



Informing a conservation policy-praxis disjuncture: A ‘commons’ perspective to tackling coastal-marine community-conserved area implementation in South Africa

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ABSTRACT

Conventional ‘people-free’ conservation often fails to deliver both social and ecological outcomes. Community-based conservation (CBC) – which is underpinned by local community participation, knowledge and priorities – offers a viable alternative in certain contexts. We explore the applicability of established ‘commons’ design principles, and factors enabling community-based conservation, to community-based coastal and marine conservation initiatives in South Africa. An extensive review of relevant South African literature, complemented by interviews conducted with diverse conservation actors, operating within wildlife, forestry and coastal and marine contexts in the country, identified common social and institutional ‘constraints’ and ‘enablers’ that affected these conservation initiatives. Key constraints include slow and complex institutional processes (particularly associated with land restitution in protected areas), a lack of political will and limited local community participation in planning and decision-making, all of which affect required collaboration. Key enablers include greater understanding and alignment of initiatives with social and ecological contexts and priorities, formalized and improved community participation, and increased partner support, as well as the presence of local champions to inform, motivate, and facilitate the implementation and management of CBC initiatives. While the objective is to provide an updated list of ‘enablers’ informing the South African coastal and marine CBC context, insights gained should be relevant to other national sectors, as well as regional and global conservation actors attempting to translate ‘people-centred’ conservation policies into practice, particularly those fulfilling obligations to the Convention on Biological Diversity’s Post-2020 Global Biodiversity Framework.

1. Introduction

Contemporary conservation initiatives must tackle complex ‘problems’ located at the nexus of conservation, climate change, development, and increasing calls to reconcile conservation with human and cultural rights; a challenge currently exacerbated by the Covid-19 pandemic (Reed et al., 2019; Sarkki and Acosta García, 2019; Roe et al., 2020). When contextually appropriate, community-based conservation (CBC) – which is underpinned by local community participation, knowledge and priorities – represents a viable approach to this task, and can deliver both social and ecological outcomes that conventional ‘people-free’ conservation approaches often can not (Galvin et al., 2018; Armitage et al., 2020).

The CBC approach also directly aligns with the Convention on Biological Diversity’s (CBD) recently proposed *Post-2020 Global Biodiversity Framework* (post-2020 GBF), which acknowledges “an unprecedented degree of collaboration and whole-of-society engagement” is required to sustainably meet the needs of people and reduce biodiversity loss (CBD, 2020: p3). Furthermore, it also explicitly calls for, “the full and effective participation of indigenous peoples and local communities” in its implementation (CBD, 2020: p7).

Like the Aichi 2020 Targets before, the post-2020 GBF recognizes the potential contributions of “other effective area-based conservation measures”, like community-conserved areas (CCAs), to reducing biodiversity loss (CBD, 2020: p9). We consider CCAs to broadly encompass all protected area (PA) initiatives that involve some form of collaborative

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governance characterized by varying degrees of ‘community-empowerment’ and ‘nested’ support from governmental, non-governmental and private sector and civil society partners (Borrini-Feyerabend et al., 2013). Although few in number, some CBC initiatives in South Africa are characterized by these collaborative governance arrangements (Cundill et al., 2013; Thondhlana and Cundill, 2017).

Notwithstanding mixed results, global reviews conclude that CBC is generally a more effective approach than conventional ‘top-down’ conservation approaches that exclude people from decision-making processes (e.g. Brooks et al., 2012, 2013). More specific to the present context, a recent large-scale systematic review found that while African CBC initiatives commonly deliver mixed or negative social outcomes, ecological outcomes are frequently positive (Galvin et al., 2018).

While South African CBC efforts are relatively new, they too often fail to produce positive social outcomes (Fabricius and Collins, 2007; Cundill et al., 2013). To date the implementation of CCAs in the country is limited to a few ‘community-managed’ or ‘owned’ wildlife reserves, with no coastal and marine equivalents. This contrasts, for example, with substantial progress made in establishing coastal and marine CCAs in Madagascar, known locally as *Locally-Managed Marine Areas* (Gardner et al., 2018; Ratsimbazafy et al., 2019). Given South Africa’s progressive and enabling CBC legislation (introduced in Section 3.2), the lack of formalized CCAs in coastal and marine areas suggests a ‘policy-praxis disjuncture’ that requires urgent attention. Consequently, in addition to informing CBC initiatives within terrestrial wildlife and forestry sectors, this paper specifically seeks to contribute towards understanding the disjuncture between policy and praxis within the South African coastal and marine context. This is achieved by exploring the applicability of established ‘commons’ design principles to the coastal conservation context in South Africa, and investigating factors enabling and constraining CBC. Furthermore, insights gained from this study should be broadly relevant to regional and global conservation policy-makers, scholars and practitioners facing similar challenges in translating ‘people-centred’ conservation policy into practice, and especially those seeking to fulfil obligations to the post-2020 GBF.

2. Revisiting enabling factors and conditions for cbc

2.1. Common pool resource problems

Commons research has significantly contributed to the design and management of diverse community-based initiatives (see Lejano et al., 2014). Of particular importance is understanding the importance of fostering collaborative governance arrangements which are deemed necessary to resolve common pool resource (CPR) ‘problems’ (Ostrom et al., 1999; Herzog and Ingold, 2019). CPR ‘problems’ primarily arise from the presence of multiple-users with diverse interests, and specifically the inability to control access to CPRs (i.e. *excludability*), and/or resource-users subtracting from the welfare of others (i.e. *subtractability*) (Ostrom et al., 1999; Herzog and Ingold, 2019). The latter concern aligns with Hardin’s “Tragedy of the Commons”, which asserts that CPRs that encourage individual or private benefits, but shared costs, are likely to constrain the ability to manage CPRs (Hardin, 1968).

2.2. Enabling community-based conservation

Ostrom’s eight design principles for robust institutions (Ostrom, 1990: p90 - Table S1) have informed the analysis of diverse community-based initiatives (Table S2). More specifically, her design principles have specifically informed analyses of multiple African (e.g. Cinner et al., 2009; Biggs et al., 2019; Child, 2019), and South African CBC initiatives (Crook and Mann, 2002; Sowman et al., 2003; Fabricius and Collins, 2007). See Table S3 for the key findings of these and other African studies reviewed. Nevertheless, Ostrom’s design principles have also been subjected to contention (Araral, 2016; Cox et al., 2016).

Agrawal (2001) and Pomeroy et al. (2001) have since offered

expanded sets of ‘enablers’ for successful CBC institutions (Table S1). Furthermore, Cox et al. (2010) disaggregate some of Ostrom’s design principles to better capture multiple conditions, and in particular, important social variables including clearly defining social boundaries, and aligning rules with local conditions (Table S1).

In African research, outside of South Africa, Cinner et al. (2009), Galvin et al. (2018) and Biggs et al. (2019) all propose variations on CBC enablers (Table S1). Cinner et al. (2009) emphasize the importance of monitoring and enforcement, collective choice arrangements, and addressing institutional mismatches arising from applying terrestrial conservation frameworks to marine realms within the context of coastal and marine CBC initiatives in Madagascar and Kenya (Cinner et al., 2009). More recently, in a systematic review of African CBC initiatives, Galvin et al. (2018) find the presence of key players/ leaders, supporting bridging organizations, and diverse and multiple partnerships key to collaboration required for CBC success. Furthermore, Biggs et al. (2019), based upon findings from Zimbabwe’s CAMPFIRE program, consider the ability for all actors to participate and change rules and to adequately resolve conflict, as well as multiple levels of external support for new initiatives as crucial to success.

In the present South African CBC context, Sowman et al. (2003) and Fabricius and Collins (2007) propose enabling conditions for CBC success (Table S1). More specifically, Sowman et al. (2003), in analyzing nine South African Coastal and Fisheries Co-management case studies, emphasize the importance of securing local access rights to resources, devolved authority, local participation and capacity building, and the presence of long-term ‘champions’ and government commitment. Furthermore, Fabricius & Collins (2007: p89–90), in their review of South African CBC initiatives at the time, emphasize the importance of understanding the social-ecological context, establishing and communicating a clear vision, building upon existing local institutions, and creating lasting incentives.

Therefore, based on this international literature review, we identify several overarching social and institutional enablers for CBC initiatives (Table 1). We use these as ‘foundational enablers’ for our exploration of South Africa’s coastal and marine CCA policy-praxis disjuncture. However, before we document our findings, we explore the evolution of the CBC discourse in South Africa, and the national policy and legislative framework that enables and governs local CBC initiatives.

3. Community-based conservation in South Africa

3.1. Emergence of community-based conservation discourse in South Africa

Biodiversity conservation in South Africa cannot be separated from its socio-political past (Kepe, 2018; Masterson et al., 2019). Many scholars consider colonial and Apartheid PAs to have perpetuated political ideologies to the detriment of local communities and their customary conservation practices (Cock and Fig, 2000; Masterson et al., 2019). Apartheid involved the implementation of a complex set of laws and regulations aimed at the separation of ethnic groups into a power hierarchy, with all groups subservient to ‘white’ rule (Clark and Worger, 2016). Like other African nations at the time, the Apartheid regime emphasized a ‘fortress conservation’ approach (Brockington and Igoe, 2006), resulting in the forced removal of many Indigenous and local communities from their customary territories to make way for PAs (Kepe, 2009, 2018; Thondhlana et al., 2016; Ramutsindela and Shabangu, 2018). Consequently, access to and use of land and resources for customary practices was prevented, resulting in food- and livelihood-insecurity and various other socio-cultural impacts (Kepe, 2009; Sowman and Sunde, 2018; Masterson et al., 2019). South Africa’s most famous conservation evictions include communities living in and adjacent to the *Kalahari Gemsbok* and *Kruger National Parks* (Thondhlana et al., 2011; Ramutsindela and Shabangu, 2018 – Fig. 1). Furthermore, notable past coastal conservation evictions include those at *Dwesa*

Table 1

A consolidated list of overarching enabling social and institutional factors and conditions for CBC initiatives commonly emerging from the literature.

Common enabling social and institutional factors and conditions for CBC initiatives	
Enabler	References
1) Clearly defined and collective recognition of a resource problem and shared interest in resolving it	Pomeroy et al. (2001); Sowman et al. (2003); Biggs et al. (2019); Child (2019); Herzog and Ingold (2019)
2) Clearly defined resource boundaries	Ostrom (1990); Agrawal (2001); Pomeroy et al. (2001); Sowman et al. (2003); Cox et al. (2010); Cinner et al. (2009); Child (2019)
3) Clearly defined group of beneficiaries	Ostrom (1990); Agrawal (2001); Pomeroy et al. (2001); Sowman et al. (2003); Cox et al. (2010); Cinner et al. (2009)
4) Enabling policy and legislation, to make, enforce and subsequently change rules of the initiative	Pomeroy et al. (2001); Sowman et al. (2003); Fabricius and Collins (2007); Cinner et al. (2009)
5) Devolution of authority and secure resource and management rights of local institutions and their members	Ostrom (1990); Agrawal (2001); Pomeroy et al. (2001); Sowman et al. (2003); Cox et al. (2010); Cinner et al. (2009); Galvin et al. (2018); Child (2019)
6) Rules governing use of resources are easy to understand and align with local perspectives, needs and conditions	Ostrom (1990); Agrawal (2001); Pomeroy et al. (2001); Sowman et al. (2003); Fabricius and Collins (2007); Cox et al. (2010); Cinner et al. (2009); Galvin et al. (2018); Biggs et al. (2019); Child (2019)
7) Presence of capable, respected, trusted and accountable local leaders/ key players to promote collective adoption of rules	Agrawal (2001); Pomeroy et al. (2001); Sowman et al. (2003); Fabricius and Collins (2007); Ostrom (2010); Galvin et al. (2018); Biggs et al. (2019)
8) Perceived legitimate and collaborative decision-making structures and equitable benefit-sharing	Agrawal (2001); Sowman et al. (2003); Fabricius and Collins (2007); Cox et al. (2010); Galvin et al. (2018); Biggs et al. (2019); Child (2019)
9) Monitoring of the resource system and users carried out by accountable monitors, and that promotes collective learning by all actors	Ostrom (1990); Agrawal (2001); Pomeroy et al. (2001); Sowman et al. (2003); Fabricius and Collins (2007); Cox et al. (2010); Cinner et al. (2009); Galvin et al. (2018); Biggs et al. (2019)
10) Use of graduated sanctions for rule violators	Ostrom (1990); Agrawal (2001); Pomeroy et al. (2001); Cox et al. (2010); Cinner et al. (2009)
11) Presence of accessible and low-cost conflict resolution mechanisms	Ostrom (1990); Agrawal (2001); Pomeroy et al. (2001); Sowman et al. (2003); Fabricius and Collins (2007); Cox et al. (2010); Cinner et al. (2009); Biggs et al. (2019)
12) Presence of diverse and multiple nested partners providing financial and institutional support with recognition for local institutions	Ostrom (1990); Agrawal (2001); Pomeroy et al. (2001); Sowman et al. (2003); Fabricius and Collins (2007); Cox et al. (2010); Cinner et al. (2009); Galvin et al. (2018); Biggs et al. (2019); Child (2019)

Cwebe and Silaka Nature Reserves (Sunde, 2014; Thondhlana et al., 2016 – Fig. 1).

Criticism of previous exclusionary conservation policies and practices led to increasing calls for more ‘people-centred’ conservation approaches in the 1990’s (e.g. Cock and Fig, 2000; Shackleton et al., 2001). This was proposed through land redistribution and restitution, improved access to natural resources, greater participation of local communities in decision-making, and increased funding for conservation and development programmes (Fabricius, 2004). Therefore, at least in terms of discourse and policy, post-Apartheid conservation exhibited a shift away from a ‘protectionist’ colonial model to a more ‘people-centred’ model, one concerned with addressing the inequities of the past and prescribing greater consideration for the socio-political and -economic implications of conservation (Cock and Fig, 2000; Cundill et al., 2013). However, some scholars describe this shift as “neoliberalisation from above”

(Büscher and Dressler, 2012: p2), and emphasize that community concerns were merely an “add-on” to top-down agendas (Els and Bothma, 2000: p19). Moreover, more recent research suggests contemporary conservation management practices remain unjust and continue to produce negative social impacts (e.g. Sowman and Sunde, 2018; Musavengane and Leonard, 2019). Consequently, while there has been some progress in terms of job creation and benefit distribution in a few cases, poor implementation and governance of ‘people-centred’ conservation agenda persists (Sowman and Sunde, 2018; Musavengane and Leonard, 2019; Rice, 2021).

3.2. Enabling legislation for community-based conservation in South Africa

In 1994, the advent of democracy in South Africa catalyzed a major law reform to address past injustices and ensure Constitutional human rights principles were embedded in all policies and legislation. South Africa’s commitment to various international conservation agreements has contributed to shaping its biodiversity conservation legislation, in particular its 1996 ratification of *The Convention on Biological Diversity of 1992*, and support for the subsequent updates (CBD, 2011). This is strongly reflected in the country’s foundational piece of legislation governing environmental conservation, i.e. the *National Environmental Management Act 107 of 1998* (hereafter NEMA) (RSA, 1998a). NEMA together with the *National Environmental Management: Biodiversity Act 10 of 2004* (hereafter NEMBA – RSA, 2004a) and the *National Environmental Management: Protected Areas Act 57 of 2003* (hereafter NEMPAA – RSA, 2004b), comprise the suite of legislation guiding environmental and conservation management. The latter two Acts include specific provisions enabling the devolution of conservation management authority to a local community member or community-based organization (CBO) (Table 2).

Additional enabling legislation for CBC includes the *National Environmental Management: Integrated Coastal Management Act 24 of 2008* and its *Amendment Act No. 36 of 2014* (hereafter NEMICMA) (RSA, 2009, 2014) and the *National Forests Act of 1998* (hereafter NFA) (RSA, 1998b). Like NEMBA and NEMPAA, NEMICMA and NFA contain provisions enabling community involvement and devolution or sharing of decision-making authority in conservation management, particularly legal recognition of CCAs through establishment of *Special Management Areas* and *Community Forest Agreements* respectively (Table 2), though neither provision has been used to date. Lastly, provincial stewardship programmes, encouraging good conservation management practices on both private and communal land, complement the aforementioned national CBC enabling legislation (Paterson, 2015; Wright et al., 2018).

4. Methods

A mixed methods approach was employed, which was informed by grounded theory and triangulation. *Grounded theory* enables both the emergence of theoretical categories from evidence, and an integrated and incremental approach to address *what, how* and *why* questions found within complex social settings, characteristic of CBC initiatives (Glaser, 2002; Charmaz, 2008). Furthermore, *triangulation* reduces the risk of drawing false conclusions from unreliable data by cross-checking information from different sources (Jick, 1979).

Firstly, an extensive, but by no means exhaustive, review of the South African literature relevant to CBC, and legal and policy documentation – spanning wildlife, forestry, and coastal and marine CBC initiatives – was undertaken to identify a list of common South African CBC social and institutional enabling and constraining factors and conditions. This targeted “purposive review” of literature (see Cook, 2019), sought to take an in-depth, but not wholly systematic approach such as that prescribed by the *Collaboration for Environmental Evidence Guidelines* (CEE, 2018). Therefore, we acknowledge the limitations of this approach, most notably the potential for bias (Cook, 2019).

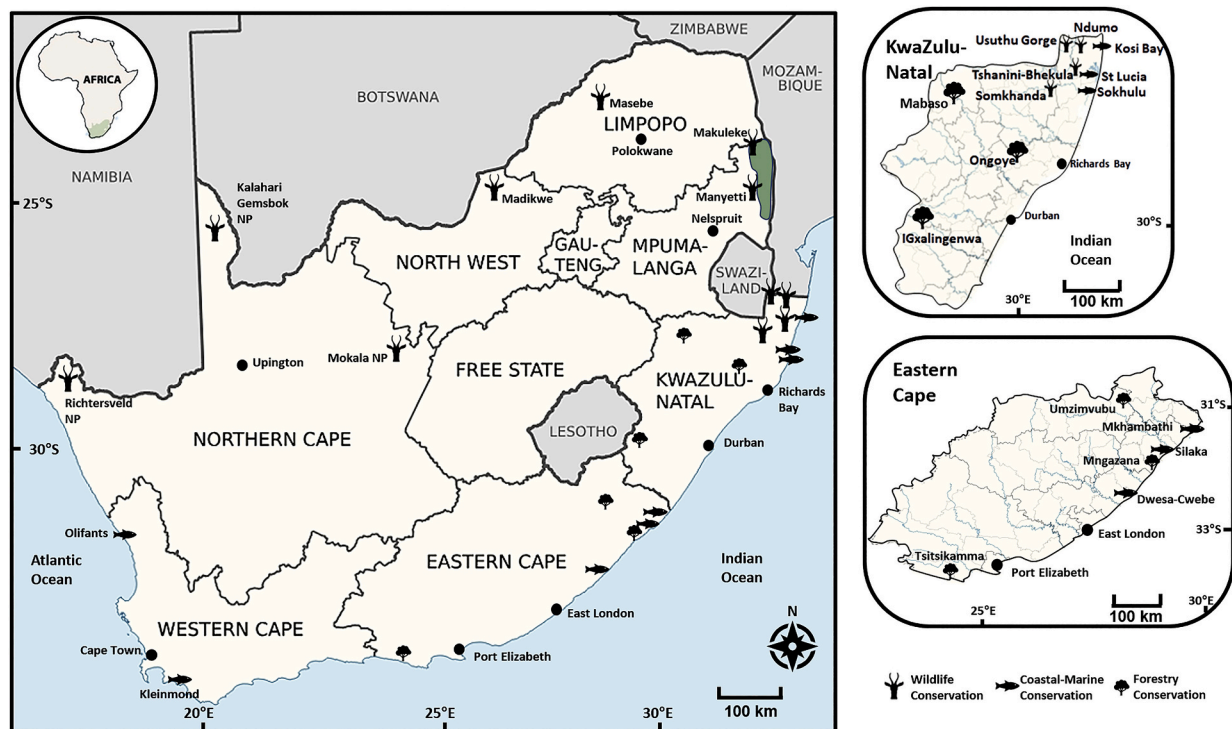


Fig. 1. Map depicting the localities of South African CBC initiatives discussed. Note Kruger National Park, located in the north-east of the country outlined along the Mozambique border. KwaZulu-Natal and Eastern Cape province are expanded due to their numerous CBC examples.

Nevertheless, this approach does offer the ability to reflect broadly upon a topic, and since most research conducted on this topic, and especially within South Africa, is largely qualitative, like others we propose that, “both qualitative research and purposive reviews emphasize purposive, iterative sampling that shapes and is shaped by emerging insights” (Cook, 2019: p56). Accordingly, this approach can identify studies and produce findings that, due to the constraints placed upon a systematic approach, may not otherwise have been captured. Moreover, since the most recent academically published research on the topic is more than a decade old (e.g., Sowman et al., 2003; Fabricius and Collins, 2007), we believe, notwithstanding the ‘non-systematic’ approach, our goal to provide a starting point for an updated understanding of trends within South African CBC initiatives is a credible one. That said, while we aim to provide a thorough and contemporary review on the topic, we encourage others to build upon our work here and conduct a systematic review on the topic.

Peer-reviewed journal articles, as well as grey literature, were obtained using a carefully constructed search string commencing with the year ‘1990’ (see Online Appendix 1). This year was chosen since, as introduced in Section 3.1, the 1990’s represented a period of revised narratives promoting and funding CBC initiatives in the country. This allowed for the review of emerging trends from existing CBC initiatives already implemented and functioning. The search was performed on the EBSCOHost and Web of Science platforms for peer-reviewed journal articles, and repeated in Google Scholar to incorporate further published, but also notably relevant grey literature (especially practitioner reports) into the review. The first 200 results in Google Scholar were screened for relevance. Further literature was consulted based on “snowballing” of literature deemed relevant that emerged from the above search strategy. Both primary and secondary studies were included, and the main criteria used to screen studies was evidence of the involvement of indigenous or/and local communities in some level of resource management and governance. Furthermore, eligible studies include both area-based and non-area based conservation initiatives falling under the umbrella term of ‘CBC’ (i.e. with some form of community involvement in conservation

management). Studies were coded iteratively based upon common emerging themes, and until we considered theoretical saturation to have been reached, related to social and institutional enabling and constraining factors and conditions for CBC initiatives.

Secondly, the above review of literature was complemented by 30 semi-structured interviews conducted with representatives of CBC ‘partner organizations’, inclusive of national and provincial government, parastatal conservation agencies, NGOs, academic institutions and civil society partners. Respondents were purposively selected based upon their expertise in the CBC field and their experience during the initiation, implementation and on-going governance of a particular CBC initiative. Interviews were conducted with 30 respondents between 2016 and 2018 and on average lasted one hour. It was determined at this point that theoretical saturation had been reached. Interview questions were open-ended and focused specifically on gaining an understanding of the perceptions of this group of respondents regarding the social and institutional enabling and constraining factors and conditions required for CBC to operate. They were asked to draw on their experiences within CBC initiatives they have been associated with. Responses were consolidated with those identified through the literature review. Informed consent was obtained from each respondent, and it was agreed that all responses would remain anonymous.

5. Findings

These findings build upon the work of Sowman et al. (2003) and Fabricius and Collins (2007) and include a review and analysis of more recent literature, insights from additional examples and an analysis of the responses of 30 interviewees. The wildlife sector possesses the greatest number of legally declared CCA initiatives in South Africa. Consequently, insights are gained mainly from this sector. While the findings are likely to have relevance to the wildlife sector, the focus of the paper, is to provide useful insights into resolving understanding the aforementioned disjuncture within CBC coastal and marine contexts. Where no legally declared CCAs exist in terms of the mechanisms

Table 2

A summary of key CBC related commitments and enabling national legislation.

Commitment/legislation	CBC/CCA enabling provisions
<i>The Convention on Biological Diversity of 1992 (CBD) & the CBD Programme of Work (CBD, 2011)</i>	Key stipulations: <ul style="list-style-type: none"> Promotes full and effective participation of indigenous and local communities Promotes legal recognition of indigenous and local CCAs
<i>National Environmental Management Act 107 of 1998 (NEMA – RSA, 1998a)</i>	Key provisions: <ul style="list-style-type: none"> Promotes enhanced community access to environmental benefits and resources (Section 2(4) (d)) Promotes recognition of traditional ecological knowledge (Section 2(4) (g)) Facilitates community empowerment in conservation management (Section 2(4) (h))
<i>National Environmental Management: Biodiversity Act 10 of 2004 (NEMBA – RSA, 2004a)</i>	Key provisions: <ul style="list-style-type: none"> Biodiversity Management Plans enable devolution to suitable persons or organizations inclusive of a local community member or community-based organization (Section 43(2)) Biodiversity Management Agreements allow for various tenure relationships flexible to natural resource and diverse actor objectives (Section 44)
<i>National Environmental Management: Protected Areas Act 57 of 2003 (NEMPAA – RSA, 2004b)</i>	Key provisions: <ul style="list-style-type: none"> Promotes incorporation of communal land within PAs (Section 2) Promotes participation of local communities in PA management (Section 2) Enables devolution to suitable persons or organizations inclusive of a local community member or community-based organization (Section 39(1)) Enables implementation of Community-Based Natural Resource Management (Section 41)
<i>National Environmental Management: Integrated Coastal Management Act 24 of 2008 and Amendment Act No. 36 of 2014 (NEMICMA – RSA, 2009, 2014)</i>	Key provisions: <ul style="list-style-type: none"> Special Management Areas enable devolution to suitable persons or organizations inclusive local community member or community-based organization (Sections 23 & 24)
<i>National Forests Act 84 of 1998 (NFA – RSA, 1998b)</i>	Key provisions: <ul style="list-style-type: none"> Community Forest Agreements promote involvement of communities in both the use and management of natural forests (Section 29(1)).

Sources: CBD (2011); RSA (1998a, 1998b, 2004a, 2004b, 2009, 2014).

provided in national environmental law.

Further information on the South African case-study literature that informed our preliminary list of CBC enablers can be found in the supporting documentation (Table S4). These enablers were then consolidated with those emerging from the interviews, and presented alongside the “foundational enablers” identified in the global literature (see Table 3). Fig. 1 depicts the locations of the CBC initiatives described below and in Table S4.

5.1. Identifying ‘enablers’ for South African CBC

5.1.1. CBC legislative complexity and interpretation

South Africa’s legislation enables CBC initiatives to be established, yet approximately 77% of respondents emphasized that complex

Table 3

A list of key South African ‘enablers’ for CCA initiation, implementation and governance (middle column), as identified from the literature, and consolidated those identified by the interview respondents (frequency, i.e., % of respondents - right column), and framed by the global literature-based ‘foundational enablers’ (left column).

Foundational enabler	South African CCA Enablers	
	CCA enabler	Frequency (% respondents)
1. Enabling policy and legislation, to make, enforce and subsequently change rules of the initiative	1A. Streamlined CBC-related legislation and institutional processes	93
	1B. Presence of State capacity and political will for CBC initiatives	70
2. Devolution of authority and secure resource and management rights of local institutions and their members, supported by partners	2A. Devolution of authority and decision-making power, and secure resource tenure, to local communities, with support of partners	60
	2B. Strong alignment of CBC initiative with and recognition for local and customary institutions, knowledge and practices	90
3. Rules governing use of resources are easy to understand and align with local perspectives, needs and conditions	2C. Increased community participation in planning and decision-making of initiatives	83
	3. Strong understanding and alignment of CBC initiatives for social-ecological context to address local priorities	90
4. Presence of capable, respected, trusted and accountable local leaders/ key players to promote collective adoption of rules	4. Presence of local ‘champions’ to motivate actors and drive CBC implementation and governance processes	60
	5A. Strong relations of respect and trust between actors for improved communication and coordination	60
5. Perceived legitimate and collaborative decision-making structures characterized by accessible and low-cost conflict resolution mechanisms and equitable benefit-sharing	5B. Strong understanding of power dynamics and the presence of strategies to legitimise conflict resolution	87
	5C. Presence of sustainable and equitable tangible incentives to alleviate poverty and encourage community participation and commitment to CBC initiatives	93
6. Monitoring of the resource system and users carried out by accountable monitors, and that promotes collective learning by all actors	6. Ability to continuously monitor and adapt initiatives and build required capacity through an iterative and community inclusive process at all levels	83
	7. Presence of both initial external and on-going State and non-State partner financial and technical support	87

legislation was a barrier to implementing CBC initiatives. Respondents note this complexity primarily concerns the unclear articulation of legislation with regard to CBC, the overlapping provisions in the conservation legislation with other laws and the lack of clarity regarding responsible State authorities. Additionally, one respondent notes how “[CBC] policy and legislation interpretation is different for different actors” (SA11), which further exacerbates institutional complexity.

Legislative complexity is especially noted within the context of land reform in conservation areas, where land reform is the mandate of the Department of Rural Development and Land Reform, and conservation

management is the responsibility of the Department of Environmental, Forestry and Fisheries (DEFF) and various parastatal environmental agencies. Therefore, while land reform is central to and considered a major driver for CBC implementation (especially the creation of CCAs) in South Africa (Paterson, 2011, 2015), a poor track record of settling land claims in conservation areas persists (Paterson and Mkhulisi, 2014). This ‘drawn out’ process of settling land claims (i.e., the return of communal land tenure to local communities), commonly results in disillusionment amongst local communities regarding CBC initiatives, and their ability to provide tangible benefits, and deepens mistrust for the State, as depicted for example in *Ndumo Game Reserve* and *Masebe Nature Reserve* (Boonzaaier, 2012; Meer and Schnurr, 2013), and several *Participatory Forest Management* initiatives (Holmes-Watts and Watts, 2008).

Notwithstanding numerous challenges, land reform enables two forms of community-owned and or -managed PAs namely: *contractual parks* (i.e. incorporated into established State PAs); and more recently CCAs. *Contractual parks* involve the State (commonly through a parastatal conservation agency) and a community (as the new landowner subject to a successful land claim) entering into a co-management agreement to share power and ‘jointly’ manage natural resource access, use and benefit-sharing arrangements (Cundill et al., 2013). Arguably the country’s most famous example of community conservation in the context of land restoration is associated with the Makuleke community and SANParks (South African National Parks - the national parastatal conservation agency) in the *Kruger National Park* (Ramutsindela and Shabangu, 2018). However, scholars argue that once the community obtained their land title they were “coerced” into pursuing a private-community partnership eco-tourism arrangement, and the ‘success’ of these partnerships is heavily contested (Ramutsindela and Shabangu, 2018: p77). Similar co-management arrangements between land claimant communities and government were reached between SANParks and the Khomani San and Meir communities, who had been displaced by the *Kalahari Gemsbok National Park*, as well as the Nama community, displaced by the *Richtersveld National Park* (Thondhlana et al., 2011; Michler et al., 2019). These arrangements aimed to allow managed access to and sustainable customary use of natural resources, as well as delivery of community benefits through interventions such as eco-tourism. However, continued top-down and science-based approaches in both cases has resulted in conflict over community participation and representation, and inequitable benefit-distribution (Thondhlana et al., 2011; Michler et al., 2019).

In addition to contractual parks, several wildlife CCAs have now been legally declared, predominantly through NEMPAA legislation (Table 2). Examples, which all originate from the conclusion of a community land claim, include *Somkhanda*, *Usuthu Gorge*, *Ndumo*, *Tshanini-Bhekula*, *Masebe*, and *Manyeleti Game/Nature Reserves*. However, since CCAs predominantly originate with the settlement of a land claim, implementation is often delayed and leads to community frustrations. Accordingly, approximately 83% of respondents identified the complexity of CBC-related legislation as constraining the implementation of CCAs. However, if these land reform processes are streamlined, and the principles of community-based management or co-management are embraced, the implementation of CBC would be *enabled*.

5.1.2. Political will and state capacity

Approximately 70% of respondents described a continued lack of political will for CBC initiatives as a major constraint. Respondents described the current conservation landscape as “vexed, uncertain, stuck and not moving” (SA15), and note that, “political instability plagues South African CBC” (SA13). Furthermore, some respondents characterize State inaction regarding CBC initiatives as “feet-dragging” (SA20), and merely “doing window-dressing” (SA15). This was largely attributed to corrupt, under-resourced, under-capacitated, and often unwilling State officials at various levels (Paterson and Mkhulisi, 2014; Coetzee and Nell, 2019). These concerns are substantiated by the State’s

poor performance in recent global State corruption and capacity indices (Transparency International, 2019; World Justice Project, 2019). In particular, some respondents, including those from government, expressed concerns regarding corrupt relations between the State and the private sector, notably conflicting interests of conservation and mining and commercial fishing (SA4, SA16). Consequently, as respondent SA16 states there is a “need to avoid private capture in [South African] conservation.”

Notwithstanding issues related to lack of government support for CBC, approximately 87% of respondents noted that external support, especially in the initial stages, is still an essential and key *enabler* for CBC to succeed. Accordingly, as respondent SA15 emphasizes, there is a specific need for “strong leadership from high politics”. Therefore, both respondents and reported cases in the literature (Shackleton, 2009; Thondhlana and Cundill, 2017) specifically emphasize the need to promote community-State engagement. More specifically, respondent SA25 notes in particular that, “the biggest challenge is a lack of initial support when communities get land handed-over or land rights”. Nevertheless, as respondent SA25 acknowledges, State inaction is perhaps more an issue of lack of capacity, emphasizing there is a “total lack of [government] understanding of how CBC works”, and therefore, an “absolute lack of ability of government to move forward with [CBC]”. Thus, as respondent SA9 states, “[CBC] is only going to work if you get government ‘buy-in’”. Consequently, a lack of State capacity and political will to support CBC emerges as a key constraining factor. However, if the State were to strategically support CBC initiatives this represents a key enabler for the establishment of community governed conservation areas.

5.1.3. Social relations in CBC institutions

Approximately 87% of respondents note the complexity and difficulty of incorporating diverse multi-actor objectives in CBC initiatives in the country. Most respondents stressed the importance of nurturing community-partner relations, notably community-state relations, for the successful initiation, implementation and governance of CBC projects. Yet, about 63% of respondents characterize these relationships as ‘average’ to ‘poor’, noting once again the detrimental effect of slow institutional processes associated with land claims and CCA declaration, and a lack of delivery of tangible benefits to local communities.

5.1.3.1. Communication, respect, trust and collaboration. The concepts of *respect*, *trust* and *collaboration* emerged strongly from both the literature and research respondents. South African CBC initiatives are often characterized by limited interaction between the State, communities and other actors, resulting in weak communication and a lack of trust (Hauck and Sowman, 2003; Thondhlana et al., 2016; Michler et al., 2019). A lack of communication between the State and community leaders, and between community leaders and their constituencies, has been shown to effect CBC outcomes, for example in *Masebe Nature Reserve* (Boonzaaier, 2012), and *Somkhanda Game Reserve* (Musa-vengane and Leonard, 2019). Likewise, all respondents identify ineffective communication and collaboration within CBC initiatives as a result of continued lack of respect and trust amongst actors. For example, respondent SA16 specifically notes that “Government, researchers, and scientists don’t respect the ability of communities, we need to change [their] perceptions of communities”. These types of strained relations cause frustration and a loss of local motivation and support for CBC initiatives (Holmes-Watts and Watts, 2008; Meer and Schnurr, 2013; Thondhlana et al., 2016). Furthermore, some respondents emphasized how, “conservation can’t win battles if [the state] goes to war with the people” (SA12), and some specifically note “a desperate need for greater support from parastatal conservation agencies” (SA17). In particular, some respondents raise concerns over a lack of state inter-departmental coordination in conservation, which one government respondent referred to as, “not much talk, and even less

doing" (SA20).

Of particular relevance to this paper, was a need for improved cooperation between the Department of Agriculture, Forestry and Fisheries (DAFF) and DEA, especially within the coastal and marine CBC arena. Since these interviews were conducted, the two departments have now joined to form the Department of Environment, Forestry and Fisheries (DEFF), yet improved coordination across the directorates, with mandates for different resources, is still required. Consequently, as one respondent emphasized there is a pressing "need to unlock the opportunities different institutions bring to the table" (SA27). Therefore, a key *enabler* described by all respondents, and mirrored in the literature, is the need to improve communication and relationships, and build trust and respect amongst all CBC actors (Matose and Watts, 2010; Krüger et al., 2016; Musavengane and Leonard, 2019).

Most respondents note the need for a 'champion' to improve levels of trust, communication and collaboration. These 'champions' may include local community leaders, or members of State, parastatal conservation agencies and/or other external partners such as those from academic institutions or NGOs. Their presence is considered especially key to keeping local communities informed, motivating community participation, and providing necessary support through the aforementioned onerous institutional processes (Croom and Mann, 2002; Harris et al., 2003; Sowman et al., 2003; Cundill and Fabricius, 2010).

Numerous respondents specifically note the importance of having committed and strong local leaders or champions in communities (e.g. SA7; SA11; SA27). However, respondent SA4 describes local leaders "as gate-keepers", since they have the potential to either enable or constrain CBC initiatives. For example, local community leaders may cause conflict if perceived to be capturing benefits from CBC initiatives (Musavengane and Leonard, 2019). Nevertheless, we consider the presence of champions to be another key *enabler* since they can motivate actors and drive CBC implementation and governance processes.

5.1.3.2. Power dynamics in CBC. All respondents identified power dynamics, and specifically the issue of who has de facto decision-making authority, as a key and overarching factor affecting CBC outcomes. All respondents express strong concerns about the power dynamics at multiple levels in CBC institutions, ranging from the upper echelons of conservation management (largely concerning State, provincial and parastatal conservation agencies) to local-level concerns regarding community representation by CBOs and local/customary authorities. Additionally, in accordance with findings from past studies (e.g. Kepe, 2009; Thondhlana et al., 2011), some respondents specifically note that, "science has never been about communities!" (SA4), and the 'power of science', and the effect of continued top-down, science-based approaches continues to affect conservation (e.g. SA7; SA10; SA25).

Concerns also exist about elite-capture within local institutions (Thondhlana et al., 2015; Coetzee and Nell, 2019; Musavengane and Leonard, 2019). Some respondents strongly emphasized the need to involve the right people, since, "the community may be excited by [the CBC initiative], but local authorities may be closed to it" (SA15), and while they may be, "open to communication [they] have the potential to 'mutiny'" (SA7). Respondents, and the literature, emphasize two mistaken assumptions made regarding local power dynamics. Firstly, that communities are homogeneous, cohesive, and benefits are equitably shared; and secondly, that all community members talk to each other (Musavengane and Leonard, 2019; Masterson et al., 2019). As respondent SA25 states, "a community is not just this big unicellular organism, you can't assume all know or agree with what's going on."

Therefore, positive relations between local and/or customary authorities and other community leaders are a key CBC *enabler* (Musavengane and Leonard, 2019). For example, with specific reference to the land claims process, respondent SA25 emphasized the need to consider potential conflict between newly established *Communal Property Associations* (i.e. the community institution responsible for decision-making

regarding a land claim) and local and/or customary authorities. These circumstances clearly indicate the need to define and legitimise conflict resolution strategies in conjunction with communities (Krüger et al., 2016; Masterson et al., 2019). Accordingly, about 87% of respondent emphasized a continued lack of understanding of local power dynamics constrains CBC initiatives (see also Musavengane and Leonard, 2019). Consequently, understanding of power dynamics and the presence of strategies to enable conflict resolution, is identified as an *enabler* for CBC initiatives.

5.1.4. Local socio-ecological context

Approximately 90% of respondents noted a lack of alignment of State and community interests constrains CBC in the country. Respondents noted this misalignment primarily concerns a lack of consideration for the country's socio-political past; a lack of recognition of local and customary institutions, a lack of alignment of CBC initiatives with poverty and livelihood needs; and emphasized the need for targeted local capacity building when required. Negative perceptions of conservation stemming from past colonial and Apartheid agencies and practices are well documented as a main cause of community resistance towards conservation initiatives (Thondhlana et al., 2016; Musavengane and Leonard, 2019; Masterson et al., 2019). In addition, all respondents acknowledge persistent and widespread poverty continues to undermine success of CBC in the country, since as respondent SA22 describes, poverty forces, "communities to think of today not tomorrow". Nevertheless, respondent SA27 suggests, "areas with little economic opportunities and good biodiversity are a driver for CBC". Not surprisingly the ability of a CBC initiative to provide sustainable and equitable tangible incentives to alleviate poverty emerges as a major *enabler* for promoting CBC. However, approximately 63% of respondents also acknowledged that CBC initiatives are seldom able to live up to the high local expectations for economic benefits, resulting in community disillusionment.

Notwithstanding the need to deliver economic benefits to communities, most respondents acknowledged communities also value CBC initiatives for non-monetary benefits. As respondent SA14 states, "culture is important for [CBC] to succeed!" More specifically, respondents and the literature note that a failure to be mindful of, recognize, and respond to local cultural contexts constrains CBC, and may even lead to conflict (Boonzaaier and Wels, 2016; Thondhlana et al., 2016; Masterson et al., 2019). However, all respondents acknowledged that customary practices have been partially eroded, largely due to previous colonial and apartheid regimes that failed to recognize these systems of natural resource governance, as is confirmed in the literature (Sunde et al., 2013; Sunde, 2014). In particular, some respondents felt that erosion of these governance systems was largely due to poverty, and a desire by the youth to be educated and 'break free' from these customary systems (e.g. SA3; SA10; SA16). For example, respondent SA3 describes how the Meir and the San people of the Kalahari Gemsbok National Park are divided between 'traditionalists' and the 'modernists', and emphasize that, "since their displacement some don't want to use customary practices, the community has evolved". Likewise, others note 'modern' communities possess different value systems, and even local ecological knowledge (LEK) is not always endorsed by the whole community (Musavengane and Leonard, 2019). Nevertheless, research into other communities shows customary systems are still functioning, and in some cases there is even a renewed recognition of the value of customary systems of natural resource management and its compatibility with CBC objectives (Sunde, 2014; Thondhlana and Shackleton, 2015; Sinthumule and Mashau, 2020). Therefore, as some respondents suggest, there is a growing "need to nurture community pride in the environment" (SA10), including LEK, and "reinforce relations with the natural resource" (SA16).

Consequently, a lack of consideration of both historical and current social and ecological contexts when initiating CBC initiatives, including being mindful of the community's negative experiences with CBC, represents a further constraining factor. Therefore, an increased

understanding of the historical dimensions and the current socio-ecological context, including the possible requirement to revitalize customary institutions and practices, represents a key *enabler* for CBC initiatives in the country.

5.1.5. Community rights

Approximately 60% of all, and 77% of non-state, respondents perceive a reluctance by the State to devolve secure rights and powers, and a failure to recognize local communities as the management authority, as a key constraining factor to progress with CBC in the country. This is well-established in the literature (e.g. Sowman et al., 2003; Boonzaaier, 2012; Cundill et al., 2013; Sowman et al., 2014). This links directly to a lack of political will as discussed in Section 5.1.2. Several studies show community motivation for CBC in the country is often predicated on a desire to take control of and manage their resources (e.g. Cundill et al., 2013; Thondhlana et al., 2016; Masterson et al., 2019). As stated a particular challenge relates to resolving the highly contentious, complex and political issue of restoration of land rights in existing conservation areas (Paterson and Mkhulisi, 2014; Kepe, 2018). Therefore, increased devolution of both secure rights and decision-making power to the community-level, with required external financial and technical support, represents an additional *enabler*.

5.1.6. Community participation

Approximately 93% of respondents specifically emphasized how slow progress, and notably the delivery of benefits, and the difficulty in navigating onerous institutional processes leads to community frustrations and constrains community participation in CBC planning and decision-making processes. Accordingly, it is well documented that a lack of effective community participation constrains South African CBC initiatives. Notable examples include the *Masebe and Ndumo Game Reserve* and *Silaka Nature Reserve*, where a lack of community participation resulted in violence (Meer and Schnurr, 2013; Thondhlana et al., 2016; Boonzaaier and Wels, 2016). Furthermore, Relly (2012) noted how the rapid implementation process at *Madikwe Game Reserve* inhibited true community participation and communication in decision-making. Improved community participation will require greater political will and respect for community abilities to manage resources, and resolution of conflicts stemming from a lack of local socio-ecological alignment of CBC initiatives. Moreover, effective community participation also requires targeted local capacity building.

Approximately 93% of respondents specifically emphasize how conflict over, and slow realization of tangible benefits represents a key constraining factor to community participation in, and support for local CBC institutions. This is depicted in many CBC initiatives in the country (Hauck and Sowman, 2003; Matose and Watts, 2010; Thondhlana et al., 2015, 2016; Michler et al., 2019). Nevertheless, as mentioned above, local motivation for CBC is not solely concerned with deriving monetary benefits (Boonzaaier and Wels, 2016).

Consequently, increased community participation in planning and decision-making is an urgent and key *enabler* for CBC implementation and governance to succeed in the country.

5.1.7. Local governance capacity

All respondents acknowledged that a lack of local governance capacity in local and customary institutions constrains CBC. Accordingly, approximately 83% of respondents emphasized the need for targeted local capacity building. Furthermore, some research has shown that a lack of local capacity building can lead to a community-perceived dependency on State institutional structures, as witnessed in *Mngazana Mangrove* and *Tsitsikamma Forests* (Traynor and Hill, 2008; Matose and Watts, 2010). Therefore, all respondents emphasized the need to provide external institutional support, particularly in the initial stages of developing a CBC initiative, and thereafter build local capacity, to support CBC implementation and governance.

Ineffective local governance institutions are commonly

characterized by poor community representation (Sowman et al., 2003; Musavengane and Leonard, 2019). This relates back to previous discussions above, and often stems from a lack of consideration of social inequalities and diverse intra-community interests and objectives (Coetzee and Nell, 2019; Musavengane and Leonard, 2019). Furthermore, responses also consistently emphasized the need to increase awareness and effective use of LEK in CBC institutions, and empower its dissemination (e.g. SA10; SA11; SA24).

Therefore, the need to identify institutional strengths and weaknesses and collaboratively develop not only State but also community knowledge and management capacity is a key *enabler* for South African CBC. Furthermore, this requires learning from ongoing monitoring and adaptation, and building capacity through an iterative and community inclusive process at all levels for improved CBC governance (Fabricius and Collins, 2007; Holmes-Watts and Watts, 2008; Cundill and Fabricius, 2010).

5.1.8. State and local institutional alignment

Approximately 90% of respondents note a lack of alignment of State and local institutions in CBC initiatives. For example, numerous scholars note the ‘inflexibility’ of conservation officials. This often manifests in restricted access to traditionally used natural resources, which often negatively influences local perceptions of conservation initiatives and institutions (e.g. Thondhlana et al., 2015, 2016; Boonzaaier and Wels, 2016; Thondhlana and Cundill, 2017). Furthermore, as respondent SA11 specifically notes, “[CBC] enabling legislation is not building on the cultural and customary foundation [found in communities]”, including tenure and resource governance systems. Moreover, as some respondents emphasize that, “policy is drawn up for the people not by the people” (SA16), and, “policy-makers don’t understand the context of the people they are working with” (SA10). This in accordance with Section 5.1.4. Consequently, respondents note the importance of recognition, respect, and alignment of CBC initiatives with local and customary institutions as an important *enabler*.

However, as mentioned previously, many respondents acknowledge that customary institutions have been at least partially eroded over time, largely due to prior discriminatory systems of law. For example, Meer and Schnurr (2013) explain how incapacity and a loss of respect for local customary authorities affected management of *Ndumo Game Reserve*. Nevertheless, examples do exist of locally respected customary authorities with decision-making power governing their natural resources (e.g. Mbatha, 2018; Sinthumule and Mashau, 2020). Consequently, stronger alignment of local/ customary and State institutions represents a central *enabler* for CBC in the country. However, these institutions may require revitalization, and continued support from partners.

6. A consolidated list of South African CBC enablers

Based upon the findings above, and framed by the list of “foundational enablers” as introduced previously in, and adapted from Table 1, we propose a consolidated list of South African specific enablers for the initiation, implementation and governance of CCAs (Table 3). The absence of some global enablers identified in Table 1 does not suggest they lack importance with the South African CBC context but were not mentioned by many respondents. The inclusion of these “foundational enablers” serves to specifically frame and show the linkages between the enablers we identified in the global conservation literature to the South African specific enablers identified in this research. While these findings, concur with the international literature, they especially emphasize the following enablers; importance of building relations characterized by trust and respect, securing local resource and management rights, recognizing local/ customary institutions, the importance of inclusive and robust public participation processes, the need for tangible benefits (especially where agreements are reached in existing South African PAs where land claims have been settled), the presence of local champions, and the need for diverse and multiple nested partners providing initial

and on-going required financial and institutional support to legitimise governance activities in CBC initiatives.

We acknowledge that this list is incomplete, especially in relation to ecological factors and conditions, however, our focus was on the social and institutional enablers. Furthermore, these CBC ‘enablers’ should not be viewed as ‘set-in-stone’, but are highly context-specific. Moreover, while commonly cited enablers such as clearly defined resource and resource-user boundaries did not emerge strongly, especially within interviews, these are important aspects for any CBC initiative. Likewise, the ability to develop a “clearly defined and collective recognition of a resource problem and shared interest in resolving it” amongst all actors, should be considered an overarching ‘enabler’ for any CBC initiative. Nevertheless, based upon our focus on social and institutional ‘enablers’, and the findings that emerged strongly from both relevant South African literature and the insights gained from respondents, we consider this list to provide a strong foundation for future research into this topic, particularly in South Africa.

7. Conclusion

As respondent SA22 states, “communities are motivated, and CBC can work”. However, this will require efforts to strengthen the factors, and improve conditions currently constraining local CBC efforts. This paper has explored South Africa’s progress with CBC initiatives broadly from a ‘commons’ perspective with the explicit objective to inform the country’s coastal and marine CBC policy-practice disjuncture. An extensive review of the literature combined with information and insights from conservation actors, has provided an understanding of why South Africa has been so slow in responding to the enabling legislation and establishing CCAs in the coastal and marine space.

This study has highlighted key constraints, and reinforced the importance of number of enablers required to pursue CBC in South Africa. However, in accordance with other well-established commons researchers (e.g., Ostrom, 1990; Pomeroy et al., 2001; Agrawal, 2001; Cox et al., 2010, 2016), we acknowledge the complexity of managing CPRs, and therefore, proposing a list of ‘enablers’, due to the number of relevant elements and their highly context-specific and interactional nature. In doing so, it has provided an updated set of enablers for CBC initiation, implementation and management (Table 3). Our findings confirm those found in previous literature on CBC in South Africa, and notably reinforce and expand upon the lists of enablers by Sowman et al. (2003) and Fabricius and Collins (2007). In particular, our research shows that issues related to political will, devolution of rights, community participation, and alignment of initiatives with socio-ecological conditions, persist. Consequently, we strongly emphasize the need for greater understanding and socio-ecological alignment of initiatives, formalized and improved community participation and representation, increased partner support, and the need to identify and work collaboratively with local champions to inform, motivate, and provide the necessary support to navigate the implementation and management of CBC initiatives in the country.

We specifically aim to inform the South African CCA coastal and marine policy-praxis disjuncture by improving understanding of initiating, implementing and governing community-based initiatives in the country within these contexts. That said, insights gained here should obviously be considered highly applicable to other sectors, most notably community-based terrestrial wildlife conservation (i.e., the national sector from which many of these insights emerged). Finally, insights should be relevant to regional and global CBC initiatives facing similar challenges in their attempts to translate ‘people-centred’ conservation policy into practice, especially those fulfilling obligations to the post-2020 GBF.

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Declaration of competing interest

The authors declare no actual or potential conflict of interest including any related to financial, personal or other relationships with other people or organizations within three years of beginning the submitted work that could inappropriately influence, or be perceived to influence, their work.

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References

- Agrawal, A., 2001. Common property institutions and sustainable governance of resources. *World Dev.* 29 (10), 1649–1672. [https://doi.org/10.1016/S0305-750X\(01\)00063-8](https://doi.org/10.1016/S0305-750X(01)00063-8).
- Araral, E., 2016. Reply to: design principles in commons science: a response to “Ostrom, Hardin and the commons” (Araral). *Environ. Sci. Pol.* 100 (61), 243–244 (doi: 10.1016/j.envsci.2016.03.022).
- Armitage, D., Mbatha, P., Muhl, E.K., Rice, W.S., Sowman, M., 2020. Governance principles for community-centered conservation in the post-2020 global biodiversity framework. *Conserv. Sci. Pract.* 2 (2), e160 <https://doi.org/10.1111/csp2.160>.
- Biggs, D., Ban, N.C., Castilla, J.C., Gelcich, S., Mills, M., Gandiwa, E., Possingham, H.P., 2019. Insights on fostering the emergence of robust conservation actions from Zimbabwe’s CAMPFIRE program. *Glob. Ecol. Conserv.* 17, e00538 <https://doi.org/10.1016/j.gecco.2019.e00538>.
- Boonzaaier, C., 2012. Towards a community-based integrated institutional framework for ecotourism management: the case of the Masebe Nature Reserve, Limpopo Province of South Africa. *J. Anthropol.* 530643, 1–11. <https://doi.org/10.1155/2012/530643>.
- Boonzaaier, C., Wels, H., 2016. Juxtaposing a cultural reading of landscape with institutional boundaries: the case of the Masebe Nature Reserve, South Africa. *Landsc. Res.* 41 (8), 922–933. <https://doi.org/10.1080/01426397.2016.1184630>.
- Borrini-Feyerabend, G., Dudley, N., Jaeger, T., Lassen, B., Pathak Broome, N., Phillips, A., Sandwith, T., 2013. Governance of protected areas: from understanding to action. In: Best Practice Protected Area Guidelines Series No. 20. IUCN, Gland, Switzerland. <https://www.iucn.org/content/governance-protected-areas-understanding-action>. (Accessed 18 June 2021).
- Brockington, D., Igoe, J., 2006. Eviction for conservation: a global overview. *Conserv. Soc.* 4, 424–470. Retrieved from: <http://www.conservationandsociety.org/text.asp?2006/4/3/424/49276>. (Accessed 18 June 2021).
- Brooks, J.S., Waylen, K.A., Borgerhoff Mulder, M., 2012. How national context, project design, and local community characteristics influence success in community-based conservation projects. *PNAS* 109, 21265–21270. <https://doi.org/10.1073/pnas.1207141110>.
- Brooks, J., Waylen, K.A., Mulder, M.B., 2013. Assessing community-based conservation projects: a systematic review and multilevel analysis of attitudinal, behavioral, ecological, and economic outcomes. *Environ. Evid.* 2 (1), 2. <https://doi.org/10.1186/2047-2382-2-2>.
- Büscher, B., Dressler, W., 2012. Commodity conservation: the restructuring of community conservation in South Africa and the Philippines. *Geoforum* 43 (3), 367–376. <https://doi.org/10.1016/j.geoforum.2010.06.010>.
- CBD (Convention of Biological Diversity), 2020. Zero draft of the post-2020 global biodiversity framework. <https://www.cbd.int/doc/c/efb0/1f84/a892b98d2982a829962b6371/wg2020-02-03-en.pdf>. (Accessed 18 June 2021).
- CBD (Convention on Biological Diversity), 2011. Strategic plan for biodiversity 2011–2020 and the Aichi targets. <https://www.cbd.int/doc/strategic-plan/2011-2020/Aichi-Targets-EN.pdf>. (Accessed 18 June 2021).
- CEE (Collaboration for Environmental Evidence), 2018. In: Pullin, A.S., Frampton, G.K., Livoreil, B., Petrokofsky, G. (Eds.), Guidelines and Standards for Evidence Synthesis in Environmental Management. Version 5.0. www.environmentalevidence.org/information-for-authors. (Accessed 18 June 2021).
- Charmaz, K., 2008. Constructionism and the grounded theory method. In: Holstein, J.A., Gubrium, J.F. (Eds.), *Handbook of Constructionist Research*. Guilford, New York, pp. 397–412.
- Child, B., 2019. Sustainable Governance of Wildlife and Community-based Natural Resource Management: From Economic Principles to Practical Governance. Routledge, New York.
- Cinner, J.E., Wamukota, A., Randriamahazo, H., Rebarisoa, A., 2009. Toward institutions for community-based management of inshore marine resources in the Western Indian Ocean. *Mar. Policy* 33 (3), 489–496. <https://doi.org/10.1016/j.marpol.2008.11.001>.
- Clark, N.L., Worger, W.H., 2016. South Africa: The Rise and Fall of Apartheid. Routledge, New York.
- Cock, J., Fig, D., 2000. From colonial to community based conservation: environmental justice and the national parks of South Africa. *Soc. Transit.* 31 (1), 22–35. <https://doi.org/10.1080/21528586.2000.10419008>.

- Coetzee, H., Nell, W., 2019. The feasibility of national parks in South Africa endorsing a community development agenda: the case of Mokala National Park and two neighbouring rural communities. *Koedoe* 61 (1), 1–13. <https://doi.org/10.4102/koedoe.v61i1.1470>.
- Cook, D.A., 2019. Systematic and nonsystematic reviews: choosing an approach. In: Nestel, D., Hui, J., Kunkler, K., Scerbo, M., Calhoun, A. (Eds.), *Healthcare Simulation Research*. Springer, Cham, pp. 55–60.
- Cox, M., Arnold, G., Villamayor Tomás, S., 2010. A review of design principles for community-based natural resource management. *Ecol. Soc.* 15, 38. <http://www.ecologyandsociety.org/vol15/iss4/art38/>. (Accessed 18 June 2021).
- Cox, M., Villamayor-Tomas, S., Arnold, G., 2016. Design principles in commons science: a response to “Ostrom, Hardin and the commons” (Araral). *Environ. Sci. Pol.* 61, 238–242. <https://doi.org/10.1016/j.envsci.2016.03.020>.
- Crook, B.J., Mann, B.Q., 2002. A critique of and recommendations for a subsistence fishery, Lake St Lucia, South Africa. *Biodivers. Conserv.* 11, 1223–1235. <https://doi.org/10.1023/A:1016074802295>.
- Cundill, G., Fabricius, C., 2010. Monitoring the governance dimension of natural resource co-management. *Ecol. Soc.* 15 (1), 15. <http://www.ecologyandsociety.org/vol15/iss1/art15/>. (Accessed 18 June 2021).
- Cundill, G., Thondhlana, G., Sisitka, L., Shackleton, S., Blore, M., 2013. Land claims and the pursuit of co-management on four protected areas in South Africa. *Land Use Policy* 35, 171–178. <https://doi.org/10.1016/j.landusepol.2013.05.016>.
- Els, H., Bothma, J.D.P., 2000. Developing partnerships in a paradigm shift to achieve conservation reality in South Africa. *Koedoe* 43 (1), 19–26. <https://doi.org/10.4102/koedoe.v43i1.205>.
- Fabricius, C., 2004. The fundamentals of community-based natural resource management. In: Fabricius, C., Koch, E., Magome, H., Turner, S. (Eds.), *Rights, Resources and Rural Development: Community-based Natural Resource Management in Southern Africa*. Earthscan, London, pp. 3–43.
- Fabricius, C., Collins, S., 2007. Community-based natural resource management: governing the commons. *Water Policy* 9 (S2), 83–97. <https://doi.org/10.2166/wp.2007.132>.
- Galvin, K.A., Beeton, T.A., Luizza, M.W., 2018. African community-based conservation: a systematic review of social and ecological outcomes. *Ecol. Soc.* 23 (3), 39. <https://doi.org/10.5751/ES-10217-230339>.
- Gardner, C.J., Nicoll, M.E., Birkinshaw, C., Harris, A., Lewis, R.E., Rakotomalala, D., Ratsifandrihamanana, A.N., 2018. The rapid expansion of Madagascar's protected area system. *Biol. Conserv.* 220, 29–36. <https://doi.org/10.1016/j.biocon.2018.02.011>.
- Glaser, B.G., 2002. Conceptualization: on theory and theorizing using grounded theory. *Int J Qual Methods* 1 (2), 23–38. <https://doi.org/10.1016/j.biocon.2018.02.011>.
- Hardin, G., 1968. The tragedy of the commons. *Science* 162, 1243–1248.
- Harris, J., Branch, G., Sibiyi, C., Bill, C., 2003. The Sokhulu subsistence mussel-harvesting project: co-management in action. In: Hauck, M., Sowman, M. (Eds.), *Waves of Change: Coastal and Fisheries Co-Management in South Africa*. Juta and Company Ltd, Cape Town, pp. 61–98.
- Hauck, M., Sowman, M., 2003. *Waves of Change: Coastal and Fisheries Co-management in Southern Africa*. Juta and Company Ltd, Cape Town.
- Herzog, L.M., Ingold, K., 2019. Threats to common-pool resources and the importance of forums: on the emergence of cooperation in CPR problem settings. *Policy Stud. J.* 47 (1), 77–113. <https://doi.org/10.1111/psj.12308>.
- Holmes-Watts, T., Watts, S., 2008. Legal frameworks for and the practice of participatory natural resources management in South Africa. *Forest Policy Econ.* 10, 435–443. <https://doi.org/10.1016/j.forpol.2008.02.005>.
- Jick, T.D., 1979. Mixing qualitative and quantitative methods: triangulation in action. *Adm. Sci. Q.* 24, 602–611. <https://doi.org/10.2307/2392366>.
- Kepe, T., 2009. Shaped by race. *Local Environ.* 14 (9), 871–878. <https://doi.org/10.1080/13549830903164185>.
- Kepe, T., 2018. Meanings, alliances and the state in tensions over land rights and conservation in South Africa. In: Mollett, S., Kepe, T. (Eds.), *Land Rights, Biodiversity Conservation and Justice: Rethinking Parks and People*. Routledge Studies in Sustainable Development. Routledge, London, pp. 17–30.
- Krüger, R., Cundill, G., Thondhlana, G., 2016. A case study of the opportunities and trade-offs associated with deproclamation of a protected area following a land claim in South Africa. *Local Environ.* 21 (9), 1047–1062. <https://doi.org/10.1080/13549839.2015.1065804>.
- Lejano, R., Araral, E., Agrawal, A., 2014. Special issue: interrogating the commons. *Environ. Sci. Pol.* 36, 1–92. <https://doi.org/10.1016/j.envsci.2013.07.007>.
- Masterson, V.A., Spierenburg, M., Tengö, M., 2019. The trade-offs of win-win conservation rhetoric: exploring place meanings in community conservation on the Wild Coast, South Africa. *Sustain. Sci.* 14 (3), 639–654. <https://doi.org/10.1007/s11625-019-00696-7>.
- Matose, F., Watts, S., 2010. Towards community-based forest management in Southern Africa: do decentralization experiments work for local livelihoods? *Environ. Conserv.* 37 (3), 310–319. <https://doi.org/10.1017/S0376892910000639>.
- Mbatha, P., 2018. The influence of plural governance systems on rural coastal livelihoods: the case of Kosi Bay (Doctoral Thesis). University of Cape Town, South Africa. <http://hdl.handle.net/11427/29768>. (Accessed 18 June 2021).
- McCann, K., Kloppers, R., Venter, A., 2015. Using biodiversity stewardship as a means to secure the natural wild values on communal land in South Africa. <https://www.fs.usda.gov/treesearch/pubs/49607>. (Accessed 18 June 2021).
- Meer, T., Schnurr, M.A., 2013. The community versus community-based natural resource management: the case of Ndumo game reserve, South Africa. *Can. J. Dev. Stud.* 34 (4), 482–497. <https://doi.org/10.1080/02255189.2013.849580>.
- Michler, L.M., Treydte, A.C., Hayat, H., Lemke, S., 2019. Marginalised herders: social dynamics and natural resource use in the fragile environment of the Richtersveld National Park, South Africa. *Environ. Dev.* 29, 29–43. <https://doi.org/10.1016/j.envdev.2018.12.001>.
- Musavengane, R., Leonard, L., 2019. When race and social equity matters in nature conservation in post-apartheid South Africa. *Conserv. Soc.* 17 (2), 135–146. <http://www.conservationandsociety.org/text.asp?2019/17/2/135/249616>. (Accessed 18 June 2021).
- Ostrom, E., 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge University Press, Cambridge.
- Ostrom, E., 2010. Analyzing collective action. *Agricultural Economics* 41, 155–166. <https://doi.org/10.1111/j.1574-0862.2010.00497.x>.
- Ostrom, E., Burger, J., Field, C.B., Norgaard, R.B., Policansky, D., 1999. Revisiting the commons: local lessons, global challenges. *Science* 284 (5412), 278–282. <https://doi.org/10.1126/science.284.5412.278>.
- Paterson, A.R., 2011. Bridging the gap between conservation and land reform: communally-conserved areas as a tool for managing South Africa's natural commons (Doctoral Thesis). University of Cape Town, South Africa. <http://hdl.handle.net/11427/11498>. (Accessed 18 June 2021).
- Paterson, A.R., 2015. Protected areas and community based conservation. In: Glazewski, J. (Ed.), *Environmental Law in South Africa*, Chapter 11. LexisNexis, South Africa. <https://store.lexisnexis.co.za/products/environmental-law-in-south-africa-skuZASKUPG1566>. (Accessed 18 June 2021).
- Paterson, A.R., Mkhulisi, M., 2014. Traversing South Africa's conservation and land reform objectives—lessons from the Dwesa-Cwebe Nature Reserve. *S. Afr. Law J.* 131 (2), 365–407. <https://hdl.handle.net/10520/EJC155162>. (Accessed 18 June 2021).
- Pomeroy, R.S., Katon, B.M., Harkes, L., 2001. Conditions affecting the success of fisheries co-management: lessons from Asia. *Mar. Policy* 25 (3), 197–208. [https://doi.org/10.1016/S0308-597X\(01\)00010-0](https://doi.org/10.1016/S0308-597X(01)00010-0).
- Ramutsindela, M., Shabangu, M., 2018. The promise and limit of environmental justice through land restitution in protected areas in South Africa. In: Mollett, S., Kepe, T. (Eds.), *Land Rights, Biodiversity Conservation and Justice: Rethinking Parks and People*. Routledge Studies in Sustainable Development. Routledge, London, pp. 31–48.
- Ratsimbazafy, H., Lavitra, T., Kochzius, M., Hugel, J., 2019. Emergence and diversity of marine protected areas in Madagascar. *Mar. Policy* 105, 91–108. <https://doi.org/10.1016/j.marpol.2019.03.008>.
- Reed, J., Barlow, J., Carmenta, R., van Vianen, J., Sunderland, T., 2019. Engaging multiple stakeholders to reconcile climate, conservation and development objectives in tropical landscapes. *Biol. Conserv.* 238, 108229. <https://doi.org/10.1016/j.biocon.2019.108229>.
- Relly, P., 2012. Madikwe game reserve, South Africa—investment and employment. In: Spenceley, A. (Ed.), *Responsible Tourism: Critical Issues for Conservation and Development*. Routledge, London, pp. 295–310.
- Rice, W.S., 2021. Change begets change: employing a change perspective to inform South Africa's coastal community conservation policy-praxis disjuncture. <https://hdl.handle.net/11245.1/128400af-2204-4acf-aa82-9192739f209d>. (Accessed 18 June 2021).
- Roe, D., Dickman, A., Kock, R., Milner-Gulland, E.J., Rihoy, E., 2020. Beyond banning wildlife trade: COVID-19, conservation and development. *World Dev.* 136, 105121 (doi: 10.1016%2Fj.worlddev.2020.105121).
- RSA (Government of the Republic of South Africa), 2009. National Environmental Management: Integrated Coastal Management Act No. 24 of 2008. *Government Gazette* No. 31884, 7 February 2009. https://www.gov.za/sites/default/files/gcis_document/201409/31884138.pdf. (Accessed 18 June 2021).
- RSA (Government of the Republic of South Africa), 1998a. National Environmental Management Act No. 107 of 1998. *Government Gazette* No. 19519, 27 November 1998. <https://www.environment.co.za/documents/legislation/NEMA-National-Environmental-Management-Act-107-1998-G-19519.pdf>. (Accessed 18 June 2021).
- RSA (Government of the Republic of South Africa), 1998b. National Forests Act No. 84 of 1998. *Government Gazette* No. 19408, 30 October 1998. https://www.gov.za/sites/default/files/gcis_document/201409/a84-98.pdf. (Accessed 18 June 2021).
- RSA (Government of the Republic of South Africa), 2004a. National Environmental Management: Protected Areas Act No. 57 of 2003. *Government Gazette* No. 26025, 18 February 2004. https://www.environment.gov.za/sites/default/files/legislation/nema_amendment_act57.pdf. (Accessed 18 June 2021).
- RSA (Government of the Republic of South Africa), 2004b. National Environmental Management: Biodiversity Act No. 10 of 2004. *Government Gazette* No. 26436, 7 June 2004. https://www.environment.gov.za/sites/default/files/legislations/nema_amendment_act10.pdf. (Accessed 18 June 2021).
- RSA (Government of the Republic of South Africa), 2014. National Environmental Management: Integrated Coastal Management Amendment Act No. 36 of 2014. *Government Gazette* No. 38171, 31 October 2014. https://www.gov.za/sites/default/files/gcis_document/201501/3817131-10act36of2014integratedcoastalmanagem.pdf. (Accessed 18 June 2021).
- Sarkki, S., Acosta García, N., 2019. Merging social equity and conservation goals in IPBES. *Conserv. Biol.* 33 (5), 1214–1218. <https://doi.org/10.1111/cobi.13297>.
- Shackleton, C., 2009. Will the real custodian of natural resource management please stand up. *S. Afr. J. Sci.* 105 (3–4), 91–93. http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S0038-23532009000200008. (Accessed 18 June 2021).
- Shackleton, C., Shackleton, S., Cousins, B., 2001. The role of land-based strategies in rural livelihoods: the contribution of arable production, animal husbandry and natural resource harvesting in communal areas in South Africa. *Dev. South. Afr.* 18, 581–604. <https://doi.org/10.1080/03768350120097441>.
- Sinthumule, N.I., Mashau, M.L., 2020. Traditional ecological knowledge and practices for forest conservation in Thathe Vondo in Limpopo Province, South Africa. *Glob. Ecol. Conserv.*, e00910. <https://doi.org/10.1016/j.gecco.2020.e00910>.

- Sowman, M., Sunde, J., 2018. Social impacts of marine protected areas in South Africa on coastal fishing communities. *Ocean Coast. Manag.* 157, 168–179. <https://doi.org/10.1016/j.ocecoaman.2018.02.013>.
- Sowman, M., Hauck, M., Branch, G., 2003. Lessons learned from nine coastal and fisheries co-management case studies. In: Hauck, M., Sowman, M. (Eds.), *Waves of Change: Coastal and Fisheries Co-management in South Africa*. Juta and Company Ltd, Cape Town, pp. 299–340.
- Sowman, M., Raemaekers, S., Sunde, J., 2014. Guidelines for Integrating Human Dimensions Into MPA Planning and Management. Environmental Evaluation Unit, University of Cape Town. http://awsassets.wwf.org.za/downloads/hd_of_mpa_guidelines_full.pdf. (Accessed 18 June 2021).
- Sunde, J., 2014. Customary Governance and Expressions of Living Customary Law at Dwesa-Cwebe: Contributions to Small-Scale Fisheries Governance in South Africa (Doctoral Thesis). University of Cape Town, South Africa. <http://hdl.handle.net/11427/13275>. (Accessed 18 June 2021).
- Sunde, J., Sowman, M., Smith, H., Wicomb, W., 2013. Emerging Proposals for Governance of Tenure in Small-scale Fisheries in South Africa. *FAO Land Tenure Journal*. FAO, Rome, Italy. <http://empres-i.fao.org/nrla/nr/tenure/land-tenure-journal/index.php/LTJ/article/view/76/112>. (Accessed 18 June 2021).
- Thondhlana, G., Cundill, G., 2017. Local people and conservation officials' perceptions on relationships and conflicts in South African protected areas. *Int. J. Biodivers. Sci. Ecosyst. Serv. Manag.* 13 (1), 204–215. <https://doi.org/10.1080/21513732.2017.1315742>.
- Thondhlana, G., Shackleton, S., 2015. Cultural values of natural resources among the San people neighbouring Kgalagadi Transfrontier Park, South Africa. *Local Environ.* 20 (1), 18–33. <https://doi.org/10.1080/13549839.2013.818950>.
- Thondhlana, G., Shackleton, S., Muchapondwa, E., 2011. Kgalagadi Transfrontier Park and its land claimants: a pre- and post-land claim conservation and development history. *Environ. Res. Lett.* 6 (2), 1–12. <https://doi.org/10.1088/1748-9326/6/2/024009>.
- Thondhlana, G., Shackleton, S., Blignaut, J., 2015. Local institutions, actors, and natural resource governance in Kgalagadi Transfrontier Park and surrounds, South Africa. *Land Use Policy* 47, 121–129. <https://doi.org/10.1016/j.landusepol.2015.03.013>.
- Thondhlana, G., Cundill, G., Kepe, T., 2016. Co-management, land rights, and conflicts around South Africa's Silaka Nature Reserve. *Soc. Nat. Resour.* 29, 403–417. <https://doi.org/10.1080/08941920.2015.1089609>.
- Transparency International, 2019. Corruption perception index 2018. <https://www.transparency.org/cpi2018>. (Accessed 18 June 2021).
- Traynor, C.H., Hill, T., 2008. Mangrove utilisation and implications for participatory forest management, South Africa. *Conserv. Soc.* 6 (2), 109–116. <http://www.conservationsandsociety.org/text.asp?2008/6/2/109/49205>. (Accessed 18 June 2021).
- World Justice Project, 2019. Rule of Law Index 2019. The World Justice Project, Washington, DC. <https://worldjusticeproject.org/our-work/research-and-data/wjp-rule-law-index-2019>. (Accessed 18 June 2021).
- Wright, D.R., Stevens, C.M., Marnewick, D., Mortimer, G., 2018. Privately protected areas and biodiversity stewardship in South Africa: challenges and opportunities for implementation agencies. *PARKS* 24 (2), 45–62. Retrieved from: <https://parksjournal.com/wp-content/uploads/2018/11/PARKS-24.2-Low-Resolution.pdf#page=45>. (Accessed 18 June 2021).