Social capital and Self-Organised Collective Action: Lessons and Insights from a South

African Community Project

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Abstract

Through the lens of new institutional economics, this paper provides exploratory analysis of

the elements of social capital behind the success of self-organised collective action in a

longstanding and effective community-based conservation and development project. Our

qualitative institutional analysis suggests that critical elements of project-level structural

social capital in the Umgano project case study include: forward-thinking and capable

leadership; long-standing partnerships with external agencies; sound operational structures

and management; and legitimate participation facilitated by forms of representation that are

transparent and accountable to constituents. In accordance with the theory, insights from the

study also indicate that successful collective action relies on processes of long-term and

earnest trust building, within and across communities, and between communities and external

agents. Such insights serve as a point of reference for role-players in similar community-

based projects and have the potential to inform future research on resource governance in

South Africa.

Key words: Social Capital; Collective Action; Common-Pool resources; Community-Based

Governance; Common Property Institutions; Forestry

1. Introduction

Coordination among resource users is important in avoiding the problems of overuse and

underinvestment in managing common-pool resources (CPRs) (Ostrom 1990; Schlager &

Ostrom 1992; Meinzen-Dick 2009). Although the use of CPRs is typically coordinated by

state or collective action institutional arrangements, traditional theories of collective action do

not explain how resource users bring about coordinated decision making and action. A large

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body of literature on the emerging 'second generation' collective action theories points to social capital as the primary mechanism facilitating collective action (Grootaert and van Bastelaer 2001; Uphoff 2000; Ostrom and Ahn 2009). Therefore understanding the role of social capital in successful community-based natural resource management (CBNRM) programmes has the potential to yield useful insights into what motivates communities to collectively organise to sustainably manage resources.

However, despite the widespread promotion of CBNRM in South Africa (Fabricius et al. 2003; Cundill et al. 2013; Blore et al. 2013), little attention has been given to investigating the role of social capital that facilitate collective action within such arrangements locally, especially where cases are self-organised. Much of the current CBNRM-related literature in South Africa, focuses on the challenges involved in co-management of protected areas by claimant communities and conservation agencies under land reform policies (e.g. Kepe 2008; Cundill *et al.* 2013). In the few cases where CBNRM has been assessed outside the context of land claims, the focus has been either on 'informal' CBNRM (e.g. Shackleton & Shackleton 2004) or on externally driven projects imposed on communities (Blore 2015). To our knowledge, there have been no attempts to analyse cases of 'formal' CBNRM initiatives driven by the community themselves. This deficit is important in light of criticisms that externally-driven CBNRM results in 'co-option' of communities rather than co-management of natural resources (de Beer, 2013). Moreover, there are no South African studies that explicitly assess the importance of social capital in the performance of CBNRM.

This paper forms part of a broader study (Blore 2015) exploring the forms of social capital operating within the Umgano project, a longstanding and effective community-based conservation and development project owned by the Mbandla community in the KwaZulu-Natal province of South Africa (Leisher et al. 2011). The objective of this paper is to conceptualise and explain, through the lens of new institutional economics, the structure and operation of self-organised collective action in the Umgano project and, in so doing, capture constituents of structural social capital (networks, roles, rules and procedures) at the project level. The paper does not conduct causal analysis, but rather a snap-shot of what successful self-organised, community-based CPR management looks like in practice, with key-informant intimations about what forms of structural social capital are helpful and how. Such insights serve as a point of reference for role-players in similar community-based projects and have the potential to inform future research on resource governance in South Africa.

The remainder of this paper proceeds as follows: a survey of relevant literature and analytical framework for understanding the role of social capital in collective action are presented in section 2; methods are summarized in section 3; a description of the case study area and people is given in section 4; Results of the institutional analysis and key informants' perceptions on factors behind the success of the Umgano project are presented and discussed in section 5; and limitations and a conclusion is offered in section 6.

2. Relevant literature and analytical framework

First generation collective action theories forecast that, without coercion, rational individuals will act in pursuance of their self-interest rather than serving the common interest of any group (Olson, 1971: 2). However, drawing on evolutionary psychology, cognitive science, and game theoretic experiments, modified theories of collective action (MTCA) have emerged to explain the apparent anomaly in human behaviour. Recognition that rationality of humans' decisions is bounded by their cognitive capabilities, information available to them, norms and social rules (i.e. forms of social capital) constitutes the core of the second generation theories of collective action (Ostrom 2000; Ostrom & Ahn 2009). Figure 1 which combines the conceptual frameworks put forward by Grootaert and van Bastelaer (2001), Uphoff (2000), and Ostrom and Ahn (2009) – depicts elements of social capital embedded in MTCA, especially the complementary role of multiple forms of social capital in facilitating coordination in CPR settings. For instance, 'structural' forms of social capital (i.e. extrinsic motivations for cooperation, such as those emanating from rules and the importance of maintaining a good reputation in cases of repeated interaction) influence the cost-benefit calculus of behaviour in favour of cooperation. Also, 'cognitive' social capital, such as norms of reciprocity and other values and habits of behaviour that embody intrinsic motivations for cooperative behaviour, enhance trustworthiness and lubricate cooperative transactions (Uphoff 2000; Ostrom & Ahn 2009). The structural/cognitive classification of forms of social capital originated from efforts to synthesise disparate areas of social capital research focussing on networks and norms respectively (Woolcock & Narayan 2000; Grootaert & van Bastelaer 2001).

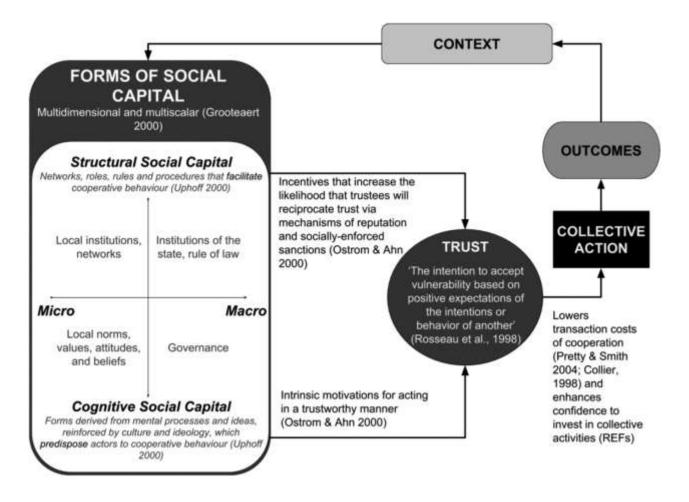


Figure 1. A conceptual model showing how forms of social capital generate collective action, viewing trust as an intermediate variable.

Note: A problematic aspect of social capital research has been the delineation of the sources, forms, and consequences of social capital (see Claridge for a review). Here, we adopt the perspective offered by Ostrom & Ahn (2009) in which trust is an intermediate variable.

Another widely-used social capital typology stems from empirical work measuring network-based (i.e. structural) social capital. This typology classifies social networks according to the quality and extent of horizontal (intra- and inter-community ties, termed 'bonding' and 'bridging' social capital respectively) and vertical (external ties to agencies and institutions, termed 'linking' social capital) linkages (Woolcock 2001). The bonding/bridging/linking typology provides a more nuanced framework for understanding the mechanism through which dimensions of structural social capital affect collective action. Bridging and linking ties are thought to be useful for leveraging important financial and informational resources which can improve the effectiveness of collective action and enhance its outcomes (Pretty & Smith 2004).

3. Methods

The objectives of this paper orient the appropriate level of analysis in the fourth quadrant of Grooteart's framework of social capital depicted in Figure 1 (i.e. interactions between context, collective action, and outcomes at project level). Data needed for implementing the intended analysis was compiled from various sources including key informants' interviews and surveys of published and unpublished documentary sources. Interview transcripts and surveyed literature were coded, grouped and summarised according to the analytical themes laid out in Dorward and Omamo's (2009), which builds on the widely used Ostrom's institutional analysis and design (IAD) framework (Ostrom 2005). Dorward and Omamo's (2009) framework, outlines categories of endogenous variables in the 'action domain' (which, in this case, is the Umgano Project), while the IAD framework focuses more broadly on how exogenous variables affect situations and generate outcomes 1.

Based on unstructured discussions with fifteen role-players (the full board of directors of the Umgano development company, two senior members of the traditional council, as well as all members of the Trust and Umsonti that were available during fieldwork), six key informants were selected by discussants as representatives of groups of actors² that oversee crucial aspects of the strategic and/or operational approach of the Umgano Project. Key-informants were targeted for semi-structured interviews, lasting between one and three hours each during 2014/15. Interviews revolved around (i) institutional aspects of the project (e.g. coordination and enforcement arrangements, activities, actors, and outcomes), and (ii) the factors that key informants believe to have contributed to the emergence and success of the project. Key informant interviews were also used to identify and obtain relevant documents and other grey literature (e.g. meeting minutes, operational plans and reports, etc). All interviews were digitally recorded, transcribed, and coded before analysis.

4. The Umgano Project area and people

The Umgano Project area (UPA) is situated approximately 100 km south west of the city of Pietermaritzburg. The area ranges in altitude (between 1 000 to 2 045 m above sea level), receives summer rainfall (approximately 750 to 1 000 mm p.a.) and is an important water

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¹ Dorward and Omamo's framework is extensively outlined in Kirsten et al. (2009).

² See section 5.1.2 for detailed explanation of the relevance and roles of these groups of actors.

catchment area (Bainbridge & Alletson 2012). The UPA's soils are shallow and not suitable for intensive agriculture but are compatible with limited afforestation and livestock management (Sisitka 2000; Bainbridge & Alletson 2012). The UPA contains vegetation from both forest and grassland biomes, comprising habitats for a range of endemic and threatened biological species. Indigenous *Podocarpus* forests in the UPA (although, strictly, they are proclaimed state forests, as are several other indigenous forests outside the UPA) are some of the best conserved forests in KwaZulu-Natal (Bainbridge & Alletson 2012).

The UPA is located on land which is formally state owned, with some parts of the project also extending to land owned by the Mabandla Traditional Council ('the Council') (Bainbridge & Alletson 2012). There have been disputes over the exact boundaries of Council lands, as is detailed by the report prepared by Whelan (2010). Although it was not mentioned in any of the key informant interviews, other sources (Sisitka 2000; Bainbridge & Alletson 2012) mention that the community entered into long-term lease agreements with the State to establish the Umgano Project. Regardless, at the time of fieldwork, the Council was in an ongoing process of seeking clarification with the Department of Land Affairs and Rural Development regarding the future ownership of the land on which the UPA falls (Legal advisor to the Umgano Project, 2014, pers. comm.).

Tenure security is a major threat to the initiative and has undermined the community's ability to access credit using the UPA as collateral, which could help finance the expansion of the Umgano Project (Umsonti Director, 2014, pers. comm.). Nonetheless, the Council have received written assurances from various government representatives that the land tenure is 'not a problem' (Legal advisor to the Umgano Project, 2014, pers. comm.) and, consequently, the Umgano Project has thus far been able to use these assurances to access financing.

The UPA is inhabited by the Mabandla community, situated in a remote, rural area characterised by poor infrastructure, high dependency on social grants, and high unemployment (Leisher et al. 2011). The community comprised upward of 22 000 people, all of whom fall under the jurisdiction of the Council (Bainbridge & Alletson 2012).

The Traditional Leadership and Governance Framework Act, or TLGFA, (Act No 41 of 2003) provides the higher-level institutional framework for the relevance and role of traditional leaders in modern day South Africa. The TLGFA recognises the role of traditional

Councils in administering the affairs of so-called 'traditional communities' in accordance with customary law, as well as other (mostly advisory and supportive) roles in cooperative governance with local municipalities to advance development and service delivery within their jurisdiction.

The Umgano Project began in 1998 as a community forestry project championed by the chief of the Mabandla community and assisted by an external management agency³. Initial capital for the project was mostly funded by the community, via a Settlement and Land Acquisition Grant (SLAG) made available through the then-named Department of Land Affairs (DLA), as well as a loan from the South African Land Bank. The Umgano Project has since paid off the Land Bank loan and has begun to invest profits from the plantation in other components of the project (Umsonti 2013). The project's primary objective is to stimulate socioeconomic development, particularly through creating job opportunities for local people. However, sustainable resource use and biodiversity conservation are also important in achieving this objective, as is stated in the project's mission statement (Bainbridge & Alletson 2012).

5. Discussion of study results

5.1. Results of the institutional analysis

Given our objective, the action domain focusses on the actors, activities, and institutional arrangements that are involved in the Umgano Project. Institutional arrangements within the Umgano Project that facilitate key aspects of community-based CPR management, include, amongst others: collective action (mechanisms that enable coordination and cooperation); sustainable natural resource management; and development that meets the needs of the beneficiaries of the project. Detailed operational aspects of the project (such as the structure and day-to-day management of the individual Umgano subsidiary companies) and role-players further up the timber supply chain are not discussed as part of this analysis. Although features of the institutional environment have been separated from the action domain, they nonetheless have important influences on the structure and functioning of the project. From an institutional perspective, it is important to consider the attributes of, and interactions between, actors, activities, and institutional arrangements to evaluate the outcomes of the Umgano Project in light of its developmental and conservation objectives.

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³ Mondi Forestry was involved in the very early stages of forestry at Umgano but withdrew from the project, and later, the community paid back the initial expense incurred by Mondi. For this reason, the involvement of Mondi is not explored in any further detail here, although it is explained elsewhere (particularly Sisitka 2000).

5.1.1. Institutional Arrangements

The Mabandla Trust Deed, the relevant aspects of The Organisational Structure of the Umgano Project, and the project's Integrated Management Plan represent important institutional arrangements that facilitate collective action and sustainable natural resource management in the Umgano Project, as well as economic development in the Mabandla community.

5.1.1.1. The Mabandla Trust Deed

The Trust forms the interface between the Council, the Mabandla community, and the managers of the Umgano Project, consequently, the Trust serves a crucial coordinating role in the Umgano Project providing the formal, legal document that stipulates the roles, rules and procedures under which the Trust functions. The Deed of Trust contains, *inter alia*, provisions for the definition and rights of the beneficiaries; roles of the Trust; terms of office for trustees; powers of trustees; and important requirements and procedures regarding the Trust's finances. The Trust Deed is especially important to the success of the Umgano Project from a collective action perspective because it provides the mechanism by which the community owns, runs and benefits from the Umgano Project (Blore 2015). However, the Deed is not effective without facilitation from other role-players and an enabling institutional environment. For instance, the Council plays an important role in overseeing and enforcing the mandates of the Trust.

The Council strengthens the role of trustees through their support and oversight; which of course, in this case, improves the legitimacy and accountability of the Trust because the Council is itself regarded with respect by the community (Umgano Executive Director, pers. comm.). The latter feature of the Trust supports Ostrom's (1990) design principle of 'nested enterprises' in the governance of common property institutions. Furthermore, the characteristic of nested enterprises is also key to the organisational structure of the Umgano Project, as will be shown next.

5.1.1.2. The Organisational Structure of the Project

The organisational structure of the Umgano Project is not necessarily static nor is it documented comprehensively in a single document like the Trust Deed. However, the organisational structure of the Umgano Project falls on the 'procedures' or 'systems' side of the institutional arrangements spectrum. Critically, the organisational structure provides the

scaffold for how key role-players interact in the project; how jobs are created, and capacity is developed within the community; and how profits are channelled towards the Trust, who then invest them in development projects in the community. Furthermore, the Development Company also receives a rental fee from the subsidiary companies, and in return, the strength of the Development Company's balance sheet enables it to borrow money on behalf of the subsidiary companies (Umsonti Director 2014, pers. comm.). This arrangement also reinforces the relative financial self-reliance of the overall Umgano Project, which has already been discussed as a major strength of the project.

5.1.1.3. The Integrated Management Plan (IMP)

The primary institutional arrangements for biodiversity conservation are captured in the regulations specified in the IMP for the Umgano Project. The IMP uses a simple land zoning approach to separate the conservation area, the timber plantation, and the livestock management zone (comprising the lower altitude grasslands). In addition, the IMP specifies what activities may take place in the various zones of the UPA and what actions need to be taken to conserve biodiversity (Bainbridge & Alletson 2012). These plans also follow best-practice guidelines to achieve sustainable development, including strict adherence to relevant legislation, such as the National Environmental Management Biodiversity Act (Act No 10 of 2004) (Bainbridge 2012).

One issue, though, is the inability of field rangers to enforce the rules stipulated in the IMP. There have been instances of fence cutting, unauthorized grazing of cattle in the timber and conservation area, hunting, illegal harvesting of timber, and arson. Furthermore, no authority has been devolved to the field rangers to do anything other than report instances of rule breaking (Head of field rangers, pers. comm.). However, the enforcement issue has recently been brought to the attention of the Council and it remains to be seen what approach the council will take. This point serves as a key threat to biodiversity conservation efforts and has the potential to threaten the viability of future ventures on the UPA.

5.1.2. Actors and their attributes

5.1.2.1. The Mabandla Community

The community represents the largest and most obvious group of role-players in the project. However, not all community members have an active role in the Umgano Project, but they are represented by the Mabandla Community Trust ('the Trust'), which plays a central role in

terms of collective action by the community. The Trust was established in 2000 as per the conditions for the allocation of SLAG funds by the DLA (Leisher et al. 2011). A Deed of Trust recognises the Trust as the legal entity tasked with holding and administering the UPA leased to them by the DLA. In addition, the Trust owns 100% of the Umgano Development Company; the project's holding company through which the community own the majority shareholding in Umgano subsidiary companies (Umsonti 2013). In addition, trustees and the chairperson of the Trust (as well as the Inkosi, advisors from the contracted management agency, and representatives from various government agencies) sit on an advisory committee which oversees all operations comprising the Umgano Project (Leisher et al. 2011). Consequently, trustees have a significant influence in decision making and the operation of the Umgano Project.

In the case of the Mabandla community, traditional leadership still plays a prominent role in the affairs of the community. Traditional leadership is a form of structural social capital in so far as it encompasses the roles, rules and procedures as entrenched in the traditions and culture of the Mabandla community. In addition, the Council has been a major driving force in the establishment and continued success of the Umgano Project. Unanimous (and often repetitive) reference was made in key informant interviews to the vision and strong leadership of the tribal leader ('the Inkosi') as a major success factor of the Umgano Project. One key informant noted 'for me that's the thing that stands out most about this community... that strong, well-visioned, ethical leadership makes a fundamental difference in the leverage of social capital of a community'. Another key informant suggested that the integrity of the Council is a key reason for the community's trust in the Inkosi's vision for the Umgano Project:

"I think it was probably a miracle that [the community] could actually trust the Traditional Council with what they were saying about what to do because, back then, rural people where major cattle owners and most of [the project] land was used for grazing. So it was a huge compromise, [moving] all those cattle off the area for plantation purposes."- (Umgano Executive Director, 2014, pers. comm.)

Furthermore, it seems that the Council's enthusiasm to collaborate with external advisors has been instrumental in the project's ability to attract, or be eligible for, donor and technical support (Bainbridge & Alletson 2012; Umsonti 2013). Another key informant suggested that

a major factor contributing to the project's success was its ability to leverage support from international, national and provincial organisations and government agencies. All key informants mentioned the relationships of trust forged between the Inkosi, external advisors, and representatives of the community as fundamental reasons for productive and sustainable collaboration amongst key role players in the Umgano Project. By extension, therefore, the role of the Council, and the Inkosi in particular, are key institutional features of the Mabandla community that can potentially explain the success of the Umgano Project. Additionally, the cooperation between the Council and external advisors and support agencies highlights some of the elements within the Umgano Project (i.e. the 'action domain') that are undoubtedly important in the success of the project.

However, most – but not all – community members are beneficiaries of the Trust. Beneficiaries comprise the roughly 2 300 households (approximately 80% of the community) who opted to contribute capital to establish the initial Umgano plantation. According to the Mabandla Trust Deed, all beneficiaries of the Trust are eligible to become trustees, who are nominated and elected biennially (Chairperson of the Trust, 2014, pers. comm.). Beneficiaries are also obligated to attend and participate in annual general meetings, where they receive updates regarding the financial and operational performance of the Umgano Project and participate in critical decision-making, such as annual salary increases for trustees and project employees. Beneficiaries also participate directly in the Umgano Project through their role as employees and are additionally able to submit proposals to the Trust for funding of community projects (Sisitka 2000).

Seasonal employees are recruited by the Development Company for a period of three months. Recruitment works on a rotational basis to maximise the number of beneficiaries employed directly by the project. A potential conflict of interest arises through beneficiaries' positions as both project employees and employers, but the issue is at least partially attenuated by the size of the beneficiary group and the organisational structures in place. Nonetheless, recruitment has not been without problems. For instance, there have been cases where employees refused to stop working after the end of their three-month contract, and other cases of employee underperformance (Sisitka 2000). Such issues have typically been resolved through mediation by trustees, benefitting to some extent from the effect of personal relationships between community members which enforce the rules-in-use because of trust or

concern over one's reputation in the community. Where this form of conflict resolution has failed, cases are channelled to the traditional leadership for mediation (Chairperson of the Trust, 2014, pers. comm.).

5.1.2.2. External Role-Players

Foremost among external role-players involved in the Umgano Project is the management agency, initially known as Rural Forest Management (RFM) – now a registered non-profit organisation called Umsonti. RFM have been associated with the Umgano Project since its conception and were instrumental in building the financial resources and corporate and legal structures that facilitate the smooth operation of the project today (Umsonti Director, pers. comm.). All key informants mentioned the critical role that RFM played, and Umsonti continues to play, in the success of the Umgano Project. The agency seems to have built strong relationships of trust with key role-players in the community (Umsonti Community Liaison 2014, pers. comm.). Umsonti have also brokered crucial partnerships with other external role-players, which have been extremely important in securing funding from investors and financing organisations.

The Umgano Project is the flagship community project for Umsonti, binding the project's success to the reputation and success of the non-profit organisation. Umsonti also have a financial stake in the project through a significant shareholding in all Umgano subsidiary companies. Moreover, Umsonti directors mentioned feeling personally obligated to see the project succeed, brokered by longstanding involvement in the project and high degrees of interpersonal trust with members of the Council and Trust (Umsonti Director 2014, pers. comm.).

Several other external organisations also support the Umgano Project, albeit to a lesser extent than Umsonti. Some of the most frequently mentioned non-government organisations (NGOs), individual consultants and government agencies involved in the Umgano Project are listed in Appendix 1. For the most part, the objectives of these role-players are aligned with those of the community; either through addressing development or conservation mandates for government agencies and donors, financial returns for investors, or through the career objectives of individual consultants. Unreliable participation and funding from government departments have been relatively insignificant for the progress of the Umgano Project, since

the project is largely self-funded and was able to find alternative sources of support (Umsonti Director 2014, pers. comm.).

5.1.3. Activities

Several business ventures run under the umbrella of the Umgano Project. At the time of fieldwork, these included forestry, eco-tourism, sawmill, and agricultural businesses. However, most of the subsidiaries have only been recently operational and forestry and conservation continue to be the primary activities taking place on the UPA. Consequently, forestry and conservation have been crucial in shaping the institutional arrangements and actors involved in the Umgano Project.

5.1.3.1. Commercial Forestry

The Umgano Development Company forged key partnerships with external role-players (most notably RFM) to help establish and manage the timber plantation and build capacity of community members (Umsonti Director, 2014, pers. comm.). Furthermore, forestry tends to have longer payoff horizons (i.e. long rotation cycles to time of harvest) than other agricultural activities. Indeed, the same can be said for conservation – where payoff horizons (through enhanced ecosystem services, for example) are arguably much longer. Consequently, key partnerships in the Umgano Project have tended to be long-standing. These partnerships are a result of communication and trust building between key role-players in the community and external agents (Umgano Executive Director, 2014, pers. comm.); a hallmark of linking social capital in this case study.

Since its inception, the Umgano Project has continued to attract donor funding and support, both from already established partnerships and new partnerships with external organisations (Umsonti Director, 2014, pers. comm.). At least four of the key informants explicitly mentioned the importance of the legal and operational structure, effective management, certification (the forestry company is certified by the Forestry Stewardship Council) and formal checks and balances on finances, as contributing to the success of the Umgano Project. From the business side, these characteristics give investors and donors a measure of confidence in the project, which in turn has resulted in their willingness to assist (Umsonti Director, 2014, pers. comm.). More generally, these formal structures and processes contribute to accountability and transparency of the project.

Additionally, from a collective action perspective, the payoff dynamics in commercial forestry required an active role from key individuals, such as RFM's community liaison and the chairperson of the Trust, as well as the support of the Council, in persuading members of the community about the long-term value of the Umgano Project (Umsonti Community Liaison, 2014, pers. comm.). However, once harvesting began and the Development Company was able to pay off its loan from the Land Bank, benefits of the project became evident, especially in terms of financial viability, investments in community amenities, and employment potential.

5.1.3.2. Biodiversity Conservation and Sustainable Land Use Practices

On the conservation side, the UPA encloses an area (approximately 1 300 ha of unused indigenous forest, grasslands, and wetlands) which has been set aside for conservation and is in the process of being formally registered as a nature reserve (Leisher et al. 2011). In addition, environmentally sustainable practices are incorporated into other land uses on the UPA, as per the project's Integrated Management Plan (IMP) (Umsonti Director, 2014, pers. comm.). The strategic partnership between the provincial biodiversity conservation agency, Ezemvelo KZN Wildlife (EKZNW), and the Umgano Project enhances the project's conservation activities. For instance, the Umgano project has received substantial support from EKZNW as a result of the biodiversity agreement, which has further served as a platform for funding and technical assistance from other conservation-related organisations, such as SANBI and the Wildlands Trust.

5.1.4. Outcomes of the Action Domain

At present, the Umgano Project has created roughly 100 permanent jobs and 30 part time jobs for members of the community (Umsonti 2013). The forestry business has been certified by the internationally recognised Forest Stewardship Council (FSC) and is harvesting 90 ha of Eucalyptus per year, translating into an annual turnover of R12 million (SA Forestry Magazine 2014). In addition, Leisher et al. (2011) found that the grasslands within the UPA had greater peak production than control sites over a time span of 10.5 years, indicating successful grassland conservation despite the various activities taking place on the UPA. The same study also found that Mabandla households have significantly higher levels of total annual income, compared to households outside the jurisdiction of the Council. Together, these positive outcomes indicate that the Umgano Project is making a positive contribution to conservation and local development. These outcomes also indicate successful collective

action and collaboration between role-players in the action domain that are partly attributable to dimensions of social capital at the project level.

5.2. Key Findings Regarding Perceived Success Factors

Findings from key informant interviews, summarized in Table 1 below, support the hypothesis that various elements of social capital have been critical for the emergence and maintenance of the project. In particular, elements of structural social capital (in terms of the roles, rules, and procedures of the social networks involved in the projects) and *linking* social capital are intricately involved in the structure and operation of the Umgano Project (as highlighted in the last column of Table 1). Moreover, it must be noted that many of the success factors ultimately stem from the supportive role of the Traditional leadership of the Mabandla community. Also, the evidence from key informant interviews suggests that social capital plays an important role in the establishment and maintenance of trust, in all its multiplex forms, between the various role-players involved in the Umgano Project. For example, 'calculus-based' trust (Rousseau et al. 1998) - originating from the project's reputation and certification— has been extremely important leveraging financial and technical support from external agencies. On the other hand, interpersonal trust has been vital in maintaining the relationships between managers, the Council and the Trust.

Table 1. Perceived success factors for the Umgano Project (Key Informants' survey).

Success factor

Council

Strong leadership and integrity of the

Description (as evidenced in the case study)

Integrity of the Council

the Inkosi

Importance of the Inkosi in leveraging linking social capital through willingness to collaborate and building project of long-term trusting relationships with important partners in the project

Manifestations of social capital

Structural social capital (in terms of the Well-visioned and ethical leadership of social networks associated with the Council); Linking social capital which facilitated the building of interpersonal trust between key role-players in the

Support of the Council

- Support of Council in overseeing the Trust to ensure that they are fulfilling their mandates as representatives of the the Trust); institution-based and community in the Umgano Project
- Importance of Council in enforcement of rules-in-use and in rallying the support of the community in the initial stages of the project when there were few direct benefits visible

Structural social capital (structure and processes associated with the Council and interpersonal trust in the traditional leadership as an outcome of social capital

Willingness to collaborate with Again, this relates to the vision of the traditional leadership

Linking social capital

Success factor

external advisors

Description (as evidenced in the case study)

 Has been essential in the successful establishment and growth of the Umgano Project because of imported expertise

Manifestations of social capital

Long-standing partnerships with external agents built on relationships of trust

- Key role-players have been crucial in helping the community develop the financial capital and the capacity to own and manage the project
- Importance of trust between trustees, the Council and management

Linking social capital; Importance of interpersonal trust as a result of long-standing interactions

Sound management and organisational structure

- Basis for 'calculus-based' and 'institution-based' trust that has enabled the project to attract continued support from donor and support organisations
- Strength of the balance sheet & sound experts' advice allows the Umgano Project to be relatively self-reliant which has enabled the project to survive the short-term funding cycles, and occasional unreliability of government & donor organisations
- Resulted in sustainable resource use, which will ultimately be beneficial to the sustainable income base for the Project the Mabandla community at large
- Organisational structure allows roleplayers to coordinate; clear idea of different actors' roles
- Organisational structure is also flexible which has enabled the project to grow and reinforce financial independence of the project

Both linking and structural social capital which has stemmed from the networking of key individuals and the reputation of the Umgano Project (which, in turn, has underpinned 'calculus-based' and 'institution-based' trust)

Organisation of the Trust

- Mandate and procedures of the Trust are stipulated clearly in the Trust Deed
- Trust Deed includes features that facilitate the legitimacy, accountability and transparency of the Trust
- Essential in the collective action component of the Umgano Project in that it allows the community to own, manage and benefit from the project

Effective organisational structures a result of collaboration with legal advisors (an outcome of linking social capital); the Trust Deed represents a form of structural social capital as it stipulates the roles, rules and procedures; and also facilitates bridging social capital between villages regarding the Umgano project

6. Limitations and Conclusion

By design, this paper approached the role of social capital in the Umgano project from a narrow perspective. Given the multiscale and multidimensional nature of social capital, a full assessment of the role of social capital in the Umgano project should include indicators of

structural and cognitive social capital, at multiple levels of analysis. This shortfall is ameliorated to some extent by integrating these results with an assessment of household-level social capital, presented in Blore (2015).

Shortfalls notwithstanding, the growth and longevity of the Umgano project single it out as a valuable case study of community-based CPR management. Modified theories of collective action point to social capital as a crucial element in such projects. The qualitative institutional analysis presented in this paper suggests that critical elements of project-level structural social capital in the Umgano project include forward-thinking and capable leadership; long-standing partnerships with external agencies; sound operational structures and management; and legitimate participation facilitated by forms of representation that are transparent and accountable to constituents. Success in the Umgano project goes beyond access to capital, capacity building, or superficial support from external agencies. In accordance with the theory, successful collective action relies on processes of long-term and earnest trust building, within and across communities, and between communities and external agents.

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Appendix 1: Other external role-players involved in the Umgano project^a

Role-Player	Role	Primary Source(s)
NGO		
Land Bank	Financing and investment	Bainbridge & Alletson (2012)
Private consultants (veterinary services; livestock management; conservation; tourism)	Various advisory services	Umsonti (2013)
The Nature Conservancy	Research on the benefits of land use zoning on the UPA	Leisher et al. (2011)
Vumelana Advisory Fund	Financing and investment	SA Forestry Magazine (2014)
Wildlands Trust	Funding towards mentoring field rangers	Bainbridge & Alletson (2012)
Government		
Department of Agriculture, Environmental Affairs and Rural Development	Funding for fencing, alien/invasive species control and land restoration; assessments and recommendations regarding biodiversity management plan for the UPA	Bainbridge & Alletson (2012)
Department of Economic Development	Funding	Umsonti Director, pers. comm. 31 July 2014
Department of Land Affairs	Initial support for land acquisition, funding, monitoring and networking with other government departments	Sisitka (2000)
Ezemvelo KZN Wildlife (EKZNW)	emvelo KZN Wildlife Key long-standing partner who has been intricately involved in the KZNW) biodiversity conservation component of the Umgano Project via their Biodiversity Stewardship programme. Some of their specific roles have been: mentoring of field rangers for the conservation area; environmental awareness and education in the community; assistance towards conservation-related research on the UPA; general assistance on conservation matters	
Industrial Development Corporation	Financing	Umsonti Director, pers. comm. 31 July 2014
South African National Biodiversity Institute (SANBI)- Grasslands	Research; assessments and recommendations regarding biodiversity management plan for the UPA	Bainbridge & Alletson (2012);

Role-Player		Role	Primary Source(s)
programme			Umsonti (2013)
Umzimkhulu local municipality	Various; not specified		Bainbridge & Alletson (2012)

^aDue to the frequent name changes of the South African national and provincial government departments in the last two decades, all government agents concerned have been referred to as they were by the source(s).