Community Fencing in Open Rangelands: A Case Study of Community Self-Empowerment in Eastern Namibia

Chasca Twyman*, Andrew Dougill**, Deborah Sporton*, and David Thomas*

This paper examines the cross-cutting debates of empowerment, vulnerability, sustainability and livelihoods within the local and global contexts relevant to the people of Okonyoka, a settlement of less than 150 people situated in the heart of Eastern Namibia's southern communal lands. Here, people are adapting their livelihoods flexibly in response to both environmental natural resource variability and to changes in social institutions and land use policies. Drought-coping strategies, privatisation of the range and changes to social networks, all have both positive and negative impacts on people's everyday lives. The building of a community fence around 'their land' can be seen as both a defensive and a conservation strategy. Planned, organised, negotiated, funded and built by the community themselves, the fence is a symbol of community selfempowerment. The community have further plans to diversify their land use, enhance their livelihoods, and improve their natural resource base now they have gained control over 'their land'. Such fences can, however, inhibit neighbouring people's livelihoods, and can change long-standing regional drought-coping strategies. The fencing exploits an ambiguity in Namibian land policy: the new Communal Land Bill will make such fencing illegal, but existing fences will remain and provision will be made for the division of land at some future date. Furthermore, the Communal Land Bill, as yet, makes no provision for groups, i.e. communities, to hold title deeds to land. Okonyoka is the first settlement to erect a community fence in Eastern Namibia's southern communal area, but surrounding settlements are impressed with the positive environmental and societal results and are planning to follow suite. Such moves would radically change the landscape of communal areas with both positive and negative consequences, but the livelihoods of the marginalised are likely to be severely affected.

Introduction

The concept of empowerment in the context of development is now inextricably linked to issues of vulnerability, poverty, sustainability and livelihoods (Titi and Singh, 1991; Carney, 1998; Cox *et al*, 1998). These concepts provide the cross-cutting themes which are explored in this paper through a detailed case study of one community's experience of fencing in Namibia's previously unfenced Eastern Communal Lands. The case presented can be viewed from a number of different perspectives. Planned, organised, negotiated, funded and built by the community themselves, the fence can be viewed as a symbol of community self-empowerment, and a catalyst for further community-initiated developments. From an alternative perspective, the powerful (i.e. the established community) can be seen to be securing exclusive access to resources, to the detriment of the livelihoods of their marginalised,

^{*} Dept of Geography, University of Sheffield. ** School of the Environment, University of Leeds.

newly resettled, neighbours. This dual perspective suggests that there is a need to both evaluate the different factors leading to community-based self-empowerment at Okonyoka, and to assess the social and environmental implications of the community fence on the livelihoods of the people both at Okonyoka and in neighbouring communities.

Initial research in Omaheke District investigated the livelihood dynamics in the south-eastern communal areas (Figure 1). Links between livelihoods, policies and poverty were explored in the analysis, with particular attention to natural resource use and availability. It became clear that people in all these communal areas are adapting flexibly in response to both environmental natural resource variability and to the institutions and policies structuring these livelihood interactions. Of particular interest are the institutions structuring the fencing of rangelands and the ways in which ambiguities in policy are being exploited. Furthermore, there is evidence that people are exploiting the patchiness of the environment by negotiating access to alternative ranges at times of drought through networks of friends and relatives across the region. Through follow up case study work we were able to investigate some of the more complex issues of power and social relations, and the ways in which these are being challenged in today's rapidly changing policy environment. These findings are brought together through detailed investigation of the case study of Okonyoka in the Aminuis Communal Area.

This paper aims to first examine the processes leading to self-empowerment and secondly to assess its implications at different levels (inter- and intra-community, household and individual) and within different spheres (social, environmental and political). The introduction briefly reviews the methods used in the research. The following section outlines the key policy debates surrounding communal lands in Namibia, and addresses the conceptual approaches to empowerment and sustainable livelihoods. The main body of the paper describes and analyses the building of the community fence at Okonyoka and questions whether it is a defensive or conservation strategy. The power relations involved in this case illustrate the complexity of the empowerment debate. The paper concludes by drawing out some wider lessons for Namibia's communal lands and for conceptual debates surrounding empowerment and sustainable livelihoods.

Research Methodology

The research presented in this paper is part of a larger project investigating policies, poverty and natural resource use in southern Africa, funded by the Natural Resource Policy Programme of the UK Department for International Development. Fieldwork for the research was conducted in Omaheke District in February and March 1999, and in March 2000. In 1999 over 80 interviews were conducted in 28 locations across the Aminuis, Corridor and Tsjaka communal areas (see Figure 1). The focus of the survey was on assessing livelihoods, natural resource use and flexible adaptations across key communal lands in Omaheke District. Semi-structured interviews with different households formed the main source of information, and this was complemented by extensive use of secondary sources, and interviews with key community informants, NGO personnel working in the area, and the Governor of Omaheke District.

Three locations were chosen for further case study work (March 2000), one of which was Okonyoka. A combination of participatory activities and more in-depth interviewing techniques was adopted for this phase of the fieldwork to assess the relationships between people's decision-making and changes in their natural resource base (both spatially and temporally). All households were visited and 17 interviews in total were conducted either with a senior man or woman, or both, from the household. Three households were not interviewed as the residents were absent. Interviews focused on drought-coping strategies, ecological resource changes through time and social networks associated with livelihood support. In this phase of the research, formal sampling of vegetation states was also conducted with respondents complementing participatory mapping exercises designed to spatially map the occurrence of different vegetation community states around villages. Fieldwork was conducted in the height of the wet season when vegetation was at its most prolific. This enabled discussion about rangeland ecological resources to be put into context and aided species identification. By using such an integrated array of participatory and ecological methods, information could be triangulated and discrepancies investigated and issues of conflict explored.

Land Policy in Namibia

The dualism of communal and commercial land tenure in Namibia dates back to the first land policy for the territory implemented by the German Colonial Authority in 1892. Over the following seventy years the dual land tenure system was to crystallise with the establishment of communal reserves initially known as 'home areas' and later called 'native nations', 'Bantustans' or 'homelands'. With these apartheid policies, communal and commercial areas continued to develop in isolation from each other until Independence in 1990. One of the driving forces of this separate land policy development was the perceived threat of land scarcity.

One of the major contemporary problems in the communal areas of Namibia is increasing enclosure of the land through private fencing. Fencing in communal areas started in the mid 1980s, most probably as a result of increasing pressure on resources from rising human and livestock populations. Farmers who erect fences are obtaining exclusive rights of access to rangeland resources, and they are also able to utilise dual grazing rights on the remaining communal land. Most of these enclosed areas include watering pans, making access to water for some communal farmers impossible (Fuller and Nghekembua, 1996b). Such activities can displace existing small-scale communal farmers, thus putting added pressure on lands surrounding communal areas. Alternatively, such pressures force people to relocate to either overcrowded communal lands or in areas reserved for other activities (e.g. wildlife etc.).

The Agricultural (Commercial) Land Reform Act of 1995 makes provision for the subdivision of commercial land, acquired under this Act for communal purposes, into surveyed holdings for small-scale farming purposes and resettlement. Through Section 38 certain forms of communal land and resource management are restricted. Interestingly, these restriction echo conditions laid down for European settler farmers by the colonial authorities (Sullivan, 1999). The recent Communal Lands Reform Bill (1999) also places emphasis on the subdivision of communal land into alienated land holdings. It proposes that any person holding recognised rights to communal land is entitled to convert such holding into a leasehold tenure (a 99 year lease) providing this takes into consideration local customary law. Similarly, 'vacant' communal land may be delineated and allocated as economic land units (though defining 'vacant' is in itself problematic). Allocation and management will ultimately rest with Regional Boards (modelled on Land Boards in Botswana). These Boards will have the power

to allocate rights under customary law in Communal Lands falling under its jurisdiction, to cancel these rights, to allocate land and to demarcate land into economic holdings. A Land Adjudication Commission will be established to mediate disputes (Republic of Namibia, 1999). The bill has undergone many changes since its first draft and further amendments are likely to address some of the 'contradictions' inherent in this land policy (Chris Morry, Oxfam, pers.com, 2000). For example, to date only individuals may hold land titles, a problematic scenario in communal areas where group land holdings would be more appropriate.

Today in Omaheke District, increasing pressure on communal rangelands, and the perceived threat of land and resource scarcity, is leading to enclosure through private fencing by individuals and communities. This fencing exploits an ambiguity in Namibian land policy: the new Communal Land Bill (1999) will make such fencing illegal, but existing fences will remain and provision will be made for the division of land at some future date. Until now, people have been able to erect fences in communal areas with little fear of prosecution, and community leaders and other local institutions and organisations have been powerless to respond. This is already having a significant impact on livelihoods in the region.

Empowerment and Livelihood Debates

Empowerment can be defined as the process by which people (typically the poor) become agents of their own development (Potter *et al*, 1999). It entails creating or transferring power among local communities through consciousness raising, education and the promotion of an understanding within communities of the causes of local disenfranchisement and of the actions they may take to contest this (Potter *et al*, 1999). The concept of empowerment has strong links with participation (the *involvement* of people in the development process), but where participation fails to really meet the needs and aspirations of people's everyday lives, empowerment is seen as the route to an alternative development that is more democratic, efficient and sustainable (Tandon, 1995; Potter *et al*, 1999). Titi and Singh (1995:173) examine the concepts further and suggest that by addressing empowerment, questions of power, powerlessness and social change come to the fore, as well as the role of stakeholders in the empowerment process. They also suggest that 'true empowerment', i.e. that which can be sustained over time, requires two-way communication as well as two-

way power relations among stakeholders (communities, policy makers and development organisations), thus making the development process more accountable and authentic. These analyses leave a number of questions unanswered and we suggest that there is a need to look more critically at empowerment and its role in the development discourse. Empowerment needs to be viewed simultaneously from a range of different perspectives, thus recognising its multi-dimensional forms. Rather than restricting our view to the two-way links between stakeholders, we suggest that the focus should be on the dynamic interplay of power relations between the many differentiated stakeholders and the influence provided by the resource bases upon which sustainable livelihoods depend. We explore these dynamic interplays in the case study of Okonyoka's community.

Conceptualising rural livelihoods in Namibia requires careful consideration of the terms livelihood, vulnerability, poverty and sustainability, as well as empowerment. In recent years there has been a general move away from poverty being defined solely in terms of income and with interventions based on welfare and basic needs approaches (Potter et al, 1999). Dissatisfaction with these models and the realisation of their 'irrelevance' to local people's every day lives has given rise to poverty being defined in terms of basic capabilities (i.e. the enabling or constraining factors influencing people's every day lives) (Cox et al, 1998), and a recognition of vulnerability, and its opposite security, as distinct from poverty. Recently this has led to the strengthening of links between concepts of well-being, or the absence of poverty, and sustainable livelihoods that incorporate security now and for the future (Carney, 1998; Cox et al, 1998). Conceptual debates surrounding livelihoods and livelihood analysis now recognise the diversity of activities in which people are involved (Toulmin 1991; Chambers 1995, 1997; Adams and Mortimore 1997) and this is critical in the Namibian context. The livelihood opportunities open to people in Namibia's communal lands, and the diverse portfolios of activities which make up 'a living', are now key areas of conceptual and empirical research which are rightly taking a more central place in policy making, as well as development related research.

The sustainable livelihood approach, advocated by the UK Department for International Development, is inherently responsive to people's own interpretations of, and priorities for, their livelihoods (Carney, 1998; Scoones, 1998). It specifically

highlights working with people and their existing strengths and constraints rather than adopting prescribed donor-driven solutions to poverty. This approach also incorporates natural resource considerations in ways which clarify the complex links between poverty and the environment (Vosti and Reardon, 1997; Scoones, 1998; Carney, 1998). This convergence of policy and livelihoods signifies a new era of policy making which aims to be 'inclusive', 'participatory' and more 'appropriate' to the perceived needs of different people (Forsyth and Leach, 1998; Tsing et al, 1999; Argrawell and Gibson, 1999; Leach et al, 1999). Of growing significance is recognition of the difference between participation, which can still retain a top-down and 'imposed' dimension (see IIED, 1995 for discussion) and empowerment, which by the definition used here is a process in which people themselves act as the agents of development. In our case study, we look critically at this concept of empowerment and ask who is being empowered, and if empowerment always leads to a win-win situation, with respect to communities and their natural resource base.

Omaheke District, Eastern Namibia

Omaheke District has both communal and commercial farming areas (Figure 1). The district has a population of 52 000 (SSD, 1994), with 6000 dwelling in Aminuis communal area, 2000 in Corridor and 1200 in Tsjaka. In Aminuis, 50% are resident in the village of that name, the remainder being in the communal land. Government research suggests that agricultural productivity in the communal areas is in secular decline, as increasing numbers of people rely on smaller areas and more marginal land (Republic of Namibia, 1997, 1999). Such research suggests that the majority of the rural population are no longer able to sustain themselves purely from agricultural production and must augment their incomes from a variety of different livelihoods. Pensions and remittances provide important supplements to cash wages for subsistence farming livelihoods. Opportunities for employment outside of subsistence agriculture are however extremely limited in communal areas, and the formal employment sector is small and unemployment is high. Poorer households are having to diversify their livelihood base or face the risks of increasing poverty and vulnerability.

Drought is endemic in the region further inhibiting the reliability of natural resource based livelihoods. Average rainfall figures across Omaheke District vary along a SW – NE gradient with at Gobabis a mean annual value of 367 mm, decreasing to a mean annual figure of only 276 mm at Aminuis (Namibian Government Weather Bureau statistics). Above all, annual rainfall figures display high levels of inter-annual variation, typified by the regular occurrence of drought years (with rainfall levels below 50 % of the mean annual total). When such years occur in succession this leads to drought-induced pressures on the vegetation resources, livestock farming systems and therefore livelihood strategies, which have adapted over time to these events in a number of different ways outlined below.

Okonyoka: 'running from drought...'

Okonyoka lies in the heart of Aminuis Communal Lands in Omaheke District (Figure 1). The settlement was established by just a few Herero households in 1959. These families moved to Okonyoka from two other settlements in the Aminuis communal area in search of water and grazing land: they were effectively 'running from drought'. Okonyoka had previously been open rangeland with only limited seasonal water available in pans. With the sinking of a new borehole permanent settlement could now be sustained and year round grazing and use of rangeland resources was established. Okonyoka is now a settlement of approximately 150 people of Herero and Banderu origin. It is situated close to 'Corridor 13', a small settlement within a communal farm, which acts as a service centre for the area with a school, clinic, shops and auction. The main livelihood in Okonyoka is livestock rearing (cattle, goats and sheep). Unlike other settlements in the region, there are few agricultural workers residing in the settlement and most agricultural work is done by family members. Household income is supplemented by pensions, remittances, piece work, craft production and occasional sales of harvested and processed foods (e.g. wild berries, bread, cooked meat), for example to people attending livestock auctions at nearby service centres.

Traditional Drought-coping Strategies

Movement of cattle from resource-poor to resource-rich areas as a form of pastoral management has been one of the main strategies employed around the world for centuries (Scoones, 1995). In arid areas, where rainfall is scattered and sporadic,

herders may track rainfall events by moving herds long distances across open ranges. Where pasture production is patchy and seasonal, herders may selectively exploit highly productive areas at key times of the year. In other areas herds are often moved seasonally between different agro-ecological zones (Bayer and Waters-Bayer, 1995). However, most government policies discourage these flexible 'opportunistic' adaptations to livestock management, preferring to settle pastoralists in order to have more control over them and the environment (Bayer and Waters-Bayer, 1995).

In the communal areas of Omaheke, movement of livestock in times of drought, or when grazing resources are poor, has been the main coping strategy (within a portfolio of other activities) used by pastoralists for many years. For example, Suzman found in his 1995 survey in Omaheke District's communal areas that 33% of households moved their livestock in response to drought (Suzman, 1995: 25). However, traditional ideas about the factors controlling livestock mobility in the communal areas are now being reconsidered. In Omaheke, pastoralists view grazing resources through a network of relationships. People have access to different land tenures even within the communal system and thus movement of livestock requires the development and negotiation of social networks and links in relation to the spatial variations in grazing resources found during the particular drought event. Those with the widest and strongest social networks have been the most successful pastoralists (in terms of numbers of cattle and annual deaths). Those with weak networks have little access to alternative ranges and must subsist on what resources they have access to nearby (roadside grazing, collection of birds' nests etc.).

Drought clearly plays an important role in determining both livelihood and rangeland management strategies in Okonyoka. Drought events have always been key junctures when livelihood patterns change and pastoral management strategies are tested to their full. Interviews showed that over the last fifty years drought mitigation activities by the residents of Okonyoka have undergone significant change. Before the 1960s, there were generally movements of people and livestock to new locations and the opening up of new grazing areas at times of drought. Okonyoka itself was established in this manner in 1959. During the period from the 1960s to 1980s more localised and temporary movements of people and livestock took place, often linked to social networks and specific ecological conditions. Movements tended to involve

relocating cattle to family and friends located either in the Corridor farms, or to two settlements in the Aminuis Reserve, Okahmandu and Otjewe, with strong family links to Okonyoka, at times when these places had received more rain or had more grazing resources available. These movements were linked to less 'severe' droughts and to prolonged dry seasons. In severe droughts, movements were co-ordinated by Government. For example, most residents of Okonyoka moved their cattle to a Government farm, Kameron, outside the communal area for a period of up to 2 years during the drought of the early 1980s.

By the 1990s, reliance during drought years tended to be on government subsidies, which were in place up to 1996. Subsidies enabled people to keep livestock without moving them by allowing the purchase of feeds. Subsequently into the late 1990s, there have also been increasing incidences of community initiated restrictions on cattle movements. There is now an increasing trend to secure exclusive access to resources for drought and dry season use either privately or communally. Cattle movements are still regulated by social networks and ecological conditions, but they are now mediated by different structures and institutions. Okonyoka is a prime example of a community facing these social, environmental and institutional changes and adapting rapidly to ensure maximum benefit for their own community. Individuals and communities in the new century have the potential to radically alter the landscape of the communal area with both positive and negative consequences, and the livelihoods of the marginalised are likely to be severely affected in the process. To assess this potential we first consider the factors leading to the construction of the community fence at Okonyoka.

External pressures: prologue to the community fencing

The gradual changes in drought-coping strategies, described above, represent one of a number of causal factors leading to the greater community control of natural resource management at Okonyoka, enabled through fence construction. The community decision to take this positive action was also affected by external pressures imposed by national land use policies and regional initiatives, notably the establishment of water committees in all communal villages. Water committees have been actively promoted by the Ministry of Agriculture whose staff recognise controls on water resources to be an important mechanism in the management of rangeland

resources. Problems remain in the messages sent from regional ministries because of the evident division between the Ministry of Lands, Resettlement and Rehabilitation, and the Ministry of Agriculture. Little inter-ministry co-ordination occurs, as illustrated by the uncoordinated emergency borehole establishment and resettlement near Okonyoka described below.

Overall there are no formal rangeland management strategies and only limited advice is provided directly by Ministry of Agriculture staff. This is usually by staff, conducting basic range assessments, who talk informally to a few farmers. However, the setting up of water committees provides a forum for community discussion of natural resource issues and decisions regarding access to rangeland grazing resources, especially in times of drought. The initial role of water committees was simply to supervise and manage the borehole in the settlement with the ultimate aim that they would take over full responsibility from the government. As part of this process, the government has reduced diesel subsidies and has promised to service and ensure all boreholes are working effectively by 2005 when it hands them over to communities. Water committees are responsible for setting prices for contributions to diesel and oil. They must also collect contributions and keep records of livestock numbers. In Okonyoka, the water committee has also taken on wider responsibilities, including the regulation of those coming into the settlement for emergency grazing. This involves assessing applicants, drawing up a contract with successful applicants (limited initially to 30 cattle for a period of 3 months) and monitoring their stay. However, though they have these new powers, the committees are facing new challenges in both enforcing agreements and in regulating the community's natural resource use. The Water Committee in Okonyoka has faced further challenges with the enclosure of their rangeland with the community fence.

Internal Issues: Community fencing, a defensive or conservation strategy?

In August 1996 the government (through the Ministry of Lands, Resettlement and Rehabilitation) opened two emergency boreholes at Okondjamo and Okozongwehe, north and south of Okonyoka respectively (Figure 1). According to the residents of Okonyoka these boreholes were opened to allow people of neighbouring settlements to utilise remote grazing resources, thereby easing pressure on resources near their own settlements during this period of drought. They

understood that the boreholes would not remain open permanently. However, by January 1997 'outsiders' had permanently settled near the boreholes and a farmer from Okondjamo had fenced off a private paddock on land considered by Okonyoka residents to be within their grazing area. A group of young men rode out to this fence, cut the wires and pulled up the poles.

The youth (some of whom were based in Windhoek) were instrumental at this time in bringing the idea of the community fence to the wider Okonyoka community. Perceived views on the positive use of fencing as part of 'good' rangeland management (in an ecological sense) were also brought to community meetings by a younger farmer who was attending a three month course on livestock management. This course was held in Aminuis and the young farmer was funded by the local Farmers Association.

Thus both defensive and conservation views were the catalyst to the building of the Okonyoka community fence. The youth in the settlement decided that 'their resources' were being compromised by these events and that as 'a community' they should protect their resource base now and for the future. After long discussions through the water committee, the building of a community fence was agreed. The community then spent the next year in negotiations with neighbouring communities. Each community was approached through their established water committee and the proposal discussed. Distances between settlements were measured and a location for the fence, equidistant between the settlements, was agreed. They visited Okomungondo, Okonyama, Otjiomungwindi, Okahumandu and Okongoa (Figure 1). They did not consult residents at the two emergency boreholes of Okondjamo and Okozongwehe, as they were not considered rightful residents of the boreholes nor the surrounding land.

In January 1998 the community of Okonyoka began to build their community fence. Money was raised by contributions per head of cattle from all residents in the settlement. The money paid for all materials, diesel for transport and food for the workers. The total cost of the fence was N\$39 000 (c. £4,000). Most people say that the community approached the government to check that they could erect a fence, but there are several different versions of the response. A few report that the government was not interested and refused to comment about the matter, others report that they

were told if their neighbours agreed then there was no problem. What is clear is that they were given no active support, encouragement or discouragement about building this fence from any of the government representatives in the area. Consequently, this fencing scheme represents a clear manifestation of community empowerment resulting from a range of external pressures and internal community issues similar to those faced at other settlements in Namibia's communal areas. As such, it is vital to examine the implications of this fencing on local communities, environments and policy frameworks.

Implications of Okonyoka's Community Fence

The integrated participatory nature of the methods in the research reported here, enables the influence of the community fence, as a clear statement of community self-empowerment, to be assessed within various dimensions (social, environmental and policy) and at various levels (individual, household, intra- and inter-community, regional). These dimensions will be considered separately, before wider lessons are discussed in relation to the potential impacts of such processes on Namibian communal areas.

Social implications

Discussions with all residents of Okonyoka demonstrated a unanimous view that the community fence was a 'good' thing despite the financial cost borne by all. Particularly important appeared to be an improved sense of 'community' derived from the successful organisation of this fencing programme, and vitally, the greater control people felt they had gained over 'their' rangeland resources. The construction of the fence has thus had a positive impact of the functioning of the community as a management institution. The increased community control over rangeland resources occurred during a period when the community were granting temporary access to grazing resources to outsiders in need of grazing land due to drought induced shortages in their home villages. Such emergency grazing rights were granted through the community meetings that evolved out of the water committees, providing a forum for discussing a wider range of natural resource management issues. It was agreed that the first three applications for grazing rights received in any given year would be accepted to a level of 30 cattle for a period of 3 months, with further meetings required to consider any extension to these rights. These decisions are now made

irrespective of kinship (or friendship) links in the settlement. This potentially reduces the importance of strong individual social links across the communal areas, to the possible benefit of some of the more marginalised households outside the settlement.

Closer examination of the operation of emergency grazing rights provision in Okonyoka, however, demonstrates potential difficulties faced both by the community of Okonyoka, but especially the more marginalised (outside the settlement) who wish to secure access to grazing resources around Okonyoka. An interesting case illustrating these difficulties is that of Eric and Christa Kandjii. Eric was born in Okahumandu though his family moved to Okonyoka a few years later. During the drought of the 1980s his family moved permanently to Corridor 13, where Eric and his wife Christa continued to keep their cattle until 1999. According to Herero tradition, sons (particularly younger sons) must 'break with their father' and move away in adulthood to establish their own kraals and homesteads. This means young men like Eric must negotiate settlement in an alternative location for their families and cattle. With increasing pressure on grazing resources and more determined moves to exclude people from critical grazing resources, it is becoming increasingly difficult for these young men to fulfil their cultural roles. This causes tension within families and puts a strain on traditional institutions.

Eric and Christa moved their cattle, goats and sheep to Okonyoka in 1999 after being granted emergency grazing rights by the water committee. Three months later they extended their visit and since then have applied for permanent residency. They report that they are now settled in Okonyoka and even contributed money per head of cattle to the community fence. However, most other residents repeatedly commented that this household had refused to leave after emergency grazing, and that the community was powerless to remove them. This highlights an increasingly worrying problem facing communal areas. Young men such as Eric must leave their father's settlements and kraals and establish permanent residency elsewhere. With increasing pressure on community grazing resources, places such as Okonyoka are reluctant to take in more people and cattle. This means there is potentially a growing number of 'landless' young households forced to move on in search of permanent residency rights in an increasingly hostile 'outsider' environment.

The situation for the eldest son is somewhat different in Herero households. Credo Kavari, the eldest son of a well established family in Okonyoka was also required to 'break with his father'. However this was a temporary arrangement and after a few years his father called him back to take up residency in Okonyoka again. Credo moved his cattle to Corridor 4 in 1992, an area his family had used for emergency grazing in the 1980s. In 1999 he returned to Okonyoka, initially applying for emergency grazing, and then just 'returning with force' at the end of the three month period. Despite the resentment some residents feel towards Credo who had returned with several hundred cattle to the settlement, he has been active in the establishment of the community fence and is well regarded in this respect. Since his return to Okonyoka, Credo has handed over his kraal and house in Corridor 4 to his younger brother who also has to 'break with his father'. Though Credo says the place is now in his brother's name, he will still retain significant control over grazing resources in the post and is still planning to construct a private paddock in this communal farm. This presents another interesting dimension to the community / private fencing dichotomy. Though Credo is passionate about protecting communal resources around Okonyoka for 'the community' to use, he is quite prepared to fence a quarter of a communal farm elsewhere for the exclusive use of his family's cattle. He sees no contradiction here and merely regards it as sensible use of resources. He is also prepared to manipulate the temporary rights granted during drought times to his own advantage. Utilising and manipulating multiple grazing rights in cases such as these is likely to have a negative impact on neighbouring 'landless' households, disempowering them further and undermining their livelihood security.

At the same time that these male traditions of 'breaking with the father' are being challenged by changes in how rangeland resource rights are viewed and managed, female-headed households are negotiating access to these resources in more subtle ways. It is not uncommon for unmarried Herero women to form their own households adjacent to their parents' compound. Often they will keep their stock in the family kraal for a few years before making their own kraal. Thus within five years a new female headed household can be established within the settlement. As women do not have to 'break' from their parental households, the establishment of new households and rights to grazing resources are far less conflictual.

The social implications for individuals and households within the community can therefore be differentiated. Clearly important is the notion of scale and perspective. An understanding the differences in gender, age and family status is essential to revealing the wider processes and complexities of social change and empowerment. These operate simultaneously at a number of levels (individual, interand intra- household and community, regionally) adding to the complexity of the social situation.

Environmental implications

As stated earlier, conservation of the ecological resource base, enabled through improved pastoral management strategies, was viewed by community members as an important factor in the construction of the community fence around Okonyoka's land. This fencing has enclosed a large area of land (c. 150 km²) some sections of which are as far as 12 km from the borehole, such that on the margins of the enclosed area cattle grazing levels will now be negligible. The first stage of ecological analysis of rangeland resources around Okonyoka involved discussion with two local farmers concerning the key bush and grass states found throughout the full extent of Okonyoka's land. This discussion also allowed a base map of the tracks and fences to be drawn so that a guided driven tour of the enclosed land could be taken encompassing all the major vegetation community states recognised by local farmers. Discussions between a key informant farmer and researchers led to the identification of seven distinct states of the vegetation across Okonyoka, assessed on the basis of dominant bush species and/or dominant grass species. This list was then used as a prompt for two local farmers to produce a spatial map of the distribution of the vegetation across Okonyoka's land (see Figure 2 for this map).

Mapping highlighted a number of important issues regarding the diversity of the ecological resource base available to farmers at Okonyoka. Firstly, the range of environmental settings caused by the presence of a number of pan depressions of various sizes and more subtle changes in soil characteristics implies that there is significant natural diversity in ecological communities, with notable differences in dominant bush cover across the area (Figure 2). Pan depressions add an important element of ecological heterogeneity in this area. The seasonal inundation of pans with shallow water implies that cattle can spend long periods away from the settlement

water supply, reducing the grazing pressure on resources close to the borehole. Furthermore the palatable nature of grass and bush species surrounding the pan margins also act to further reduce grazing pressures around the settlement. Secondly, natural die-back of bush species, in particular of *Acacia mellifera* (die-back most likely caused by fungal disease), which is the main encroaching bush species throughout Eastern Namibia (Bester, 1996), appears to be preventing land degradation problems associated with the development of uniform dense bush stands. Such bush encroachment pressures have detrimentally affected livestock production in many similar parts of the region by markedly reducing grass production on large tracts of land (Quan *et al*, 1994; Adams, 1996). The bush cover at Okonyoka however remains at levels where grass biomass production will not be adversely affected. Indeed farmers highlight the positive impacts of the varied bush cover, in terms of providing dry season fodder for cattle and browse for smallstock throughout the year.

Significant variations in the grass cover were also recorded spatially across Okonyoka's enclosed land (Figure 2), indicative of the changing pattern of grazing pressure brought about by fence construction. In areas close to the settlement, where grazing pressure remains concentrated, grass communities are made up entirely of the annual sour grass Schmidtia kalaharensis. This grass forms uniform stands in intensively grazed areas throughout the communal areas of Eastern Namibia, a factor critically affecting the ability of farmers to maintain herd sizes through periods of drought, when such an annual grass cover provides limited nutritious cover (Tainton, 1999). Discussions with local residents suggest that at the time of fencing the majority of the enclosed land was dominated by this annual sour grass with only an occasional presence of long-lived perennial grasses. However, spatial mapping and subsequent ecological analysis demonstrates that for many of the marginal areas close to the community fence, perennial grass species (notably the palatable shiny hair grass - Stipagrostis uniplumis; and the less nutritious stick grass - Aristida stipidata) have re-established themselves and even become the dominant ecological cover. transition in ecological state has occurred in these marginal areas since fence construction as a result of the significant reductions in grazing intensity (as livestock from neighbouring settlements are prevented from grazing this land). The return of perennial grass cover is indicative of the remaining resilience typical of such semi-arid

ecosystems (Behnke *et al*, 1993; Dougill *et al*, 1999) and demonstrates the positive conservation effect the fence has afforded to the enclosed land at Okonyoka.

The change in the nature of grass cover has had a number of positive impacts on the livelihoods of people in Okonyoka. Greater diversity in grass cover improves the condition of cattle with perennial cover being particularly important at times of drought. Although much of this cover is beyond the 8 km from water which cattle will walk for grazing, farmers adapted by cutting and collecting much of this grass cover through the 1999 dry season to feed to cattle in the kraal. Subsequently, herd sizes could be maintained with reduced dependence on bought feeds despite the below average rainfall, demonstrating how positive effects on the environment, caused by the community empowerment process, have improved livelihoods of farmers within this community. This, however, has been enabled through exclusion of neighbouring farmers from land, in particular those resettled residents of the recently established boreholes of Okondjamo and Okozongwehe. These people are now forced to graze their animals on the land of other neighbouring villages who, having seen the positive social and environmental impacts of the Okonyoka scheme, are planning similar fencing programmes of their own. Such moves, if unopposed by government, will leave the resettled inhabitants of Okondjamo and Okozongwehe landless and searching for an alternative community home. However, as community rules tighten on access to such grazing rights, these people could become more and more marginalised and lacking of the basic resource needs required to support their livestock based livelihood. Thus despite positive environmental resource base changes (in terms of increased ecological heterogeneity) observed with fencing, this benefit appears to be at the expense of livelihood security for the more marginalised groups within communal area societies.

Policy implications

Given the positive impacts witnessed in Okonyoka, both on extending the sense of community control over livelihoods and the improvement in their natural resource base, it is not surprising that many other established communities throughout the Aminuis Reserve wish to follow Okonyoka's lead and fence their land. Such moves represent a clear establishment of the community self-empowerment process within the area, a factor encouraged by government initiatives (e.g. implicitly through

water committees) and much contemporary development thinking. However, such a positive view must be guarded given evidence that the benefits felt by the few who belong to the established community groups are being gained at the expense of more marginalised, poor and landless groups. These concerns are real, and suggest that in practice the process of 'community fencing' of communal areas could be viewed as an extension of the negative trends of private fencing seen regionally throughout southern Africa. Such a process provides control over access to grazing rights to the livestock owning members of established communities at the expense of many others, such as younger sons who are trying to establish a herd away from their fathers' village.

That fencing has until recently been neither illegal nor legal in Namibia has led to widespread fencing in all communal areas (Hangula, 1995; Fuller and Nghekembua, 1996), but there have been few reports of organised community fencing until now. This policy gap has inadvertently created a forum for community self-empowerment through this fencing process. However, self-empowerment for Okonyoka has been at the expense of empowerment for others, particularly more vulnerable and marginalised households. Again, while there are obvious positive environmental and livelihood consequences for some, these have been at the expense of the sustainability of other people's lives. It is a difficult issue to resolve and demonstrates the complexity of the empowerment process.

Titi and Singh (1995) suggest that by fully understanding the process of empowerment, in particular power, powerlessness and social change, sustainable development can lead to a win-win situation. For this to really work they say, there is a need to recognise the 'countervailing processes' of change (1995: 173). The case of Okonyoka presented in this paper clearly illustrates the multiple dimensions of empowerment that must be considered. As we stated in the introduction, rather than restricting our view to the two way links between stakeholders (i.e. single community and policy), we should focus on the dynamic interplay of power relations between the differentiated stakeholder (i.e. inter- and intra-community, neighbours, policy etc.) and the influence provided by the resource bases upon which sustainable livelihoods depend (environmental variability and change). Thus in terms of policy, the ambiguity or policy gap has both empowered some sections of society, albeit

inadvertently, as well as disempowered others (emergency settlers, young or marginalised households).

This provides difficulties for local NGOs at the development interface. Working with an organised community has obvious benefits and allows the NGO to take on the role of facilitator rather than project implementor. There are households in Okonyoka facing poverty and vulnerability on a daily basis, and the community as whole would benefit from such guidance. One local NGO has plans to start community land use planning and Okonyoka would make an ideal pilot for the scheme. Residents of Okonyoka have already expressed interest in taking their own plans for community based natural resource management further. The fact they have achieved this fence has boosted their confidence as a community and they are now considering applying to the government to declare their area as a conservancy. Again these views stem from the youth within the community and links to family members in Windhoek who have heard of successful conservation based schemes in other regions (e.g. Ashley and LaFranchi, 1997; Barnes, 1995). They have ideas about wildlife tourism, but perhaps more realistic are their ideas for safari hunting for game meat production through careful stocking of key game species such as springbok, eland and kudu. Further investigations into such dual stocking strategies is needed, but the community will to improve their livelihoods with the aid of such government sponsored schemes is growing. This poses some crucial questions for NGOs and government institutions operating in these communal areas. Can an NGO or government department be part of a process of empowerment that may marginalise poorer and more vulnerable households along the way? On the other hand, should the NGO or government department also censure such innovative actions by the community? These are unresolved questions facing local NGOs and government departments operating in the area.

Lessons for Namibia's Communal Lands

The case of Okonyoka's community fence has emerged in this policy gap and though other settlements are keen to follow their lead, the policy context is changing. Once the Communal Land Bill has been enacted (due in 2000) then these communities will be in breach of the law if they fence. Furthermore no communities can register their land as yet and there is no provision for communal rights, though

this is likely to be amended. The case of Okonyoka's community fence is unique: reflecting a particular set of policy, social and environmental circumstances at a given time. Given these discussions, has the current ambiguity in policy been a positive catalyst for community self-empowerment, or provided a chance for the powerful to exert more control over resources to the detriment of others? The community self-empowerment process at Okonyoka is dynamic and flourishing, and it has already had major impacts on the environment and local livelihoods of those in and around the settlement. These impacts, positive and negative, are operating at a range of levels and demonstrate the complexity of the empowerment process.

At the household level within Okonyoka, the fencing programme has led to a series of positive benefits. In particular, a greater sense of community, with active involvement of all livestock owning residents on water committees (young and old, male and female, established and resettled residents) has provided increased community control over natural resources and livelihoods. Tensions here arise over accepting new households into the settlement. In particular, there are mixed views about those first granted emergency grazing access, but who now see this as an opportunity to permanently 'break with their father' and establish their own household in a community where natural resources are relatively plentiful.

These issues highlight potential negative impacts on marginalised groups (notably emergency borehole residents, landless, Bushmen etc.) faced at an intercommunity scale across the communal areas. The community fencing of Okonyoka's land has immediate implications on recently resettled residents of Okondjamo and Okozingwehe, who if neighbouring settlements follow a similar empowerment process, face the long term likelihood of being fenced out and left landless. The formalisation of procedures for accepting 'outsiders' in times of drought could also inhibit traditional drought-coping strategies of those from other communities where pressures on the natural resource base are greater than those experienced at Okonyoka.

From this wider regional perspective of communal lands, and the support that could be offered by NGOs and/or government, such an empowerment programme can be viewed both positively and negatively. Within a wider policy arena the World Conference on Agrarian Reform and Rural Development (WCARRD) Review Mission, funded by FAO (1993), stated that there should be a moratorium on fencing

communal rangeland. They proposed that communal areas should retain communal systems of land tenure, on the understanding that these systems best ensure security of tenure for the rural poor. However, given that the rural poor are not a homogeneous group even these forms of communal tenure have the potential to be problematic and to constantly evolve, as our case has shown. The findings for policy makers and local NGOs are therefore less than clear cut following a detailed analysis of the implications of community self-empowerment processes. Such analyses must assess the impacts both on the self-empowering community, but also more marginalised groups neighbouring them and in a wider regional context. Only with such multiscale analysis of social, environmental and policy implications can a best case scenario be assessed with particular attention on supporting strategies that will enhance sustainable livelihoods and aid to reduce poverty.

References

Adams, M (1996) 'When is ecosystem change land degradation?' *ODI Pastoral Development Network Paper 39e.* London, Overseas Development Institute.

Adams W M and Mortimore M J (1997) 'Agricultural intensification and flexibility in the Nigerian Sahel' *Geographical Journal* 163:150-160.

Agrawal A and Gibson C (1999) 'Enchantment and Disenchantment: The Role of Community in Natural Resource Conservation' *World Development* 27(4): 629-649.

Ashley C and Carney D (1999) Sustainable Livelihoods: Lessons from early experience. London, Department for International Development.

Ashley C and LaFranchi C (1997) 'Livelihood strategies of rural households in Caprivi: Implications for conservancies and natural resource management' *Directorate of Environmental Affairs Discussion Paper 20*. Windhoek, Ministry of Environment and Tourism.

Barnes J (1995) 'The value of non-agricultural land use in some Namibian communal areas: a data base for planning' *Directorate of Environmental Affairs Discussion Paper 16*. Windhoek, Ministry of Environment and Tourism.

Bayer and Waters-Bayer (1994) 'Forage alternatives from range and field: pastoral forage management and improvement in the African drylands' in Scoones I (ed) *Living with Uncertainty: New Directions in Pastoral Development in Africa*. London, Intermediate Technology: pp58-78.

Behnke R H, Scoones, I and Kerven, C (1993) Range Ecology at Disequilibrium. New models of natural variability and pastoral adaptation in African savannas. London, Overseas Development Institute.

Bester B (1996) 'Bush encroachment a thorny problem' *Namibia Environment* 1: 175-177.

Carney D (ed) (1998) Sustainable Rural Livelihoods. What contribution can we make? DFID, London

Chambers R (1995) 'Poverty and Livelihoods: Whose Reality Counts?', *IDS Discussion Paper 347*.

Chambers R (1997) Whose Reality Counts? Putting the Last First. London, Intermediate Technology.

Cox A, Farrington J and Gilling J (1998) 'Reaching the Poor? Developing a Poverty Screen for Agricultural Research Proposals' *Overseas Development Institute Working Paper 112*. London, ODI.

Dougill A J, Thomas D S G and Heathwaite A L (1999) 'Environmental change in the Kalahari: integrated land degradation studies for non equilibrium dryland environments' *Annals Association American Geographers* 89 (3): 420-442.

FAO (1993) *Inter-agency MCARRD policy review mission to Namibia*. Main report prepared for the Government of the Republic of Namibia by the Food and Agriculture Organisation, Rome.

Forsyth T and Leach M (1998) *Poverty and Environment: Priorities for Research And Policy.* An Overview Study. Prepared for the United National Development Programme and European Commission.

Fuller B and Nghekembua S (with T F Irving) (1996) "The Enclosure of Range Lands in Eastern Oshikoto Region of Namibia" *Social Science Division Research Report 24*. SSD, Multi-Disciplinary Research Centre, University of Namibia, Windhoek.

Hangula L (1995) "Communal Land Reform in Namibia and the Role of Traditional Authorities" *Social Science Division Discussion Paper 11*. SSD, Multi-Disciplinary Research Centre, University of Namibia, Windhoek.

Leach M, Mearns R and Scoones I (1999) 'Environmental entitlements: Dynamics and Institutions in Community-Based Natural Resources Management' World Development 27(2): 225-247

Potter R B, Binns T, Elliot J A and Smith D (1999) *Geographies of Development*. Harlow, Longman.

Quan J, Barton D and Conroy C (1994) A Preliminary Assessment of the Economic Impact of Desertification in Namibia. Windhoek, Directorate of Environmental Affairs.

Republic of Namibia (1995) *National Land Policy*. Windhoek, Ministry of Agriculture, Water and Rural Development.

Republic of Namibia (1997) *Integrated Poverty Reduction Strategy for Namibia: A Discussion Document.* National Planning Commission, Windhoek, Namibia.

Republic of Namibia (1999) *Namibia's Green Plan: Environment and Development*. Draft. Ministry of Wildlife, Conservation and Tourism, Windhoek.

Republic of Namibia (1999) *Communal Land Reform Bill*. Windhoek, National Assembly.

Scoones I (ed) (1994) Living with Uncertainty: New Directions in Pastoral Development in Africa. London, Intermediate Technology.

Scoones I (1998) 'Sustainable Rural Livelihoods: A Framework for Analysis' *IDS Working Paper* 72. Institute of Development Studies, Sussex.

Singh N and Titi V (1995) 'Empowerment For Sustainable Development: An Overview' in N Singh and V Titi (eds) *Empowerment: Towards Sustainable Development*. London, Zed Books: pp6-26.

SSD (1994) *Socio Economic Survey: Eastern Communal Areas*. Social Sciences Division, Multi-Disciplinary Research Centre, University of Namibia, Windhoek.

Suzman J (1995) *Poverty, Land and Power in Omaheke Region*. Windhoek, Oxfam UK&I.

Tainton N M (1999) *Veld Management in South Africa*. Pietermaritzburg, University of Natal Press.

Tandon Y (1995) 'Poverty, Processes of Impoverishment and Empowerment: A Review of Current Thinking and Action', in N Singh and V Titi (eds) *Empowerment: Towards Sustainable Development*. London, Zed Books: pp29-36.

Titi V and Singh N (1995) 'Engaging Stakeholders in a Process of Change towards Sustainable Development' in N Singh and V Titi (eds) *Empowerment: Towards Sustainable Development*. London, Zed Books: pp172-182.

Toulmin C (1991) 'Natural Resource Management at the Local Level: Will this Bring Food Security of to Sahel?' *IDS Bulletin* 22 (3): 22-30.

Tsing A, Brosius J and Zerner C (1999) 'Assessing Community-based Natural Resource Management', *Ambio* 28(2): 197-198

Vosti S and Reardon T (1997) Sustainability, growth and poverty alleviation: A policy and agro-ecological perspective. Baltimore, John Hopkins University Press.

Figure Captions:

Figure 1. Eastern Namibia study location

Figure 2. Reproduction of participatory map of ecological states identified around Okonyoka.