

THE ROLE OF USER COMMITTEES FOR THE DEVOLUTION PROCESS IN NAMAQUALAND, SOUTH AFRICA

FINDINGS AND OPEN QUESTIONS FROM THE FIELDWORK IN NAMAQUALAND, SOUTH AFRICA.

Paper prepared for the *11th Biennial Conference of International Association for the Study of Common Property, 19-23 June 2006, Ubud, Bali Indonesia*

Bjørn Vollan¹

ABSTRACT

This paper is based on empirical investigations looking at the emergence of collective action and institutional change in villages of the Namaqualand, South Africa within the scope of the BIOTA Southern Africa project. Based on quantitative data analysis it outlines the importance of decision-making and participation in the process of devolution of responsibilities over common-pool resources to local communities. It discusses optimal design principles for user committees being very relevant for biodiversity preservation at the local level.

In a common-pool resource system decision making is embedded in community structures, cultural backgrounds and is dependent on political realities. Critical factors of a robust social-ecological system are those that permit collective activities which are needed to sustain the commonly owned pasture. For Namaqualand it had been identified that the structure of interactions between community and local infrastructure provider is the critical factor that allows collective action and thus efficient community governance including community-based conservation activities. The local infrastructure providers interact with the villagers through user committees whose members have to inform and mobilize the community and devise and enforce rules that govern the respective task. First empirical investigations revealed that

¹ Universität Marburg, Institut für Kooperation in Entwicklungsländern, Am Plan 2, 35032 Marburg, Germany and BIOTA (Biodiversity Monitoring Transect Analysis in Southern Africa). Email vollan@wiwi.uni-marburg.de.

external influence coming from devolution and decentralisation might negatively affect village cohesion, co-operative norms and thus collective action especially 1.) without a longer history of co-operation or collective action (section 3) 2.) under high unemployment, and 3.) if many committees are running in the community and do not generate income for the people (both section 4). The latter point indicates that unsuccessful political and social interactions on the commons run the risk of winding up in “social traps” where people getting more and more selfish (frequency-dependent pay-offs in a prisoner's dilemma game). Additionally, political, economic and cultural changes after the apartheid era lead to an adjustment of the underlying motives for participation and decision-making in committees. In the new situation in particular richer individuals abstain from committees and conflicts remain unresolved. This in turn negatively affects communities and committees ability and legitimacy to self-organize voluntarily or on demand to government policies.

The study found that if the possibility of making good collective decisions at the local level depends on a sufficient number of villagers having and applying norms and beliefs that support the respective institution and an external environment that builds on existing norms with interactive participation, then successful community-based development is not only a question of efficiency and cost-benefit calculations but one of consistent policy measures of devolution, decentralisation and poverty reduction in order to foster village cohesion, social capital and collective decision-making. The paper ends with recommendations for local governance institutions that are less likely to end up in conflicts.

1. INTRODUCTION

Community-based natural resource management (CBNRM) is promoted to reconcile conservation and development at the local level and has become one of the dominant policy guidelines for sustainable rural development in southern Africa (Ribot 2003:53). The guidelines for CBNRM follow recommendations from researchers, development agencies and NGOs around the world, who emphasize the importance of local public participation in the use and maintenance of commonly owned forests, pasture lands, wildlife and fisheries in order to improve local development and natural resource management. Similarly to the CBNRM programmes, a wave of decentralisation has been taking place in many countries around the world with the aim to bring public service delivery closer to the people and thereby making delivery more efficient. Decentralisation agendas of southern African countries make it a must for government officials to involve local people in all kind of projects or to transfer authority to community committees. The sectoral approach followed by most governments, leads to a number of community workers representing various departments and agencies in one area (Swanepoel 1992:112). This development has been taking place without considering any possible negative effects devolution could have. Cleaver wrote that participation "*... followed a myth, that communities are capable of anything, that all that is required is sufficient mobilization and the latent and unlimited capacities of the community will be unleashed in the interests of development*" (Cleaver 1999:604). It is hence not surprising, that "*... studies of devolution are mostly aimed at showing that devolution/decentralization is superior to centralized solutions by stressing the efficiency/ equity/ sustainability aspects of its outcomes. Thus, they defend and justify it on the basis of its effects. This rhetorical strategy emphasizes why devolution should be pursued, but provides little insight into the conditions under which proposals for devolution may actually be accomplished successfully. We suggest that insights from writings on collective action form a fertile source to address this void*" (Agrawal and Ostrom 2001). This article aims to address both citations. It will show the limited scope participation in external projects can have for certain communities by drawing from experiences of empirical and theoretical findings of collective action and social capital in Namaqualand. Besides the well established literature of the links between social capital, natural resource management and development this paper will explore the importance of social capital for decentralisation. It will further show, that external influence might crowd-out self-organized collective action in the Namaqualand. The starting point of this analysis is, that any collective decision-making requires a certain amount of individual actors having

norms and beliefs that support the institutions involved (Richerson et al. 2002:431). Collective decision making is both crucial in the management of devolved common property resources and in decentralised local management systems. Norms and beliefs or social capital is measured with mutual trust, reciprocity and reputation that are linked to the collective actions occurring in devolution and decentralisation.

The paper is build up as follows. Section 2 introduces the study area and presents the methods used for data collection and analysis. Section 3 starts with (Agrawal 2003:251) suggestion to "investigate common property arrangements and associated subject positions with greater historical depth". This section concludes that co-operative non-kin based norms evolved over time in past interactions due to successful collective action and are still effective for village governance today. The inattention of the design principles for successful common-pool resource management towards external social, political-institutional, and physical environment will be illustrated with reference to state policies and market integration in section 4 by showing how external influence through establishing of decentralization committees temporarily changes the norms of trust and reciprocity villagers have. Section 5 discusses the findings within a larger social-ecological framework following (Peters 1987:178) statement that one has to understand the socially and politically embedded commons in order to explain individual calculus in a common-pool resource system (section5). Section 6 concludes the paper and formulates policy recommendations.

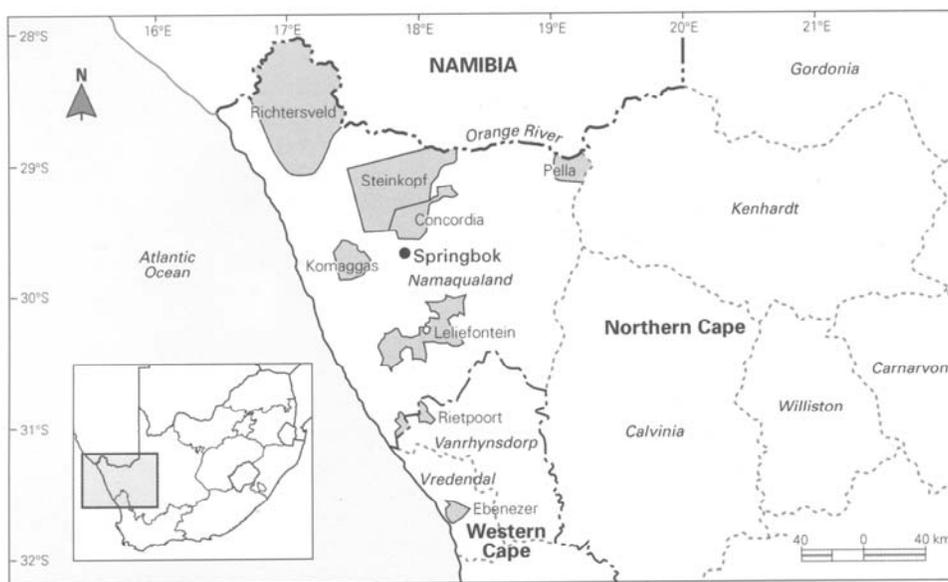


Figure 1 Namaqualand and 'certain rural areas'. The focus of the study is the area around Leliefontein. Map taken from: Timm Hoffman, Cape Town; in: (Wisborg and Rohde 2004)

2. STUDY AREA, METHODS USED FOR DATA COLLECTION AND DATA ANALYSIS

Namaqualand, the study area, is a winter-rainfall desert of some 50.000 km², located in the north-western part of South Africa (see figure 1). In Namaqualand, six former "colored rural reserves" make up more than a quarter of the land and is home and resource base to a majority of the rural population. The disconsolate territories of these communities were the last refuges for the Khoi-khois and the "coloureds" population who were displaced by the arriving European settlers, appropriating more and more land. It was only in the arid region of the north-west where an independent livelihood could exist.

Many of the villagers are unemployed and rely on state pensions, welfare grants, remittances from relatives working in nearby towns or coastal diamond mines as well as on occasional salaries. The high rate of unemployment also means that the people must rely heavily on the local natural resources for getting fuelwood and grazing for their livestock. Historical cornerstones of the commons in Namaqualand², are manifold. Starting with colonial oppression and with the allocation of unproductive land to the coloureds, this situation was worsened with the 1913 Land Act, which made it illegal for Africans to own or lease land outside the reserves. The reserves became mainly a pool of migrant workers for the coastal diamond mines who only paid a single man rate and were not responsible for caring of the workers and their families. The apartheid regime continued the marginalisation process. Decisions of the local people were taken in administrative boards and could be overruled at any time by government representatives, which were mainly aiming to "ensure that the economic development of these areas was in line with the interests of white farmers" (Rohde et al. 1999:5). The apartheid regime imposed land use plans on the coloured reserves and provided the farmers with an infrastructure they could use but were not allowed to maintain it. It could take a long time until government repaired broken wind pumps in drought periods. No feeling of ownership or responsibility could emerge and people became patient and sometimes desperate recipients of government help. In 1984 an attempt was undertaken to privatise communal land in order to enhance a coloured middle class. The establishment of the 'economic units' in 1984 worsened the skewed distribution of wealth in the commons.

² An impressive historical analysis of the Leliefontein area to which is often referred here is provided by (Rohde et al. 1999) for historical summaries for the Namaqualand see also: (Anseeuw 2000) or (Boonzaier 1996).

Communal land was divided into 47 units, where 30 were rented to a emerging coloured middle class, while only 17 units were set aside for communal use of 230 farmers. The privatisation was rejected by the population and overruled by the supreme court. (Cousins 1996:11) summarizes, that "the struggle over property rights has left a legacy of factional division and bitterness within the reserves". However, section 3 offers another influence the overruled privatisation might have had for the communities. Since 1994, Namaqualand has been part of a broader process of land redistribution in South Africa. The government bought land from commercial farmers and transferred it to rural communities. These "new" commons are fenced-in farms with relatively good infrastructure compared to the "old" commons. Two camps on the new commons are shared among two or three communal farmers. Both the old and the new commons of Namaqualand fall under the co-management regime of the department of agriculture and the municipal administration. The external parties set fixed rules of stocking rates and provided management plans for the commons although villages and the responsible 'meentkomitee' were allowed to make changes according to their view. In 2002 a referendum were held in the communities whether the future ownership of the commons should be under the authority of a common property association (CPA Act of 1996) the municipality or option on choice that may include trust ownership and individual title. The majority of the Leliefontein communities voted for the municipality.

The assessment of households' social capital and participation and communities' collective activities and abilities to create and follow rules was done with 215 structured interviews on household level and semi-structured interviews with community members and committee members in over 20 villages of the Namaqualand and 5 of the Karas region in Namibia. The household questionnaire takes various forms of collective action into account including the development of institutions, resource mobilization, coordination activities and information sharing (Poteete and Ostrom 2003). This work has its focus on the linkage between community-level data of villages in the former Leliefontein reserve, with an additional household survey³ undertaken with 151 households in the same villages from August to November 2004 . This survey was part of a larger research done also in an adjacent Namibian region. The questionnaire is based upon former studies of the World Bank (Narayan and Woolcock 2000), (Narayan and Cassidy 2001) but adapted on local realities. (Narayan and Woolcock 2000) favour a synergetic view of social capital, that incorporates different levels and dimensions, and recognizes the positive and negative outcomes social capital can

³ Questionnaire can be obtained from the author upon request.

generate. The reasoning of this article is retroductive as the explanations and hypotheses are built up on the basis of observed patterns and trends.

After the pre-test, the first household survey took place in the village of Soebatsfontein (new municipal commonage) with most household leaders and extended to other villages in the old commonage, to get a broader insight in social relations for the whole Namaqualand and especially the Leliefontein area. The respondents were the head of the household or his wife, chosen randomly according to spatial criteria and availability of the person. The objective of this work was not to have a representative, but rather a purposed sample to grasp the existing diversity in the Namaqualand including both the Kamiesberg and the Nama Khoi municipality districts⁴. The enumerators in the villages have been selected following recommendations from local organisations and were all involved and respected persons in community organizations guaranteeing a broad response rate throughout all village groups. The characteristics of households participating in voluntary collective activities and incentive based collective activities are examined with logistical regression analyses of different social capital indicators covering trust, reciprocity, reputation and networks. For that purpose an confirmatory and exploratory factor analysis for the complete household survey including Namibia was done in order to separate the different dimensions of social capital. As the data was mainly collected using simple and understandable questions with dichotomous response categories, the data is at a nominal or ordinal scale and had to be reduced to factors⁵ by using CATPCA (Categorical Principal Components Analysis) or HOMALS (Homogeneity Analysis by Means of Alternating Least Squares) in SPSS 11.0. The differences between the villages and the sort of commonage was done with ONEWAY ANOVA (Variance Analysis) and T-tests.

⁴ The very few demographic data made it rather difficult to identify a representative sample.

⁵ I excuse that there is not an appendix for the variables included in the factors. Work in progress...

3. THE INFLUENCE OF PAST DEPENDENCE AND PAST CO-OPERATION ON COMMUNITY GOVERNANCE TODAY

The period after the 1950's, which has become known as the apartheid regime followed the principle that different races should develop along different lines. The Bantu Education Act of 1953 therefore stated, that Africans should only be educated to a degree which would give them the skills to serve their own people and perform labouring work for the whites and to prevent urbanisation by keeping the coloureds in the reserves. During that time the maintenance of the infrastructure on the commons was under the authority of the Department of Coloured Rural Areas. There were certain limitations and difficulties imposed by the government. Infrastructure and land were of poor quality and the water points too small in relation to the number of livestock (Couch and Pendleton 1998:12). The outside dependency of the coloured farmers was increased through delegating maintenance and provision of infrastructure to an outside entity. Broken wind pumps were left damaged for months until the extension worker came to repair them. Farmers were not trained in repairing wind pumps or able to purchase the required materials themselves instead they became petitioners for their animals survival. Similarly, coloured workers on commercial farms or in the mines were left uneducated with the only purpose in receiving and performing orders. Individual and collective decision making was hindered in several ways, the only strategy was to wait for help. It is more than 10 years ago since independence and many policies changed favouring coloured farmers. However, from a viewpoint of collective action, there is still a heavy burden to overcome from the apartheid dependence system a study on collective action has to take that into account. (Shackleton et al. 1998:21) are right in characterizing South African communities as "not having had a long tradition of cooperation, instead, [they] were confronted with hard challenges under rapidly changing conditions". Indeed taken the long history of external control in Namaqualand into account it is rather implausible to expect large scale collective actions. The question however is whether that also "prevented them from gradually learning" to co-operate and to evolve collective norms of governance.

Besides past dependency, past cooperation also plays a major role for governance today. To analyze this, we will compare the only village within the Kamiesberg Municipality that received a common land after apartheid and did not possess land before with 6 other villages from the rural reserves. The comparison reveals a difference in the ability to manage the commons under the co-management scheme. The argument is, that natural resource use in the

old commons is managed by co-operative agreements among the villagers (e.g. collective herding strategies or the informal allocation of grazing land) and that the prior experience with co-operation makes it easier to manage villages on the old commons. The overall result for Soebatsfontein and the Leliefontein area is presented below in table 1.

Significant characteristics of the "new commons" (Soebatsfontein, n=35) derived from a t-test with the "old commons" of Leliefontein (6 villages; n=68). Both of the Kamiesberg Municipality.

- Lower "social cohesion" and togetherness (favour to a neighbour, amount of friends, participation at community ceremonies) ^b. People tend to contribute less without obtaining individual benefits ^a
- Little appeal for democratic decision-making processes (bad information flow, low participation rates in meetings and not informed with resp. not happy with decisions) ^b and more people leaving the committees ^a
- Lower trust in local level institutions with frequent interactions (village committees, municipality, political parties) ^b
- Higher trust in higher level institutions with few interactions (police, judiciary, landbank) ^b
- Higher general trust including strangers ^a

Table 1: Significant results from T-tests between new and old commons.
(a= variable from questionnaire; b=derived factor)

Table 1 contains all significant results obtained from a t-test. Soebatsfontein shows a lack of social cohesion which can be at least partly associated to the nature of the new commons. Without relying on co-operative agreements over resource access in the past, there was no pressure to learn collective behaviour or to form expectations of others behaviour over a longer period like in the Leliefontein area. (Gjertsen and Barrett 2004:329) took "community cohesion" as one of two indicators for identifying comparative advantages between community based, co-management or state managed resources. A low level of village cohesion was taken as an identifier for higher state efficiency of management. The lower degree of cohesion might come from the lack of experience to battle collectively against the economic units in 1988. This can be a factor that make it difficult for Soebatsfontein to effectively use and participate in the new village institutions. The other indicator of (Gjertsen and Barrett 2004) was the "fundraising capacity" of the community. The lower willingness to contribute for the community without getting money rewarded diminishes the fundraising

ability of the villagers in Soebatsfontein. Examples of these are the writing of applications for funding or to collectively raise the voice for more development projects. This can be an explanation why the village did not obtain water and electricity pipelines, yet. Taking (Gjertsen and Barrett 2004)'s indicators to determine the optimal management for Soebatsfontein would most probably lead to a shift towards state management. The frustration stemming from uncoordinated, half finished actions and unresolved conflicts around actions to be taken leads to less participation in decision-making processes, the withdrawal of people from committees and a reduction of trust towards the institutions responsible for the co-management. Interestingly, this frustration is only directed towards these institutions since higher level institutions and general trust is even higher than in the Leliefontein area⁶. The comparison showed, that, albeit high employment, the co-management scheme is less successfully implemented in Soebatsfontein than in other regions and might require more assistance from the municipality or the NGOs to find mechanisms that let people participate again. On the opposite, the old commons created an environment of togetherness and were a vehicle for social learning. Especially the inherent conflicts in resource use and thus the presence of mechanisms of punishment and reward seems to be crucial in a context of social learning (van den Bergh and Stagl 2003:296). (Putnam 1993a), one of the pioneers in social capital theory writes, that "social context and history profoundly condition the effectiveness of institutions but acknowledges, that investments in social capital by "using wise public policies" could revitalize the stock of social capital (Putnam 1993b). Hence, social capital might also reveal a possibility to overcome contextual historical and institutional path dependencies as it is both context specific and self-enforcing. Successful experience leads to an increase in trust and an expectation that others will co-operate in future. This reduces uncertainty of interactions and makes co-operation and collective action more likely to emerge. From that perspective we will see whether it was a "wise public policy" to introduce village committees to revitalize the stock of social capital. The following chapter explores the effects sectoral committees have had on the social capital and governance capacities of the villages in the Namaqualand.

⁶ The strong outside orientation of trust, especially the general trust including strangers is significantly higher, relates to the higher values the large portion of permanent workers gives these outside institutions.

4. THE EFFECT OF DEVOLUTION/DECENTRALISATION ON THE GOVERNANCE OF VILLAGES IN NAMAQUALAND

4.1. Local Governance and Samaritan Dilemma

Shortly, after the apartheid, in 1995, the newly elected South African government initiated municipal elections for the Transitional Local Councils (TLCs) and created municipalities in all rural areas. Under the new constitution from 1998, the municipalities have a key role in the provision of basic services, in particular water, sanitation, refuse removal, electricity, town planning, land administration and so on. Municipalities and local governments reduce part of their accountability by transferring authority to community committees in a process of devolution⁷. These policies are also aiming to supply individuals with occasional contractual jobs (see figure 2). (Anseeuw 2000:48) found in his thesis covering 108 households of Leliefontein, that 39.5% of the households got their revenues from occasional wages compared to only 28.7% from regular salaries. This development is rooted in the recent political changes that also changed the attitudes of many people towards a mentality of entitlement. Hence, most communities expects some kind of monetary benefits from projects which in turn forces outsiders establishing a project to provide some kind of revenue to the community. This situation is similar to one described as samaritan dilemma⁸. Suppose an altruistic organisation is willing to transfer resources to a person when he comes into hard times. If the person anticipates that the organisation will act in this manner, the person will do too little to prevent the hard times out of his own initiative. Helping somebody may undermine his incentives to work. In our context, we mean, that helping undermines the incentives to work and organize voluntarily as well as to spent the received money wisely. Imagine an outside organisation and the community agree on a project and set up a management committee. The contract consists of some kind of transfers or services in exchange to some degree of voluntary participation. However after the contract is signed, each individual villager or committee member will have no incentive to participate in the voluntary work unless he or she awaits some private returns from the project. Committee members might anticipate that the donor will have to pay for the work if the work progresses slowly or cannot be completed on a voluntary base. Once money is paid, villagers will have

⁷ According to indicators, South African Governments act as real partners of the devolution process. and rank among the highest in the world and the highest in Africa with indicators for "government effectiveness" and "voice and accountability" (Kaufmann et al. 2005)

⁸ See (Buchanan 1975) for the original essay on the samaritan dilemma.

no incentive to finish a project with the foreseen amount of money if they anticipate, that more money will be put into the project. This point can be illustrated by an example where an organisation will put additional money into half finished community projects because he cannot credibly commit himself to a certain fixed amount of money in the beginning. If the villagers are aware of the donor's situation they will misuse or overspend the foreseen amount of money as they know they will receive enough money later to finish the project. If more money is put in a defunct committee, the defunct behaviour is "rewarded" as the stream of benefits is extended and will lead to more occasional work for the community. In the end most of the villagers will be satisfied except the fact, that it took some years to finish a housing project or set up toilet facilities. The outside organisation might blame the difficult situation in the Namaqualand without being aware that he was part of the problem.

Depending on the actual tasks, outsiders are more or less trapped into the samaritan dilemma. Once the decision about a payment has been done the selection of the contractors and the selection of the workers as well as other important decisions are taken in the established committees. Due to government efforts to push forward decentralisation, public service delivery and empowerment of local communities, as well as many other projects; villages in Namaqualand are governed by numerous sectoral or project specific committees apart from the designated ward committee ('wyk komitee').

Influence of unemployment on the establishment of external committees

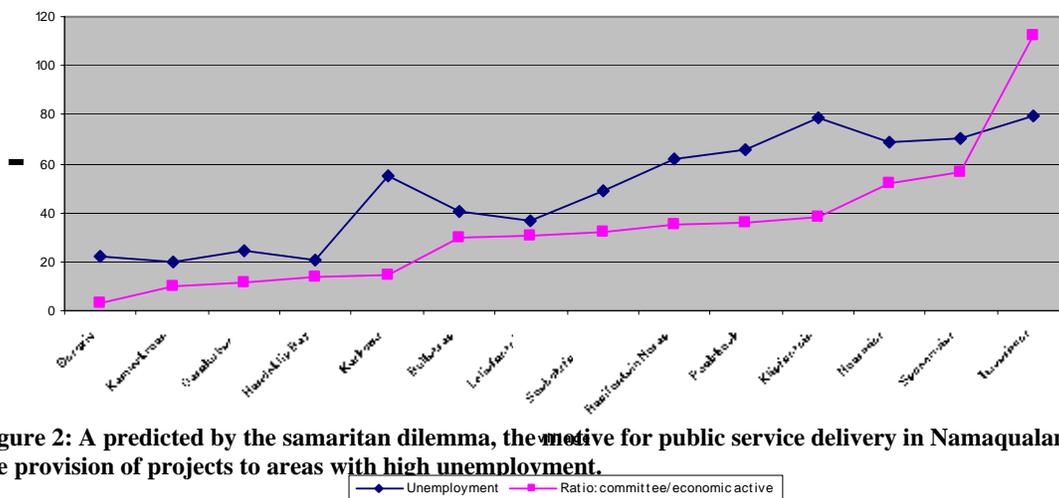


Figure 2: A predicted by the samaritan dilemma, the motive for public service delivery in Namaqualand is the provision of projects to areas with high unemployment.

First, I am going to analyse the overall impact of committees on village level and then specify by comparing voluntary and paid collective actions following from the establishment of a

committee⁹. It will be shown how the samaritan dilemma leads to reduced social capital in villages.

4.2. The influence local committees have on social capital

In the Namaqualand participation in committees is functional in the sense that people form groups to meet predetermined objectives of externally initiated projects. However, committees could also be platforms for self-mobilised collective action. The discrepancy between the situation in Namaqualand and the optimal outcome of a committee can be explained with the vast literature of social capital and common-pool resource management. Social capital deals with the prominent role of trust, reciprocity and reputation for the formation of collective action. According to (Putnam 1995) social capital are "... features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit". According to the definition, there are different aspects, that lead to increased coordination or cooperation. We could already see in section 3 of this paper how social cohesion loosely described as networks and past co-operation increase the success in co-ordination activities. This chapter examines the role of trust and other norms for co-operation and co-ordination. The point of departure is the behavioural approach to the rational choice theory that explains the core relation between reciprocity, reputation and trust in overcoming social dilemmas (Ostrom 1998). *"Thus, trustworthy individuals who trust others with a reputation for being trustworthy (and try to avoid those being untrustworthy) can engage in mutually productive social exchanges, even though they are dilemmas, so long as they can limit their interactions primarily to those with a reputation for keeping promises"* (Ostrom 1998:12). These three categories are used as indicators for potential collective action and can be linked to structural variables in order to explain levels of co-operation and success of local institutions. These categories were measured on household level aggregated and compared with structural variables. As a first result, there are no significant differences in levels of aggregated trust among villagers, reciprocity or reputation of villagers being trustworthy between villages in the old and new commons. The variation among villages is significant, pointing towards structural reasons.

⁹ A clear distinction between voluntary and paid collective action is difficult as each project can generate some monetary incentives at different stages. Projects, that are primarily based on voluntary work are mostly initiated by NGOs or donors that try to set up gardening, tourism, healthcare, crime prevention or other projects to raise awareness for conservation or HIV. Occasional jobs or 'incentive based' collective action are construction work for houses, fencing, or water and electricity pipelines.

	Size of the village ^a	Unemployment rate (%) ^a	Total no. of external committees ^c	Voluntary collective work ^{b**}	Occasional work via committee ^{b*}	Index of reciprocity ^{b*}	Norms of trust ^{b**}	Belief others are trustworthy ^b
Tweerivier	207	79,37	13	1,7	1,2	2,33	-0,5	1,00
Spoegrivier	460	70,54	14	1,6	1,0	2,5	-0,1	1,08
Paulshoek	497	65,63	7	1,3	1,5	3,3	0,7	1,29
Soebatsf.	246	48,9	7	1,2	1,4	3,4	0,3	1,18
sig.-level				0,035	0,076	0,064	0,016	

*= significant at 0,1; **=significant at 0,05

Table 2: Influences of resource pressure, unemployment and devolution on community norms in Namaqualand. (Higher values are tagged blue and lower red to highlight the contrast for the reader; a= Data calculated from South African Census 2001; b=Data taken from author's household survey 2004; c=Data taken from author's community survey 2004)

Table 2 exemplifies for 4 comparable villages from the Kamiesberg municipality relationships between key variables of collective action and social capital. Table 2 also shows other significant correlations between key variables of collective action:

1. High unemployment shows a relationship with a large amount of committees (see also figure 2). This indicates the reasoning, that decentralisation policies are aiming to bring employment opportunities to the poorest villages.
2. High unemployment shows a relationship with lower level of norms of trust & reciprocity & reputation. This relationship could be based on higher levels of alcohol abuse, which is a major issue in the reserves. However this reasoning will not be further analyzed here.
3. A large number of committees leads to more voluntary work instead of projects that generate income through occasional work.
4. In villages with many committees people have lower levels of norms of trust & reciprocity & reputation¹⁰.
 - 4.1. More specifically: levels of norms of trust & reciprocity & reputation decrease, when voluntary work is the outcome of the committees. This

¹⁰ This finding is surprising as collective action is most often positively related to social capital either by definition or in empirical studies. In South Africa, the importance of group membership for household welfare was recently shown by (Maluccio et al. 2000) for the Kwazulu-Natal region. They conclude, that frequent group memberships increases trust and thereby household welfare. Similar results were found in (Rowley 1999) study of social capital in sub-Saharan Africa or by (Narayan and Pritchett 1996) in rural Tanzania. In contrast to that is the cross-country study of (Knack and Keefer 1997), who found that group memberships are not directly related to economic activity, and unrelated to trust, and that it hence may be counterproductive to promote horizontal associations via an encouragement of group formation and participation.

points toward the fact, that committees are considered as unsuccessful when they do not generate benefits and villagers lose their trust in the leaders.

4.2. However, levels of norms of trust & reciprocity & reputation increase, when paid work is the outcome of the committees. As explained in the samaritan dilemma rent-seeking and embezzling of money is accepted by the rest of the villagers as long as it is "rewarded" with occasional work. Hence paid work does increase trust, reciprocity and reputation within the village and corrupt behaviour is not necessarily linked to less norms of trust, reciprocity and reputation.

In the remainder of this section we are going to analyze the reinforcing nature between points 3. and 4.. I argue, that with increasing number of external committees and simultaneously arising lack of co-ordination among them their overall impact deflagrates. One rationale of choosing committees is to consolidate leadership. However, it is in its nature, that local leadership is restricted by the amount of capable and willing persons to serve on the committee. If many committees exist, committees are competing for scarce resources like: good leadership and the attention of the villagers to participate in meetings. Similarly, a large number of committees makes it more difficult to achieve good practices for monitoring, reporting, accountability and ownership with emerging unclear responsibilities over leadership. When most projects are initiated only with a small group of people without the support from the rest of the community, which is the case when many committees exist, the likelihood that unsuccessful (or useless) meetings and actions occur is increased. The splitting up of community governance lead to less success (here measured as occasional work) which leads to the situation where people get frustrated and complain about their leaders and good potential leaders abstain from committees and norms of trust, reciprocity and reputation decrease. Additionally, with increasing number of committees groups will not solve their conflicts but just form new committees. This leads to a development described as "factional politics" with the establishment of rival committees (Cousins 1996:16), reinforcing the high number of already existing organizations and thus aggravating the described problems. The unsuccessful interactions in villages with many committees run the risk of winding up in "social traps" where a greater share of the population loses their norms of trust, reciprocity and reputation. More interestingly is the situation where paid work leads to higher norms of trust under the assumption made in the precedent subchapter that more paid work might be related to more corruption of outside money. Generally, one would assume, that corruption would lead to lower norms of trust, reciprocity and reputation among villagers. However, this

is not necessarily the case. The evolution of corruption in a society was analyzed by (Bruegger 2005). She used replicator dynamics to model payoffs for certain individual strategies as functions of the overall population behaviour. Hence the individual incentives to corrupt depend on the prevalence of corruption in the population: "*When corruption is widely spread, corrupt behaviour may have greater benefits (gains from corruption need not to be hidden) and lower costs (corrupt activities are less likely to be punished)*" (Bruegger 2005:2). Related to our results, this statement confirms the view, that the more corruption in a village the higher the benefits are. If corruption is linked to the presence of paid work, then higher norms of trust in villages with more corruption point towards that corruption of outside money is an accepted behaviour in these villages and that corrupt behaviour can coexist with higher norms of trust as long as the gains are shared among the villagers. It is better to corrupt outside money and to give some to the community instead of not obtaining any money at all. However, this does not mean, that villagers like corrupt behaviour, it just means, that it is preferential compared to no projects at all. Furthermore it is only true for externally initiated projects. Corrupt behaviour in self organized collective actions is still likely to have negative effects on trust and reciprocity.

4.3. Attributes of people participating in collective action and governance

At the first look at table 2, one could expect that people doing voluntary collective action or being member of a committee might have lower overall community norms of trust and reciprocity. The respective regression results of the household data are displayed in table 3.

Dependent Variable	Adj. R ²	Significant Predictors	Possible Description
Voluntary Collective Action	0,607	Appeal for democratic decision-making ^b Trust in new institutions (NGO, Researcher) ^b Higher level of Education ^a Social cohesion ^b	"Community ties and open for change"
Member of a committee	0.464	Appeal for democratic decision-making ^b Belief that Municipality can solve problems ^b Belief that monetary contributions are important ^b Not permanent employed ^a	"Favouring State centric approaches"
Occasional work via committee	0,546	No Farm Income ^a Low willingness to pay for community ^b Trust in external institutions (Govt.) ^b Environment is not community problem ^b	"Beneficiaries without community norms"

Table 3 Regression results for different collective actions taken from author's household survey. (a= variable from questionnaire; b=derived factor; c= constructed index)

Voluntary workers and committee members believe in democratic participation processes and go more frequently to village meetings and keep themselves informed about what is going on in the different committees. Members either have a higher trust in NGO's or the municipality, dependent on the amount of interactions they have had. The latter point shows, that the interaction at the local level produces trust in the respective organisation. However, important for collective action is the level of trust in community members. Both committee members and voluntary workers cannot be explained with one of the key variables of social capital. The only effect trust, reciprocity and the belief that others are trustworthy have is on village level with the described outcome. Contrary, not political attitudes but personal characteristics determine the participation in incentive based collective action. This reflects the fact, that most people are chosen from a larger pool of possible workers without any prior participation in voluntary work. Their dominant characteristics could be paraphrased as relatively poorer individuals with a low willingness to engage for community problems. Interestingly, t-tests indicate, that they have significantly lower community norms of trust or reciprocity¹¹. People participating in incentive-based collective action answered more often, that they were less willing to participate in projects offering benefits for the whole community if they would not benefit directly from that activity. Similarly, a short socio-psychological experiment adapted from (Ernst et al. 1996), aiming to identify social preferences showed, that people employed in incentive based collective action were significantly stronger oriented towards their own profits. Table 4 further illustrates the importance between participation and trust in local organisations (committees). The reasons for participation and withdrawal from community meetings and functions depends on trust in the respective organisations. If villagers loose their trust in local organisations or in the process of decision-making they are likely to withdraw from community work.

Dependent Variable	Adjusted R2	Significant Predictors
Participation in meetings	0.601	Member of a committee ^a High trust in local organisations (committees) ^b
Less participation in committees compared to 3 years ago	0.319	High income ^a Less trust in local organisations (committees) ^b

Table 4 Regression results for Participation in Meetings and withdrawal from committees.
(a= variable from questionnaire; b=derived factor)

¹¹ This underlines the robustness of the result obtained in table 2. There are higher levels of trust and reciprocity in Paulshoek and Soebatsfontein even if there are more people paid for collective action, and hence more people in the villages have lower trust and reciprocity.

Regression results and correlations affirm, that mostly richer people with strong family ties have become less involved and people with looser friendship networks have become more involved in committees. This indicates, that committees poses a threat to the existing power structures and also, that participation is simply too time consuming for the some of the richer people compared to the benefits they will get out of it. The replacement of centrist village structures under the control of the richest served the community with the enforcement of norms and their capacity of leadership and punishment. Rich, and respected individuals with strong family ties played an important role to punish deviating, or reward co-operative behaviour¹². Hence, they might have been an important component of the sustenance of pro-social behaviour in the past. The fractioning of power in small communities is an influence, which negatively affects committees ability and legitimacy to self-organize when potential leaders abstain. If it would be an aim to challenge the existing power structures, the establishment of committees should be followed up with a strong focus on capacity building.

5. A FRAMEWORK TO ANALYZE DECENTRALISATION AND COLLECTIVE ACTION IN A COMMON-POOL RESOURCE SYSTEM

Conflicts arising from the outside creation of social capital stemming, from participation, or decentralisation has not been paid much attention to so far (Suzuki 2004). The prevailing opinion is that, increased social and human capital will lead to the emergence and sustenance of local groups which is highly appreciated for e.g. conservation efforts (Pretty and Ward 2001:220). Norman (Uphoff 1993:619), stresses the importance of public policies that capitalize on complementary relationships of NGOs with state and market institutions to revive and expand collective action. He argues, that villagers should have multiple channels that enable them to engage in dialogue with governments or NGOs. Only James (Manor 2004) raised the question in a recent article whether user committees could be a "damaging second wave of decentralisation". Manor focuses on financial discrepancies between single- and multi-purpose committees (here: 'wyk komitee') that lead to destructive conflicts over resources and fragments village participation (Manor 2004:207). The preceding section aimed at adding some empirical evidence to the 'damaging' character of externally initiated user committees that occurs to the potential to self-organize effectively. This damage occurs as norms of trust and reciprocity are important to self organize from within a system.

¹² As stated in (Rohde et al. 2001:18), wealthy communal farmers play an important role in the Namaqualand for income generation of the poorest.

The remainder of this section discusses the impact the effects of devolution have for the resource system in Namaqualand as a whole. The interdependency among different institutional and ecological subsystems and the social ties integrated within a community confirms (Peters 1994; 2002) and (Woolcock 1998) view of embeddedness of actors. The maintenance of infrastructure, or the appropriation of the resource has to be analysed in a broader framework of the commons. Resource users interact with a complex and fragile ecosystem¹³, with their infrastructure, with each other, and with local governments or NGOs on a daily basis in order to sustain their livelihoods (see figure 2). This interaction requires social capital which is embedded in a socio-political, historical and cultural background. (Anderies et al. 2004) identify the possibility to form sustainable collective action at the local level as the major condition of a robust social-ecological system.

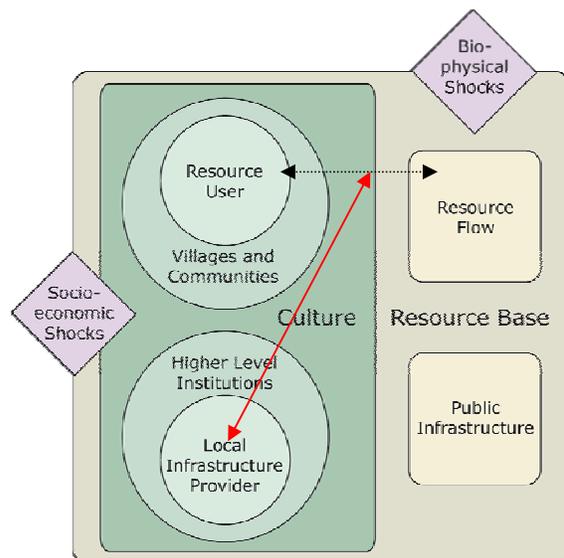


Figure 3: Framework for the analysis of common-pool resource systems. It includes the critical interactions to outsiders as well as the embeddedness of actors in a robust common-pool resource system. Based on (Anderies et al. 2004)

In Namaqualand the resource is a regulated common property, co-managed by the municipality and the communities. The problems involved are more complicated than (Hardin 1968) original argument of the "tragedy of the commons". Appropriation is still (mis)guided by individual short-term benefit maximising but the dynamics are best represented with the littering game of (Brenner and Witt 2003). The authors used frequency-dependent pay-offs to

¹³ A selective regime with highly predictable rainfall and moderate temperatures (Cowling et al. 1999) is responsible for the unique plant ecological features of Namaqualand. This area has been recognized as the earth's only arid hotspot of biodiversity, placing it among the 25 most ecologically valuable spaces in the world.

modify the well-known prisoner's dilemma game. The structure of the game is similar to that used by (Bruegger 2005) to explain the evolution of corruption in a society. The higher the share of the population not adhering to a norm of conservation, the more likely it will be that other people will also not adhere to the norm of conservation. The refinements to the prisoner dilemma add a dynamic component to the game and imply, that the value of all pay-offs depend on the average of the chosen strategies in the former rounds. If the pasture has been overused for many years, the pay-offs for overusing does become smaller (but will always be higher than conservation farming). Similarly, if the pasture has been conserved in the past, then the pay-offs for co-operating are decreasing and those for deviating are increasing. This view implies, that the social dilemma is always prevalent. A collective effort to make and enforce use-rules leads to the temporarily solution of the dilemma. However, the dilemma is not solved nor does it disappear completely as successful conservation will increase the resource base and thereby also the individual incentives to deviate from the co-operative solution. Only the insight in the long-term benefits of conservation and continuing efforts can sustainable prevent the overuse¹⁴. The surmounting of the social dilemma described by Brenner and Witt can be achieved through collective action. As we have seen, social capital loosely described as existing norms of trust, reciprocity and the expectation that others will also cooperate (Ruffle and Sosis 2003:20) are essential for collective action. Social capital enables people to solve social problems or to create new structural arrangements like committees that solve problems. Committee members using democratic principles can create and enforce rules that better help them to escape from the social trap. However, co-ordination tasks of committees are not easy as they underlie multiple Nash equilibrium. This shifts the focus of the analysis from the irresistible tendency of individuals to exploit the commons, towards human encounters involving problems of trust, leadership, group identity, and heterogeneity of group members (Baland and Platteau 1995; Baland and Platteau 1996:114). Therefore (Anderies et al. 2004) stresses the importance of the often neglected relationship between the resource user and the public infrastructure provider as the critical link to effectuate the strong need for co-operation in the commons (red arrow in figure 2). In Namaqualand committees are established as a means to cope with this critical issue. For people living in the villages it has become the most viable livelihood strategy to behave individualistic in committees as a response to the opportunistic behaviour in the rest of the

¹⁴ Of course, reality is more complex. Whether the social dilemma will lead to a socio-ecological dilemma depends on the resource characteristics. For semi-arid regions rangeland scientists advocate a non-linear relation between use and degradation with multiple equilibrium (Behnke and Scoones 1993). See (Vetter 2004) for a recent review. This view questions the existence of an ecological dilemma that would aggravate the social dilemma of individual profit maximisation and free-riding.

village. I therefore argue, that there is a high probability, due to the heuristics and misperceptions about the kind of committee that is established and the embeddedness of actors that it is very likely, that individualistic/opportunistic behaviour will be transmitted from one initial committee into other committees and group-decision making in general. It might even lead to the erosion of well established informal norms of past governance¹⁵. Moreover, the competition between different committees for attention will lead to a disinterest of the community members towards new projects and a refusal to attend meetings¹⁶.

Another aspect of decentralisation and devolution is the question whether payments should be used as an incentive for sustaining collective action. A phenomena described as crowding out of intrinsic motivation is known from motivational psychology and has become popular among some economists mainly with the work of (Frey 1997). (Frey and Jegen 2001:594) and (Ostrom 2000) explain how external control or payments can lead to restricted self-determination or to reduced self-esteem and changes people's motivation to act. (Cardenas et al. 2000) conducted experiments in 6 Colombian villages and found, that individuals in a common-pool resource system, confronted with external regulation began to exhibit less other-regarding behaviour and, instead, made choices that were more consistent with pure self interests; that is, the regulation itself appeared to crowd out other-regarding behaviour. (Frey and Jegen 2001:594) conclude their survey, "... that an external intervention in common-pool resource dilemmas may fail as it absolves people from moral obligations in general" and that "disturbing the moral of a social group managing natural resources can have disastrous consequences for biodiversity" (O'Riordan and Stoll-Kleemann 2002:15). The analysis for the Namaqualand is so far of the same mind with that view, since a large number of externally established committees crowd out other regarding norms of trust, reciprocity and reputation. However, there is discrepancy regarding the payments to a group. In Namaqualand most people await at least some revenues stemming from a project no matter whether it is for conservation or something else.

¹⁵ As described in (Frey 1997:41pp), the probability of transmission depends on the similarity of the task and the participants as well as the frequency of their interaction, and the strength of the adherence to custom and norms, which makes it very likely to occur in a common-property regime given the already explained embeddedness.

¹⁶ Meetings from Conservation International (CI) during April 2006, to introduce its programme had a very low turnout. In Kharkams the biggest village with 1300 inhabitants only 4 came to the announced meeting.

6. CONCLUDING REMARKS AND RECOMMENDATIONS

The implications of committees have been explored in this paper as it is the pathway chosen by politicians to govern the commons with committees. Devolution (not only over natural resources) in Namaqualand is effectuated by committees whose members have to inform and mobilize the community and devise and enforce rules that govern their commons sustainable. Since the possibility of making collective decisions at all depends on a sufficient number of individual actors having and applying norms and beliefs that support the respective institution and external influences alter these norms, it remains unclear whether and how devolution will be a successful way to govern the commons. It remains unclear which of the competing views presented in chapter 3 and 4 will be more important for community governance. One possible explanation could be, that norms of trust and reciprocity are changing more rapidly according to outside occurrences whereas the social cohesion/networks presented in chapter 3 are the main determinants for long term governance. Whether the outside occurrences will harm the networks can only be answered by future research and monitoring. However, the aim of this study was only to present evidence for the impact decentralisation has on the different forms of social capital. Taking the importance of social capital reported in the literature we conclude, that successful community-based conservation is not only a question of cost-benefit calculations but one of consistent policy measures of devolution, decentralisation and poverty reduction in order to foster village cohesion and collective decision-making. Therefore, the presented findings should not be understood as a critique against decentralisation but one against uncoordinated decentralisation. The role of committees for society at large has to be seen with greater concern and integrated approaches should be intensified. This view is shared by (Galvin and Habib 2003) in their survey covering the rural water sector. They conclude that "*recent initiatives by some donors to promote a more inclusive community-oriented form of decentralisation have not yet borne fruit. In the absence of strategies to overcome the structural realities and centralising tendencies, both participatory development and sustainable delivery in South Africa might have to be postponed for the foreseeable future*"(Galvin and Habib 2003:883). The inclusive approaches exist and have been carried out by the Desert Research Foundation (DRFN) in Namibia with great success. Their approach called "Forum for Integrated Resource Management (FIRM)" focuses on inter-sectoral co-operation instead of sectoral competition. All stakeholders and partners in development, sit on one platform on request of one focal community, addressing the variety of issues raised by that one focal community (Kruger 2003:15). In the South African context

only the elected ward committees could serve as such a platform. A strengthening of the ward committees could shift passive into interactive participation according to the needs of the communities. As real, self-determined participation increases, dependency on outside providers of assistance will decrease and real participation might lead to collective action. However, this development will require a collective action of all outside organisations to adhere to their made commitments and to use existing channels which will lead to a change of people's attitude against outside projects. Lastly a stronger enforcement of rules in committees would make people more accountable for the actions they take.

7. FURTHER RESEARCH

The next step will be to analyse data from the Rural Water Supply in Southern Namibian about the effectiveness of water point committees. This will enable us to look at the actual design of committees (composition, size, voting rules) and to compare them with some of the optimal design principles. Additionally, field experiments (trust game and common-pool resource game) have been carried out during March and April 2006 in Namaqualand and Southern Namibia to link the household data with decisions in the game to test the crowding out hypotheses for reward and punishment and to obtain comparable data of the amount of trust among villagers in the commons of Namaqualand.

8. REFERENCES

- Agrawal,A. 2003. "Sustainable governance of common-pool resources: Context, methods, and politics." *Annual Review of Anthropology*. 32:243-262.
- Agrawal,A. and E.Ostrom. 2001. "Collective action, property rights, and decentralization in resource use in India and Nepal." *Politics & Society*. 29:485-514.
- Anderies,J.M., M.A.Janssen, and E.Ostrom. 2004. "A framework to analyze the robustness of social-ecological systems from an institutional perspective." *Ecology and Society*. 9.
- Anseeuw,W. Household, family, economic entity. The identification of relevant economic entities for development. 2000. University of Western Cape.
- Baland,J.M. and J.P.Platteau. 1995. "Does heterogeneity hinder collective action?".

- Baland, J.M. and J.P. Platteau. 1996. *Halting degradation of natural resources is there a role for rural communities?* Clarendon. Oxford.
- Behnke, R.H. and I. Scoones. 1993. "Rethinking Range Ecology: Implications for Range Management in Africa." In R.H. Behnke, I. Scoones, and C. Kervan, editors, *Range Ecology at Disequilibrium. New Models of Natural Variability and Pastoral Adaptation in African Savannas*. Overseas Development Institute, International Institute for Environment and Development, Commonwealth Secretariat. London.
- Boonzaier, E. 1996. *The cape herders : a history of the Khoikhoi of Southern Africa*. Ohio University Press. Cape Town : Athens, OH.
- Brenner, T. and U. Witt. 2003. "Melioration learning in games with constant and frequency-dependent pay-offs." *Journal of Economic Behavior & Organization*. 50:429-448.
- Bruegger, E. Replicator Dynamics with Frequency Dependent Stage Games. 5. 2005. Universität Bern. Discussion Paper.
- Buchanan, J.M. 1975. "The Samaritan's dilemma." In E. Phelps, editor, *Altruism, morality and economic theory*. Russell Sage Foundation. New York. 71-85.
- Cardenas, J.-C., J. Stranlund, and C. Willis. 2000. "Local environmental control and institutional crowding-out." *World Development*. 28:1719-1733.
- Cleaver, F. 1999. "Paradoxes of Participation. Questioning Participatory Approaches." *Journal of international development*. 11:597-612.
- Couch, D. and W. Pendleton. Issues in rural development: A socio economic comparison of eastern and southern communal areas. Research Report 32. 1998. Windhoek, University of Namibia, Multi- Disciplinary Research Centre.
- Cousins, B. Range management and land reform policy in post-apartheid South Africa. Occasional Paper Series 2. 1996. Bellville, Cape Town, Programme for Land and Agrarian Studies, School of Government, University of Western Cape.
- Cowling, R.M., K.J. Esler, and P.W. Rundel. 1999. "Namaqualand, South Africa – an overview of a unique winter-rainfall desert ecosystem." *Plant Ecology*. 142:3-21.
- Ernst, A.M., V. Franz, and C. Kneser. Das Informationsdilemma - Theorie und empirische Umsetzung. 125. 1996. Freiburg, Institute of Psychology, University of Freiburg.
- Frey, B.S. 1997. *Not Just for the Money: An Economic Theory of Personal Motivation*. Edward Elgar. Cheltenham.
- Frey, B.S. and R. Jegen. 2001. "Motivation Crowding Theory: A Survey of Empirical Evidence." *Journal of Economic Surveys*. 15:589-611.
- Galvin, M. and A. Habib. 2003. "The Politics of Decentralisation and Donor Funding in South Africa's Rural Water Sector." *J*. 29:865-884.

- Gjertsen,H. and C.B.Barrett. 2004. *Land Economics*. 80:321-339.
- Hardin,G. 1968. "The Tragedy of the Commons." *Science*. 162:1243-1248.
- Kaufmann,D., A.Kraay, and M.Mastruzzi. Governance Matters IV: Governance Indicators for 1996–2004. 2005. Washington, World Bank.
- Knack,S. and P.Keefer. 1997. "Does Social Capital have an Economic Payoff? A Cross-Country Investigation." *Quarterly Journal of Economics*. 112:1251-1288.
- Kruger,B. FIRM The Forum for Integrated Resource Management: Putting Communities at the centre of their own development process. 2003. Windhoek, Desert Research Foundation Namibia.
- Maluccio,J., L.Haddad, and J.May. 2000. "Social Capital and Household Welfare in South Africa, 1993-98." *Journal of Development Studies*. 36:54-81.
- Manor,J. 2004. "User Committees: A Potentially Damaging Second Wave of Decentralisation?" *European Journal of Development Research*. 16:192-213.
- Narayan,D. and M.F.Cassidy. 2001. "A Dimensional Approach to Measuring Social Capital: Development and Validation of a Social Capital Inventory." *Current Sociology*. 49:59-102.
- Narayan,D. and L.Pritchett. Cents and Sociability: Household Income and Social Capital in Rural Tanzania. Policy Research Working Paper 1796. 1996. Washington, DC, World Bank.
- Narayan,D. and M.Woolcock. 2000. "Social Capital: Implications for Development Theory, Research, and Policy." *W*. 15.
- O'Riordan,T. and S.Stoll-Kleemann. 2002. *Biodiversity, sustainability, and human communities protecting beyond the protected*. Cambridge University Press. Cambridge, UK.
- Ostrom,E. 1998. "A behavioral approach to the rational choice theory of collective action." *American Political Science Review*. 92:1-22.
- Ostrom,E. 2000. "Crowding out Citizenship." *Scandinavian Political Studies*. 23:3-16.
- Peters,P.E. 1987. "Embedded systems and rooted models: The grazing lands of Botswana and the commons debate." In B.McCay and J.Acheson, editors, *The Question of the Commons*. University of Arizona Press. Tucson. 171-194.
- Peters,P.E. 1994. *Dividing the Commons: Politics, Policy, and Culture in Botswana*. University Press of Virginia.
- Peters,P.E. 2002. "Grounding Governance: Power and meaning in natural resource management." In T.A.Benjaminsen, B.Cousins, and L.Thompson, editors, *Contested*

- Resources: Challenges to the Governance of Natural Resources in Southern Africa.* Programme for Land and Agrarian Studies (PLAAS). Bellville. 7-19.
- Poteete, A. and E. Ostrom. In pursuit of comparable concepts and data about collective action. CAPRI Working Paper No. 29, 1-28. 2003. Washington D.C, IFPRI.
- Pretty, J. and H. Ward. 2001. "Social Capital and the Environment." *World Development*. 29:209-227.
- Putnam, R. 1993a. *Making Democracy Work*. University Press. Princeton.
- Putnam, R. 1993b. "The Prosperous Community - Social Capital and Public Life." *American Prospect*. 13:35-42.
- Putnam, R. 1995. "Bowling Alone: America's Declining Social Capital." *Journal of Democracy*. 6:65-78.
- Ribot, J.C. 2003. "Democratic Decentralisation of Natural Resources: Institutional Choice and Discretionary Power Transfers in Sub-Saharan Africa." *Public Administration and Development*. 23:53-65.
- Richerson, P.J., R. Boyd, and B. Paciotti. 2002. "An Evolutionary Theory of Commons Management." In E. Ostrom, T. Dietz, N. Dolsak, P.C. Stern, S. Stonich, and E.U. Weber, editors, *The Drama of the Commons*. National Academy Press. Washington, DC. 403-442.
- Rohde, R., T.A. Benjaminsen, and T.M. Hoffman. Land Reform in Namaqualand: Poverty alleviation, stepping stones and economic units. Occasional Paper No. 16. 2001. Cape Town, Programme for Land and Agrarian Studies, University of the Western Cape.
- Rohde, R., T.M. Hoffman, and B. Cousins. Experimenting with the Commons: A comparative history of the effects of land policy on pastoralism in two former 'reserves' in Namibia and South Africa. Occasional Paper Series No. 12. 1999. Programme for Land and Agrarian Studies, School of Government, University of Western Cape.
- Rowley, J. 1999. *Working with social capital*. Department for International Development. London.
- Ruffle, B.J. and R.H. Sosis. Cooperation and the In-Group-Out-Group Bias: A Field Test on Israeli Kibbutz Members and City Residents. Experimental 0310002. 2003. Economics Working Paper Archive at WUSTL.
- Shackleton, S., G. von Maltitz, and J. Evans. Factors, conditions and criteria for successful management of natural resources held under a common property regime: A South African Perspective. Occasional Paper Series 8. 1998. Bellville, Cape Town, Programme for Land and Agrarian Studies, School of Government, University of Western Cape.
- Suzuki, R. The Intersection of Decentralization and Conflict in Natural Resource Management: Cases from Southeast Asia. Rural Poverty and Environment Working Paper Series No. 17. 2004. Ottawa, International Development Research Centre.

- Swanepoel,H. 1992. *Community Development: Putting Plans into Action*. Juta & Co Ltd.
- Uphoff,N. 1993. "Grassroots Organizations and NGOs in Rural Development: Opportunities with Diminishing States and Expanding Markets." *World Development*. 21:607-622.
- van den Bergh,J.C.J.M. and S.Stagl. 2003. "Coevolution of economic behaviour and institutions: towards a theory of institutional change." *Journal of Evolutionary Economics*. 13:289-317.
- Vetter,S. 2004. "Equilibrium and non-equilibrium in rangelands - a review of the debate." In S.Vetter, editor, Programme for Land and Agrarian Studies (PLAAS). Bellville.5-15.
- Wisborg,P. and R.Rohde. Contested land tenure reform in South Africa: The Namaqualand experience. Occasional Paper Series 26. 2004. Bellville, Cape Town, Programme for Land and Agrarian Studies, School of Government, University of Western Cape.
- Woolcock,M. 1998. "Social Capital and Economic Development: Towards a Theoretical Synthesis and Policy Framework." *Theory and Society*. 27:151-208.