

Social capital and the pursuit of ecotourism as a land-use option in land reformed communities: a study of Kwa-Zulu Natal's tribal Areas, South Africa

Regis Musavengane*

Department of Geography and Environmental Studies, School of Geography,
Archaeology and Environmental Studies,
University of the Witwatersrand, Johannesburg, South Africa, P/B 3, Wits 2050. Email:
regmuss2000@yahoo.com

Professor Danny Simatele

Centre for Water Research and Development (CiWaRD);
Department of Geography and Environmental Studies, GAES,
University of the Witwatersrand, Johannesburg, South Africa,

Corresponding Author*

Abstract

Following decades of apartheid that manifested itself through oppression and racially-based land dispossessions; the democratic South African regime developed a platform for previously oppressed people to re-claim their land. Successful land claims on conservation areas by previously disenfranchised communities have often resulted into the co-management agreements with external actors, including conservation organisations in pursuit of both Community-Based Ecotourism (CBET) and enhancement of sustainable livelihoods. Using field-based data collected through methods inspired by the traditional of participatory research such as semi-structured interviews and focus group discussions, this paper explores the role of community participation in natural resources management. It specifically examines the extent to which social capital can be instrumental in promoting collaborative management of community based ecotourism (CBET) initiatives in tribal communities of Kwa-Zulu Natal, South Africa. It is argued in the paper that social capital is an indispensable tool for successful co-managing of CBET schemes in land reformed tribal communities and should be part of the integrated national development agenda and policy framework.

Key Words: Community Based Ecotourism, Social Capital, Land claim and Collaborative environmental management

Introduction

Political transformations in most developing nations have been accompanied with vast land claims by indigenous communities who were forcibly detached from their traditional land during colonization and apartheid eras (Holden & Otsuka, 2014; Cundill *et al.*, 2013). In the context of sub-Saharan African countries, the need for land-reform has been aggravated by the great scarcity of farmland (Headey & Jayne, 2014). However, most of the reclaimed land is being done in areas pursuing conservation activities (Cundill *et al.*, 2013; Musavengane & Simatele, 2016). Caught between owning the land and pursuing conservation as a land use option and improving their livelihoods; local communities have tended to form collaborations with external stakeholders in managing communally owned natural resources (Morton *et al.*, 2012; Cundill *et al.*, 2013). Collaborative management (commonly known as co-management) is perceived as a sustainable route in governing common pool natural resources in re-claimed areas (Travers *et al.*, 2015; Anaafo, 2015). Co-management

“describe a partnership by which two or more relevant social actors collectively negotiate, agree upon, guarantee and implement a fair share of management functions, benefits and responsibilities for a particular territory, area or set of natural resources” (Borrini-Feyerabend, 2004:69). Whilst there is a well-developed literature on collaborative and social networks of reclaimed land in state-run protected areas, there is a considerable lack of research on collaboration efforts in reclaimed privatised wildlife farms (Brooks *et al.*, 2012; Spierenburg & Brooks, 2014).

Muboko and Murindagomo (2014) define Collaborative Community-based natural resources management (CCBRM) as a group of people with same goals who convene to police and manage a common pool of natural resources (CPR) (Spires *et al.*, 2014). Existing literature suggest that any effective CBRM initiative requires the support and participation of local communities. Through community participation; trust and social networks (or social capital) are developed which then act as a significant resource in the day to day operations and lifecycle of a CBRM initiative, particularly in rural contexts (Liu *et al.*, 2014). Social capital is centred on social networks and results into building common values and norms that enhance understanding and participation of all stakeholders in collaborative management of communally owned natural resources (Baksh *et al.*, 2013). Social capital is defined as the networks of relationships that foster the development of resources and benefits that can be used for the good of the individual as well as the collective (Putnam, 2000; Floress *et al.*, 2011).

This article explores the role of community participation in natural resources management. It is specifically interested in examining the extent to which social capital can be an instrument for promoting collaborative management of community based ecotourism (CBET) initiatives in tribal communities of Kwa-Zulu Natal, South Africa. Much emphasis is placed on establishing the role of community participation in managing their resources in an effort to achieve sustainable ecotourism schemes in rural areas. The article first provides theoretical background of social capital in CBET. Then outline the methodological consideration followed. Thereafter, research findings are reported then conclusions are made based on these results.

Social Capital and collaborative community based ecotourism

The International Ecotourism Society (2004) defines ecotourism as responsible travel to natural areas that conserves the environment and sustains the well-being of local people. This definition of CBET implies that social dimension of ecotourism cannot be ignored in creating sustainable CBETs (Jones, 2005). It is inherent in the above definition that for any CBET efforts to be fruitful, there is a need to solicit appropriate support from all stakeholders and encourage the participation of local communities (Musavengane & Matikiti, 2015). This view is supported by Hakim and Nakagoshi (2008) and Liu *et al.* (2014) who writes that, social capital plays a vital role in the success of CBET ventures yet the issues of local community participation and involvement in tourism are rarely discussed in scientific literature. Similarly, Jones (2005), Okazaki (2008) and Ha (2010) found that, although social capital is a term that is commonly used in the development literature, its use in the tourism literature is a recent development and there has been no consensus on what it implies. Despite the lack of agreement on what social capital means within the tourism discourse, it can be speculated that social capital is an aspect that is centred around the notion of how social networks intertwine in forming shared societal norms, values, aspirations and how these combine in facilitating a process of co-operation among actors in achieving specific objectives and goals (Putnam, 1995; Baksh *et al.*, 2013; Simatele & Simatele 2015).

Social capital is a result of a systematic interaction of several factors, among which include aspects such as social relationships that exist between community members (Krishner, 2001; Jones, 2005). These social associations, to a large extent influence and form the basis

on which society reacts to given and specific scenarios (Lyon, 2000; Simatele, 2010). From these observations, it can therefore be argued that social capital is a systemic process in the formation of social networks and relationships that are aimed at fostering the development of resources and benefits that can be used for the good of the individuals as well as the collective (Portes 1998, Woolcock, 1998; Pretty & Ward, 2001; Musavengane & Simatele, 2016) The formation of social capital in a community promotes social cohesion and this cohesion can play a pivotal role in inspiring communities attain desired goals. Pretty & Smith, (2003) for example, argue that positive social cohesion facilitates cooperation of all stakeholders and significantly reduces possible costs and negative impacts associated with disjoined groups.

Trust, reciprocity and co-operation can be regarded as the three main features of social capital. It can therefore be argued that, the stronger these three elements are within a community, the greater the collaborative output of Community-Based Ecotourism schemes in local communities (Zahra & McGehee, 2013). Collaborative management has its roots in the development of national and international policies which were popularised in the 1980's and 1990's (Anderson & Grove, 1987; Berkes *et al.*, 1991; Spires *et al.*, 2014). In the same vein, Chambers (1994) and Hove *et al.* (2013) for instance, stress the need for greater civic participation in decision making in an awake to the growth of democratic and development discourses which empowers poor people through natural resource use. Similarly, Simatele and Simatele (2014) support the importance of grassroots decision making in managing common pool resources, as it enables and promotes collective cooperation of stakeholders in devising strategies for effective resource management.

The need for collaborative management in common pool resources was born out of growing concerns on centralization in the management of community natural resources, a situation that left many communities with no or little voice in the way natural resources were governed (Simatele & Simatele, 2015; Musavengane & Matikiti, 2015). Consequently, communities felt increasingly disenfranchised and this resulted into unsustainable use of natural resources and environmental degradation (Ngubane & Brooks, 2013). The need for sustainable solutions to natural resource management and community development, necessitated the search for ecological approaches that emphasized the necessity for engaging all stakeholders in decision making and learning based approaches requiring collective and adaptive management strategies such as the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) implemented in Zimbabwe (Frost & Bond, 2008; Holdon & Otsuka, 2014).

Despite the paradigm shift in resource management from top-down systems to bottom-up strategies, research evidence seem to suggest that community-based approaches to natural resource conservation can be problematic (see Dressler *et al.*, 2010). A critical question, for example, revolves around the issue of whether the single structure collaborative banner can simultaneously be used to pursue both conservation and community development efforts. Hove *et al.* (2013) for example, argues that nature conservation often becomes compromised in the process of pursuing both goals. Another critical concern as observed by Brockington *et al.*, (2008) is on the lack of benefits accruing to local residents, an aspect that is considered by some observers as resulting from the dominant role assumed by the private sector and which allows it to gain control over resources at the expense of local residents' rights of access and use (see also Dzingirai 2003;). In support of these sentiments, Büscher and Dressler (2012) are of the view that co-management schemes often end up effectively disenfranchising local people, who lose control over natural resources, while private sector partners involved in these programmes benefit. The level of importance in involving communities in managing community natural resources is revealed by its enshrinement in World conventions such as the World Conservation Strategy and the Brundtland Commission in which it is emphasised that communities must be empowered and allowed to play a cardinal role in devising environmental management strategies. Cundill *et al.* (2013)

for example argues that, decentralization of decision making is a critical pillar in enhancing various co-management types as it informs, shapes and influences the design processes of collaborative projects. Edifying on this observation, Muller (2012) is of the view that co-management in the management of common pool resources facilitates a situation where local communities have control over resources and promotes self-sustenance or sustainable development of the poorest in a community.

In South Africa, the Makuleke community located in Western Kruger National Park (WKNP) reclaimed control of a piece of land in 1996 following a protracted court processes for land restitution. This piece of land has been, and continues to be managed under a Contractual Park arrangement between the Makuleke Community Property Association, SANParks and Wilderness Safaris since 1996. This has earned the Makuleke Contract Park a brand conservation identity as 'The Heart of The Great Limpopo Transfrontier Park' due to its strategic location in the centre of the parks (Makuleke, 2004). Due to its potential in community based ecotourism, Makuleke community entered into partnership with private partners who provided funds and material assistance for development projects. For the benefit of future similar collaboratives, it is vital to note the existing aspects of private sector partnership in Makuleke: the Community Property Association (CPA) receives 10% of revenue; in return the community will be given jobs and skilled in areas of their choice; and an arrangement on the Built-Operate Transfer (BOT) which allows private partners to build and operate lodges for a specific period then transfer ownership to the CPA (Makuleke, 2004). Through this partnership agreement, CBET revenue benefits the Makuleke community in various ways: creation of jobs, scholarship for local students, feeding schemes for the poorest individuals and households in the community and other indirect benefits. Coria and Calfucura (2012) observe that, the shortage of resources, lack of skills and poverty often reduces bargaining power and partnerships in local community's such as the one in Makuleke allows a situation where external partners with the 'know how' negotiate on behalf of local communities to ensure that appropriate benefits accrue to the community. Although, Makuleke is widely recognised as a 'successful' co-management model within and beyond Sub-Saharan region, the jobs it offers are regarded as unsustainable as most people are employed in unskilled lower position with meagre salaries (Steenkamp & Uhr, 2000; Cundill *et al.*, 2013; Cundill *et al.*, 2013).

In Eastern Cape Province of South Africa, Dwesa-Cwebe community ceded its goals of pursuing other land-use options (such as pastures for cattle grazing) in favour of conservation. This was precipitated by an out of court land claim settlement of R14 276million (*equivalent to US\$921 032.26,*) by the state (Ntshona *et al.*, 2013). The focus was not to compensate individual community members; rather, the money was to be invested in various community development schemes that would benefit the entire community at personal level. For example, Dwesa-Cwebe Nature Reserve was earmarked to be a springboard for development of various ecotourism ventures (Cundill, 2013). Furthermore, the Community Forest Agreement (CFA) was developed and incorporated in the land claim settlement to ensure sustainable use of land and associated resources. The CFA has a clause that accommodates use and management of natural resources by local people. As with the trend in land claims in South Africa of having co-management when there is land claim, Dwesa-Cwebe community could not be exonerated from this. The Department of Water Affairs and Forestry, Eastern Cape Parks, and the Department of Land Affairs and local government institutions co-manage the Dwesa-Cwebe Nature Reserve as instituted by the Land Trust under CFA (Ntshona *et al.*, 2013). Regardless of co-management agreement, Ntshona *et al.* (2013) report that local people were disenfranchised their rights to natural resource use by the game reserve management. Enlightening on this observation, Palmer *et al.* (2006) note that exclusion of local communities is more the norm than the exception inevitably increasing conflict between conservation authorities and local communities. With this in mind, various authors have included exclusion or inclusion as an important element in measuring social capital (Jones, 2005; Musavengane & Simatele, 2016).

From the above discussion it can be deduced that social capital greatly focuses on social networking within local communities. Social networking has potential of invigorating community social and economic aspirations that may trigger sustainable natural resource use in CBET (Moser & Felton, 2006; Moore *et al.*, 2014). Moore *et al.*, (2014) for example, are of the view that community based natural resources management (CBNRM), if properly instituted and managed can result in the propagation of systems and processes that can lead to effective strategies for natural resource management and the opposite is also true. For example, in his study on the fractured state in the governance of private game farming, Tariro Kamuti find out that low social capital within the community deters attainment of CBET goals (Kamuti, 2014). His case study in Umtshezi Municipality revealed that there are conflicts between land beneficiaries and neighbouring farm owners. For instance, one of Kamuti's respondents shared concerns on the weak social relationship between new land owners and their neighbours:

"The negatives associated with game farming have to do with land given to the people by the state, something that has come up next to us over there and there are a lot of problems from those people. There is a problem; they stole our fence, they come and steal wood, and poachers come from them. I have spoken to councillors but still we cannot control it. We work hand in hand with a councillor and his team which seems to help a little to solve the problems" Kamuti (2014:201).

Weak relationships between community members might derail CBET efforts as it deters tourists from visiting the area (Musavengane & Matikiti, 2013). The studies presented thus far provide evidence that embracing the concept of social capital in community-based ecotourist creates and enhances vertical and horizontal linkages. As Jones (2005:305) note, "a nuanced understanding sees social capital as part of power relations within a system and embedded within its cultural and political context".

Methodological consideration

Description of research site

Gumbi community is located in Uphongolo local municipality in the Zululand District Municipality in Northern KwaZulu Natal Province (see FIG 1). It has five settlement areas; Zonyama, Cotlands, Hlambinyathi, Bethal and Candover. According to the local Headman (*Induna*- in IsiZulu language), there are approximately 312 households in the Gumbi community. The Gumbi people who were forcibly removed from their land in 1960s were restored land under the Land Reform Process in 2005. The Gumbi is the main tribe that resides in the Gumbi community and now proud owners of the land that was previously settled by white game farmers. After claiming the land, the Gumbi people decided to keep large portions of the land under conservation and create a consolidated game reserve, *Somkhanda Game Reserve* for economic and social development in the community.

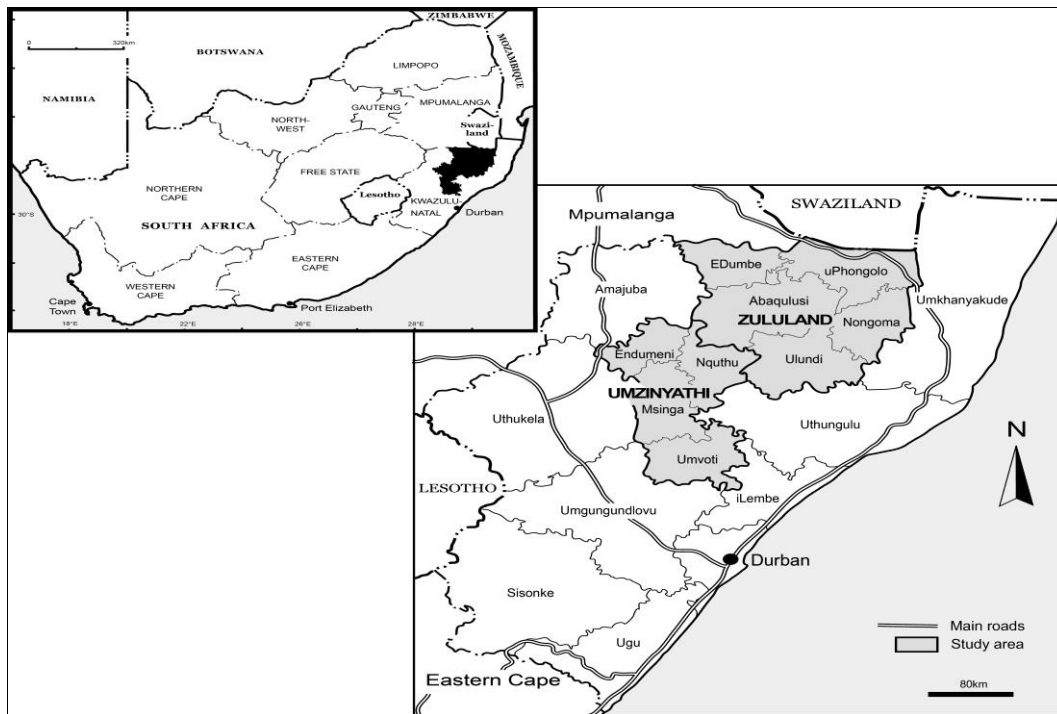


Fig 1. Location of study sites: Umzinyathi and Zululand

Source: Cartographic Unit, Geography Department, University of the Witwatersrand.

According to Nathi Gumbi, the founder and beneficiary of Somkhanda Game Reserve, the community partnered with Wildlands Conservation Trust (*referred to as Wildlands henceforth*) after failing to manage it on their own for the first five years after successfully claiming the land. Emvokweni Community Trust (ECT) contracted Wildlands to manage and transfer skills to local community members (Emvokweni Community Trust is a legally, constituted board responsible for operations of the Somkhanda Game Reserve. They are the owners of the Game Reserve and members are voted in by land beneficiaries). ECT also leased tourism section to African Insight so that they oversee all tourism operations. Both entities are operating on 5year leases. The established collaboratives necessitated skills development projects that would ensure transference of skills from Conservation groups to local people. The reserve is the first community owned private wildlife reserve to be created from land reform processes in South Africa (Dugmore, 2013). According to Wildlands Conservation Trust, the game reserve spans 16 418.82 hectares of land, Settlement and Grazing area has 5 209.40 hectares and still 11 508.72 hectares are still pending land claim (See FIG 2).

Somkhanda Game Reserve boasts a number of wildlife such as rhinoceros, impala, kudu and wild dogs, just to mention but a few. In an interview with the African Insight Manager, it was highlighted that tourists especially student groups enjoy wildlife seeing during educational tours. During the educational tour, the students will get engaged in various activities such as rhino monitoring, camera trap project, tree identification and learn bush skills with qualified tracker/guide. In support of the tour activities, the Somkhanda game reserve's tourism section operates a bush lodge facility; a private camp consisting of 2 lodges, each with a deluxe/family suite and 2 standard en-suite units. The reserve also has three private family chalets; each unit is private, set away from the rest of the lodge and complete with its own firepit and braai stand. Thirdly, its 20 bed mobile tented safari camp is fully mobile and can be set on a secluded setting within Somkhanda Game Reserve.

To enable a comparative analysis, the Ngome Game Reserve owned by the Zondi community was chosen as our second case study. Zondi community is part of

Umzinyathi District Municipality under Umvoti Local Municipality, north of Greytown in KwaZulu Natal. It is mainly inhabited by the Zondi tribe, who received their land under the land redistribution process in 1996. The community established a game reserve that spans 4 300ha; Ngome Game Reserve. The game reserve is situated approximately 1 and half hours from Pietermaritzburg (see FIG 1). It was previously named Bhambatha's Kraal and renamed to Ngome Game Reserve to reflect its transformation from private to community ownership. Prior to the name Bhambatha's Kraal, the labour tenants of the Zondi tribe occupied the two labour farms (Aaangelen and Olivefontein) that were then converted to game farming in 1974 and 1982 respectively.

Ngome Game Reserve is managed by the Ngome Community Land Trust (NCLT) in partnership with Ezemvelo-KZN Wildlife (EKZNW) and KwaZulu-Natal Hunting and Conservation Association (KZNHCA). The NCLT was established in 2004 as a reaction to the corruption and money laundering allegations of the previous trust. These allegations led to lack of trust in the Ngome Game Reserve project. Since then, it is reported that the community members lacks confidence in the management and operation of the game reserve (Ngome, 2012). These allegations culminated into poor management of Ngome Game Reserve and derailed progress in attaining the intended goals of being a benchmark project of other rural communities in South Africa

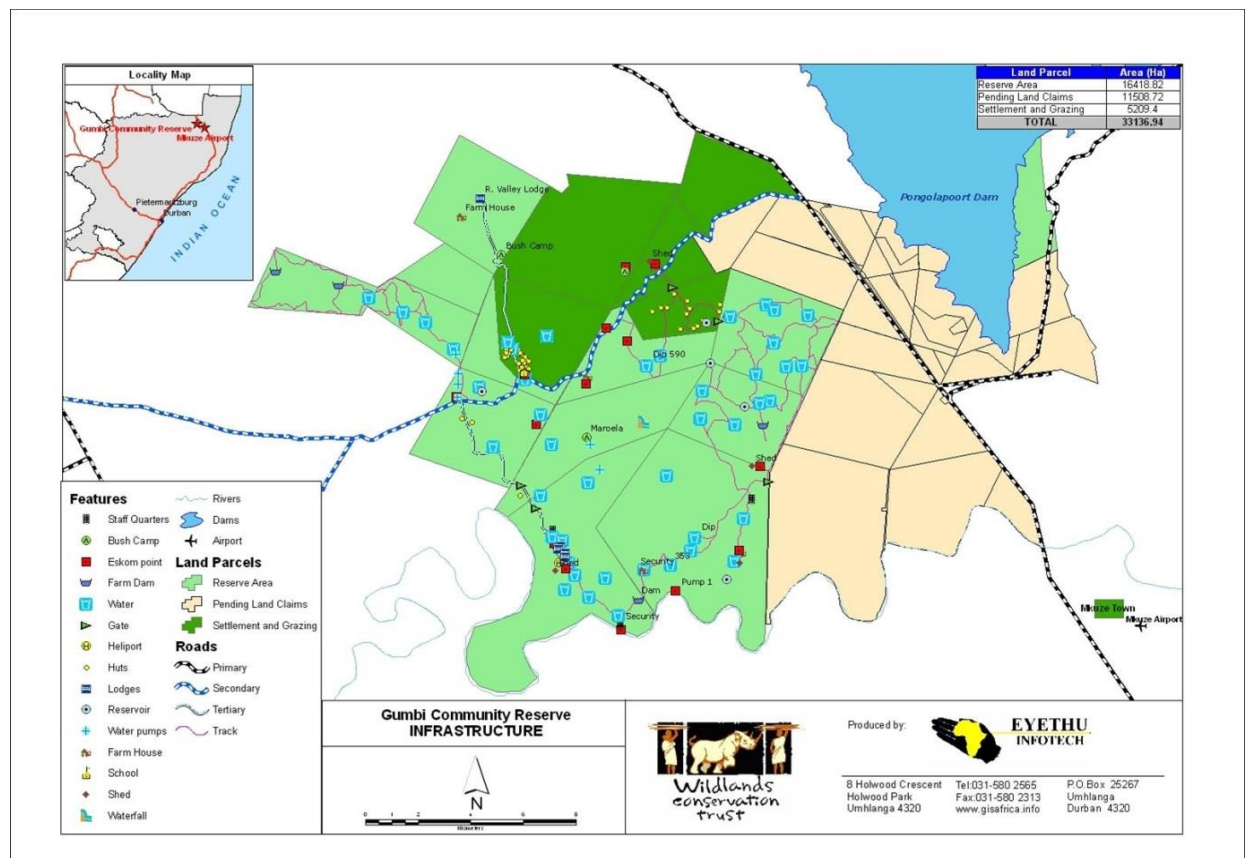


Fig 2. Somkhanda Game Reserve Map
Source: Courtesy of Wildlands Conservation Trust

The research approach

Following his seminal work on social capital, Putman and others adopted the use density of membership in community organisations in measuring social capital (Putman, 2000). One disadvantage of this approach is that it excludes cognitive social capital indicators as emphasis is mainly placed on structural social capital. Furthermore,

Krishna (2001) argues that the approach cannot be generalised in all communities due to heterogeneity of cultures. Thus, in his study on measuring social capital conducted in India, Krishna developed a questionnaire with a range of questions on social cohesion, trust, collective action, solidarity, reciprocity and group membership. The design of the questionnaire was based on the six broad social capital dimensions; groups & networks, collective action & cooperation, information & communication, social cohesion & inclusion and empowerment & political action. With some modifications it was decided to adopt some of Krishna and Shrader's research questions which they developed during their noteworthy World Bank research on social capital (see Krishna & Shrader, 2000). Based on this, a structured questionnaire which captures both structural and cognitive social capital was developed for the current study (see Table 1). It must be note that social capital is here conceptualised, and embedded in the survey as well as operationalised in the study to ensure content validity and reliability of the findings. In order to achieve this, both historical and contemporary literature on social capital measures were extensively reviewed, evaluated and analysed (Krishna & Shrader, 2000).

Table 1. Survey Responses to Questions and Social Capital Indicators & Scores

Social Capital Indicators	Answer	Gumbi (%) N= 30	Zondi (%) N=23	Scoring system ^a	Gumbi Score ^b	Zondi Score ^b	Stat Signif. Diff. ^c
Background information							
Proportion M/F		14/16	11/12				
Average Age		36.3	35.2				
Mutually beneficial collective action							
In the last month, how many days have you joined together with other community members for community work	Never Once 2-5 days More than 5 days	44 50 6 0	72 28 0 0	0 0.33 0.67 1	0.88	0.51	U= .193
Structural indicators							
<i>Vibrancy of Associational Life</i> Average membership in any organisation	Number of organisations			1 each	2.0	2.0	U= .106
<i>Norms and Rules</i> The rules and regulations in this community are adhered to	Very well Well A little Not very well	30 47 13 10	10 4 4 82	1 0.33 -0.33 -1	0.89	0.21	U=.01
Cognitive indicators							
<i>Reciprocity and Sharing</i> Would you prefer jointly sharing grazing land or own an area by yourself?	Individually Jointly	6 94	5 95	0 1	0.94	0.94	U=.608
Community	Strongly Disagree	73	4	1			

members are only interested in their own welfare	Disagree	17	22	0.67	0.93	0.32	U=.408
	Neither Agree/Disagree	0	9	0.5			
	Agree	10	17	0			
	Strongly Agree	0	48	-1			
Community leaders are only interested in their own welfare	Strongly Disagree	0	0	1	0.27	0.25	U=.103
	Disagree	0	4	0.67			
	Neither Agree/Disagree	10	9	0.5			
	Agree	20	9	0			
	Strongly Agree	70	78	-1			
If I have a problem, there is always someone who will help	Strongly Disagree	3	78	-1	0.71	0.22	U=.338
	Disagree	7	9	0			
	Neither Agree/Disagree	37	13	0.5			
	Agree	23	0	0.67			
	Strongly Agree	30	0	1			
<i>Conflict and cohesion</i> There is social unity within the community	Strongly Disagree	0	9	-1	0.96	0.87	U= .101
	Disagree	3	0	0			
	Neither Agree/Disagree	3	9	0.5			
	Agree	10	21	0.67			
	Strongly Agree	84	61	1			
There is conflict on what is acceptable in managing the game reserve	Strongly Disagree	0	0	-1	0.55	0.33	U= .193
	Disagree	7	0	0			
	Neither Agree/Disagree	73	4	0.5			
	Agree	17	9	0.67			
	Strongly Agree	3	87	1			
<i>Trust</i> Most people in this community are honest and can be trusted	Strongly Disagree	0	0	-1	0.96	0.94	U= .101
	Disagree	0	9	0			
	Neither Agree/Disagree	10	0	0.5			
	Agree	7	21	0.67			
	Strongly Agree	83	70	1			
Our community leaders are honest and can be trusted	Strongly Disagree	53	87	-1	0.44	0.31	U=.120
	Disagree	13	4	0			
	Neither Agree/Disagree	3	5	0.5			
	Agree	7	4	0.67			
	Strongly Agree	24	0	1			
Community Trust members are honest and can be trusted	Strongly Disagree	80	57	-1	0.35	0.44	U=.47
	Disagree	13	9	0			
	Neither Agree/Disagree	4	30	0.5			
	Agree	3	4	0.67			
	Strongly Agree	0	0	1			
<i>Power, exclusion, equity and decision making</i>							

There is open dialogue in managing and sharing Game Reserve information	Strongly Disagree	62	91	-1	0.61	0.15	U=.257
	Disagree	12	4	0			
	Neither Agree/Disagree	10	1	0.5			
	Agree	13	4	0.67			
	Strongly Agree	3	0	1			
There is fairness in resource allocation & I am involved in decision making	Strongly Disagree	0	87	-1	0.50	0.17	U=.377
	Disagree	13	9	0			
	Neither Agree/Disagree	40	0	0.5			
	Agree	10	4	0.67			
	Strongly Agree	37	0	1			

^a This is the subjective score allocated to each answer, based on the methodology and scoring system developed by Krishna and Shrader (2001): -1 (high negative social capital) through 0 (no social capital) to 1 (high positive social capital).

^b This is the calculated score for each answer, demonstrating relative differences between Zondi and Gumbi communities.

^c Exact significance are displayed. The significance level is .05.

Field-based data collection took place between June and July 2015 in both research sites. It was purposely decided to employ a confidence level of 95% to draw a sample population and this resulted into a total of thirty (30) households from Gumbi and twenty-three (23) households from Zondi being selected respectively. To attain a representative sample of the household composition of the two communities, a stratified sampling method was used. Furthermore, focus group discussions were done with 12 Gumbi and 8 Zondi community participants. In addition, judgemental sampling was applied to identify and engage with key actors such as policy makers, who often function as leaders of conservation organisations; project coordinators and managers, local community leaders and chiefs operating within the study locations.

Open ended questions and focus group discussions were employed in order to enable the researchers to determine changes in the social capital variables and possible reasons for such occurrences if any. Moreover, in order to obtain an in-depth understanding of social networks within Zondi and Gumbi communities, questions on inclusion and exclusion of community members in decision making were included in the questionnaire. A scoring system was developed to rank the responses given, where -1 is high negative social capital and on the other end 1 represents high positive social capital and 0 signifies absence of it. Thereafter, average social capital scores are then calculated. Table 1 shows the calculated social capital score averages together with percentages of interviewees giving each response. Thereafter, the Mann-Whitney-Wilcoxon (MWW) *U* tests (sometimes called the Wilcoxon rank-sum test) were conducted on the scores to test and establish certain correlations specifically to determine whether the scores difference between Gumbi and Zondi community were significant (see Table 1). MWW is used where two data samples are independent and if they come from distinct populations and the samples do not affect each other. Using the Mann-Whitney-Wilcoxon Test enabled us to decide whether the population distributions are identical *without* assuming them to follow the normal distribution. The Mann-Whitney-Wilcoxon *U* test was adopted in the current study as it covers samples with different sizes, the analysis was done using SPSS version 23. The Mann-Whitney-Wilcoxon signed rank test results shown in Table 1 display exact significance at a significance level of 0.05 (where $p > 0.05 =$ accept null hypothesis).

Results and Discussion

Mutually Beneficial Collective Action: The first set of social capital indicators set to measure the level and role of Mutually Beneficial Collective Action in pursuing CBET. It was observed

that the existence of Somkhanda Game Reserve in its functional state and the dilapidation of Ngome Game Reserve can be attributed to collective effort of the community. Thus, the discussion that follows critically examines the role of cognitive and structural social in the shaping the current state of the Game Reserves. This section will also report on the influence of community 'norms' and 'values' (major aspects of social capital) in conservation and utilisation of natural resources in Zondi and Gumbi communities.

In Gumbi community, focus group discussions revealed that the research participants' way of life and perceptions are heavily embedded and shaped by traditional norms and values. During these discussions 10 of the 12 participants explained their strong ties with Traditional Leaders. Their loyalty to traditional system of governance as well as culture seems to form the basis on which their everyday lives. Strong evidence of this is reflected in the inclusion of the chief in decision making and operations of the Somkhanda community game reserve. Further discussions with Gumbi research participants revealed that an estimated 98% of the responses suggested that they were happy with the involvement of the late chief in decision making and the general operations of the game reserve. Thus, the cultural significance and influential role of the 'late' Chief instilled collective action amongst community members and substantial variations of social capital can be attributed to this. For example, during our field work visit, the Gumbi men were organising a community service to do during Mandela Day (a national holiday in the Republic of South Africa) which was to be followed by a friendly soccer match. In addition to this, Gumbi community is working on a water project near Somkhanda Game Reserve funded by Wildlands (bridging social capital). They are hoping to have diverse community projects, to enhance the vibrancy of associational interactions. According to this evidence we can infer that the increase in structural social capital can be attributed to a significant high level of community unity. Interviews with Gumbi households supported the general presence of collective action in the community. Of the 30 respondents, 50% reported that they did a community project at least once hence higher average social capital score of 0.88 compared to Zondi community with 0.51 where 28% cited that they at least met for community project once (See Table 1). These results give more weight to previous findings that suggests that social relationships that exist between community members influence the level of social capital within the community (Lyon, 2000; Krishner, 2001; Jones, 2005; Simatele, 2010).

If we turn to Zondi community, although the game reserve is now in a non-functional state there is high social unity amongst community members. During focus group discussions 7 of the 8 focus group participants explained how the community is intertwined and how they work together to achieve community goals. In their account of their livelihood, they cited that they do assist each other with the fetching of water from far sources as water is generally a scarce resource in the community. A female respondent in her late 70s further explained that they used to have community meetings to discuss how to resolve water challenges and also whenever there is a problem the community would gather and resolve the issue. For instance men would go and chase monkeys from hurting their goats and crops (bonding social capital). Regardless, of high collective action, 72% of interview respondents reported that they had never met for community work in the past month (See Table 1). Ninety two percent of respondents attributed this to lack of positive commitment from Traditional leadership structures. Thus, the lack of bonding social capital between community members and Traditional authorities signals a direct link to the dereliction of Ngome Game Reserve. The Mann-Whitney-Wilcoxon signed rank test results as shown in Table 1, indicate that the observed difference on mutually beneficial collective action, is significant between measurements in both communities ($p > 0.05$, $U = .193$). The null hypothesis is therefore accepted. In summary, these results prove that social associations, to a large extent influences and forms the basis on which society reacts to given and specific scenarios as noted by Lyon (2000) and Simatele (2010). Furthermore, these findings are consistent with those of Tariro Kamuti, who suggested that low social capital within the community deters attainment of CBET goals (Kamuti, 2014).

Structural Social Capital: The second set of indicators aimed to measure the level and role of Structural Social Capital in pursuing community-based ecotourism. Both Gumbi and Zondi communities have an average of 2.0 in individual membership in community organisations (Table 1). A common view amongst interviewees is that they consider themselves members of the communities they stay, burial societies and also *Stokvel* (a scheme where people put money together then withdraw it as a lump sum and buy food stock in bulk). As reported by respondents during focus group interviews, in both Zondi and Gumbi communities there is significantly lack of groups which community members could have joined to increase vibrancy of associational life. These findings further support Jones (2005) suggestion that, the use of group membership in measuring social capital can be a limitation as it doesn't reflect the real vibrancy in the community.

If we turn to community 'norms and rules', another structural social capital element, there was a general consensus among respondents that Gumbi people do respect the rules and value their norms. When the participants were asked whether they adhere to the community rules and regulations, the majority (47%) commented that they are well aware and adhere to the laws (See Table 1). An example cited by most respondents is the respect of wildlife within and outside the Somkhanda Game Reserve boundaries. Majority of residents pointed out that, they co-habitat with wildlife in their household spaces without harming them, although there is a handful number of people who poach animals. Some participants expressed the belief that some rules are violated because of various reasons (such as lack of consultation in formulating them). Turning now to the social capital scores, the Zondi score was significantly lower (0.21) compared to Gumbi (0.89). Such low score can be explained by 82% of respondents who reported that the rules and regulations were not adhered to very well in the Zondi community (see Table 1).

A possible explanation for this might be related to lack of openness in the managing and information sharing of Ngome Game Reserve, 91% 'strongly disagreed' with the hypothesis that 'there is open dialogue' in game reserve management (see Table 1 – under power, exclusion and decision making). The Mann-Whitney-Wilcoxon signed rank test results as shown in Table 1, indicate that the observed difference on structural social capital, is insignificant between measurements in both communities ($p < 0.05$, $U = .01$); the null hypothesis is therefore rejected. Overall, these results indicate that lack of stakeholder participation and consultations reduce the level of structural social capital and derail attainment of common CBET goals. This is supported by Simatele and Simatele (2014) who identified the need of having collective cooperation of stakeholders in grassroot decision making. One outstanding reason highlighted is that stakeholder participation enables and promotes in devising strategies for effective resource management.

Cognitive Social Capital indicators were then measured to determine the significance of trust and reciprocity in co-managing community natural resources. The first set of cognitive social capital questions meant to determine the levels of reciprocity and sharing in the communities. Respondents were asked to indicate whether they would prefer to own one grazing field of their own or jointly share with other community members. This question aimed at measuring the depth of trust within the community as land ownership or sharing requires high level of trust. The findings suggest that there is higher level (0.94 each) of cognitive social capital in both Gumbi and Zondi community (See Table 1). However, a follow up question on reciprocity and sharing, specifically on whether community members were only interested in their own welfare yielded different findings. In Gumbi, the majority (73%) of those who responded to this question felt that community members are not only interested in their own welfare, a minority of participants (10%) are of the view that people are self-centred. On the other hand, 48% of respondents in Zondi community strongly agree on the self-centeredness of community members hence a lower score of 0.32. The next question asked informants whether community leaders are only interested in their own welfare. The

most striking result to emerge from the responses is that both Gumbi and Zondi communities yielded lower cognitive social capital scores of 0.27 and 0.25 respectively. This might be attributed to the focus group discussion results that there were some negative comments about how community leaders handle issues within the community. For example, in Zondi community a woman in her late 60s lamented that “*our leaders do not consult us, they just do whatever they want and most of the money they obtained from and for the Ngome Reserve wasn't disclosed to us. They are more concerned with their personal lives not ours*” (Personal Communication (referred to as Pers.Com henceforth), 2015a). These findings seem to provide important insights into the significant role of bonding social capital in attaining common goals and how weak bridging capital derails positive CBET efforts. The results support Pretty & Smith (2003) argument that positive social relationships within communities can significantly facilitate cooperation in attaining common goals.

A further set of question on cognitive social capital measure the level of conflict and cohesion in Zondi and Gumbi communities. When the participants were asked whether there is unity within the community, the majority (84% in Gumbi and 61% in Zondi) strongly agreed that there was high level of solidarity in their villages, although Gumbi showed significantly higher cognitive social capital score of 0.96 than Zondi with 0.61 (see Table 1). These scores have shown significantly similar pattern with those of mutually beneficial collective action dimension. Turning now to the presence of conflict on what is accepted in managing the game reserve; majority (87%) of respondents in Zondi strongly agreed to the presence of conflict. When the participants were asked this question during focus group discussions, the majority (9 people) cited reasons of lack of trust in the Zondi community leadership structures. The results, as shown in Table 1 indicate that 87% of Zondi respondents strongly lack trust in their community leaders. The most surprising aspect of data was when participants were asked about the honest and trustworthiness of Community Trust members, thirty percent could neither agree nor disagree. In addition to this, almost two-thirds of the focus group participants (8 people) said that they were not aware of the existence of the Community Trust. Further focus group discussions with other stakeholders explained the gravity of lack of trust in community leadership. For example, one informant, a conservation expert who was involved in the initial development of the Ngome Game Reserve explained that:

“At the beginning all seemed okay but our relationships with the Chief and Ngome Trust deteriorated as there was lack of respect and openness from all of us. We have tried to see how we can restart building the trust but we still have some challenges. All I can say for now is that a lot happened and we need to be open enough for us to make any progress” (Pers.com, 2015b).

Interestingly, a high score of trust (70% - strongly agree) among Zondi community members mitigate the consequences of high levels of lack of trust with leaders and Community Trust. In overall, these results indicate that lack of transparency and fair distribution of project proceeds strongly reduces cognitive social capital. This observation is in agreement with Palmer *et al.* (2006) view that lack of transparency and fairness increase conflict between conservation authorities and local communities.

As with the Gumbi community, it is apparent from Table 1 that respondents have mixed views on the trust element. These variations might be directly linked to comments of change of leadership structures shared during focus group discussions. For example, during focus group discussions, majority (9 out of 12) of the participants alluded that the previous Traditional Leadership structure was more people oriented compared with the current structure. These findings suggest that, the current leaders are more power-focused (discussed in detail in the subsequent section). Respondents were further asked to indicate whether Emvokweni Community Trust (ECT) members were trustworthy and honesty. Eighty

percent strongly disagreed to the notion that the community members were honest and trustful. A possible explanation for this might be related to views that emerged during focus group discussions on lack of trust on leadership. A common view amongst participants was lack of interactive consultations and feedback from the ECT. If we now turn to the level of trust among community members, interestingly a higher score of social capital (0.96) on the level of trust offset lack of trust in leadership and the ECT members (0.44 and 0.35 respectively). The Mann-Whitney-Wilcoxon signed rank test results as shown in Table 1, indicate that the observed difference on trust among community members, is significant between measurements in both communities ($p > 0.05$, $U = .101$), the null hypothesis is therefore accepted .

The final set of social capital indicators set to measure the level and role of *Power, Exclusion, Equity and Decision making* in pursuing CBET. An attempt was made during interviewing to establish the level of involvement of community members in decision making within the community as it determines power-relations within the community. From Table 1, it can be seen that in Gumbi community there is currently a lack of open dialogue in managing and sharing Game Reserve information. The reasons given by more than half (8 out of 12) of those who participated during focus group discussions may be directly linked to the Likert responses. In their accounts of the events surrounding Gumbi Game Reserve, it was reported that, during the inception stage there was more involvement of community members and the founders and ECT members were more visible and provided feedback on time (high bonding social capital). However, participants reported that the ECT members have neglected community members in decision making and there are no updates provided to the community. For example, a Gumbi elderly man in his late 70s and who has lived his entire life in this community lamented:

“After the formation of Somkhanda Game Reserve (SGR), we never had meetings with the ECT members. We just know that there is a Trust but we don’t know what it is and who is in it. No one provides us with information or reports on the use of financial benefits for the community. I am so angry about this because we should be allowed to participate in decision making” (Pers.com, 2015c).

Furthermore, a common concern raised by focus group participants is the ‘diffusion of the Traditional Leadership system’. It has been observed that, despite the loyalty of the Gumbi community to their traditional leaders, there is a general sense and feeling among the research participants that the current decay in traditional governance systems. These observations suggest that, this might be the cause of power-conflict, corruption and exclusion of citizenry in decision making. Another participant, a former member of the Emvokweni Community Trust in Gumbi for example said:

“The passing away of our old chief has brought new dynamics in the power structure. The new chief wants to have the overall voice in decision making of the Somkhanda Game Reserve. We now have a lot of tensions between the Trust members and the traditional authorities and this is having a multiplier effect on the extent to which local people can participate in managing the SGR. The current Traditional Authority has sour working relationships with the existing Emvokweni Community Trust (ECT) and the community at large” (Pers.com, 2015d).

In all cases, the participants reported that, current conflict between ECT and Traditional Leadership has affected the holding of meetings. One informant, a former ECT member reported that, *“the conflict is purely power struggle where current members are being forced out of office illegally by the Traditional Leaders who want their own people, who are not elected to hold office to be in charge”* (Pers.com, 2015e). Another interviewee reported

that, the case is currently at the Master of Court. Moreover, the founding member of the Somkhanda Game Reserve also confirmed the current conflict between ECT and Traditional Leadership. He however, emphasised that, the conflict does not disturb the running of the game reserve because it is independently managed by Wildlands.

Turning on to Zondi community, 91% strongly disagreed to the notion of presence of open dialogue in managing the Ngome Game Reserve (NGR), hence a lower score of 0.15 (see Table 1). When a hypothesis that 'there is fairness in resource allocation' was proposed to research participants, a minority of participants (4%) indicated that there was fair allocation of resources. The majority of those who responded to this hypothesis cited exclusion of community members in decision making as the cause of unfair distribution of natural resources. Furthermore, in focus group discussions all, eight participants revealed that there were no consultative processes during the lifetime of the NGR. Thus, some respondents linked the violence against the Game Reserve to exclusion of community members in decision making. A male respondent aged between 50 and 60 years lamented:

"they came here and removed us from our land without any consultation; we just saw the cars parked around with white farmers and Inkosi (Chief). We were informed that we had to move as the place was supposed to be turned into a game reserve.....when the game reserve was still functional we never get involved in any decision making. We were never consulted by the Community Trust and we don't even know what a Community Trust is and how it came into being" (Pers.com, 2015f).

The above sentiments suggest that if any Community Based Ecotourism (CBET) scheme is to be successful, there is need for fundamental social changes. These changes must be accompanied by a positive alteration in power relations among all the interested stakeholders. It is evident in both the Ngome and Somkhanda Game Reserves that power relationships are at the centre of the disenfranchisement of local people's participation. There is thus, an urgent need to devolve the power structure and shift the locus of resource management to the people. Taken together, these results suggest that there is need to develop a strategy that will strengthen local people's participation in managing their resources, failure to which any intervention measure will not be adequate. This suggestion is supported by Büscher and Dressler (2012) who note that co-management schemes often end up effectively disenfranchising local people by excluding them in decision making.

Implications for Sustainable Community Based Conservation

CBRM success has been defined in this paper as 'positive effect of environmental activities on social capital dimensions, namely; groups & networks, trust, collective action, social inclusion and information and communication'. The findings of this study suggest that the success of community based natural resource management in tribal areas greatly depends on the level of the existing social capital. A closer look at Gumbi community reveals that continued existence of Somkhanda Game and its success stories results from strong social capital which in turn appear to be instrumental in ensuring its sustainability. For example, high levels of trust and interaction of community members during inception of the game reserve secured its current state. However, the future success of Somkhanda Game Reserve (SGR) is greatly depended on the improvement of trust between community members, ECT and Traditional Leaders. It is important to note that the current trust that exists among community members and their belief in traditional culture should be maintained through resolving the power-struggles between the ECT and Traditional Structures. To ensure sustainability of SGR, the conflict was escalated to the Master of Court to define the powers clearly to all stakeholders. Furthermore, the study suggests that the inclusion in decision making and sharing of information with community members will be improved after

the Court ruling. Every effort is being taken to conserve the natural resources within Somkhanda Game Reserve. It currently has vast animals including the rhinoceros, wild dogs, kudus and is in the process of introducing the buffalos after concluding the consultative processes.

On the other hand, Zondi Community's lower social capital on various indicators - in particular cognitive, seems to have grossly contributed to the unsustainability of Ngome Game Reserve (NGR). Low levels of trust of community members in their Traditional Leaders and Community Trust led to the halt of all conservation activities. The Game Reserve fence which was erected was destroyed and buildings are dilapidated. Continuous exclusion of community members and lack of information seems to have worked against conservation efforts. There is a possibility that this was exacerbated by strong social cohesion of community members who united against their exclusion in decision making. To guarantee the resuscitation and sustainability of the Ngome Game reserve it is therefore advisable for policy makers to commence by appreciating the strong unity among community members. This acts as a driver for undertaking and developing community based ecotourism project within Ngome community.

Conclusion

This paper explored the role of community participation in natural resources management. It specifically examined the extent to which social capital can be an instrument for promoting collaborative management of community based ecotourism (CBET) initiatives in tribal communities of Kwa-Zulu Natal, South Africa. It further investigated collaborative efforts in the management of common pool resources in pursuance of nature conservation, specifically Community Based Ecotourism in tribal communities. In light of the worldview, more attention was drawn in Gumbi and Zondi communities in KwaZulu Natal Province of South Africa. It has been revealed that the key to successful CBET collaborative projects revolves around social capital elements: structural indicators, cognitive indicators, collective action and power structures including stakeholder participation.

An in-depth look at cognitive and structural social capital represents an intricate situation in both Gumbi and Zondi communities. Although the communities are not immune from corruption, participants reported their robust trust among one another reflected by presence of strong social cohesion. On the other hand, there is substantial evidence on the lack of trust with the traditional leadership structures among Gumbi and Zondi community members. This is evidenced by continuous conflicts between Traditional Leaders and Community Trusts (and with the community members in the case of Zondi). This ultimately led to lack of community participation in CBET issues that directly affect them. Consequently, the Zondi community revolted against the pursuance of CBET initiatives and destroyed the Game Reserve fence and eventually the built-property decayed. Whereas in Gumbi community it is evident that community members are interested in conservation, as it is something they aspire and have benefited from to a certain extent. Nevertheless, the continuous power struggle between Traditional Leaders and the Emvokweni Community Trust is not sustainable as this will increase the level of lack of trust and considerable social capital dissolution in Gumbi community. In essence, social capital seems to have emanated from the seed of social unity sown through Somkhanda Game Reserve founders and the preceding Chief. However, the passing on of the baton to succeeding leaders who may not share the same vision of collective action and pursuance of people's interests may pose a risk of rapidly destroying that social capital.

The evidence from this study suggests that, the frequent exclusion of rural population in participating in processes that have a direct influence on their lives undermines efforts of pursuing CBET. This view is supported by Hove *et al.* (2013) and Oteng-Ababio *et al.* (2013)

who observed that, there is an urgent need to promote a strong and genuine grassroots grown community participation in environmental management decision making. In the same vein, Shackleton and Shackleton (2015) notes that, under common ownership or use of land and resources there is often an expression of different expectations and needs as revealed in this study. There would therefore seem to be a definite need for these expectations and needs to be expressed and addressed systematically and transparently to accommodate all stakeholder's needs in co-managing CBETs in tribal areas with a gloomy history of injustice. There is, therefore, a strong need to invest more into social capital- an indispensable tool for successful co-management of CBET schemes that promotes sustainable development.

The present study confirms previous findings and contributes additional evidence revealed in the work of Blewit (2008:78) who notes that social capital as an operational concept “denotes the relationships by which groups and individuals identify, communicate, network, build trust, enter into dialogue, resolve conflicts, and solve problems and realise collective and individual potential as agents of change and sustainable development”. As an analytical tool, social capital seems to provide a dynamic and holistic explanatory approach to the pursuance of community based ecotourism in land claimed communities compared with the dominant evaluative techniques in the tourism field. Another important practical implication is that, social capital can be used to promote the analysis of communities as heterogeneous and evolving opposed to assumptions of their homogeneity and static state. There is a strong possibility that social capital can also address power-relations, social exclusion and inequality through consideration of both structural and cognitive indicators.

References

Abesha, G.A. & Ongaro, L. (2013). Analysis of ecotourism development in Sant'antioco Island, Southern Sardinia, Italy. *International Journal of Ecosystems and Ecology Sciences*, 3 (4): 651-656.

Anaafo, D. (2015). *Land reforms and land rights change: A case study of land stressed groups in the Nkoranza South Municipality, Ghana*. *Land Use Policy*, 42: 538–546.

Anderson, D. & Grove, R. (1987). *Conservation in Africa: People, Policies and Practice*. New York, Cambridge University.

Baksh, R., Soemarno, T., Hakim, L. & Nugroho, I. (2013). Social Capital in the Development of Ecotourism: A Case Study in Tambaksari Village Pasuruan Regency, East Java Province, Indonesia. *Journal of Basic and Applied Scientific Research*, 3 (3): 1-7.

Berkes, F., George, P.J. & Preston, R.J. (1991). The evolution of theory and practice of the joint administration of living resources. *Alternatives*, 18 (2): 12-18.

Blewit, J. (2008). *Understanding Sustainable Development*. London: *Earthscan*.

Borrini-Feyerabend, G., Pimbert, M., Farvar, M.T., Kothari, A., and Renard, Y. 2004. Co-management of natural resources in Sharing Power – Learning by doing in co- management of natural resources throughout the world. *IIEED & IUCN/CEESP/CMWG. Cenasta, Tehran*: 67-107.

Brockington, D., Duffy, R. & Igoe, J. (2008). *Nature Unbound: Conservation, Capitalism and the Future of Protected Areas*. London: *Earthscan*.

Brooks, S., Spierenburg, M. & Wels, H. (2012). "The Organization of Hypocrisy? Juxtaposing Tourists and Farm Dwellers in Game Farming in South Africa." In *African Hosts and their Guests: Cultural Dynamics of Tourism*, edited by Walter van Beek and Annette Schmidt, 201–222. *Oxford: James Currey*.

Büscher, B., & Dressler, W. (2012). "Commodity Conservation: The Restructuring of Community Conservation in South Africa and the Philippines." *Geoforum*, 43 (3):367–376. doi:10.1016/j.geoforum.2010.06.010.

Chambers, R. (1994). Participatory rural appraisal (PRA): analysis and experience. *World Development*, 22: 1253–1268.

Chambers, R. & Conway, G.R. (1992). 'Sustainable Rural Livelihoods: Practical Concepts for the 21st Century', Discussion Paper 296. Brighton, UK: *Institute of Development Studies*.

Chengcai, T. Linsheng, Z. & Shengkui, C. (2012). Tibetan Attitudes Towards Community Participation and Ecotourism. *Journal of Resources and Ecology*, 3 (1): 8-15.

Chowdhury, I.A., Zakaria, A.F.M., Islam, M.N. & Akter, S. (2013). Social capital and resource conservation in "Community Based Haor Resource Management (CBHRM) Project": A case from Bangladesh. *Spanish Journal of Rural Development*, IV (3): 21-34.

Coria, J. & Calfucura, E. (2012). Ecotourism and the development of indigenous communities: The good, the bad, and the ugly. *Ecological Economics*, 73: 47- 55.

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.

Diaz, H., Drumm, R., Ramirez-Johnson, J., & Oidjarv, H. (2002) Social Capital, Economic Development and Food Security in Peru's Mountain Region. *International Social Work*, 45: 481–495.

Dressler, W., Büscher, B., Schoon, M., Brockington, D. Hayes, T. Kull, C., McCarthy, J. & Streshta, K. (2010). From Hope to Crisis and Back? A Critical History of the Global CBNRM Narrative. *Environmental Conservation*, 37(1):1-11.

Dzingirai, V. (2003). "The New Scramble for the African Countryside." *Development and Change*, 34 (2): 243–264. doi:10.1111/1467-7660.00304.

Floress, K., Prokopy, L.S & Allred, S.B. (2011). It's Who You Know: Social Capital, Social Networks, and Watershed Groups. *Society & Natural Resources: An International Journal*, 24:9, 871-886, DOI: 10.1080/08941920903493926.

Frost, P.G.H & Bond, I. (2008). The CAMPFIRE programme in Zimbabwe: Payments for wildlife services. *Ecological Economics*, 65: 776-787.

Ha, S.K. (2010). Housing, Social Capital and Community development in Seoul. *Cities*, 27: 535-542.

Hakim, L, & N. Nakagoshi. (2008). Planning for nature-based tourism in East Java: Recent status of biodiversity, conservation, and its implication for sustainable Tourism. *ASEAN Journal of Tourism Hospitality Management*, 7(2): 155-167.

Headey, D., & Jayne, T.S. (2014). Adaptation to land constraints: Is Africa different? *Food Policy*, 48: 18–33.

Holden, S.T. & Otsuka, K. (2014). The roles of land tenure reforms and land markets in the context of population growth and land use intensification in Africa. *Food Policy*, 48: 88–97.

Hove, M., Ngwerume, E. & Muchemwa, C. (2013). The Urban Crisis in Sub-Saharan Africa: A Threat to Human Security and Sustainable Development. *International Journal of Security and Development*, 2 (1): 7 – 18.

Jones, S. (2005). Community-based Ecotourism: The Significance of Social Capital. *Annals of Tourism Research*, 32(2): 302-324.

Kamuti, T. (2014). "The Fractured State in the Governance of Private Game Farming: The Case of KwaZulu-Natal Province, South Africa." *Journal of Contemporary African Studies*, 32 (2): 190–206.

Krishna, A. (2001). Moving from the Stock of Social Capital to the Flow of Benefits: The Role of Agency. *World Development*, 29: 925–943.

Krishna, A., & Shrader, E. (2000). Cross Cultural Measures of Social Capital: A Tool and Results from India and Panama. Social Capital Initiative Working Paper No 21. Washington DC: *World Bank*.

Liu, H., Huang, D., Chen, H., Yue, X., Zhao, X. & Liang, Z. (2014). The role of social capital in encouraging residents' pro-environmental behaviours in community based ecotourism. *Tourism Management*, 41:190-201.

Lyon, F. (2000). Trust, Network and Norms: The Creation of Social Capital in Agricultural Economies in Ghana. *World Development*, 28(4): 663-681.

Makuleke, L. (2004). The Makuleke Story. In: Paper Presented at the World Conservation Congress, Bangkok, Thailand, 17–25 November.

Moore, ML, Tjornbo, O, Enfors, E, Knapp, C, Hodbod, J, Baggio, JA, Norström, A, Olsson, P & Biggs, D. (2014). Studying the complexity of change: toward an analytical framework for understanding deliberate social-ecological transformations. *Ecology and Society*, 19(4), 54: 1-10 <http://dx.doi.org/10.5751/ES-06966-190454>.

Morton C., Gunton, T.I & Day, J.C. (2012). Engaging aboriginal populations in collaborative planning: an evaluation of a two-tiered collaborative planning model for land and resource management. *Journal of Environmental Planning and Management*, 55, 4: 507-523, DOI: 10.1080/09640568.2011.613592.

Moser, C & Felton, A. (2006). Intergenerational Asset Accumulation and Poverty Reduction in Guayaquil, Ecuador 1978-2004. *Brookings/Ford Workshop, Asset-based Approaches*, Conference paper, June 27-28, 2006.

Muboko, N & Murindagomo, F. (2014). Wildlife control, access and utilisation: Lessons from legislation, policy evolution and implementation in Zimbabwe. *Journal of Nature Conservation*, 2: 206-211.

Muller, K. (2012). Social capital and collaborative environmental governance: Lessons from Western Cape, *South Africa. IUCN*.

Musavengane, R. & Matikiti, R. (2015). Does social capital really enhance community based ecotourism? A review of the literature. *African Journal of Hospitality, Tourism and Leisure*, 4(1): 1-18.

Musavengane, R. & Simatele, D. (2016). Community-Based Natural Resource Management: the role of social capital in collaborative environmental of tribal resources in Kwa-Zulu Natal, South Africa. *Development Southern Africa*, DOI: 10.1080/0376835X.2016.1231054.

Ngubane, M. & Brooks, S. (2013). Land beneficiaries as game farmers: conservation, land reform and the invention of the 'community game farm' in KwaZulu-Natal. *Journal of Contemporary African Studies*, 31 (3): 399-420.

Ntshona, Z., Kraai, M., Kepe, T. & Saliwa, P. (2010). From land rights to environmental entitlements: community discontent in the 'successful' Dwesa-Cwebe land claim in South Africa. *Development Southern Africa*, 27: 353–361.

Okazaki, E. (2008). A community-Based Tourism model: its conception and use. *Journal of Sustainable Tourism*, 16(5): 511-529.

Otang-Ababio, M., J.E. Melara Arguello and O. Cabbay. (2013). Solid Waste Management in African Cities: Sorting the Facts from the Fads in Accra, Ghana. *Habitat International*, 39: 96-1-4.

Pers.com, 2014a & 2015a-f. Personal communication with focus group members in Gumbi and Zondi Communities in Kwa-Zulu Natal. March 2014 - July, 2015.

Portes, A. (1998). Social capital: Its origin and applications in modern sociology. *Annual Review of Sociology*, 24: 1-24.

Pretty, J. & Ward, H. (2001). Social capital and the environment. *World Development*, 29(2): 209-227.

Pretty, J. & Smith, D. (2003). Social Capital in Biodiversity Conservation and Management. *Conservation Biology*, 18 (3): 631-638.

Putnam, R.D. (2000). *Bowling Alone: The Collapse and Revival of American Community*. Simon & Schuster, New York.

Shackleton, S.E. & Shackleton, C.M. (2015). Not just farming: natural resources and livelihoods in land and agrarian reform. In: Cousin, B. & Walker, C, (eds). Land divided, land restored: land reform in South Africa for the 21st century. *Jacana*, Auckland Park: 191-205.

Simatele, D & Binns, T, 2008. 'Motivation and marginalisation in African urban agriculture: the case of Lusaka, Zambia'. *Urban Forum*, 19(1): 1–21.

Simatele D. & Simatele M. (2014). Climate variability and urban food security in sub-Saharan Africa: lessons from Zambia using an asset-based adaptation framework. *South African Geographical Journal*, DOI: 10.1080/03736245.2014.924873.

Simatele, D. & Simatele, M. (2015). Migration as an adaptive strategy to climate variability: a study of the Tonga-speaking people of Southern Zambia. *Disasters*, DOI: 10.1111/disa.12124.

Spierenburg, M. & Brooks, S. (2014). Private game farming and its social consequences in post-apartheid South Africa: contestations over wildlife, property and agrarian futures. *Journal of Contemporary African Studies*, 32 (2): 151-172, DOI: 10.1080/09637494.2014.937164.

Spires M., Shackleton, S. & Cundill G. (2014). Barriers to implementing planned community-based adaptation in developing countries: a systematic literature review. *Climate and Development*, DOI: 10.1080/17565529.2014.886995.

Steenkamp, C. & Uhr, J. (2000). The Makuleke land claim: Power relations and community based natural resources management. Evaluation Eden series. *IED*, London, UK, Discussion Paper No. 18.

The International Ecotourism Society. (2004). Uniting Conservation, Communities and sustainable Travel. <http://www.ecotourism.org> Accessed 4 November 2014.

Travers, H., Winney, K., Clements, T., Evans, T., & Milner-Gulland, E.J. (2015). A tale of two villages: An investigation of conservation-driven land tenure reform in a Cambodian Protection Forest. *Land Use Policy*, 43: 186–196.

Woolcock, M. (1998). Social capital and economic development: Toward a theoretical synthesis and policy framework. *Theory and Society*, 27: 151-208.

Zahra, A. & McGehee, N.G. (2013). Volunteer Tourism: A host community capital perspective. *Annals of Tourism Research*, 42: 22–45.