006; Lam and Paul 2014). This compromises the livelihood self-sufficiency, resulting in the creation of a reserve of unemployed labour with vulnerable and insecure livelihoods (Kabra 2009; Lasgorceix and Kothari 2009).

Displacement from protected areas has also been found to have impacts on pastoralists. Pastoralists have traditionally herded their livestock over vast areas of arid and semi-arid savanna in many parts of the world. However, over time they have lost their herding lands, particularly to conservation, with severe social and economic consequences (Graham 1989; McCabe et al. 1992; Fratkin 1997; Mustafa 1997; Brockington 2004). Displacement of pastoralists forces grazing of livestock to become legally possible in the thin strip of land outside the reserve which is normally surrounded by villages settled with cultivators. This results in losses through livestock diseases from food shortages (Brockington 2004). Additionally, the eviction of pastoralists increases the percentage of the population who are unable to support themselves by pastoralism, which results in poverty and malnutrition in the human population (McCabe et al. 1992; Mustafa 1997). This wealth of research about subsistence farmers and pastoralists does not provide insight into a different category of displaced people-commerical farm workers and dwellers. This study intends to fill this gap in knowledge by (1) investigating the implications of the creation and expansion of Mapungubwe National Park and GMTFCA on the lives and livelihoods of commercial farm workers and dwellers and; (2) exploring the future of commercial farm workers and dwellers who are still working on the farms in Mapungubwe.

Study Area and Methods

Location and characteristics

The study area is located on the northern side of South Africa and is part of GMTFCA spreading into neighbouring Zimbabwe and Botswana. The area is in the Limpopo province of South Africa, immediately south of the Limpopo River which serves as the border between South Africa, Zimbabwe and Botswana (Figure 1). The South African section of GMTFCA is made up of Mapungubwe National Park (which is managed by SANParks), contracted freehold land and Venetia Limpopo Nature Reserve.

The primary core area is Mapungubwe National Park which extends from Pontdrift border gate in the west, to Weipe farm in the east incorporating 20 properties of varying ownership status with a total ecological land area of 19 810 ha. The park is the home of the Golden Rhino which was discovered on a royal grave on Mapungubwe hill in the early

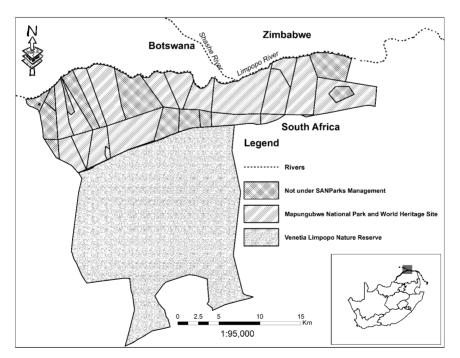


FIG. 1.—Location of the Study Area

1930s (Huffman 2000; Carruthers 2006). The whole archaeological "discovery" of the Mapungubwe hill and civilization and the iconization of the "Golden Rhino" – which forms an integral part of the marketization of the Mapungubwe National Park and GMTFCA by SANParks today was synonymous with dispossession because the whole digging on the Mapungubwe hill was kept secret but most importantly, local (black) people were excluded from their heritage and livelihoods (Carruthers 2006). The cultural significance of the area led Mapungubwe to be proclaimed a World Heritage Site by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) on the 5th of July 2003 (SANParks 2008; Peace Parks Foundation 2012).

The cultural importance of the archaeological treasures of Mapungubwe, the richness in biodiversity and the scenic beauty of the region have led to the creation of GMTFCA. GMTFCA is therefore generally regarded as a cultural TFCA (GMTFCA TTC 2010). Over the past ten years, there has been conflict between Coal of Africa and the coalition of civil society group over Mapungubwe. The conflict emerged as result of a mining license that was granted to Coal of Africa to mine coal at the buffer zone (seven km east of Mapungubwe National Park) of GMTFCA by the South African Department of Mineral Resources (DMR). The approval to mine coal was challenged by Mapungubwe Action Group, local land owners and the international coordinator of the GMTFCA. These stakeholders were represented by the Centre for Applied Legal Studies at the University of the Witwatersrand and lodged a court appeal to address the shortcomings of the environmental management plan and prevent further damage to the environmentally sensitive environment.

Methods

Fieldwork of this study was conducted between 2011 and 2018 on the South African section of GMTFCA. Permission to conduct this research was granted by SANParks. The fieldwork involved participant observation, interviews and analysis of documents. Purposive sampling was used to select members to be interviewed in the Mapungubwe area. As Devers and Frankel (2000) have noted, with purposive sampling, the researcher decides on the informants and/or study sites that can best provide the needed information. The key stakeholders selected for this study included the international coordinator of GMTFCA, private land owners or farmers, former and current farm workers and dwellers, SANParks officials, donors and 268

conservation NGOs who are directly involved in the creation of the TFCA. A total of 64 key informants were selected and interviewed until the point of data saturation. The sample comprised 49 males and 15 females. The voungest participant was 28 years old whereas the oldest was 75. Semistructured interviews were conducted with the interviewees in their home area and each interview lasted for approximately 60 minutes. Interviews were conducted in English and Tshivenda and no interpreter was required since the author is fluent in both languages. These interviews captured the more recent events concerning the process adopted to create and expand GMTFCA and the implications of that on commercial farm workers and dwellers. The author attended the Trilateral Technical Committee meeting of delegates from Botswana, South Africa and Zimbabwe held on 8 June 2011. The Trilateral Technical Committee (TTC) is a committee that is made up of delegates from Botswana, South Africa and Zimbabwe to provide strategic direction for the attainment of the objectives of the GMTFCA. The Committee meets at least four times a year. The author also attended a Mapungubwe Park Forum meeting with staff, private land owners, land claimants and local communities. Field observations helped in corroborating information collected through interviews.

Other sources of data included minutes of TTC meetings, government reports, Peace Parks Foundation (PPF) reports and maps, the Memoranda of Understanding signed by Botswana, South Africa and Zimbabwe towards the creation of TFCA and the integrated development plan of the GMTFCA. These multiple sources of information provided a way to examine the implications of the establishment of TFCA on the lives and livelihoods of commercial farm workers and dwellers.

Land-use transformation in Mapungubwe region: Farming to conservation

The idea of transforming Mapungubwe from farming into a nature conservation area has a long history that dates back to 1922 from an initiative of General Jan Smuts, who was then Prime Minister of South Africa. A block of 9 farms was set aside as the Dongola Botanical Reserve with the aim of studying the vegetation and assessing the agricultural and pastoral potential of the area (Carruthers 1992; Hall-Martin et al. 1994; Robinson 1996). By 1944, Dongola Botanical Reserve had grown from a small block of nine farms to a considerable area of 27 farms with a total area of 60 000 ha. In 1944, this

was extended to the concept of a Dongola Wildlife Sanctuary after it was realised that the area was not suitable for human habitation because the area lies within the tropics where the temperature is high and rainfall is low and erratic. The proposed Sanctuary was to promote the conservation of Limpopo River valley west of Musina and to transform a vast area of 240 000 ha into a National Park (Carruthers 1992; 2006; 2009). It was at this time that the possibility of linking the Sanctuary with conservation areas in Botswana and Zimbabwe was first considered. The proposed sanctuary was to be achieved through the expropriation of land which would directly affect private land owners (Sinthumule 2017). The concept of a wildlife sanctuary was hotly debated both in parliament and in the press to the extent that it became known as the 'Battle of Dongola' (Hall-Martin et al. 1994; Robinson 1996; Carruthers 2006; 2009). Unfortunately, the project was caught up in political battles between Smuts' government (United Party) and the opposition (National Party) that eventually led to its abandonment following the electoral victory of the National Party in the general elections of 1948 (Carruthers 2006; 2009; Sinthumule 2017).

Over the last two decades, the Mapungubwe region has undergone a transformation similar to that proposed by General Smuts, namely, the establishment of a nature conservation area at the confluence of the Limpopo and Shashe Rivers. In June 1990, De Beers Consolidated Mines established the 36 000ha Venetia Limpopo Nature Reserve. This was a turning point because the idea of a park was raised afresh by De Beers on 30 December 1993 through a letter to the Minister of Environmental Affairs (Hall-Martin et al. 1994; Robinson 1996). At a meeting of the National Parks Board (now SANParks) held in June 1994, the Board resolved to pursue the objective of proclaiming Mapungubwe area as a national park. This dream became a reality on 9 April 1998 when the park was officially declared a National Park. The ultimate objective stated at the time of its official opening was that the park should become a major component of the TFCA shared by South Africa, Botswana and Zimbabwe (SANParks 2010). Just like any other park in South Africa, the creation of Mapungubwe National Park was made possible by SANParks-a government agency that was established in terms of the National Environmental Management: Protected Areas Act, 2003 (Act No 57 of 2003). In terms of this Act, the primary directive of SANParks is to oversee the conservation of South Africa's biodiversity, landscapes and associated heritage assets through a system of national parks (Department of Environmental Affairs 2017). They carry out this responsibility by establishing new protected areas. In addition, where possible, they buy land to be consolidated into existing protected areas in order to increase the size and diversity of protected areas. In the case of Mapungubwe, after the park was established, the next step was to consolidate the core area of the park by buying land from private land owners.

In 1996, SANParks started the process of purchasing land from private land owners to be incorporated into Mapungubwe National Park and the TFCA (Interviews, Park manager 16/01/2012; International coordinator of GMTFCA 22/03/2011). In February 1997, PPF – a non-governmental organisation was created by the late Dr Anton Rupert with his own money to facilitate the establishment of the TFCA in southern Africa. Dr Rupert was a very wealthy South African business tycoon and the former president of WWF-South Africa (Wolmer 2003; Spierenburg and Wels 2010; Ramutsindela et al. 2011). Dr Rupert Family Foundation, PPF and De Rothschild Foundation have been the major players who assisted SANParks to facilitate negotiations with landowners in Mapungubwe to either sell or lease land to consolidate the core area of South Africa's contribution to the GMTFCA (Peace Parks Foundation 2006). Other conservation agencies that assisted SANParks to purchase land in Mapungubwe include the National Park Trust (NPT), WWF-SA and De Beers. The involvement of PPF and the conservation agency associated with Dr Rupert was to be expected in the GMTFCA. This is because it is in line with the stated aim of the PPF which includes raising and allocating funds to projects that will promote the creation of the TFCAs, but most importantly, assist in purchasing and leasing land for the development of the TFCAs.

The farms that were purchased by SANParks include Hamilton, Den Staat, Samaria, Welton, Balerno, and Janberry. All these properties were integrated into Mapungubwe National Park and the TFCA (Interview, park manager 16/01/2012). In addition, properties that were bought by conservation agencies like NPT, PPF and WWF-SA include Welton, Riedel, Rhodes drift, Hamilton, Tuscanen and were all leased to SANParks for a period of 99 years (Interview, park manager 16/01/2012; Interviews, international coordinator of GMTFCA 22/03/2011; conservation coordinator of De Beers 30/06/2011; PPF representative 28/02/2012). Furthermore, De Beers also leased four Schroda farms and committed their 36 000 ha Venetia Limpopo Nature Reserve to be part of Mapungubwe National Park and the TFCA (Interviews, conservation coordinator of De Beers 30/06/2011). In May 2000, the late Dr Rupert and De Beers formed a company called Friends of Peace Parks (FPP) to specifically purchase the key properties of Little Muck, Armenia and Mona which were also integrated into the park

(Interview, board member of De Beers 03/09/2011). What can be deduced from the situation is that the involvement of Dr Rupert and conservation agencies in buying and leasing the land to SANParks was made to facilitate the creation of the GMTFCA. The process of buying land to be incorporated into Mapungubwe National Park and GMTFCA was stopped because of the problems of land claims (Interview, park manager 14/01/2013). The whole of Mapungubwe National Park and Venetia Limpopo Nature Reserve were claimed by Machete and Tshivhula communities and the land claims are still pending (Interview, government official 23/01/2012). Although there are similarities between the Dongola Wildlife Sanctuary in the 1940s and present-day transformations, recent changes have prompted little public debate, discussion or controversy. Furthermore, between the 1940s and the contemporary land use transformation, the position of the people most directly affected shifted from white private land owners to black farm workers and dwellers which become the focus of the next section.

Implications of Land-use Change on Commercial Farm Workers and Dwellers

The buying of farms to create Mapungubwe National Park and GMTFCA marked the beginning of land use change from farming to conservation in Mapungubwe. There are costs as well as benefits when areas shift from farming (particularly irrigation farming) to nature conservation. The establishment of a conservation area may improve ecological conditions and produce economic benefits through ecotourism, but there are unavoidable costs to resident communities, particularly farm workers and dwellers.

The farm workers (current and former) interviewed were South African and Zimbabwean nationals. The majority of the farm workers were Zimbabweans, accounting for more than 80%. The remaining were South Africans citizens who were primarily from Pedi and Venda ethnic groups. The majority of the farm workers and dwellers who were interviewed had lived and worked in Mapungubwe irrigation farms for more than 10 years. When commercial irrigation farming took off in Mapungubwe area in the early 1980s, local people working in the area were allowed to live on the farms. They were also allowed to build their own houses within the farms which facilitated the farm workers' relocation permanently with their families inside the farms. One interviewee commented: 'I started working in Mapungubwe when I was still a young girl. I have four children who were all born on the farm. I also built a three-roomed house on the farm for me and my children' (Interview, former farm worker 17/01/2012). From the late 1980s and early 1990s, the number of farm workers living on the farms grew as more labour was needed for the growing business of citrus and vegetables. The farm workers and dwellers who were interviewed lived on site and spent nearly all their time on the farm (Interview, various farm worker 2012-2016). The result of this arrangement was the emergence of a permanent labour system in Mapungubwe commercial irrigation farms.

Whilst farm workers and dwellers were permanent residents in commercial irrigation farms in Mapungubwe, they did not have property rights over the land. The property rights and the title deeds of the farms inherited during apartheid era remained with the white farm owners (Ramutsindela and Sinthumule 2017). Just like during apartheid era, contemporary displacement in Mapungubwe is also highly racialized. This is because all the properties in Mapungubwe are owned by white farmers whereas black South Africans and Zimbabweans provide the required labour (Sinthumule 2014). The selling of commercial irrigation farms by white farm owners to SANParks and other environmental organizations such as PPF, WWF-SA, NPT and De Beers as explained in the previous section directly affected the black farm workers. This resulted in the displacement of black farm workers and dwellers. For instance, when Rhodesdrift farm was sold and incorporated into Mapungubwe National Park and GMTFCA, farm workers and dwellers were forced to move out of the property by the land owner. As one informant recounted: 'We were only given six months to demolish all our houses and vacate the farm. It was hard and difficult to believe that the farm has been sold. I was forced to move out of the farm and I did not know where to go because all my life was based on the farm. It is something that I will never forget in my life' (Interview, former farm worker 17/01/2012). This quotation shows that the displaced farm workers and dwellers were emotionally and psychologically affected by eviction because the selling of farms happened so fast when workers least expected it. The farm owners who sold the farms did not hire professional counselors (or social workers) to ease the transition of land use from farming to conservation.

Similarly, SANParks and other conservation agents responsible for buying the farms did not find it necessary to organise sessions for counselling the displaced workers. Some of the reasons given include that the displaced farm workers were not employees of either SANParks or environmental organisation like PPF and De Beers. As a result, they were not compelled to arrange counselling meetings to help the displaced farm workers. In addition, their interest was more on acquiring land to promote conservation of biodiversity in the region (Interviews, park manager 16/01/2012). In other words, the interest of these organisations was not to improve the socioeconomic status of local communities. This is despite the claim by proponents that "the creation of TFCAs will improve the lives and livelihoods of local communities living within and around this initiative" (Griffin 1999; De Villiers 1999; van der Linde 2001). Similar results of displacement of local people in the name of conservation with devastating effects on the lives of people were also reported in other areas and countries (Schmidt-Soltau 2003; Rangarajan and Shahabuddin 2006; Lam and Paul 2014; Lunstrum 2016).

The majority of farm workers and dwellers who were interviewed moved out of Mapungubwe to Alldavs, while others moved to Taaibosch, Musina and Makhado (Interviews, various farm workers 2012-2016). However, other farm workers and dwellers did not relocate out of Mapungubwe but moved to 'squatter' with friends in other farms that were not part of Mapungubwe National Park or the TFCA. Although the government of South Africa introduced new legislation such as the Land reform (Labour tenants) Act 3 of 1996, which aimed to protect labour tenants from eviction and give them the right to acquire ownership of the land that they live on or use, displacement or eviction of labour tenants happened in Mapungubwe unchallenged. The farm workers who were displaced indicated that they did not 'resist' their eviction from farms. In addition, the displaced farm workers showed that they did not approach the government or the South African Human Rights Commission for help because they did not know that they had the rights to acquire ownership of the land. They simply demolished their houses as instructed, packed their belongings and vacated the land peacefully within the specified time frames by the land owners (Interviews, various farm workers 2012-2016).

The selling of commercial irrigation farms by land owners also affected the lives and livelihoods of farm workers and dwellers. In Mapungubwe, commercial farm workers and dwellers depend entirely on commercial irrigation farmers for employment. This makes commercial irrigation farms in the area an important source of livelihoods for farm workers. For instance, fieldwork evidence of April 2018 suggests that the wages of full-time farm workers varied from one farm to another in Mapungubwe. The average wages from various farms were grouped into three caregories without disclosing their names (Table 1).

The wages as illustrated in Table 1 seem small (particularly farms in catergory B and C that are below the minimum wages for farm workers in

	GMTFCA IN APRIL 2018								
-	Farms in Category A		Farms in Category B		Farms in Category C				
	Monthly	Weekly	Monthly	Weekly	Monthly	Weekly			
	R3000 \$228.64	R750 \$57.16	R2200 \$167.67	R550 \$41.92	R1600 \$121.94	R400 \$30.49			

TABLE 1 Average Wages for Full-Time Farm Workers in Private Land within the Gmtfca in April 2018

*These wages are for employees who work 9 hours a day from Monday to Friday and 6 hours on Saturdays.

Sources: author

South Africa), nonetheless, they are of great value to farm workers who are able to support their families that range from three to eight members. The selling of commercial irrigation farms by farm owners to conservation agents directly affected farm workers and dwellers because they became jobless without source of income. One former farm worker recounted: 'When our boss sold Rhodesdrift farm, I lost my job that I treasured so much after working for more 30 years as a farm manager. I was not compensated and I was not given pension. I was stranded, devastated, and it was the most painful thing that ever happened to me because it happened so fast and I did not expect it. We did not get an opportunity to meet the new owner as we were no longer required in the area' (Interview, former farm worker 17/01/2012). For instance, during its operation as a commercial farm, NETKOR Boerdery had 70 full-time employees and 100 casual workers who were employed for a period of 3 to 6 months during the harvesting period. The selling of this farm resulted in 170 people losing their jobs (Interview, former farm worker 24/06/2016). Rhodesdrift farm also had 50 permanent employees and 100 temporary workers were hired during harvesting seasons. As such, the selling of Rhodesdrift farm resulted in 150 people losing their jobs.

Similarly, when Samaria farm was sold (862 hectors) to SANParks in 2007, 240 full-time farm workers and 600 temporary workers became jobless. This situation changed when SANParks leased 380 hectares portion of Samaria farm (which had citrus fruits), first to South African Fruits Exporters (SAFE) and second to Rouen Gouses (an individual) to manage the farm. At the time of this study Samaria farm had only employed 25 people on a permanent basis and 50 temporary workers were employed during harvesting seasons for three months (Interview, farm manager 24/06/2016). Those farm workers who were not re-hired when SANParks

leased the farm were forced to vacate the farm as their services were no longer required. The future of farm workers in Samaria farm is uncertain because if the contract is not renewed and the 380 hectares becomes part of Mapungubwe National Park and GMTFCA, it will mean that the remaining 75 people will become jobless. At the time of this study, the buying of commercial irrigation farms had displaced more than 1000 commercial farm workers in Mapungubwe area and left them jobless. These results are not unique to Mapungubwe area. Rather, similar studies in other areas also found that displacement in the name of conservation resulted in joblessness of people which significantly affects their monetary income (Brockington 1999; Cernea and Schmidt-Soltau 2006; Kabra 2009).

Fieldwork evidence suggests that losing of jobs which were the only source of income has brought about far-reaching negative changes to farm workers' lives. Those farm workers who lost their jobs indicated that they suffered from severe economic distress as they did not have any other source of income. They could not pay their debts, school fees for their children, but most importantly, they were unable to support their families. As a result, the loss of jobs increased the vulnerability to hunger and starvation (Interview, various former farm worker 2012-2016). The study also found that the loss of jobs by farm workers has negatively affected the income of spaza shop owners in the area because they depend on farm workers as their only source of income as there are no villages in the area (Interview, various spaza shop owners, 24/06/2018). Essentially, the loss of jobs has not only affected the household economy, but also the market economy of the area. In addition, the loss of jobs also resulted in chronic poverty because majority of farm workers who were interviewed spent three to six years before they could get new jobs (Interview, farm worker 22/03/2013) whereas other former farm workers who are now permanent residents of Alldays in Limpopo Province of South Africa were still unemployed and staying in government houses at the time of fieldwork (Interview, former farm workers 24/06/2016). Other studies have also indicated that eviction or displacement of people led to loss of jobs which had devastating effects on the lives of people (Colchester 2004; Rangarajan and Shahabuddin 2006; Adams and Hutton 2007).

The interviews also revealed that the pain of losing jobs, particularly by vulnerable groups like women was more serious. Some women indicated that the loss of jobs eroded their dignity because they did not have money and a place to sleep. Others indicated that they became prostitutes during the time when they were unemployed to afford money to support their families. They explained this situation as the most embarrassing and painful thing that ever happenned to their lives (Interview, various former farm worker 23/06/2016). It is clear that the selling of irrigation farms by property owners to SANParks and conservation agencies left many farm workers financially broke and emotionally broken, and on the other hand, it had financially empowered the land owners. In all the land transactions that were successfully completed in Mapungubwe, SANParks benefited through the acquisition of more land, which is much needed for conservation and farm owners were economically empowered.

Unlike in other areas where the displaced people or villagers were resettled or compensated (Kabra 2009; Rantala et al. 2013), in the case of Mapungubwe, there was no compensation or resettlement for farm workers and dwellers. Furthermore, it was found that all farm workers who were permanently employed did not receive pension from their former employers. In addition, although they were permanently employed, they were not registered with Unemployment Insurance Funds (UIF) (Interview, various former farm worker 2012-2016). This insurance gives short term relief to workers when they become unemployed provided that they are registered with the insurance. What can be deduced from this is that white property owners in Mapungubwe are only interested to hire labourers that can be exploited to make more money.

The buying of commercial irrigation farms also reduced the number of job opportunities, particularly for farm workers. This is because the number of employees required in commercial irrigation farms is far more than the number of employees required in game ranching and conservation or protected areas. For instance, a total of 5 to 15 workers per hectare is required in commercial irrigation farms and this is not the case in protected areas (Interview, farm manager 24/06/2016; various farm owners 2012-2016). In addition, irrigation farms in Mapungubwe employ 50 to 200 permanent workers, depending on the size of the farm. Irrigation farmers also employ 100 to 700 temporary workers for a period of 3 to 6 month during harvesting periods. At the time of data collection, Mapungubwe National Park, which has a total size of 19 810 ha, had 67 permanent employees.

The park is very small as compared to other national parks in South Africa and as a result, additional employees are not required (Interview, park manager 24/06/2016). The displaced farm workers, particularly the South African citizens were not re-hired by Mapungubwe National Park but were employed by other commercial farms in Mapungubwe (Interview, various farm workers 2012-2016). In other words, eco-tourism or conservation was unable to absorb the large number of displaced farm workers. This is despite

the claim that TFCAs "will create employment opportunities in distressed rural areas" (Griffin 1999; Van der Linde et al. 2001). What can be discerned from the situation is that when more farms are bought and integrated into Mapungubwe National Park and the GMTFCA, job opportunities for farm workers and dwellers decrease.

The Future of Commercial Farm Workers and Dwellers in Mapungubwe

'Our future is uncertain in this area. We don't know what will happen tomorrow, next week or next month. We are at the mercy of farm owners. We are the subjects of the farm owners. If they decide to sell their farms to SANParks, we will find ourselves in the street' (Interview, farm worker 15/06/2016).

The displacement without resistance that happened in other farms in Mapungubwe created a lot of confusion, uncertainty and frustrations to farm workers and dwellers in other commercial irrigation farms that are within GMTFCA as made clear by the quotation above. It is important to note that there are 10 large-scale irrigation farms that are within Mapungubwe National Park and the TFCA, but not part of the TFCA. Under these circumstances, the Park and the TFCA are highly fragmented (Sinthumule 2016; 2017). The ultimate intention of SANParks is to consolidate the Park by incorporating all privately-owned farms (game and irrigation) in order to create a contiguous TFCA devoted primarily to wildlife conservation (Interviews, international coordinator of GMTFCA 22/03/2011; park manager 16/01/2012). The expansion of GMTFCA for environmental management will have serious implications for many people in the area. Specifically, the livelihoods of farm workers and dwellers who depended on these farms for ages will be seriously affected. The commercial irrigation farms in the Mapungubwe area have been providing and continue to provide sustainable jobs to thousands of communities (Table 2).

Table 2 indicates the total number of people who were employed by private farms in the Mapungubwe area at the time of this study. If SANParks and conservation agents become successful in buying all the commercial irrigation farms in Mapungubwe, a total of 1150 permanent farm workers will lose their jobs. In addition, a total of 3080 temporal workers who are employed during harvesting periods for a period of 3 to 6 month will also

Farm name and number		Portion	Type of Farm	Permanent workers	Temporary workers
Pont Drift 12		0	Game Reserve	00	00
Pont Drift 12		1	Game Reserve	00	00
Modena 13		1	Game Reserve	00	00
Parma 40		0	Game Reserve	00	00
Modena 13		0	Citrus farm	36	120
Tuscanen 17		1	Vegetable	68	400
Den Staat 27		1	Citrus & vegetable	86	150
Samaria 28		1	Game farm	01	00
Samaria 28		2	Game farm	02	00
Koaxa bush camp		0	Game farm	03	00
Hackthorne 30		0	Game farm	00	00
Athens 31		0	Game farm	00	00
Welton 34		0	Vegetable	50	160
	Skutwater & Weipe	2-4	Vegetable	150	250
	Weipe	5	Vegetable	90	100
Weipe	Weipe	6-7	Vegetable	100	400
47	Hanaline Boerdery	0	Vegetable	227	200
	Depo Weipe	0	Citrus	92	580-600
	Noordgrens Landgoed	0	Citrus	200	700
Riedel 48		0	Game	00	00

TABLE 2 Fieldwork Estimates of Numbers of Farm Workers and Dwellers on Private Land within Gmtfca at the Time of This Study

lose their source of livelihoods. This will mean displacement of all these people from Mapungubwe area. Therefore, there is uncertainty about the future of farm workers and dwellers in Mapungubwe area.

Conclusions

This study has demonstrated that the creation of Mapungubwe National Park and the GMTFCA was made possible by a network of powerful actors. These actors include wealthy individuals, powerful conservationists and environmental NGOs from within and outside South Africa, and a government body (SANParks). These organizations helped SANParks to acquire much-needed land to consolidate the core of South African section of the GMTFCA. The study has also shown that the creation and consolidation of the park was made possible at the expense of commercial farm workers and dwellers who depend entirely on the farms for residential and livelihoods purposes.

Whereas South Africa has attempted to reconcile the need for biodiversity conservation and the need to secure rights and livelihoods of the poor through several policies driven programmes (e.g Bill of Rights), conservation continues to dominate when there is a trade-off between the two. In the case of Mapungubwe, conservation continues to dominate at the expense of farm workers and dwellers. The buying of farms in Mapungubwe by SANParks, PPF, FPP, De Beers, NPT and WWF-SA has led to the displacement of farm workers and dwellers. This has resulted in negative implications on the lives and livelihoods of commercial farm workers. If these powerful organisations succeed in buying the remaining irrigation farms that are within the GMTFCA, more than a thousand people will be displaced, with devastating effects on farm workers and dwellers. It can, therefore, be concluded that despite democracy, South Africa has achieved minimal success in reconciling the livelihoods of people and biodiversity conservation.

Acknowledgements

This paper draws on material from a project on 'Politics of land in the Greater Mapungubwe Transfrontier' funded by the National Research Foundation of South Africa Unique Grant Number 99306, for which I am grateful.

(Submitted: Feb 9, 2018; Revised: May 23, 2018; Accepted: June 12, 2018)

References

- Adams, William M. 2004. *Against Extinction: the Story of Conservation*. London: Earthscan.
- Adams, William M., and Jane Hutton. 2007. "People, Parks and Poverty: Political Ecology and Biodiversity Conservation." *Conservation and society* 5(2): 147–183.

- Agrawal, Arun, and Kent Redford. 2009. "Conservation and Displacement: an Overview." *Conservation and society* 7(1): 1–10.
- Bates, Diane C. 2002. "Environmental Refugees? Classifying Human Migrations Caused by Environmental Change." *Population and environment* 23(5): 465–477.
- Beinart, William. 1989. "Introduction: the Politics of Colonial Conservation." *Journal* of Southern African Studies 15(2): 143–162.
- Berry, Mark, and Cadman Mike. 2007. *Dongola to Mapungubwe, the 80-year battle to conserve the Limpopo valley*. Swartwater: Mmabolela press.
- Brockington, Daniel. 1999. "Conservation, Displacement and Livelihoods. The Consequences of the Eviction for Pastoralists Moved from the Mkomazi Game Reserve, Tanzania." *Nomadic Peoples* 1: 74–96.
 - _____. 2002. Fortress Conservation: the Preservation of the Mkomazi Game Reserve. Oxford: James Currey Ltd.

_____. 2004. "Community Conservation, Inequality and Injustice: Myths of Power in Protected Area Management." *Conservation and society* 2(2): 411–432.

- Brockington, Daniel, and James Igoe. 2006. "Eviction for Conservation: A Global Overview." *Conservation and Society* 4(3): 424–470.
- Brockington, Dan, and Kai Schmidt-Soltau. 2004. "The Social and Environmental Impacts of Wilderness and Development." *Oryx* 38(02): 140–142.
- Carruthers, Jane. 1992. "The Dongola Wild Life Sanctuary: Psychological Blunder, Economic Folly and Political Monstrosity or More Valuable than Rubies and Gold?" *Kleio* 24(1): 82–100.

_____. 1993. "'Police boys' and Poachers: Africans, Wildlife Protection National Parks, the Transvaal 1902 to 1950." *Koedoe* 36(2): 11–22.

_____. 1995. *The Kruger National Park: a Social and Political History*. Pietermaritzburg: University of Natal Press.

_____. 2006. "Mapungubwe: an Historical and Contemporary Analysis of a World Heritage Cultural Landscape." *Koedoe* 49(1): 1–13.

_____. 2009. "National Parks in South Africa." Pp. 51–66, in *Evolution and Innovation in Wildlife Conservation: Parks and Game Ranches to Transfrontier Conservation Areas*, edited by Helen Suich, Brian Child, and Anna Spenceley. London: Earthscan.

Cernea, Michael M. 2000. "Risks, Safeguards, and Reconstruction: A Model for Population Displacement and Resettlement." pp. 11-55 in *Risks and Reconstruction: Experiences of Resettlers and Refugees*, edited by Cernea, Michael M., and Chris McDowell. Washington DC: The World Bank.

____. 2005. "Restriction of Access is Displacement: A Broader Concept and Policy." *Forced Migration Review* 23: 48–49.

_____. 2006. "Re-examining "Displacement": a Redefinition of Concepts in Development and Conservation Policies." *Social Change* 36(1): 8–35.

Cernea, Michael M. and Kai Schmidt-Soltau. 2006. "Poverty Risks and National Parks: Policy Issues in Conservation and Resettlement." *World development*

34(10): 1808-1830.

- Chatty, Dawn, and Marcus Colchester, eds. 2002. *Displacement, Forced Settlement and Sustainable Development*. Oxford: Berghahn books.
- Colchester, Marcus. 2004. "Conservation Policy and Indigenous Peoples." Environmental Science & Policy 7(3): 145–153.
- Department of Environmental Affairs. 2017. Annual Report. Pretoria: Government printer.
- Devers, Kelly J., and Richard M. Frankel. 2000. "Study Design in Qualitative Research: Sampling and Data Collection Strategies." *Education for health* 13(2): 263–271.
- De Villiers, Bertus. 1999. *Peace Parks: The Way Ahead*. Pretoria: Human Sciences Research Council Publishers.
- _____. 2008. *People and Parks-sharing the Benefits*. Johannesburg: Konradadenauer stiftung.
- De Wet, Chris J., ed. 2006. *Development-induced Displacement: Problems, Policies, and People*. New York: Berghahn Books.
- Dowie, Mark. 2009. Conservation Refugees: The Hundred-year Conflict between Global Conservation and Native Peoples. Cambridge: MIT Press.
- Downing, Theodore E. 2002. *Avoiding New Poverty: Mining-induced Displacement and Resettlement*. UK: International Institute for Environment and Development London.
- Fratkin, Elliot. 1997. "Pastoralism: Governance and Development Issues.: Annual Review of Anthropology 26(1): 235–261.
- GMTFCA Trilateral Technical Committee. 2010. *Greater Mapungubwe Transfrontier Conservation Area Integrated Development Plan.* Botswana, South Africa and Zimbabwe: Peace Parks Foundation.
- Graham, Olivia. 1989. "A Land Divided: the Impact of Ranching on a Pastoral Society." *Ecologist* 19(5): 184–185.
- Griffin, John. 1999. Study of Development of Transboundary Natural Resource Management Areas in Southern Africa. Washington, DC: Biodiversity Support Programme.
- Hall-Martin, Anthony J., Novellie A. Peter, and Knight H. Mike. 1994. *Dongola: Proposal for the Creation of a Major Transfrontier National Park between South Africa, Botswana and Zimbabwe*. National Parks Board: Unpublished report.
- Huffman, Thomas N. 2000. "Mapungubwe and the Origins of the Zimbabwe Culture." *Goodwin Series* 1: 14–29.
- Hutton, Jon, William M. Adams, and James C. Murombedzi. 2005. "Back to the Barriers? Changing Narratives in Biodiversity Conservation." Forum for Development Studies 32(2): 341–370.
- Kabra, Asmita. 2009. "Conservation-induced Displacement: a Comparative Study of Two Indian Protected Areas." *Conservation and Society* 7(4): 249–267.
- Kepe, Thembela. 2004. "Land Restitution and Biodiversity Conservation in South

Africa: The Case of Mkambati, Eastern Cape Province." *Canadian Journal of African Studies* 38(3): 688–704.

- Lam, Lai Ming and Saumik Paul. 2014. "Disputed Land Rights and Conservation-led Displacement: A Double Whammy on the Poor.: *Conservation and Society 12*(1): 65–76.
- Lasgorceix, Antoine and Ashish Kothari. 2009. "Displacement and Relocation of Protected Areas: a Synthesis and Analysis of Case Studies." *Economic and political weekly*: 37-47.
- Lunstrum, Elizabeth. 2016. "Green Grabs, Land Grabs and the Spatiality of Displacement: Eviction from Mozambique's Limpopo National Park." *Area* 48(2): 142–152.
- McCabe, J., Scott Perkin, and Claire Schofield. 1992. "Can Conservation and Development be Coupled among Pastoral People? An Examination of the Maasai of the Ngorongoro Conservation Area, Tanzania." *Human Organization* 51(4): 353–366.
- Mishra, B. K., Ruchi Badola, and A. K. Bhardwaj. 2007. "Conservation Induced Displacement and Resettlement: a Case Study of Gujjar Rehabilitation from Rajaji National Park." *Indian Forester 133*(10): 1341–1349.
- Mustafa, Kemal.1997. *Eviction of pastoralists from the Mkomazi Game Reserve in Tanzania: An historical review*. IIED, International Institute for Environment and Development: Drylands Programme.
- Nepal, Sanjay Kumar and K. W. Weber. 1995. "Managing Resources and Resolving Conflicts: National Parks and Local People." *International Journal of Sustainable Development & World Ecology 2*(1): 11–25.
- Peace Parks Foundation. 2006. *Annual Report.* Stellenbosch. _____. 2012. *Annual Report.* Stellenbosch.
- Peluso, Nancy Lee. 1993. "Coercing Conservation?: The Politics of State Resource Control." *Global Environmental Change* 3(2): 199–217.
- Ramutsindela, Maano. 2003. "Land Reform in South Africa's National Parks: a Catalyst for the Human-nature Nexus." *Land Use Policy* 20: 41–49.
- Ramutsindela, Maano, Marja Spierenburg, and Harry Wels. 2011. *Sponsoring Nature: Environmental Philanthropy for Conservation*. London: Earthscan.
- Ramutsindela, Maano and Innocent Sinthumule. 2017. "Property and Difference in Nature Conservation." *Geographical Review* 107(3): 415–432.
- Rangarajan, Mahesh and Ghazala Shahabuddin. 2006. "Displacement and Relocation from Protected Areas: Towards a Biological and Historical Synthesis." *Conservation and Society* 4(3): 359–378.
- Rantala, Salla E., Heini Vihemäki, Brent M. Swallow, and George Jambiya. 2013. "Who Gains and who Loses from Compensated Displacement from Protected Areas? The Case of the Derema Corridor, Tanzania.: *Conservation and Society* 11(2): 97–111.
- Robinson, A. Gilbert. 1996. Limpopo Valley National Park: towards Transfrontier

Conservation in Southern Africa. National Parks Board: Unpublished report.

- Saberwal, Vasant K., James P. Gibbs, Ravi Chellam, and A. J. T. Johnsingh. 1994. "Lion-Human Conflict in the Gir Forest, India." *Conservation Biology* 8(2): 501– 507.
- SANParks. 2008. *Mapungubwe National Park management plan, South African National Parks*. Pretoria: SANParks.
- _____. 2010. *Mapungubwe National Park management plan*, South African National *Parks*. Pretoria: SANParks.
- Schmidt–Soltau, Kai. 2003. "Conservation–related Resettlement in Central Africa: Environmental and Social Risks." *Development and change* 34(3): 525–551.
- Schmidt-Soltau, Kai, and Dan Brockington. 2007. "Protected Areas and Resettlement: What Scope for Voluntary Relocation?" *World Development* 35(12): 2182–2202.
- Sinthumule, Ndidzulafhi Innocent. 2014. *Land Use Change and Bordering in the Greater Mapungubwe Transfrontier Conservation Area*. PhD thesis, Cape Town: University of Cape Town.
 - _____. 2016. "Contested Land in Peace Parks: the Case of Greater Mapungubwe." Proceedings of the Centenary Conference of the Society of South African Geographers, 125–132.
 - _____. 2017. "Resistance against Conservation at the South African Section of Greater Mapungubwe (Trans) frontier." *Africa Spectrum* (52)2: 53–77.
- Spierenburg, Marja and Harry Wels. 2010. "Conservative Philanthropists, Royalty and Business Elites in Nature Conservation in Southern Africa." *Antipode* 42 (3): 647–670.
- Sunseri, Thaddeus. 2005. "'Something else to burn': Forest Squatters, Conservationists, and the State in Modern Tanzania." *The Journal of Modern African Studies* 43(04): 609–640.
- Terborgh, J., van Schaik, C., Davenport, L., and Rao, M. (2002). *Making Parks Work: Strategies for Preserving Tropical Nature*. USA: Island Press.
- Terminski, Bogumil. 2013. "Development-induced Displacement and Resettlement: Theoretical Frameworks and Current Challenges." *Development 10*: 101.
- Vandergeest, Peter. 2003. "Land to Some Tillers: Development-induced Displacement in Laos." *International Social Science Journal* 55(175): 47–56.
- Van der Linde, Harry, Judy Oglethorpe, Trevor Sandwith, Deborah Snelson, Yemeserach Tessema, Anada Tiega, and Thomas Price. 2001. Beyond Boundaries: Transboundary Natural Resource Management in Sub-Saharan Africa. Washington, D.C., U.S.A.: Biodiversity Support Program.
- Watts, Scotney and Helena Faasen. 2009. "Community-based Conflict Resolution Strategies for Sustainable Management of the Tsitsikamma National Park, South Africa." *South African Geographical Journal* 91(1): 25–37.
- Wolmer, William. 2003. "Transboundary Conservation: the Politics of Ecological Integrity in the Great Limpopo Transfrontier Park." *Journal of Southern African Studies* 29(1): 261–278.

NDIDZULAFHI INNOCENT SINTHUMULE is a senior lecturer in the Department of Geography, Environmental Management and Energy Studies at the University of Johannesburg, South Africa. He received his PhD in Environmental studies from the University of Cape Town. His research interests and area of publication include conservation, transfrontier conservation, borders, land reform and humanenvironment relationships. [*E-mail*: sinthumuleinnocent@gmail.com]