

# Valuing the commons: Rural livelihoods and communal rangeland resources in the Maluti District, Eastern Cape

Zolile Ntshona

Research  
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SCHOOL  
of  
GOVERNMENT  
UNIVERSITY OF THE WESTERN CAPE



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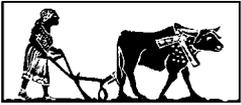
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# Acronyms

CARE	Cooperative for Assistance and Relief Everywhere Inc.
CBLM	Community Based Land Management (an EDA programme)
CPR	common property resources
DFID	Department for International Development of the UK government
DWAF	Department of Water Affairs and Forestry
EDA	Environmental and Development Agency
NGO	non-governmental organisation
PLAAS	Programme for Land and Agrarian Studies
PTO	Permission to Occupy certificate
WFW	Working for Water (a programme of DWAF)





# Chapter 1: Introduction

The 'hidden' value of wild resources, trees and grazing resources on communal rangelands is often overlooked by conventional economic assessments, even though their contribution to people's lives is enormous. There is growing interest in the role played by wild resources in rural people's livelihoods.

**I**IED (1997:5) states that these wild resources are not only important to:

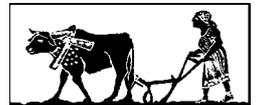
*...hunter gatherers, but make substantial contributions to the livelihood strategies of settled farmers, pastoralists...many natural resource management policies which affect wild resources and their habitats fail to consider their full economic benefits.*

This study of common property resource use in the Maluti District of the Eastern Cape was carried out under the auspices of the Programme for Land and Agrarian Studies (PLAAS), a research unit of the School of Government at the University of the Western Cape. The study was done in collaboration with the Environmental and Development Agency (EDA) Trust, an NGO which has worked in the Maluti District for many years.

I spent 18 months doing research in the study area from October 1998 to mid-2000. The purpose of the study was to assess the value of the contribution that communal rangelands make to rural people's livelihoods. The overall goal of the project is to contribute to improved management of communal rangelands, based on a better understanding of the value of common property resources they yield.

Although 'common property resources' refers to resources found in communal rangelands, I use the term more broadly to include resources found in home gardens and arable fields. This study investigated the contribution of wild resources, grazing

resources and trees. For the purposes of this study, 'wild resources' are understood to refer to medicinal plants, wild fruits and wild vegetables. 'Trees' refers to trees for fuel, droppers, poles and building material. 'Grazing resources' refers to the grass and few tree species grazed and browsed by animals, thatch grass used for building, and other grass species used to make brooms, mats and platters. Methodological and other constraints meant that it was possible to make a detailed investigation of the contribution of only one of the common property resources in the study area, namely fuel wood.

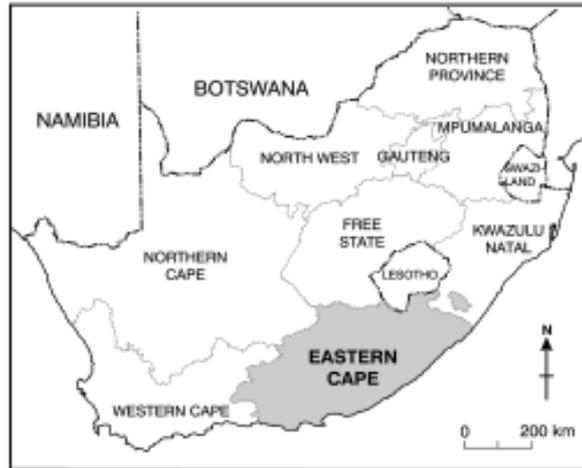


## Operational links and arrangements

PLAAS focuses on training and research on the following themes: land restitution and redistribution programmes; land tenure reform; emerging regimes of natural resource management; rural livelihoods and farm household production systems; and processes of institutional restructuring and reorientation in support of land and agrarian reform.

This research study is one of a number that are part of the PLAAS Community-Based Natural Resource Management (CBNRM) programme. The CBNRM programme was intended to have numerous research projects but, due to financial constraints, not all of them materialised.

The objectives of the CBNRM programme are:



**Figure 1: Location map of the Eastern Cape and study area**

- generation of accurate, empirically-based analytical research reports on current natural resource management conditions, constraints and opportunities in selected study areas
- provision of practical advisory inputs to natural resource management and related policy development, and to the implementation of natural resource management and related initiatives in the communal areas and other group-owned rural settings
- production of analysis which critically evaluates and enhances the research methods and paradigms that social science can use to support sustainable community-based natural resource management.

EDA is committed to redressing the imbalances of poverty and inequality in South African society and working to improve the quality of life in the rural areas. EDA staff selected three initial sites for their Community Based Land Management (CBLM) programme in the Maluti District: Mvenyane, Madlangala and Mkekane. The three sites were intended as pilot sites for the programme.

In order to carry out this study properly, make informed decisions about field sites and generally understand the area before the study started, I worked together with EDA. It was intended that we would have a reciprocal relationship for the purposes of sharing information, findings and ideas.

## National context

### Background to land management practices

In order to understand the complexity of common property resource management, one has first to understand the history of land management and ownership in South Africa.

In the early twentieth century, the South African government was concerned that land occupied by indigenous African people was degraded. This concern culminated in the introduction of 'betterment' as a means of addressing land degradation. The scheme was loaded with a number of intervening strategies.

Efforts to 'rehabilitate' or 'stabilise' agricultural land in the communal areas took shape in the 1930s as the international concern with soil conservation spread to South Africa. The 1932 Native Economic Commission drew attention to the environmental problems in the 'native areas' that it described as severe, an obstacle to agricultural development and a threat to the direction of 'native policy'. It argued that there was a need to combat soil erosion, the apparent destruction of grazing areas and the drying up of springs in the reserves. Proclamation 31 of 1939 was enacted to promote the culling of excess stock, although it was widely resisted and not effectively implemented until after World War 2. Four years after the 1932 Commission, the Secretary for Native Affairs made a statement on land policy with plans for the rehabilitation of the reserves, including surveys of each 'location' (local area) before land reclamation began. Yawitch (1981:10) has argued that the perceptions driving policy at this time were of Africans as inherently poor farmers:

*with an irrational wish to desire to accumulate cattle and an unwillingness to accept crop rotation...It is because of this that the division of the land, the limitation of stock and anti-erosion measures were seen as the ultimate*

*solution to the problem. Moreover, it is because such a solution did not take the political and economic factors that had forced reserve agriculture to deteriorate into consideration, that such solutions could not and did not work. It was not necessarily that these measures were a failure in their own terms, but because they were implemented without sufficient consideration of the existing social conditions and the causes of those conditions, they served only to antagonise the local populations.*

The strategy of betterment first emerged from these concerns in the 1930s. It combined physical land reclamation measures (such as gully rehabilitation) with land use planning that reorganised and segregated the three principal elements in the communal areas landscape: settlement areas, arable land and grazing land. These measures were sometimes accompanied by other agricultural development measures such as the introduction of stock dipping tanks and the fencing of grazing areas into camps in which rotational grazing schemes were introduced.

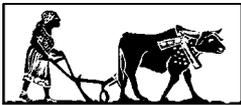


The pre-betterment period was characterised by herding of livestock, use of beacons and packed stones to mark areas demarcated for grazing, strong leadership from the chiefs, and effective collective action among resource users to ensure sound management of common property resources, especially land, rangelands and forest resources (Ntshona 2000a).

During the betterment scheme, much of this was substituted with fencing; strong policing from the chiefs (then used as government tools), the government and its rangers; culling of livestock; and a centralised form of management. De Wet and McAllister (1983) wrote that the plan during the betterment scheme was to rehabilitate areas declared for betterment and to make them economically viable. This was to be achieved by dividing rural

areas into zones allocated for residential, arable and grazing purposes. Officials charged with monitoring the scheme were to assess the carrying capacity of the area and, if necessary, to order the culling of stock. Planning of these areas was based on the idea of 'economic units'. These units were designed in such a way that a family, in order to make the minimum of £60 per year that was perceived as being sufficient to make a living off the land, should have access to arable and grazing land. The units were expected to comprise three morgen (about 2.43ha) of arable land and 17 head of cattle, each requiring three morgen of grazing land.

De Wet and McAllister (1983) state that, in practice, the economic units could not support the number of people that were on the land. 'Surplus' families were therefore expected to have to move off the land. For the proposals of the Tomlinson Commission<sup>1</sup> to be successfully implemented, the rural environment would have to be restructured because people would have to move to newly planned residential areas so that the rest of the area could be made available for cultivation and grazing. Industries would have to be expanded as well, to provide work for those that would have to move from their old rural homes to new villages and industrial areas. The betterment envisaged by the Tomlinson Commission was in effect not implemented, because the government did not make funding available for the establishment of new rural villages and industrial towns. Because the new settlements never got off the ground, there was nowhere to move the surplus population. The idea of economic units was dropped because the commission had reported that, for a black family to make a living off agriculture, they would need an income of £120 per year. That would mean that 80% of the rural families would have to move off the land. This was not practical because it would cause social problems, so the figure of £60 was decided upon instead.



The betterment scheme, after it was implemented, could only survive under close supervision and policing. Chiefs and headmen in areas that were subjected to it were expected to monitor its success. In areas where there was resistance (since the rural people were opposed to their areas being fenced, their dwellings to be relocated and land use to be changed), police were used to ensure its smooth implementation. Many resented the betterment scheme because of the manner in which it was introduced. Along with the strong-arm tactics of the government, the scheme included agricultural production initiatives to entice the recipients to participate. When this did not seem to work, the authorities resorted to enforcing the scheme. Boundaries were demarcated, fencing was introduced, and culling and dipping programmes were implemented.

In some areas the scheme was welcomed since, among other things, it gave children an opportunity to go to school because the introduction of fences meant herding of livestock was no longer necessary. In others, the resistance grew stronger as a result of the lack of proper consultation about the implementation of the scheme. The expenses that were incurred in implementing and maintaining the betterment scheme were exorbitant, a factor which caused it to collapse over a period of time.

The collapse of the betterment scheme saw communal rangelands and fields in the rural areas being managed differently from the pre-betterment and the betterment periods. There is a general sense among the common property resource users that the current situation has brought confusion to many people. The unclear land tenure situation, loss of livestock in large numbers because of the absence of fencing, loss of plant species which are at the core of survival for many rural people, and semi-legal occupation of communal land for private purposes have affected the livelihoods of many people.

### The need for land tenure reform

In southern Africa, land tenure reform is needed to address problems originating in colonial conquest and dispossession (Adams et al. 2000). Land users themselves are not clear as to who the owner of the land is (Turner 1999). Land reform in communal areas has lagged behind reform of privately-owned land. By late 1999, 50 000 households had acquired rural land in the former white areas through government subsidies. In 1996, the Interim Protection of Informal Land Rights Act was passed to give some protection to people with informal land rights. This Act has been extended annually to keep the interim protection it offers in place until a new law is passed. More comprehensive land tenure proposals were put forward in the Land Rights Bill (Turner 1999).

This Bill was intended to address the following problems:

- overcrowding, conflicting and overlapping land rights
- unclear status of land rights, for example where land is registered as state land but in some instances groups and tribes have strong legal rights to the land which are almost equivalent to ownership
- abuse of human rights under traditional or communal systems
- breakdowns in the land administration system (DLA 1998).

The draft proposals identified ten key functions: internal land use planning, land use zoning and development, land allocation, decision making, management and allocation of funds, investigations of entitlement to legally secure tenure or comparable redress, accreditation of land rights holders structures, registration of land rights, record keeping and enforcement. At the time of the research the new Minister of Agriculture and Land Affairs put a halt to the Bill. She was reported to be moving ahead with a major policy shift without consulting key interested parties (*Business Day* 4 May 2000). Instead of providing for people to choose their tenure regime, as had been provided for in the draft Land Rights Bill,

the Minister wanted to vest authority over communal land in tribes along with other individuals needing high-content land rights. This meant that there would be support for the chiefs. These chiefs have always claimed to speak on behalf of their constituencies, but many of them rule in an autocratic manner.

If this approach to tenure reform continues, the livelihood outcomes of many people will be negatively affected. Among other things, people are now less keen to invest in livestock because there is no clarity or authority for a continued communal system of rangeland ownership. Because of the uncertainties that this policy shift has created, big livestock owners in some areas are using the opportunity to semi-legally 'privatise' portions of communally-owned land with the permission of chiefs. This will affect the benefits accrued by other land users in the long run.

The Communal Land Rights Bill published for comment in August 2002 provides for the transfer of ownership of state land in the former 'homelands' to its current occupants. Both communities and individuals may apply for transfer, following which a series of steps must be followed. These include a rights inquiry, registering community rules, agreeing on group membership, surveying boundaries, and setting up local administrative structures. The Minister may appoint officials to assist communities in these processes. Critics of the draft Bill assert that land titling, even for groups, contradicts the underlying principles of African land tenure systems, and that the lessons drawn from South Africa's experience in establishing communal property associations have been ignored (Cousins 2002).

### Development challenges

The main development challenge is improving the effectiveness of institutions from government departments to natural resource user groups. Building an understanding of what should be done is



hindered by the fact that there are different schools of thought on generating livelihoods in rural areas. Those who supposedly carry the vision of agricultural development have been trained to believe that commercial farming practices yield greater benefits than communal practices. Taking into account the larger amount of money that must be invested in 'commercial' agriculture to yield a return, and the fact that 'commercial' and 'communal' farming and management systems have different objectives, this belief can be challenged, at least in South Africa.

The institutional chain of command ensures that commercial agricultural methods imposed from the top are propagated by agricultural extension officers in the field. These ideas are further bolstered by incentives for farmers who use approved methods. Government institutions do not build on what local people already do to cope with shocks and stresses in their environment, they prefer to introduce new ideas based on their (often flawed) understanding of the situation. For example, extension officers recently advised farmers in the study area to dispose of their indigenous livestock and farm commercial breeds instead. Farmers were advised to keep commercial breeds away from indigenous breeds. This has led to requests by some individuals who want to farm commercial breeds for land to be set aside for their exclusive use so that their livestock can be grazed away from indigenous animals.

Because many local institutions have become run down and lack confidence in their own ideas and knowledge, some have bought into the dominant paradigm of commercial agriculture, and are trying to impose these methods on people without proper consultation. Many projects based on commercial systems have failed. Channelling commercial farming ideas through weak local institutions may pose a serious threat to livelihoods, especially when implementation is likely to benefit only the small number of people who are able to engage with the commercial

paradigm. There must be proper consultation whenever an outsider intervenes, and a proper analysis of the potential benefits and threats. People on the ground should be able to put forward their own ideas, whether these conform to the dominant commercial paradigm or not, and expect assistance with implementing them. Institutions must become strong so that they are able to critically engage with information and the form of assistance provided by the authorities.

## Research themes and questions

### Livelihood information

This theme captures information on the socio-economic status of each household in the study area. My interest is in the livelihood strategies of these households and how these livelihood strategies relate to the main sources of livelihood. Information on the main sources of livelihood and livestock ownership is also dealt with under this theme. Using wealth ranking (explained in Chapter 3), I have also looked at levels of wealth (rich, upper middle, lower middle and poor) and how they relate to the different sources of livelihood. More information on this theme appears in Chapter 5.

### Use of natural resources

Chapter 6 looks at the use, importance, scarcity and management of common property resources. This chapter also provides a resource directory with all the natural resources people commonly use and the prices that traders charge.

### The value of natural resources

Valuing natural resources is important for influencing policy and making users more aware of the monetary value of the resources they use. Once policy makers are aware of the real value of natural resources, they are likely to create an enabling environment for their management. Chapter 6 covers the results of the valuation method and looks at the implications of the results. Because of limited time and funding, the valuation of common property resources was confined to fuel wood.



### Management of natural resources

How natural resources are managed has a direct influence on their use and availability. This is impacted upon by the rules and institutions available in the villages to govern resources. Management of natural resources is assessed with reference to conditions and criteria for successful resource management.

Information from South Africa, from other areas, and from the Maluti District is used to determine the applicability of these conditions and criteria for successful common property resource management in the rural areas of South Africa, particularly the Maluti District. This theme is addressed in Chapter 8.

### Land tenure

This theme emerged because of the formation of the Farmers' Association in the area. The formation of the association is examined against the background of recent policy shifts on land affairs. Chapter 7 looks at how the issue of land tenure has impacted on the livelihoods of people and the general relations among villagers.

### Livestock

Chapter 9 looks at the number of livestock households own, why they keep them, how they manage them, and the multiplicity of benefits they derive from them.

### Land degradation

The concern here is the extent of degradation of land in the area and its causes. This theme helps to gather information on the forms of land degradation compared with what people perceive to be an ideal. This theme is important because it helps us understand how and why people value rangeland resources and how and why they manage them (or fail to manage them) in certain ways. This theme is briefly addressed in Chapters 8 and 10.

### Research questions

- How much do communal rangelands contribute to people's livelihoods?

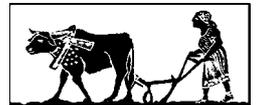
- Why do people keep livestock?
- What is the range of factors determining how people derive multiple benefits from communal rangelands?
- What are people's perceptions of the contribution that communal rangelands make to their livelihoods?
- How do resource users think communal rangelands can be sustainably managed?
- How can management be improved if the valuation results show that there is more value in these resources than previously anticipated?
- What is the impact of changing government policies on people's livelihoods?

## Description of the Maluti District

Maluti District is in the north east part of the Eastern Cape. It is divided into 25 administrative areas, each of which is made up of wards that people commonly refer to as villages (*iilali*). Mkemane, where the study was conducted, consists of four villages – Zitapile, Small Location, Mkemane and Mpofini. It falls within the Ludidi area, which is further divided into Ludidi A and Ludidi B administrative areas.

As in most of the communal areas in South Africa, the land history of the Maluti District has been oppressive and 'conducive to poor management' (Turner 1999). The district population of 160 777, according to 1991 figures, was one of the highest of all the districts in the former homeland area of Transkei. According to these figures, the land area of the district is 221 891ha, with a population density of 72 people/km<sup>2</sup>.

The 1994 livestock figures reveal that the average area of grazing land per large stock unit (LSU) was 0.84ha, the number of LSUs per dip tank was 2 084 and the number of LSUs per dam was 35 431 (LAPC 1995). The report showed that there were 106 294 LSUs in the district, but that the appropriate number based on the recommended carrying capacity was 66 819, suggesting the area was



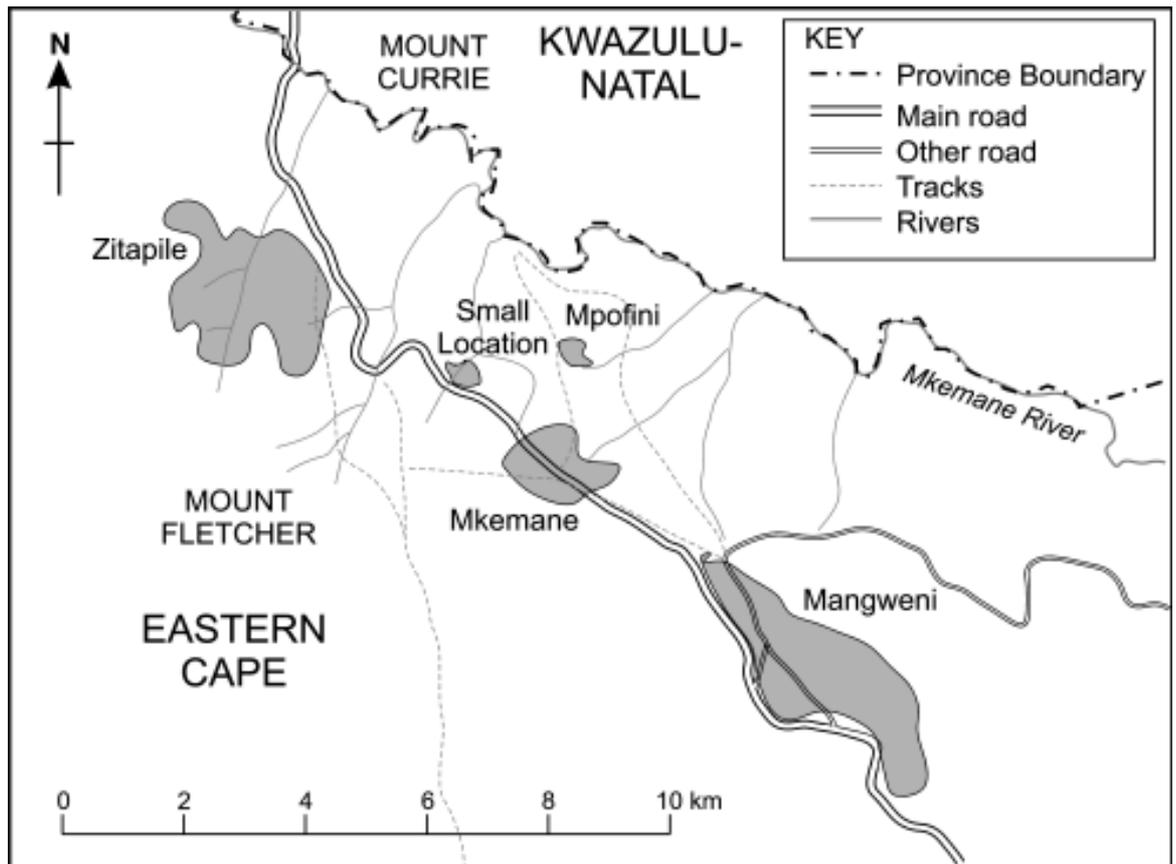


Figure 2: Map of the study area

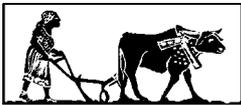


Table 1: Maluti District: Land use type, 1985

Land use type	ha
Arable land	80 640
Grazing	89 318
Community gardens	4 076
Home gardens	217
Forestry	835
Woodlots	14 000
Nature conservation	183
Non-agricultural land	32 622

Source: LAPC (1995)

overstocked to the tune of 37%. In this publication there is no explanation of how the carrying capacity was calculated. The author is aware of the debates around the issue of carrying capacity, but the figures

Table 2: Maluti District: estimated potential land use by type, 1985

Estimated potential land use by type	ha
Arable land	40 000
Forestry	1 000
Woodlots	2 000
Grazing	} 175 601
Conservation	
Non-agricultural	
Private commercial farming	3 290

Source: LAPC (1995)

quoted show the difference between conventional scientific recommendations and the actual use of rangeland by local stockowners. A study by Cousins (1997) in the district reveals that people keep

**Table 3: Maluti District: land use patterns, 1989/90**

Land use patterns	%
Arable land	18
Grazing	75.2
Forestry	0.4
Other	6.4

Source: LAPC (1995)

livestock for multiple purposes – 63% keep them for ploughing and milk, 25% for meat, 100% for sales and 25% for savings and investment. Reasons for selling cattle in the area included urgent cash needs (12%), cash for household consumption (53%), disposing of old and buying young (30%), the pursuit of business goals (47%) and other reasons, for example disposing of livestock by selling to avoid losing them through stock theft (30%) (Cousins 1997:40). Goats were kept mostly for slaughtering and traditional ceremonies (Cousins 1997:44).

## Structure of the report

Chapter 1 is the introduction. Chapter 2 addresses the local response by EDA through its CBLM programme. Chapter 3 describes the methodology employed in this study. Chapter 4 is on the description

of the Mkemane area and Chapter 5 is an outline of livelihood concepts and livelihoods in Mkemane. Chapter 6 addresses the value of selected resources to people's livelihoods. Chapter 7 deals with land tenure issues in the area and Chapter 8 deals with the management of rangelands. Chapter 9 deals with livestock production. Chapter 10 is on conservation, production and livelihoods on rangelands in the area. Chapter 11 addresses the local impact of policies and programmes in Mkemane and Chapter 12 deals with the wider relevance of the study and implications for local and national policy.

## Endnotes

- 1 The Tomlinson Commission for the Socio-Economic Development of the Bantu Areas within the Union of South Africa was set up to 'conduct an exhaustive enquiry into and to report on a comprehensive scheme for the rehabilitation of the Native Areas with a view to developing within them a social structure in keeping with the culture of the Native and based on effective socio-economic planning' (Houghton 1956:1). The Tomlinson commission reported that people in rural areas had no management system for their land. They used the term 'parasitic system of land usage' to describe land use in these areas.



# Chapter 2: Local response to conditions in communal areas

The first democratic government which was elected in 1994 ushered in new laws, institutional arrangements and policies to determine proper and effective governance and to deal with the wrongs of its predecessor. However, rural areas, which are poor, always lag behind any policy reform.

**W**hen the democratic government came into power, EDA realised that there was a need to translate intention into action within the framework of new policies and institutional arrangements (EDA 1998). The timing of the two activities (EDA's Community-Based Land Management programme and PLAAS's Community-Based Natural Resource Management study) was perfect since the two share the same basic principles and objectives. The latter study was mainly a research project on communal rangelands management and livestock production. On a micro level it looked at some of the issues pertinent to the EDA programme, which encompassed a range of issues.

EDA initiated the CBLM programme to establish a lasting mechanism of co-operation between land users, and between land users and the government. The intention was for the majority of land users to be able to use the land productively and sustainably, thereby increasing their income from land use. Land users determine their land use, management priorities, joint and several obligations, and rights. The state, on the other hand, undertakes to provide a legal framework to sustain the arrangement. There are reasons why CBLM is important. It was an initiative able to directly address the needs

of rural people and also a vehicle for testing and improving the practicality of new laws, policies and institutional powers, in particular:

- Land tenure security.
- Land administration and sustainable use on communal land.
- Local government institutions, with their limited skills and resources.
- Service delivery at local level, since government emphasises that delivery should be at local level.
- Delivery of agricultural extension services (CBLM has a framework for the application of the 'conservation through production' principle and other concepts such as 'land care').
- Support in rural areas where there is little prospect that the benefits from these policies will be realised in the short term. CBLM needs to be developed and applied if the potential for optimal use of the natural resource base is to be realised (EDA 1998).

The objectives of the CBLM programme were to:

- assist the majority of land users to increase income from increased and/ or improved production and conservation practices
- improve the sustainability of these gains by (re) establishing local agreements between different land-using groups on the management of land within its



capacity and on the administration of these arrangements

- assist government to establish ways of accommodating these local arrangements in its framework of competency and responsibility
- make the learnings of the project available to a wider range of government agencies, other development agencies and rural land users, through developing, testing and dissemination of models for CBLM (EDA 1998:2).

The CBLM programme was implemented in two districts: Matatiele and Herschel. EDA proposed that the programme should be in two phases, a preparatory phase and an implementation phase, over a period of three years.

The CBLM programme in EDA Matatiele was structured into three components:

- social forestry and environment sector projects
- agriculture sector projects
- development facilitation sector projects.

In the first component, the wattle and integrated catchment management project intended to rid areas of wattle trees. These trees reduce the ground water yield and infest land that could be used for other purposes such as agriculture and human settlement. The project also aimed to assist communities involved in clearing to generate income through secondary value-adding activities. The clearing was to be funded by poverty relief funds from the Department of Water Affairs and Forestry (DWAF) through its Working for Water (WFW) programme. EDA would assist in the wattle-clearing programme.

Environmental education has also been part of EDA's Matatiele programme. There have been requests from students, teachers and lecturers through school environmental programme. Groups that interact with EDA and are involved in a range of land use projects:

*will receive support for developing insight into their environment as a whole and integrated system, and be*

*encouraged to include foresight of potential negative and positive impacts of their actions in the planning and implementation of their projects. This intervention will encourage and provide increased capacity for self-monitoring by communities and project groups, enhancing the overall goal of CBLM (EDA 1998:16).*

In the agricultural sector, the range management project was intended to ensure land users, in particular livestock owners, would receive and use improved information from participatory rural appraisal, farmer networking, research and technical advice to achieve benefits from improved rangelands. This component of the CBLM also looked into land use, administration and management. The goal of the livestock component was to develop the production and income-earning opportunities of livestock owners in conjunction with the conservation goal of CBLM. This was to be done through the provision of technical advice and support. A fields component aimed to stimulate interest in lower-risk and more diversified production options. The promotion of food gardens was intended to enable people produce more at homestead level, thereby reducing the pressure on communal lands and, in the process, improving nutrition and food security. Farmer networking was to be introduced as a vehicle for communication and sharing ideas on new experiences and knowledge between farmers.

The last component, development facilitation, 'is the means by which different stakeholders and processes will be brought together and supported in their efforts to understand their own and one another's positions in the pursuit of management arrangements for sustainable and productive land use' (EDA 1998:21).

The components of the CBLM programme were refined to the following themes during the implementation phase:

- wattle and integrated catchment management
- environmental education and action

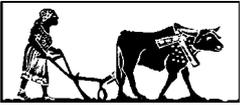


- community forest support
- range management
- agricultural support
- local governance
- eco-tourism development
- land tenure.

These themes were refined, based on the information gathered during the preparatory phase, in order for the programme to be relevant to the needs of people and to fit with government programmes and policy formulation processes.

The themes were not implemented in isolation. Cross-cutting themes of gender, sustainable land use, institutional capacity building, enhancement of livelihood outcomes, networking, advocacy and partnerships, and common property resource management were integrated into the project.

The impact of the CBLM programme in the district is assessed in Chapter 10 where implementation-phase activities are discussed with the emphasis on Mkemane. The CBLM programme ran for three years,



after which funding was exhausted. There were some achievements coupled with a number of problems, and the future of this sort of support for the area is uncertain.

The major problem the CBLM programme encountered was the government's change in position on the Land Tenure Bill. Land tenure reform was to be piloted in the area. This piloting initiative would have given the CBLM programme an enabling framework to achieve its goal of establishing a lasting mechanism of co-operation between land users, and between land users and the government. Time and energy had already been invested by EDA in preparing for the piloting of land tenure reform as proposed in the Bill before the government decided to shelve it.

EDA's CBLM programme was an attempt to address the multiple challenges of building sustainable livelihoods in a South African communal area. As such, it provided the framework within which my detailed research on the uses, value and management of rangeland resources took place.

# Chapter 3: Methodology

For guidance in choosing a research site, I used ranked sources of income from the CBLM workshop report (EDA 1998). This is a report based on several workshops in the CBLM pilot areas on continuing projects on the ground; a mood survey; a basic assessment of natural resource status; documentation of land use practices; nominal and actual management; administration at local level; an institutional survey and the policies of government. I also considered verbal information, in particular from the EDA staff members.

**T**he small size of Mkemane and the fact that people have an interest in both commercial and communal ways of livestock production led me to choose it as a research site. It would have been expensive to work in Mvenyane because of its 12 sub-villages, as opposed to Mkemane, which only has four sub-villages. The CBLM workshop report showed that livestock sales were the highest source of income in Mkemane, but this was not the case in Madlangala and Mvenyane. It appeared from the report that livestock is the people of Mkemane's greatest source of income. My personal impression when I visited the site was that the local people focus on livestock production. The place was also highly favoured by EDA agriculturalists because political tensions in the area were thought to be minimal, an assumption which was later proved to be incorrect.

## Overview of the methodology

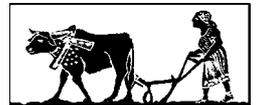
The methods used in this study are social mapping, 'aggregate' diaries, wealth ranking, a questionnaire survey, and valuation. Individual interviews were conducted throughout the study with resource users, herbalists, livestock owners and others. Table 4 shows all the methods that were

used, villages where they were administered, and where the results are presented.

Work could not resume in Zitapile because of a lack of political stability in the village. I wanted to hold meetings to build rapport with the villagers, something which requires the permission of the traditional authority. However, the residents were in the process of trying to replace their sub-headman. I could not bypass the sub-headman since he was legally still in power. Because of the dispute, my formal communication channel with the community was blocked.

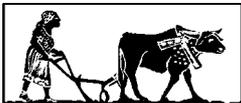
I started conducting social mapping in Small Location with the assistance of EDA. The maps are not reproduced in this report because they were used only as a foundation for other methods. I then went on to do 'aggregated diaries' (explained below), gradually including Mkemane in my survey. Informants came from Small Location, Mkemane and Mpofini.

I conducted a wealth ranking exercise in 58 households in two of the three villages in the study area – Small Location and Mpofini. The low literacy level in the area prompted me to make some adjustments in the questionnaire. For example, I used counters and a chart with pictures instead of Likert scales when



**Table 4: Summary of methods used**

Order of use	Method	Location	Rationale	Presentation of results
1	Social maps	Small Location	To understand the geography of the area, land use, natural resources management and location of natural resources. Mapping was used as a foundation for other methods and different parts of its results are reported in different chapters.	Chapter 8
2	'Aggregated diaries'	Small Location, Mkemane, Mpofini (n=18)	To understand issues of natural resources management, natural resources use and livestock production at household level. Results from the diaries were used to identify questions for the questionnaire survey.	Chapters 8 and 9
3	Wealth ranking	Small Location and Mpofini	To stratify the villages according to the perceived wealth ranking and to use the data with the survey results.	Chapters 5 and 9
4	Questionnaire survey	Small Location and Mpofini (n=58)	To make valid generalisations for the entire district.	Chapters 5 and 9
5	Valuation	Mpofini (n=10)	To gather information on the value of fuel wood over two periods of time.	Chapter 6



asking people to rank their preferences regarding natural resources and livestock. (Likert scales are described in Judd et al. 1991). The more beans they put on the picture of a particular activity (for example, a picture of people collecting firewood), the more they valued it. Each questionnaire took about an hour and a half to administer. The process itself was not cognitively taxing since the questionnaire design took the lack of literacy among informants into account.

After completing the questionnaire survey, I conducted the same valuation exercise in ten households twice – once in summer and once in winter. These households were also included in the questionnaire survey sample. The ten households were selected using purposive sampling. If time had allowed, the sample size drawn could have been larger to make it possible to draw inferences for the broader population of the district.

## Qualitative methods

A number of participatory methods were used to investigate the area and its complexities. Social maps were used to help understand the geography and the resources used in two villages – Mpofini and Small Location. In Small Location, two kinds of maps were produced. The first map was produced to understand the geography of the area and to share the usefulness of the resources found in the area. The second one was for wealth ranking. The workshop exercise for producing social maps was participatory in nature.

### • Mapping of the area:

- Participants drew a map of their area indicating residential area, arable fields, roads, rivers, homesteads, rangelands, forests, schools, community gardens and other important features. Participants were

divided into two groups because of the size of the group. After they completed their respective exercises, the two groups agreed that the map drawn by one group captured everything. The map shows all the important local features, including roads, old and new residential areas, four camps, school, vegetable gardens, arable fields, gates, taps, the Mkemane river, mountains, forests, medicinal plants, different grass species, shops, economic activities, and the boundaries and fences of the betterment area. From the map, participants were asked to tell a story of the changes in residential area, fields and local rangelands. The story was given over three periods of time – the pre-betterment period, the betterment period, and the post-betterment period.

- Participants were asked to say how many households there are in the village, based on information from the map.
- Participants were asked to identify economic activities within the area from information on the map.
- Participants were asked to indicate the location of essential natural resources which they use, whether in their area or just outside it. This was important because the resources included in the valuation included not only found in the area, but also those found in adjacent areas to which people believe they have rights.
- Participants were also requested to indicate where boundaries were before fences collapsed. This helped to understand whether the betterment or the pre-betterment boundaries are respected.
- **Livestock:** Participants were asked to give livestock numbers during the three periods. This helped me to understand whether there has been an increase or a decline in numbers. Three informants,

the only participants in the meeting who owned livestock, gave information about livestock numbers of their own homesteads over the three study periods. This showed that livestock numbers increased during the betterment period and declined during the post-betterment period. Other participants supported these claims.

- **Role of women in natural resource management:** Women were asked about their activities regarding the management of natural resources over the three periods of time. In the meeting it appeared that men have always dominated management of natural resources. It is only during the post-betterment period that women have been invited to participate in general village meetings.
- **Change in species:** People were asked to identify grass species that had grown in any of the three periods and any that have become extinct.
- **Institutional relationships:** A Venn diagram was used to indicate organisations and government offices that work closely with local people.
- **On-site inspection:** I did transect walks, accompanied by villagers, to help me understand the landscape and identify the resources. A young man in his late 30s told me about the places where fencing was erected, plant species which are extinct because of lack of fencing, the landscape, and the rotational grazing system they were using. An elder of Mkemane village told me of the species they were using for fuel and grasses which are unpalatable to livestock in winter. He confirmed what the young man had told me.
- **In-depth meetings and interviews:** These helped me to identify key informants – resource users and livestock owners – to obtain detailed reasons why people use these resources, and to clarify how they practically perceive sustainable resource use and management in future, among other things.



The information captured in the mapping exercise is not included in the data presented here. It helped me to understand the area and know what kind of question could be asked after the mapping exercise.

A wealth ranking exercise was conducted in Mpofini with about 50 people, and another in Small Location with about 10. The third village was omitted from the study because of financial and time constraints. The size of the groups is an approximate figure because people came in and went out during the meetings. Participants drew a map of their village showing all the households in it. Each household was assigned a number, and this was correlated with a separate list of the name by which each household is generally known. In most cases, households are named after the husband, even if he has passed away. After mapping was complete, participants agreed on the one major source of livelihood for each household. Information about other sources of livelihoods was gathered during the questionnaire survey.



Participants in each group were then asked to agree on wealth ranking criteria for four types of household, with '1' representing the wealthiest, '2' representing an upper middle wealth household, '3' a lower middle wealth household, and '4' the poorest.

In Mpofini, participants said a household ranked '1' is able to employ another person and has livestock. A household ranked '2' has livestock and receives regular remittances and a pension grant. A household ranked '3' comprises a pensioner who receives irregular remittances or a pensioner who has many children to look after. Households ranked '4' relied on food received from their next of kin or did irregular piece jobs and handicrafts. It is difficult to separate 'piece jobs' and 'handicrafts' because people move between the two descriptions.

The criteria developed in Small Location were similar to those from Mpofini, but a household ranked '1' had more than 50 cattle, and a household

ranked '2' had a source of income perceived to generate a reasonable amount of money, like a taxi.

In each group three participants who showed they have a high level of knowledge of the area and the different households ranked the households. The three, shown as A, B, and C in the results, were not far from one another in their allocation of households to the different categories of wealth. The numbers given by the participants were converted to percentages (4 = 100%, 3 = 75%, 2 = 50% and 1 = 25%) for simplicity, and the percentages were added up to get averages: in other words, the lower a household's mean score (average of the three percentages) the richer the household is.

An example of the results from the Mpofini exercise (for the first 10 households of 105) is in Table 5.

'Aggregated diaries' were used to get information about livestock, trees and wild resources. These records are referred to as 'diaries' because the initial idea was to ask people to keep diaries of their activities in responses to open-ended questions on livestock, grazing resources, wild resources and trees. The questions were agreed in meetings between the 18 respondents and the researcher. The various respondents did succeed in documenting in writing their activities with regard to livestock, trees, grazing resources and medicinal plants, but they were not specific about *when* they performed any of these activities. Because of this lack of time specificity, I have used the term 'aggregated' when referring to these records.

The 'diaries' cover a five-year period – 1995 to 1999. Information from these diaries shaped the 'hidden harvest' exercises I conducted in one village over two seasons – summer and winter. Respondents were selected using purposive sampling and the kind of information they provided informed the kinds of questions that were asked later in a structured questionnaire. The selection

**Table 5: Wealth ranking exercise example: 10 households in Mpofini**

Household	Informant A		Informant B		Informant C		Total
	Rank	% equivalent	Rank	% equivalent	Rank	% equivalent	
1	3	75	4	100	4	100	<b>91.6</b>
2	3	75	2	50	3	75	<b>66.6</b>
3	4	100	4	100	4	100	<b>100</b>
4	4	100	4	100	4	100	<b>100</b>
5	3	75	3	75	4	100	<b>83.3</b>
6	3	75	2	50	3	75	<b>66.6</b>
7	3	75	1	25	3	75	<b>58.3</b>
8	2	50	3	75	3	75	<b>66.6</b>
9	3	75	2	50	3	75	<b>66.6</b>
10	3	75	4	100	4	100	<b>91.6</b>

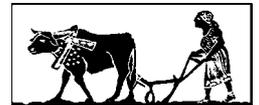
procedure considered both people with livestock and those without to find out whether the common perception that livestock owners benefit more than non-livestock owners from rangeland resources has any foundation. After carefully studying the area, I discovered that the livelihoods of many non-livestock owners are derived from communal rangelands.

## Quantitative methods

The qualitative data was coded and matrices were developed which helped in

the design of the questionnaire and the analysis of the survey results. Matrices can easily be replicated for different purposes just by changing the contents of the boxes.

Although qualitative methods generate detailed insight into the issues investigated, more conventional methods such as quantitative methods were also used to generate a broad view of the issues that can assist policy makers in their decision-making processes. This broader picture will help policy makers and other researchers to replicate the study, and to

**Table 6: Example of a questionnaire matrix about cattle**

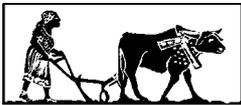
No. of cattle	Reasons for keeping livestock	Marketing	Amount invested in vaccination per annum	Amount invested in feed per annum	Off-take	Types of livestock
1–5						
6–10						
11–15						
16–20						

**Table 7: Example of a questionnaire matrix about trees**

Socio-economic status as per wealth ranking exercise	Reasons for using trees	Amount of fuel wood used per day	Substitutes for different tree species	Species used for medicinal purposes and why
Poor				
Lower middle				
Upper middle				
Rich				

**Table 8: Example of a questionnaire matrix about wild resources**

Socio-economic status as per wealth ranking exercise	Reasons for using wild resources	Which wild resources are used and why	Wild resources used for medicinal purposes
Poor			
Lower middle			
Upper middle			
Rich			



test the validity of the theories generated in other areas.

I set out to discover who frequently uses these resources, and whether the use of resources could be correlated with the wealth of the household. This kind of information was collected using structured questionnaires. I wanted to administer the standardised questionnaire in 52 randomly-selected households of the 105 in Mpofini, but was only able to do this in 27 because so many people were away from the village trying to eke out a living at the time of the survey visit. In many cases grandparents were looking after their grandchildren, effectively increasing the number of people in most households which could be surveyed. Although I wished to visit these homesteads when owners return, I feared that this could lead to duplication. The same procedure was followed in Small Location where a sample of 40 households was drawn randomly but only 31 of those were interviewed. In all, 58 households were interviewed.

The procedure followed in doing the exercise was to use counters for questions that in the conventional method would need response cards. This was done because of the low literacy level of many people in the village.

In Mpofini, many people, especially those who owned newly-built houses, were away in cities working or looking for work. Some of those who were in the sample for the questionnaire survey left their children with their grandparents – one household surveyed comprised a grandmother and all her grandchildren.

The information collected through the questionnaire survey was used with the information collected from the wealth ranking exercise. The information collected using the questionnaire survey was: sources of livelihood, contribution of different sources of livelihoods to a particular household (ranked from lowest to highest), use of different types of natural resources, number of times people collect

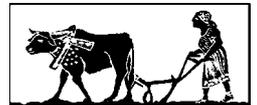
different types of natural resources, substitutes for different types of natural resources, people's perception of how their quality of life would change if natural resources they are using were to become extinct, livestock ownership, livestock numbers, change in livestock numbers in the past five years, reasons people keep livestock, purchases of feed and vaccines for livestock in the past two years, livestock sales, use of natural resources to inoculate animals, reasons people sell livestock, amounts received for livestock sold in the past two years, questions on management of natural resources including betterment, condition of rangelands, involvement of women in the management of natural resources, effectiveness of the contribution of communal rangelands, employment data of the household, education, age, household composition and whether the household head was male or female.

In the field, I managed to undertake valuation of fuel wood and collect price data for medicinal plants. For the latter I consulted traditional healers who gave prices for the medicines they sell. From this information a resource directory (Table 12) was developed. The resource directory is a table with lists of grass, tree species and medicinal plants with prices attached to them when they are sold in a processed or raw form. The resource directory is further discussed in Chapter 6. There were flaws in the questions about prices because the cost of obtaining and preparing the medicine was omitted.

For the fuel wood valuation method, only one village, Mpofini, was selected. Ten households were selected using purposive sampling and sampled twice –

once in summer and once in winter – to assess the value of the fuel wood they used. This assessment was done by comparing the amount of fuel wood used for household tasks in summer with the amount of paraffin it would require to do the same tasks.

The first assessment was conducted in summer. Here the households were asked to use fuel wood as they usually would on one day, and to use paraffin to perform the same tasks on the second day. The paraffin was supplied by the researcher. The wood was weighed before use on the first day and the weight of unused wood and ash deducted to work out the number of thermal units used on that day. Similarly, the paraffin was weighed before use on the second day and the weight of unused paraffin deducted. Since paraffin is a market commodity with a monetary price, and a comparison could be made with the amount of wood needed for a household to perform the same task, it was possible to assign a monetary value to a kilogram of wood equivalent to the amount of money 'saved' by a household collecting fuel wood for free instead of having to buy paraffin. During the following winter, I assessed the amount of fuel wood used by nine of the same households. The tenth household was unfortunately no longer in the village. The valuation of the fuel wood was based on the concept of net economic value. It is calculated as revenue minus harvesting, processing and transport costs, including non-financial costs such as own labour (IIED 1997). The results are described in Chapter 6.



# Chapter 4: Description of the Mkemane area

The three CBLM pilot areas where EDA works together with their land uses appear in Table 9. I focused on Mkemane which has more grazing land and less arable land than the other areas. Mkemane is located in the north eastern part of the Eastern Cape province, 70km from Matatiele and 68km from Mt Frere.

**Table 9: CBLM pilot areas and their land use patterns**

	Madlangala	Mvenyane	Mkemane
Grazing	1 221ha	2 109ha	12 270ha
Residential	233ha	864ha	629ha
Arable	184ha	542ha	93ha

Source: Department of Agriculture, Maluti District



**M**kemane is named after the Mkemane River, which passes through a number of villages, and it is located in Ludidi area. Ludidi comprises 12 villages, namely Mnyamaneni, Lukholweni, Nyaniso, Rholweni, Fiva, Epiphany, Sidakeni, Palane, Zitapile, Small Location, Mpofini and Mkemane. Ludidi is further divided into Ludidi A administrative area (Small Location, Mkemane, Mpofini, Lukholweni, Palane and Epiphany) and Ludidi B (Zitapile, Fiva, Nyaniso, Rholweni, Sidakeni and Mnyamaneni). Locally, people refer to four villages collectively as Mkemane (Small Location, Mkemane village, Mpofini and Zitapile). Each of these wards (villages) has its own sub-headman (*unozithetyana*). There are two headmen (*izibonda*) for Ludidi, one in charge of each administrative area. Headmen are nominated because of their relations to the chief. The headmen of Ludidi A and Ludidi B have the same clan name as the chief and they report to the

chief. At one time sub-headmen also had to be related to the chief, but members of the villages decided that this was no longer necessary. They agreed that anybody committed to the development of rural people and a resident of that particular village could be elected as *unozithetyana*. The chief in charge of the Ludidi area is also responsible for other areas, including such as Kaka.

## Demography and settlement

There are three main ethnic groups living in the Maluti District – the Basotho who are concentrated close to the border of Lesotho and South Africa, the Hlubi and the Xhosa who are represented across the district but concentrated in areas further from the border of Lesotho and South Africa at Qachasnek. The Hlubi and the Basotho are the dominant groups.

Locally-available statistics from the extension office about households in the area proved unreliable, so information had

to be collected from scratch. The number of households in Small Location was 118, in Mpofini there were 105, and in Mkemane there were about 300.

Mkemane was planned under the betterment scheme. This means that, in each village, land was divided for settlement, grazing and arable agriculture purposes. Because the area is mountainous, planning is unlike in other areas where rows of houses are clearly visible. The settlement is scattered since houses cannot be close together because of streams and slopes in the residential areas.

## Land administration

Land administration in the district, including Mkemane village, is complicated because of the unclear land tenure arrangements in the country as a whole. Greenberg (1999) argues that acquiring a plot in the district takes time and money because of the number of people who have to be approached. At each stage, some money has to be paid, from the sub-headman in the ward to the headman and then to the chief. In addition, a government official must be approached when applying for a plot, this after the abovementioned process is complete.

## Land tenure

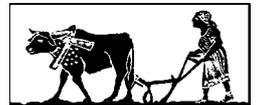
The land tenure situation is unclear because of the lack of clarity at national level described in Chapter 1. Because the district is in a former homeland, it still uses the 'permission to occupy' (PTO) system. People in the district have shared their frustration concerning the lack of security of tenure. Responding to the lack of clarity about tenure, the local Farmers' Association requested the headman and the chief to set aside three camps for the exclusive use of its members. This was approved. This development has serious implications for the livelihoods of people who are not members of the association. This semi-legal land acquisition also brings with it the potential for conflict.

## Livelihoods

According to the Department for International Development of the UK government (DFID) livelihoods conceptual framework (DFID, no date; Scoones 1998), people have livelihood *assets* (financial capital, human capital, social capital, physical capital and natural capital) which they put to use in livelihood *strategies* in order to achieve livelihood *outcomes* (See Figure 3 on page 26).

**Financial capital** refers to the financial resources which are available to people in the form of savings, supplies of credit, regular remittances or pensions which give them different livelihood options. A source of financial capital which is most valued in the area and seen as a safety net is state grants. Households with elderly or disabled people (although there are very few households with disabled people) are entitled to social grants like pensions or disability grants and are better off than most because of this regular inflow of money. This helps them to meet most basic household needs. With regard to remittances, the picture is bleak. The unemployment rate in South Africa is very high, and more than one million jobs have been lost over the last five years. This has impacted directly on income earners, as well as indirectly on people in the rural areas who depend on remittances. This situation forces many able-bodied people to eke out a living from natural resources rather than paid employment.

**Human capital** refers to the skills, knowledge, ability and good health which are important for pursuing different livelihoods options. Although there are two schools in Mkemane, the nearest high school is about 25km away. Because household sizes are generally large, there is no lack of household labour. However, the elders say the youth are not keen to work unless they are offered incentives. Access to health facilities in the area is poor. A mobile clinic visits a central location near Mkemane once a month, but residents were unclear about the precise date on which this happens. The service is



also supposed to visit Mkemane itself, but it is not very reliable. A fortnightly health service is available more than 10km away. People have to walk this distance because of the lack of transport.

**Social capital** is taken in the DFID framework to mean social resources upon which people draw in pursuit of livelihood objectives. These are developed through networks and connectedness, membership of more formalised groups, and relationships of trust, reciprocity and exchange. One example of social capital is the Farmers' Association (see below), membership of which guarantees benefits such as exclusive grazing for livestock. The decay of institutions in the area complicates issues pertaining to natural resource management, land administration and livelihoods. One example is the semi-legal acquisition of land by the Farmers' Association, something which has had serious negative implications for the livelihoods of others. These semi-legal benefits have been made possible through the links that the association has with the tribal authority.



The next asset discussed in the DFID framework is **physical capital**. Transport in the area and the condition of the roads have always been a major concern. Although there were attempts to improve the roads, heavy rain caused major damage to roads, setting back this process. The cost of transport to the closest market is very high, especially considering the fact that most people in the area are unemployed. A return bus trip to the market costs R18, so people can only afford to visit the market infrequently. In addition, there is a lack of production equipment and infrastructure to pursue livelihoods options. In most cases, people use common property resources to build their houses, although some migrant labourers were able to afford houses built of bricks. The Department of Water Affairs and Forestry, through its contractors, is in the process of installing standpipes. Although this is a major breakthrough, it is not linked to improved sanitation. Some

people use pit latrines and others have no toilets. This poses threats to human capital in terms of the poor health status of many individuals, especially children, because they are so susceptible to diseases. Access to telecommunication and to clean and affordable energy are far from being realised in the area. Strong institutions are needed in the area to lobby for the delivery of services.

**Natural capital** is the only livelihood resource that is accessible to all the households in the study area and, as such, is at the core of this study. Common property resources, particularly communal rangeland resources, provide an important buffer for the livelihood base of most households in the area. Natural resources have a value without any major associated 'costs'. People rely on natural resources to provide many things, including materials for heating and cooking; grazing their animals; wild fruits and wild vegetables; medicines for themselves and their animals; grass for thatch, brooms, mats and platters; mud for plates, plastering and decorating; and other building materials. Plants like *impepho* have a multitude of uses, for example, relief of chest pains, decoration and repelling lightning.

The land which the people of Mkemane use for residential and agricultural purposes is also common property. Problems with current tenure arrangements make these resources less secure than they should be, representing a stress on people's livelihoods. The great dependency on common property resources for survival places stress on the resource base, raising concerns about sustainable use of natural resources and about whether so many people can in fact make a living off such a limited resource base. The importance of natural capital in this situation emphasises the importance of recognising the value of the natural resources people use, and the empirical calculation of that value. Giving a financial value to common property resources will help to prompt policy makers to intervene in how these resources are managed.

## Natural resource management and use

Management of communal rangelands in the district is a combination of what people practised during the betterment scheme period, their perceptions of what should happen, an almost 'open access' (unregulated and uncontrolled) situation, and issues related to management of animals which, for example, permit opportunistic grazing in winter. There are no forums to determine rules of use. In most cases, the elite (that is, the Farmers' Association) determines what should happen. Membership of the association is concentrated in Small Location.

Rangeland fires which are set outside the agreed burning times are a matter of concern to big livestock owners (mostly members of the Farmers' Association). During the winter season, people are frequently woken up by fiercely burning fires which may threaten their homes. This has been going on for quite some time and has not been resolved because of weak institutional arrangements. When asked about rules governing common property resources, people refer to the rules established during the betterment period which are still in effect. The decay of traditional common property regimes has significant and serious implications for livelihoods. Ideally, people want a system that resembles the betterment scheme, but believe that they should be the ones who govern the system. They can appreciate some of the benefits which the betterment scheme brought, but they resent the manner in which it was introduced (Ntshona 2000b).

Research shows that an almost 'open access' situation prevails in the rural areas of the Maluti District (Ntshona 2000b).

This can be explained as follows:

- The Eastern Cape communal areas have a history of dependence on the South African government. The governance of natural resources changed from being decentralised before the 1930s, to being centralised for the 60 years which followed, to an almost 'free-for-all' after the democratic government came into power in 1994. For several decades prior to that, government continuously supported its policy of centrally directing natural resource management through betterment land use planning.
- Many rural people have disregarded the leadership of chiefs in the Eastern Cape. This was expressed by, for example, the cutting of government fences around grazing areas, which people considered as oppressive tools of the state. These fences were erected as part of the betterment scheme's demarcation of grazing areas to inhibit land degradation. The government enforced the scheme against the will of the people using chiefs, headman and the police.
- Entitlement to social grants means people can be slightly less dependent on natural resources, so they do not spend much time on good natural resource management.

The point is that the extent to which people engage with the management of common property resources is significantly decreasing. The institutional arrangements governing these resources are weak. The conditions for successful management of common property must be identified to avoid a collapse of governance of the natural capital which is so important to the livelihoods of the rural poor.



# Chapter 5: Outline of livelihoods concepts and of livelihoods in Mkemane

Poverty in South Africa is rife, especially in rural areas. Rural people are forced by many factors to eke out a living in the cities and combine this with other activities near their rural homes.

**A**gricultural intensification and extensification, diversification and migration are the main livelihoods strategies used in rural areas. The viability of migration as a strategy has been seriously affected in the past few years by the high rate of retrenchment in the cities. Many able-bodied people have been forced to go back to their homes and build their livelihoods there. This in itself is not easy because of past injustices, the heterogeneous nature of communities, and the institutions that govern these. The land most households have is not very productive and the institutions in most areas are weak. Another issue that retrenched people need to consider is the social relations (especially connectedness) they have to make productive use of the assets they possess. Assets are also not easy to acquire; they need to be understood in the broader political, social, economic and environmental context. Viewing what people do to make a living through any livelihood framework provides a specific context and maps out the relations between the different factors that people have to contend with.

Widespread rural poverty in South Africa raises concerns about which mixture of strategies the people, rich and poor, use to secure their livelihoods. Livelihood strategies are seen in this report to be linked to a range of factors ranging from the political environment (national and local) to the natural and social

environment surrounding individuals and the household environment (the socio-economic status of each particular household). This chapter first seeks to describe the elements of the livelihoods concept before moving on to three livelihoods models.

## Defining livelihoods

Scoones (1998:5), drawing on Chambers and Conway, uses the Institute of Development Studies (IDS) definition of livelihoods:

*A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base.*

DFID (no date) says that livelihoods are sustainable when they:

- *are resilient in the face of external shocks and stresses;*
- *are not dependent upon external support (or if they are, this support itself should be economically and institutionally sustainable);*
- *maintain the long-term productivity of natural resources; and*
- *do not undermine the livelihoods of, or compromise the livelihood options open to, others.*



Another method DFID uses to conceptualise sustainability is to consider different aspects of sustainability. The aspects include firstly environmental sustainability, which is achieved when the natural resources are used sustainably to meet the needs of the present generation without compromising the needs of future generations. The second aspect is economic sustainability. In the context of the livelihood of the poor, this is achieved if 'a baseline level of economic welfare can be achieved and sustained'. Third is social sustainability which 'is achieved when social exclusion is minimised and social equity maximised'. Fourth is institutional sustainability, which is achieved when structures can perform their duties over a long period of time.

As Cousins (1998:16–7) says:

*Rural livelihoods are multiple, diverse and dynamic...[they] bridge the rural – urban divide...[they] maintain complex social and economic relationships across a number of levels, both locally and non-locally...highly differentiated by social identity and also...are institutionally mediated.*

The multiple, diverse and dynamic nature of rural livelihoods is aimed at 'managing risk, reducing vulnerability and enhancing security' (Cousins 1998:16). The bridging of the rural/urban divide shows how people from rural, urban and peri-urban areas combine earnings from the informal sector, wages and remittances in the cities with rurally-based agriculture, livestock keeping, disability grants, pensions, employment, micro-enterprises such as 'beer brewing, and craft production trade in plant materials, and claiming through social networks' (May et al. 1995 cited in Cousins 1998). Rural livelihood strategies also involve 'maintaining complex social and economic relationships across a number of levels, both locally and non-locally' (Cousins 1998:7). They 'link individuals, family members, social networks and community institutions' (Cousins 1998:17). They are also

differentiated by social identity with variable and unequal outcomes depending on class, gender, age and many other factors (Bernstein 1992; Crehan 1992; Kepe 1997; Levin & Weiner 1996; Carter & May 1997 cited in Cousins 1998). Cousins (1998) also states that 'livelihoods are institutionally mediated'. He argues that this can be complex where there is communal land tenure and most resources are collected from the commons. These factors all contribute to the complexity of rural livelihoods.

Drawing from the definitions above and the complex nature of rural livelihoods, I will move on to discussing models for understanding rural livelihoods. Various authors have tried to structure, understand and manage the complexity of livelihoods by proposing sustainable livelihoods frameworks or models. In the context of the case study area, those aspects of a sustainable livelihood that are lacking can easily be identified using the framework.

## Livelihood models

### DFID's livelihood framework

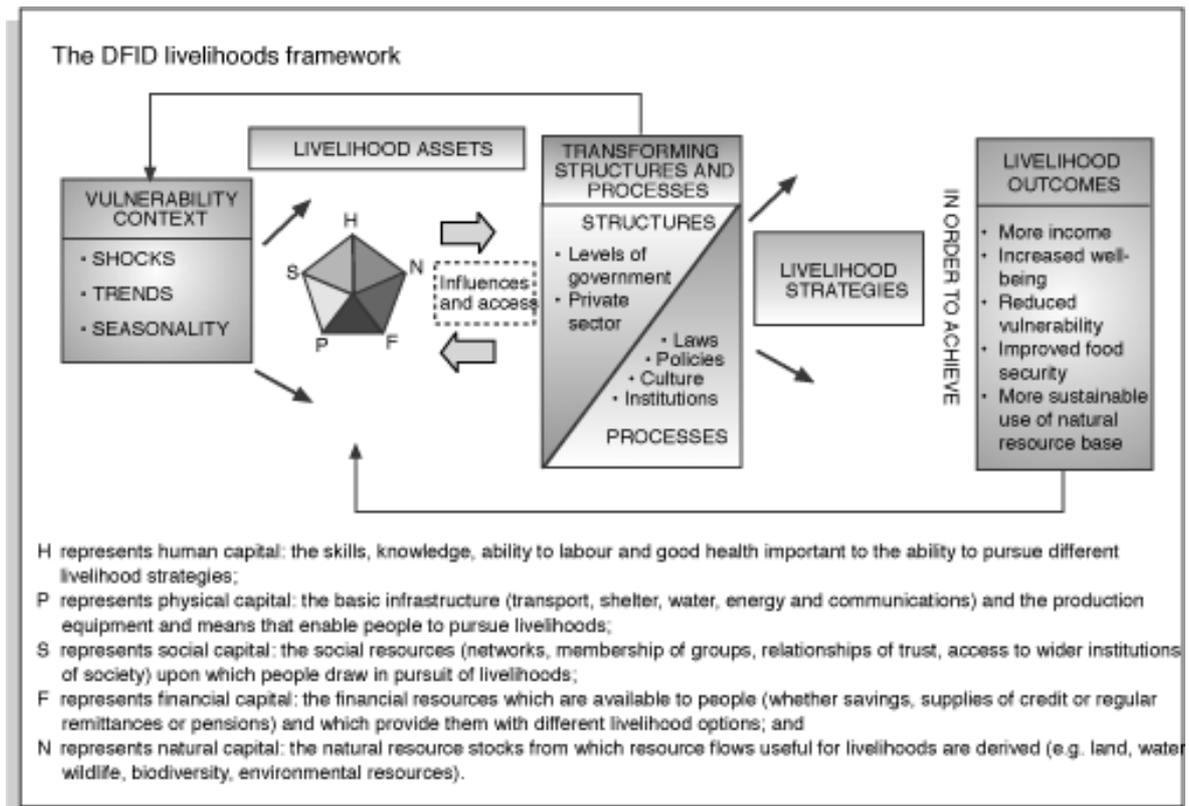
DFID (no date) uses its own livelihood framework as a tool for understanding the livelihoods of the poor (see Figure 3). It presents the important factors that affect people's livelihoods and how these are related. This work has been built over years, drawing from other studies conducted around the world. This framework:

*provides a checklist of important issues and sketches out the way these link to each other; draws attention to core influences and processes; and emphasises the multiple interactions between the various factors which affect livelihoods.*

(DFID no date)

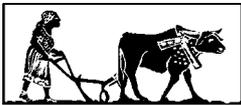
The vulnerability context in the DFID framework describes the external environment in which people live and over which they have limited or no control. The trends include population trends, resource trends, national and international economic trends, trends in governance and technological trends. Shocks include





**Figure 3: The DFID sustainable livelihoods framework**

(Source: Carney et al. 1999)



human health shocks, crop or livestock health shocks, natural and economic shocks and conflict. Seasonality includes seasonality of prices, production, and health and employment opportunities. DFID regards the vulnerability context to be important because its features have a direct bearing on people's assets and the choices open to them in pursuit of a livelihood outcome. The concern with livelihood assets is how people try to convert their assets into positive livelihood outcomes. This is founded on the belief that no single category of assets is sufficient for the numerous livelihood outcomes. These assets have been addressed in context in Chapter 4. The pentagon in Figure 3 brings the five assets used in the DFID framework together in a visual metaphor. The central point of the pentagon shows zero access to assets while the outer perimeter represents maximum access to all of the identified assets. Natural capital is the most accessible asset

for the households in the study area.

Access to various assets affects access to other assets. DFID (no date) says that one asset can generate multiple benefits. If a household has secure access to land (a form of natural capital) and uses it productively, this should increase its financial capital as well.

When its financial capital is enhanced, it can gain respect and connectedness to the community (social capital). Livestock (natural capital) can also be used as physical capital – it can be used for animal traction. All the assets are influenced by the vulnerability context. According to the framework, a set of *transforming structures and processes* affects the conversion of assets into livelihood outcomes. These structures and processes include institutions, organisations, policies, culture and legislation that shape livelihoods. These transforming structures 'operate at all levels from household to international arena and in all spheres, from

the most private to the most public' (DFID, no date). They determine access to the various types of capital, to livelihood strategies and to decision-making bodies and sources of influence. They also determine the terms of exchange between types of capital and returns to any given livelihood strategy. They have an impact upon whether people are able to achieve a feeling of inclusion and wealth and, because culture is included in this arena, they account for unexplained differences in the way things are done in different societies.

Structures (conceptualised by DFID as 'hardware') are organisations that 'set and implement policy and legislation, deliver services, purchase, trade and perform all manner of other functions that affect livelihoods' (DFID, no date). These organisations, both public and private, include political bodies at various levels from local through to national, executive agencies (ministries and departments), judicial bodies, parastatal/quasi-governmental agencies, and commercial enterprises, corporations, civil society and NGOs. These structures are important because they make processes work, or they may impede processes.

Processes (thought of by DFID as 'software') determine the way in which structures operate and interact. Processes include policies (macro, sectoral, redistributive, regulatory); legislation (international agreements and domestic); institutions (markets, institutions regulating access to assets, rules of the game within structures); culture (societal norms and beliefs); and power relations (age, gender, caste and class).

The final part of the DFID framework is livelihood strategies and outcomes. Livelihood strategies are the 'range and combination of activities and choices that people make/undertake in order to achieve their livelihood goals... [This] is a dynamic process in which they [people] combine activities to meet their various needs at different times'. An in-depth

overview of these livelihood strategies is presented in Scoones's livelihood framework where he talks of agricultural intensification/ extensification, livelihood diversification and migration (explained below). Livelihood outcomes, on the other hand, are achievements of livelihood strategies. These include more income, increased wealth, reduced vulnerability, improved food security and more sustainable use of the natural resource base.

### Scoones's framework

This framework resembles the one offered by DFID. It starts by asking a question in the analysis of sustainable livelihoods.

This question shapes the framework itself:

*Given a particular context (of policy setting, politics, history, agroecology and socio-economic conditions), what combination of livelihood resources (different types of 'capital') results in the ability to follow what combination of livelihood strategies (agricultural intensification/ extensification, livelihood diversification and migration) with what outcomes?*



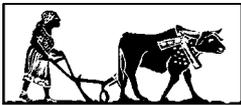
Scoones provides five key elements from the definition of livelihood for assessing outcomes. The first three of the elements link 'looking, in turn, at the resilience of livelihoods and the natural resource base on which, in part, they depend' (Scoones 1998:5).

The five elements are come from 'concerns over work and employment with poverty reduction with broader issues of adequacy, security, well-being and capability', namely:

1. *The creation of working days* – which 'relates to the ability of a particular combination of livelihood strategies to create gainful employment for a certain portion of the year' (Scoones 1998:5).
2. *Poverty reduction* – level of poverty is a criterion that can be used in the assessment of livelihoods. 'However, such quantitative assessments of poverty can be used in combination

with more qualitative indicators of livelihoods' (Jodha 1998; Schaffer 1996 cited in Scoones 1998:6).

3. *Well-being and capabilities* – Sen (1984; 1987), cited in Scoones 1998, sees capabilities as “what people can do or be with their entitlements”, a concept which encompasses far more than the material concerns of food intake or income. Such ideas represent more than the human capital which allows people to do things, but also the intrinsically valued elements of ‘capability’ or ‘well-being’.
- while Chambers (1997) argues that such a well-being approach to poverty and livelihood analysis may allow people themselves to define the criteria which are important. This may result in a range of sustainable livelihood outcome criteria, including diverse factors such as self-esteem, security, happiness, stress, vulnerability, power, exclusion, as well as more conventionally measured material concerns’ (cited in Scoones 1998:6).



4. *Livelihood adaptation, vulnerability and resilience* – Scoones here argues that the ‘ability of a livelihood to be able to cope with and recover from stresses and shocks is central to the definition of sustainable livelihoods’ (Scoones 1998:6). Citing Davies (1996), he further argues that ‘such resilience in the face of stresses and shocks is key to both livelihood adaptation and coping’.
5. *Natural resource base sustainability* – ‘refers to the ability of a system to maintain productivity when subject to disturbing forces, whether a ‘stress’ (a small, regular, disturbance with a cumulative effect) or a ‘shock’ (a large infrequent, disturbance with immediate impact)’ (Conway 1985 and Holling 1993 cited in Scoones 1998:6). This, according to Scoones (1998), implies avoiding permanent decline of the natural resource stock.

Following on from an analysis of livelihood resources, Scoones provides a

checklist of questions:

- *Sequencing*, which basically looks at whether one asset is a precursor for gaining access to others.
- *Substitution*, which asks whether one asset can be substituted for another.
- *Clustering*, which asks whether, if a person has one type of capital, he or she has access to others.
- *Access*, which is dependent on structures and organisations (explained above).
- *Trade-offs*, which is about the trade-offs faced by people with different access to different types of livelihood resources in pursuing a livelihood strategy.
- *Trends* and how these affect the availability of different types of livelihood resources.

This framework is somewhat similar to that of DFID, but Scoones emphasises clusters of livelihood strategies. These are livelihood intensification/ extensification, livelihood diversification and migration. An example of livelihood intensification would involve capital investment or labour input for more output per unit area. Livelihood extensification would mean more land under cultivation. Diversification involves diversifying a range of off-farm income-earning activities and migration would be making a living away (mostly in metropolitan areas), permanently or temporarily.

As in the DFID framework, Scoones looks at structures and organisations that ‘mediate the complex and highly differentiated process of achieving a sustainable livelihood’ (Scoones 1998:11).

The emphasis of both these frameworks is on the complexity of relations between components of the framework. Both stress the importance of analysing each component and its relationship to others in order to understand the whole. For each component of the framework, Scoones stresses what should be analysed. For context, conditions and trends, the emphasis is on the factors affecting things like policy setting. To understand any livelihood strategy that a person embarks

on, one has to understand the policy environment that affects that person. Poverty conditions inform the livelihood choices that people have. For livelihood resources, Scoones stresses the importance of analysing these resources, looking at trade-offs, combinations, sequences and trends. In structures and organisations, he stresses the analysis of institutional/organisational influences on access to livelihood resources and composition of the livelihood strategy portfolio. In livelihood strategies and livelihood outcomes, he talks of the analysis of the livelihood strategy portfolio and pathways and analysis of outcomes and trade-offs respectively.

*... the combination of activities that are pursued can be seen as a 'livelihood portfolio'. Some such portfolios may be highly specialised with a concentration on one or a limited range of activities; others may be quite diverse. Different livelihood pathways are evident over different time scales. Over seasons and between years, variations in options emerge (Chambers et al. 1981). Equally, within domestic cycles different combinations of strategies may be pursued sequentially, depending on changes in dependency ratios, health conditions and other factors. Over longer periods – over several generations, for example – more substantial shifts in combinations may occur, as local and external conditions change. It is this dynamic element, evident in the composition and recomposition of livelihood strategies, which it is important to examine specially in the context of assessing the sustainability of different options. This makes the historical approach central to any analysis (Scoones 1998:10).*

Although the complexity of rural livelihoods is stressed in both the frameworks discussed so far, the following one addresses these complexities in depth and converges on some issues from the first two frameworks.

### CARE's livelihood model

This framework is similar in many ways to the two above, but its focal point is at household level.

*CARE's model centres around a household's livelihood strategy: the asset box includes the capabilities of household members, the assets and resources to which they have access, as well as their access to information or ability to influence others, and their ability to claim from relatives, the state or other actors. In so doing, there is a realisation that production and income activities are only a means to improving livelihoods and not an end in themselves*

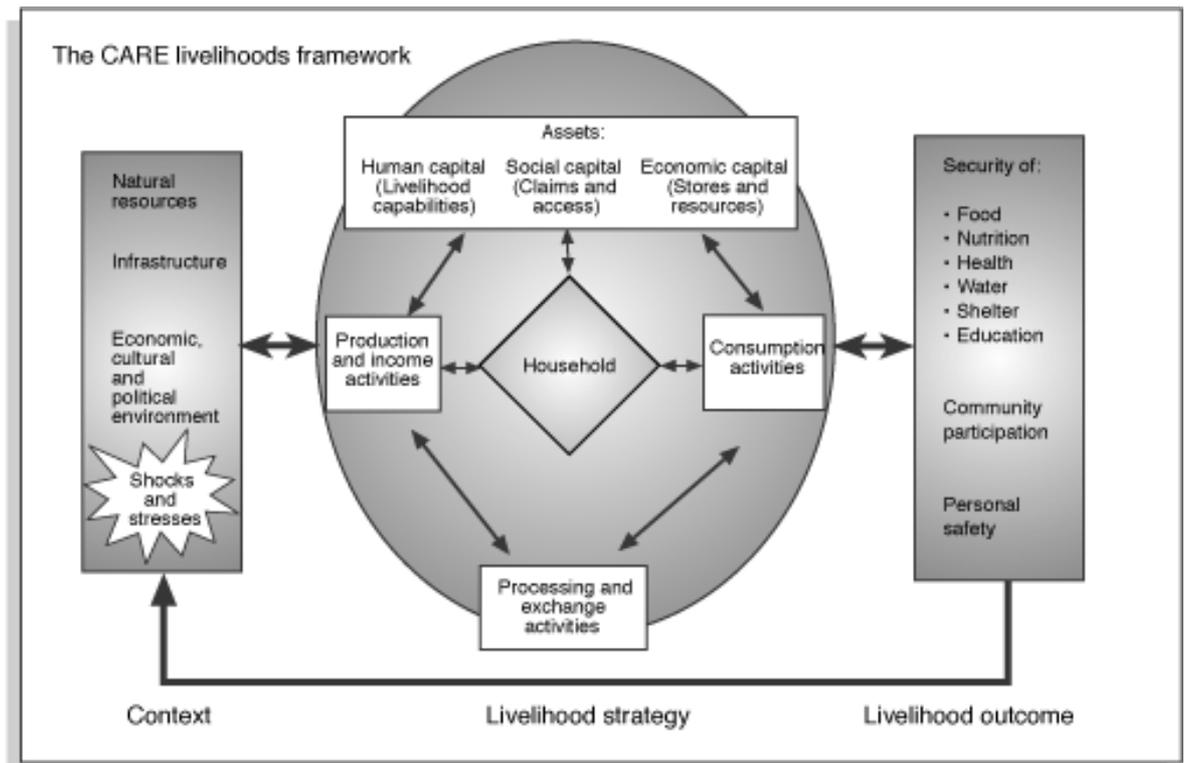
(Drinkwater & Rusinow 1999:2–3).

Unlike the other models discussed above, CARE distinguishes between the resource base over which households have direct control (household assets) and that which is regulated through membership in a larger community (common property assets). Another distinction is the use of terminology. Livelihood strategies refer to livelihood intensification/ extensification, diversification and migration as far as the two other models are concerned, but the CARE model uses livelihood strategy to refer to both livelihood resources (livelihood assets) and livelihood strategies.



### Sources of livelihood in the study area

People living in the study area are faced with a number of stresses and shocks to their livelihoods, including: retrenchments from places of work; high unemployment; situations that make it necessary for people to dispose of their livestock; unfenced fields, which make people more averse to risks because of open access; poor management structures at local level; lack of information; no access to markets; extremely poor infrastructure; loss of livestock through diseases and many others. All of these challenges negatively



**Figure 4: The CARE livelihoods framework**

Source: Carney et al. 1999

affect the livelihood outcomes of households in the area. This background and the past political dispensation of South Africa forced many people into lower levels of social and economic well-being than they might otherwise be.

As mentioned in the earlier chapters of this report, this study did not employ any conventional methods to ascertain the extent of wealth in each household, but relied on people's perceptions of the situation. People in the two villages sampled had almost the same constructs of whom they perceived as rich, of upper middle income, of lower middle income or poor. Their definition of each level of wealth revolved around livestock ownership, access to pension grants, remittances, piece jobs and kin dependency. People who rely on their next of kin for sustenance were mostly considered as the poorest, and those who had many livestock units were considered the richest. People who rely more on piece jobs and handicrafts were considered to be of lower middle income or as the poorest.

Two wealth levels that had more nuanced definitions were upper middle and lower middle. Although the same livelihood source was used to define these income groups, a number of other factors were taken into consideration to decide whether a person fitted into the lower middle or the upper middle income group. These factors included household composition, assets, and the general economic background of the particular household. This prompted me to develop different analyses to look at the relationship of different constructs identified in the study as imperative for a sustained livelihood. A series of discussions with people in the villages informed the constructs used.

As a general overview of livelihood context in the study area, Table 10 differentiates between the different levels of wealth as identified by the people according to main source of livelihood and perceptions of wealth which emerged during the wealth ranking exercise. Kin dependency, piece jobs and handicrafts, spaza, local security guarding



**Table 10: Levels of wealth and main sources of livelihood**

Main source of livelihood	No. of affected households	% of households	Levels of wealth				Total
			Rich middle (%)	Upper middle (%)	Lower (%)	Poor (%)	
Pension	16	27.6	0	18.8	62.5	18.8	100
Piece jobs and handicrafts	13	22.4	0	0	23.1	76.9	100
Remittances	13	22.4	0	23.1	46.2	30.8	100
Kin dependency	1	1.7	0	0	0	100	100
Livestock herding	1	1.7	0	0	0	100	100
Herbalism	1	1.7	0	100	0	0	100
Unemployment Insurance Fund	1	1.7	0	100	0	0	100
Subsistence agriculture	5	8.6	20	20	60	0	100
Deceased husband's pension	1	1.7	0	0	100	0	100
Early pension (pension before the age of 60 for women and 65 for men)	1	1.7	100	0	0	0	100
Spaza shop	1	1.7	0	0	0	100	0
Combination of natural resources and remittances	1	1.7	0	0	100	0	100
Specific skill	1	1.7	0	0	100	0	100
Local security guard	1	1.7	0	0	0	100	100
Taxi owner	1	1.7	0	100	0	0	100
<b>Total</b>	<b>58</b>	<b>100</b>					

n=58

and livestock herding are shown in the table to be the livelihood strategies of most of the poor households. Subsistence agriculture is one source of livelihood for the rich. They mainly use their produce for home consumption. This group of people also owns many livestock units. A total of 62.5% of lower middle people have pension as their main source of livelihood and 18.8% of upper middle households get pension grants. What the table also shows

is that people's livelihoods are centred mostly on pension grants, piece jobs and handicrafts which are mostly based on natural resources (for example, broom making, plastering, making of mud bricks, platters and ropes) and remittances. Households for which pension grants are the main source of livelihood are 27.6% of the total, piece jobs and handicrafts 22.4%, and remittances 22.4%. Even if all the households across the three villages were



interviewed, the same results would be reflected. For example, there are only two security guards in the three villages looking after the junior secondary school and one was selected in the sample. In the three villages there are only two taxi men, three people who regard themselves as herbalists (although other people also have a flair for the use of medicinal plants) and few people who have certain specific skills. In other words, the 1.7% of households representing only one household in this sample are not unrealistic numbers, they reflect the actual situation.

Table 10 shows the main contributors to people's livelihood strategies. However, main sources of livelihood are not the only sources of livelihood to which people have access. People rely on multiple sources of livelihoods, which they combine in different proportions, to secure a living. Using the wealth categories people gave during the wealth ranking exercise and the main sources of livelihoods given in Table 10, households in the area can be grouped according to the following clusters:



1. The first cluster includes households with livestock, old age pension and remittances as sources of livelihood. This group is able to support its livestock holdings and its crop production activities through its financial resources. Households in this cluster, depending on the household composition and the consistency of remittances, are considered to be upper middle income households. Those with high large household composition and fewer assets (for example, ploughs and livestock) are considered to be of lower middle income.
2. The second cluster includes people who are eligible for old age pensions. This cluster supports its agricultural activities through pensions. Households in this cluster are considered to be upper middle and lower middle income, depending on the household

composition in many cases.

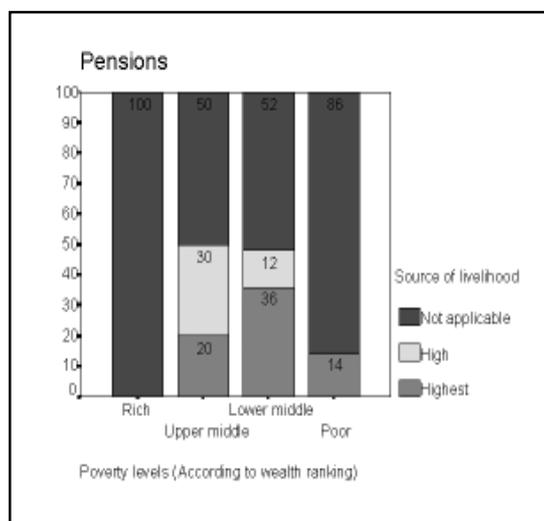
3. The third cluster consists of people involved in piece jobs, handicrafts and who are dependent on kin. Most households in this cluster own very few or no livestock units. They switch between these three sources of livelihood. Female-headed households dominate this cluster. It is mainly households from this cluster which depend heavily on a number of common property resources. These households are mostly poor, female-headed, and depend on irregular piece jobs coupled with irregular handicrafts and kin dependency.
4. The fourth cluster includes households with large livestock holding who can afford to make productive use of their arable land. These agricultural activities are mainly supported through remittances or financial resources from businesses such as shops. Some in this cluster, who are highly involved in agriculture, have obtained livestock and fields through inheritance. These are mainly rich households which seldom provide employment to the poor.
5. The fifth cluster consists of skilled labour and people in self-employment. This involves welding, bricklaying and brick making. According to the wealth ranks given, this cluster falls in the lower middle and poor categories.
6. The sixth cluster consists of households which own spaza shops and/ or sell liquor. Female-headed households dominate this cluster. The ones who do both employ people to work their land or look after their livestock for food and liquor. They seldom do it for money. Households that sell liquor and have spaza shops fall in the upper middle category and those that only have spaza shops fall in the poor category.

The graphs below highlight issues of concern regarding the contribution made by different sources of livelihood identified to be more beneficial to a

substantial number of people. Each graph shows the number of households in each of the four wealth categories who said that the source in question made a 'highest', 'high', 'low' or 'lowest' contribution to their livelihoods, as well as the number of households which said that this livelihood source was not applicable.

### Pensions

Pensions (Figure 5) most often make a 'highest' contribution to livelihoods among lower middle income households (36% of households indicated the highest contribution) followed by 20% of the upper middle households which also indicated a 'highest' contribution. A total of 14% of the poor households also indicated a 'highest' contribution from pensions. Although this is the case for some households, many of the poor (86%) and lower middle households (52%) indicated that pension grants were not available to them. Looking at the proportional contribution of pensions for those who are entitled to them and those who are not, pensions contribute more to the upper middle income households (50% indicated some contribution whether perceived as 'highest' or 'high'), followed by lower middle income households (48%), followed by a few poor households (14%). If one looks at the groups which

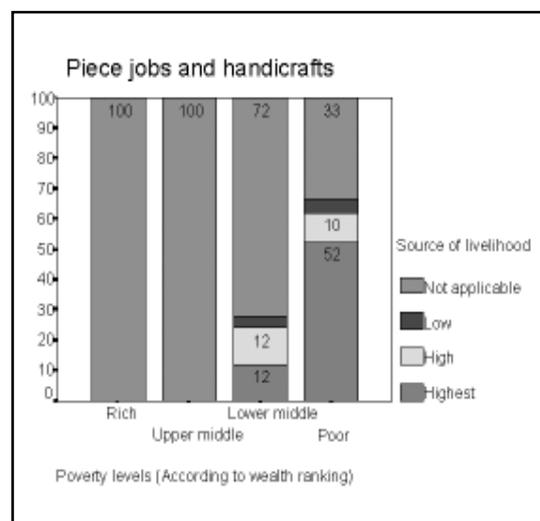


**Figure 5: Contribution of pensions to livelihoods**

are eligible for pensions, it can be seen that the highest number of non-recipients can be found among the poor, but this goes down for other levels of wealth. Pension grants do not feature in the livelihoods of the rich.

### Piece jobs and handicrafts

Figure 6 shows that piece jobs and handicrafts, which rely mostly on natural resources, most often make a 'highest' contribution to poor households (52% of poor households indicated a 'highest' contribution). The emphasis here is on cash gains from services rendered or goods sold. These are not applicable to the rich and the upper middle income households. For lower middle income households, they make a 'highest' and a 'high' contribution to an equal number of households. Handicrafts include the making of brooms, mud bricks, grass platters, medicines using medicinal plants, decorations using a special type of mud, plastering and roofing using thatch grass. Piece jobs and handicrafts were not mentioned by most lower middle income households and by 33% of poor households. It is surprising that most lower middle income households were not involved in piece jobs and handicrafts. From the wealth ranking exercise, people indicated that some lower middle income

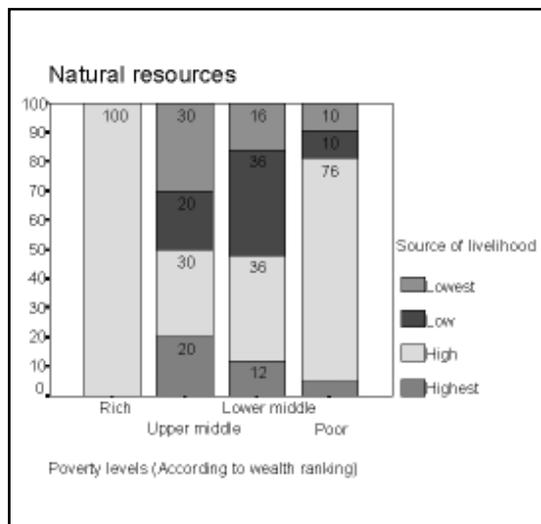
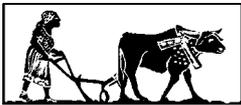


**Figure 6: Contribution of piece jobs and handicrafts to livelihoods**

households earn pensions and receive remittances (which are inconsistent in this category of households). These households were classified as lower middle income because of their household composition – the money they receive supports many people.

### Natural resources

The contribution from natural resources to livelihoods (Figure 7) among the rich is very high (100%), followed by the poor (76%). There is no wealth group to which natural resources did not make a livelihood contribution. Everybody uses them, albeit for different purposes. This study therefore suggests that natural resources are a safety net to all households, especially the poor. Some rich households also indicated that natural resources make a 'high' contribution to their livelihoods. A 'highest' contribution was most often indicated by the upper middle, followed by the lower middle and the poor.

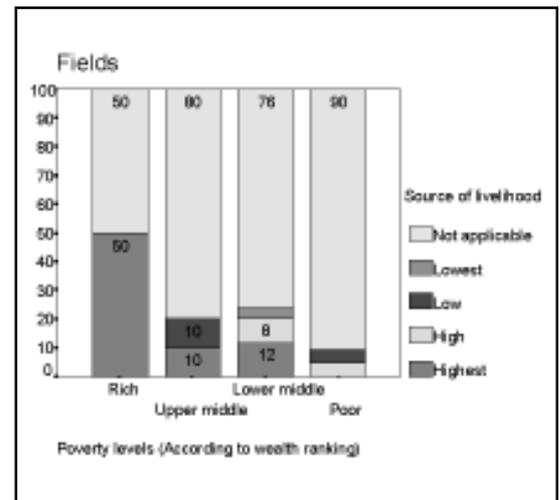


**Figure 7: Contribution of natural resources to livelihoods**

### Fields

Fields (Figure 8) made very little contribution to the livelihoods of most of the poor households (90%), upper middle (80%) and lower middle income households (76%). More rich households (50%) indicated a 'highest' contribution than did lower middle (12%) and upper

middle income households (10%). In the recent past, especially after 1994, fences which had previously kept animals away from arable fields were not maintained in a good state of repair. This resulted in many people leaving their fields fallow and only using parts around them to collect thatch grass. The few rich people in the sample indicated that subsistence agriculture was their main source of livelihood.



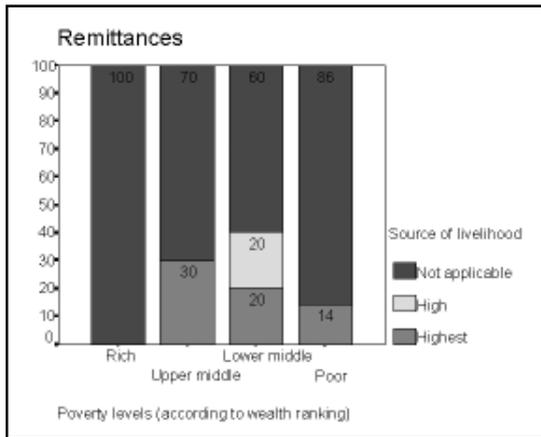
**Figure 8: Contribution of fields to livelihoods**

### Remittances

Figure 9 shows that most poor households (86%), 70% of upper middle and 60% of lower middle income households do not earn remittances, where remittances are applicable. Remittances make the most 'highest' contribution to upper middle income households, then lower middle, followed by poor households. A 'high' contribution was indicated by 20% of lower middle income households. No rich households indicated that they receive remittances.

### Livestock

With regard to livestock (Figure 10), the only households which indicated this made the 'highest' contribution to their livelihoods were rich households. Livestock contributions do not apply to most poor (81%) and lower middle income households (56%).

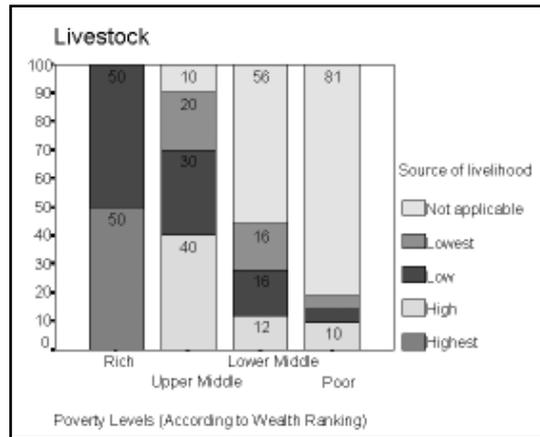


**Figure 9: Contribution of remittances to livelihoods**

## Conclusion

Livestock makes the highest contribution to the livelihoods of those households perceived to be rich and which hold many livestock units. From the data on livestock which appears in Chapter 9, it can be seen that very few people have livestock, and those who do generally have very few units. Those who embark on piece jobs as their main source of livelihood have between one and five head of cattle. In the study area, the number of cattle owned by a household is a measure of social standing, something which might affect the social capital of households, positively or negatively. People who have been employed in the past and have land to work in the villages have managed to accumulate livestock. Although the data do not show this, most people with high numbers of animal units were former migrant labourers, while some acquired their large herds through inheritance. The poor and lower middle income groups cannot afford to maintain the health of their livestock. In 1999 none of the poor in the survey bought any feed.

People with remittances and subsistence agriculture as sources of livelihood have more livestock than other people with other sources of livelihood. Pensions make the 'highest' contribution to lower middle income households where the few individuals who are entitled to them are concentrated. Remittances only benefit



**Figure 10: Contribution of livestock to livelihoods**

households which have migrant labourers in them. Fields benefit a small portion of the rich, lower middle and upper middle income groups.

Because the poor have so few livelihood options, they rely almost entirely on natural resources in order to survive. Piece jobs and handicrafts make the 'highest' contribution to the livelihoods of most poor households. The kinds of piece jobs people embark on transform natural resources into useful things such as brooms. The only market outlet is pension pay points. A few people canvassed in the survey saw natural resources as making a 'low' or 'lowest' contribution to their livelihoods, but this could have been the result of these people taking being able to utilise natural resources for granted. The only form of livelihood contribution that applied to all four wealth categories of household in the study sample was natural resources. If this is to be sustained for generations to come, then proper management of common property resources is essential.

At this stage, there is confusion about the management of these resources. Programmes to support management of these natural resources and programmes to maintain livestock production are decaying. People are not sure whether there are rules or not, and some are not sure about the condition of the rangelands. As a result of high unemployment and



retrenchment, people are forced to eke out a living back in their rural villages. The history that has been given in Chapter 4 with regard to management of common property resources suggests that an agent like the government is needed to assist and support what people are nostalgic for – a ‘betterment’ scheme, but in a different form; one which recognises the role of common property resource users. There is a great need for government to commit itself to issues of natural resource management and assistance to livestock owners through marketing, dipping and vaccination programmes. Only effective intervention by policy makers in the management of natural resources will arrest the declining contribution that these resources make to people’s livelihoods.

For people in the district, livelihood strategies as defined by Scoones (1998) involve mostly livelihood diversification and, for a few households, agricultural intensification. Migration is decreasing because of high unemployment and agricultural intensification only benefits the few who can afford the capital needed for productive use of land.



Using the sustainable livelihoods framework of Scoones (1998), it can be seen that the past and present policy processes have severely impacted on the livelihoods of many rural people. The history of land allocation and poverty in this country has already been covered in Chapter 1. In addition, people seem to lack livestock.

Physical capital was addressed in Chapter 4. It was said that the infrastructure and other related things such as schools are in a bad state and moreover, the schools in Mkemane do not go up to matriculation level. This impacts negatively on the formation of human capital. People do, of course, acquire knowledge from their elders on life and survival. A full 25.9% of survey respondents had never been to school, only 10.3% had passed grade 4, 19% had passed grade 6, 13.8% had passed grade 7

and 12.1% had passed grade 8. The lack of formal education has a severely negative impact on employment opportunities.

The only capital that is freely available for everybody is natural capital. Although problems around its management (addressed in Chapter 8) threaten that the livelihood outcome may be negative rather than positive, something can be done to assure its sustainability. Policy makers must take a good look at the benefits that accrue to people from natural resources, recognise their value, and ensure that they are sustainably managed for future generations.

Having said that, it is imperative to convince policy makers of the use of these resources and whether their contribution is a convincing reason for them to act. The usefulness of these resources is addressed in Chapter 6. Chapter 6 also addresses their value in monetary terms, since money is the most commonly used unit of exchange. Valuation has only been undertaken for fuel wood. Chapter 6 shows that the methods commonly used to convince policy makers that common property resources are beneficial to many rural households fail to consider the complexities of rural areas.

As the reader will see in Chapter 7, the social structures and processes through which sustainable livelihoods can be achieved only benefit a few individuals. Formal institutions, such as the Ministry of Land Affairs, chiefs and headmen at local level are becoming barriers to sustainable livelihoods through the granting of usufruct rights to certain individuals. Scoones recognises in his framework that interventions in support of sustainable livelihoods must be attuned to social relationships, their institutional forms (formal and informal) and the power dynamics embedded in these, if sustainable institutional entry points are to be found. What Chapter 7 shows is that institutions that are supposed to mediate access to natural capital (seen as the most important capital in the study area) are

biased – they are giving land parcels to few individuals at the expense of other members in the village.

Besides management of common

property resources, another pressing issue that needs a speedy intervention by government is land tenure. This is discussed in Chapter 7.



# Chapter 6: Resource value

Cousins (1998) argues that the National Forest Action Plan (DWAF 1997) gives recognition to the high economic value derived from common property resources.

In this document, it is estimated that fuel wood production is about 11 million tons per annum, which is worth more than R1 billion; traditional medicine is estimated at R500 million–R1 billion per annum, and the curio industry based on woodland products is worth over R7 million (DWAF 1997 cited in Cousins 1998:23). DWAF (1997:45) cited in Cousins (1998) states that these values are ‘largely unaccounted for in terms of national accounting (for example measures of GDP)’.

The latter statement poses a challenge to policy makers to recognise the role, importance and economic value of these resources to rural people’s livelihoods. These resources are shown in many studies to have significant economic values and to contribute to the well-being of rural communities (IIED 1997; Clarke et al. 1996; Cousins 1998; Shackleton et al. 1999a; Shackleton et al. 1999b; High & Shackleton 2000). Many other writings have shown their value, role and importance.

Although these resources seem to be overlooked by policy makers, it is essential to recognise their characteristics, which confound the use of traditional economic assessment methods, and thus have contributed to their hidden/ wild/ invisible status:

- *They are highly site-specific and seasonal.*
- *Their importance differs from one social group to another.*
- *They are often collected opportunistically and sometimes illegally, making harvest assessments difficult.*

- *They are often marketed through informal networks or used as subsistence products and so do not have a formal market value.*
- *They often represent a value to local people, or to ecosystem function, which cannot be translated into financial terms.*
- *Their value may vary according to who has access or control over them... (IIED 1997:7).*

As stated in Chapter 4, the livelihood resource that seems to be most abundant and available is natural capital. For the purposes of this study, this form of capital is divided into three categories: wild plant resources, grazing resources and trees. These resources, according to IIED (1997:6–7):

- *enhance food security by providing an important buffer during certain seasons and/ or major periods of stress;*
- *supply vital nutritional supplements to diets based largely on carbohydrate-rich staples;*
- *have significant economic value by preventing the need for cash expenditure, for example on construction material, fodder, and medicine;*
- *can provide ready sources of income to cash-poor households;*
- *have many cultural values, such as sacred sites or species used in ceremonies or for barter;*
- *hold the key for the future of agricultural production by providing essential genetic material;*



- *help to regulate climatic patterns and protect against natural disasters and degradation processes;*
- *represent as yet unknown medicinal values for future medical needs;*
- *and provide essential indicators of environmental change.*

The importance of these resources is based on direct, indirect and non-use values.

The direct use value shows the direct use that people make of wild resources as means of subsistence. However, because many of these resources are not traded but are consumed by people who collect them and also because 'they rarely come under effective ownership or management, their true economic significance is often ignored' (IIED 1997:22). An example of indirect use value, as shown in Table 11, is the birds and bees in plant reproduction and that of non-use value can be an aesthetic value which an area provides (IIED 1997).

Wild resources are harvested and processed for home consumption or sale

(McGregor 1995; Ainslie et al. 1996; Clarke et al. 1996; Campbell et al. 1997; Cunningham 1997; Shackleton et al. 1999a; Shackleton & Shackleton in press, cited in Shackleton et al. 1999b). A number of rural households are dependent on the natural resource base for a range of basic living requirements (Shackleton et al. 1999b). In their paper, Shackleton et al. (1999a, citing Shackleton & Mander, in press) stated that the degree of use varies across regions based on a number of factors 'including resource availability and accessibility, resource productivity, institutional controls, population densities, employment levels, income levels, education levels, availability of alternatives, and personal and cultural preferences'. Evidence shows that it is poorer households and more deep rural households that use a diversity of these resources more than better-off households and less isolated households (McGregor 1995; Cavendish 1996; Campbell et al. 1997, Qureshi & Kumar 1998).

Furthermore, a study conducted in Haryana, India (Qureshi & Kumar



**Table 11: Economic values of wild resources**

Use values		Non-use values
Direct	Indirect	Existence/ cultural
Wild plants and animals directly consumed or marketed <i>Examples:</i> <ul style="list-style-type: none"> <li>• Food</li> <li>• Medicine</li> <li>• Construction material</li> </ul>	Species or system which supports other economic activities <i>Examples:</i> <ul style="list-style-type: none"> <li>• Role of forested areas in protecting watershed by regulation flooding</li> <li>• Nutrient cycling in agricultural lands promoted by forest or wild areas</li> <li>• Pollination of crops provided by wild species or birds or bees</li> </ul>	Species or system which is valued for its own right without reference to an economic use <i>Examples:</i> <ul style="list-style-type: none"> <li>• Cultural appreciation and heritage</li> <li>• Beauty</li> <li>• Motivation to bequest resources to future generations (including a wide range of resources, that is, biological diversity)</li> </ul>
Non-consumptive benefits of resources <i>Examples:</i> <ul style="list-style-type: none"> <li>• Shade from trees</li> <li>• Use of forested area as burial ground</li> <li>• Use of wild species for improving domestic varieties</li> </ul>		

Source: Barbier 1991 cited in IIED 1997:23

1998:342) stated that the 'formal invisibility and non-recognition of contributions of common lands to rural economy and ecology have led to their neglect by the welfare and production policy makers and planners, analysts and even rural society...' (Singh 1986; Jodha 1990; Pasha 1992; Gadgil & Guha 1995, cited in Qureshi & Kumar 1998:342). This situation, as shown in their study, has implications for the livelihoods of the rural poor, and is exacerbating land desertification, deforestation, rangeland depletion and atmospheric warming. But there is no credible intervention by the government and NGOs to reverse the situation (Rao 1992 cited in Qureshi & Kumar 1998). Qureshi and Kumar (1998:342-3) stated that 'an effective strategy for the regeneration, management and use of these lands requires an improved understanding of the different types of goods and services provided by them to different groups of users in different agro-ecological regions'.



Cousins (1998:25) refers to the fact that: *economic valuation of benefits from land rights needs to take adequate account of the full range of benefits from communal rangelands. This has implications for the business plans and feasibility studies required for land redistribution and land restitution projects. For labour tenants, compensation for the loss of their rights should be based on a full economic valuation of the benefits derived from the rangeland they have been using...In relation to tenure reform, rights of access to communal rangelands are likely to receive the status of protected rights under the proposed legislation (Department of Land Affairs, 1998) [This was the legislation that was proposed before the recent policy shifts.] The importance of these for the livelihoods of the rural poor means that officials who witness*

*group decisions on the use, development or disposal of rangelands should take particular care that the decisions are taken by a majority of affected right holders including those who use secondary products – and not just the livestock owners whose herds graze the commons (who often belong to the wealthier families).*

My work aims to demonstrate the importance of wild resources, grazing resources and trees in the communal areas of South Africa, by detailed investigation of their availability, ownership, use and management in the Mkemane area. Demonstrating the roles and importance of wild resources, trees and grazing resources requires careful measurement and valuation techniques which will be explored by applying them to field realities in Mkemane. Livestock production is greatly influenced by the importance of wild resources, grazing resources and trees. When common property resources are properly managed, there are more benefits derived from livestock.

## Natural resources

Natural resources contribute significantly to energy, medical, nutritional, building, cultural and other needs. They include wild resources, grasses and trees. Wild resources include medicinal plants, wild fruits and wild vegetables. Grasses include grass grazed by livestock, grass for thatching, grass to make brooms and grass to make grass mats and meat platters. Trees include trees used for fuel, for building and for other miscellaneous uses such as shade. These resources contribute to rural people's livelihoods in different ways. Most of them are for household consumption, some provide shelter and some are sold in informal markets. The most popular markets are the pension pay points. Another form of selling is to go door to door with the products.

Unlike other safety nets like old age pensions, these resources benefit everybody. Amongst other things, they are used for building houses and cattle byres; as a source of energy, nutritional, and medicinal needs; for brick making; for decorations; and for grazing livestock. Some people, through their expertise, make a business from these resources. Their businesses would bring more cash income if there were better access to the existing markets.

Natural resources do not only enhance natural capital, but also financial capital (income generated through trading of these products), and physical capital (for example, schools built using these products). In addition, their use enhances social relations and, therefore, builds human capital. Women collect these resources as groups and by so doing they build their connectedness with other women. Some of the resources need skills to process. These skills are passed from one generation to the next. The loss of any of these resources through overutilisation or through a land grab by a minority would directly affect people's socio-economic status.

People's lives revolve around these resources, as is demonstrated by responses from 58 households on how their lives would change in the absence of natural resources. People mentioned all sorts of words that connote difficulty when discussing the implications of depletion of these resources. Their annual schedule shows that natural resources are at the centre of their lives. During the month of September, people prepare the soil for planting field crops. They break dry manure into fine pieces to spread it evenly on top of the soil. In October, November, December and January people plant maize and potatoes – these months are also crucial to herbalists for harvesting their medicinal plants since most of these plants become green during the rainy summer season. Villages like Small Location plant in October, while other villages begin

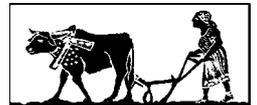
planting in November. In February, people collect firewood and they plant radishes and turnips to prepare livestock feed for the winter season. In March, they decorate their homes using special types of mud. In April and May they harvest their produce, and during the winter season (June, July and August) they collect thatch grass. This is not a hard and fast pattern – people are engaged in other activities as well. The point is that natural resources are central to people's livelihoods.

The following subsections discuss commonly-used natural resources – their importance, use, scarcity and management. The importance of the resource will address the benefits accrued from it; use will address the frequency of use of the resource; scarcity will address the availability of these resources in the area; and management will address whether there are any rules pertaining to their collection.

### Medicinal plants

The use of medicinal plants in the area range from repelling lightning to curing the ailments of animals and people, including colds, sores, headaches and stomach aches. Herbalists claim to be able to cure chronic diseases like cancer and HIV/Aids through the use of these plants.

Health facilities are more than 10km away from the Mkemane sub-villages. This prompts many people to make use of medicinal plants. In addition, the unemployment factor needs to be considered. People cannot afford Western medicine and hence they resort to natural resources for medical needs. As mentioned above, people are visited once a month in the village by a mobile clinic and another mobile visits once in two weeks. The latter is 10km away from the village. Most people have no alternative but to use these plants because of factors such as the deep rural nature of the area, lack of facilities and infrastructure, and the general socio-economic environment.



### Box 1: Nombeko's dependence on natural resources

Nombeko collects wood throughout the year. In March, she starts collecting more wood, preparing for the winter season. She has to prepare a fire in the *imbawula* (a brazier made from a 25 litre paint tin punched full of holes to allow the heat from the coals inside to spread) each day, starting in May, and gradually reducing the amount of wood she uses by September (spring). She collects wattle trees for fuel. There are two types of wattle – black and silver (*Acacia mearnsii* and *Acacia delbata* respectively). She uses black wattle in winter for heating and cooking. This is because it burns more slowly than silver wattle. The area has natural forests with trees whose wood burn slowly. These trees (like *uqudu*) burn more slowly than black wattle. Other trees that burn slowly are *intshitshi* (*Agrimonia eupatoria*), *isidwadwa* (*Leucosidea sericea*), *umlungu mabele* (*Adenopodia spicata*), *isiqalaba* (*Faurea macnaughtonii*), *unyenye* (*Grewia occedentalis*), and *ilothwane* (botanical name unknown). These trees are no longer collected. During the betterment period the forest agent asked people not to collect them for firewood because they have strong poles (*iziqonga*) that would be helpful to people. Fuel wood has been collected from wattle trees since she was a young girl. These trees never run out.

Plants that are helpful for fever and influenza, according to Nombeko, are *iqwili* (*Alepidia amatymbica*), *umhlonyane* (*Artemisia afra*), *impepho* (*Helichrysum odoratissimum*), *amagqabi e-gum tree* (gum tree leaves). She uses them for her own health and that of her family because she does not have money to visit medical practitioners. From time to time, she and other harvesters of these plants pool what they have collected for sale in Durban. They sell *impepho* for R1 000 a wool bale and R2 a bunch. The only problem is the lack of a market outlet. They must stay in Durban for a long time if they want to sell all their produce.



A forest called Maliphole was taken away from them and given to a white farmer. This year, permission has been granted to people in the neighbouring villages to collect medicinal plants and *urasha* (grass used to make brooms) in this forest. They collect *iqwili* there as well. The only thing they are prohibited from doing is to walk around with dogs, as these are a danger to the white farmer's livestock. They use their rangelands to collect other medicinal plants.

She earns her living from handwork using natural resources. In 1996, she made R600 from selling brooms. In 1997 she earned about R788, in 1998, R978 but in 1999 she had not sold anything. In 1997, she made R100 from selling grass mats and in 1998, R15 from selling *izithebe* (grass platters).

In 1995, she had 50 chickens. In January 1996, all her chickens died because of a disease. She started keeping chickens again but in 1997 they died because the disease struck again. She keeps chickens for home consumption only.

In the two years during which the study was conducted, no incidences of side effects of the plants were reported. People seem to know which plants to use and in

what amounts. Besides their health benefits, most of these plants can be sold. People sell plants like *impepho* (*Helichrysum odoratissimum*) in places as

far away as Durban, some four hours' drive from Matatiele. To some households, especially those without any source of income, these resources are a safety net. Nombeko's household is one such case.

The case study in Box 1 is typical of the way natural resources serve as a safety net for low-income households. The only concern here is that there is a claim on this land because people say it was taken away from them. People consider natural resources on that land as something which belongs to them.

Like Nombeko, other people also reported that if there were numerous market places, it would be easy for them to sell their harvested and processed products. Although this might seem like an unsustainable collection just to make money, herbalists are mainly concerned with 'unskilled collectors' because these are the ones who are likely to damage the resource.

Two other people in Mkemane sell processed medicine (*amayeza*) in Cape Town. Ntlandlolo has established himself in Cape Town and the other is new to the business of harvesting medicinal plants from his home village to sell in metropolitan areas. Both are herbalists.

The most frequently used plants are those that have many uses for many people, like *impepho*. The plant is used as

incense for ancestor worship, it relieves fatigue, it is used to repel lightning, it is used as cough remedy, and it is used for chest problems.

Livestock owners seldom use natural resources to inoculate their livestock. The present trend is to buy commercial vaccines, something which has been influenced by big livestock owners who usually guarantee the performance of these vaccines.

Herbalists are the main users of medicinal plants, but other women and men collect the medicinal plants they know whenever they need them. Herbalists complained that other users do not take enough care when harvesting these medicinal plants. They attribute the scarcity of certain plants to people who, after collecting pieces of root from certain plants, do not cover the roots again so that the plant can re-grow. They also blame outsiders who collect indiscriminately without any concern for future generations. People generally attribute the scarcity of some medicinal plants to the lack of natural resource management and the lack of clear rules. People said that some medicinal plants which used to be found in the study area can no longer be found there. They said that certain of these plants can still be found on nearby



### Box 2: Ntlandlolo's sale of plant medicines

Ntlandlolo is based in Cape Town, about 1 500km away from the village where his family stays. He visits the village when necessary to harvest medicinal plants. He treats his patients with mixtures of plant medicines containing up to six different plants. He boils small quantities of these plants together and stores the remainder of the plant for later use. It takes him 2½ hours to fill a 25 litre container using an electric stove.

He charges for medication and consultation separately. He normally charges R22 for a general consultation, R500 for court cases concerning misconduct in the job, R1 500 for court cases concerning stealing and R500 for stomach-related sicknesses. In the latter case, medication is included. Ntlandlolo sells no less than 13 litres of medicine a day at R25 per litre.

He is involved in informal financial schemes to which each member is expected to contribute R2 000 a month. His wife is eligible for a pension.

### Box 3: Grazing for Nkoduso's livestock

Nkoduso says that rotational grazing will enable the communal rangelands to recover. He says government should provide livestock owners with fencing material so that they can build camps for their livestock. By keeping livestock in a camp for two weeks before moving onto the next one, he says the rangelands would regenerate. He is worried about veld fires during the winter season.

In 1999, Nkoduso had 34 cattle, 17 goats and 100 sheep. He seldom uses medicinal plants to inoculate his livestock. In 1996 he spent R3 000 on vaccines, in 1997, R800, in 1998, R1 000 and in 1999, R500.

The most important trees in his life are wattles. His household uses them for cooking and heating. He uses about 2kg of wood per day. He also used them to build and roof one of his houses, to build his cattle byre and to fence his garden. He has collected between 300 and 400 wattle poles for different purposes in his house. He says there should be proper management of trees to ensure that poles are available for everybody. Nkoduso feels that trees should not be burnt.

He uses wild resources to make baskets, grass mats and brooms. Medicinal plants are helpful to him when he has a cold or influenza, especially *impepho* and *iqwili*. Among the important resources he uses are wild vegetables, which he uses to supplement his diet. In his childhood, he used them a lot.

He sees communal rangelands as a place where livestock can graze, which is the most important factor as far as he is concerned, and a place from where they can collect fuel wood.



commercial farms where there is management of resources. Harvesters said that during the betterment period, when management was in place, it was easier to find plants which have since become scarce.

#### Wild fruits and vegetables

Wild fruits, mainly *amaqunube* (wild berries), are known to many households as substitutes for commercially available fruit products. Almost everybody canvassed during the survey indicated that they only use wild fruit when someone else (for example, young boys herding livestock) has harvested them because these resources are not easily found and are seasonal.

People use wild vegetables as supplements to commercial vegetable products. Many households collect these especially during the months of November,

December and January when vegetable gardens and fields are planted. People combine these wild vegetables with maize porridge. *Isishebo* ('greens') is a crucial additive to the diets of people since it substitutes for commercial vegetables like cabbage and spinach. The wild vegetable most people use is *unomdlomboyi* (*Amaranthus paniculatus*). Many households prefer to eat both their daily meals with *unomdlomboyi*. Other wild vegetables are less popular. If *unomdlomboyi* were available throughout the year, many people would save the money they now spend on buying commercial vegetables. In summer, the fields and vegetable gardens are filled with this wild plant. Many people in the sample shared their experiences of saving on vegetable expenses when *unomdlomboyi* is available in their gardens. One woman

who has two children studying in Durban supplements her diet with *unomdlomboyi*. The little money that her husband earns pays for the children's school fees. It is mostly women who harvest these plants for their families.

Wild vegetables are not scarce in the area, but they are seasonal. The only concern most women have is the fields that are not used. When fencing was still in place and the fields were fully functional, wild vegetables were abundant. Proper management of fields results in good harvest of these resources, which are an important buffer for most households and provide nutritional benefits. Now that there is no fencing, livestock eats or tramples these wild vegetables. Presently, they are mainly collected from home gardens, which in most households are fenced.

There is no communal management of wild vegetables. Those with fields and vegetable gardens assist those who have none by allowing them in their home gardens and fields to harvest the vegetables. No respondent indicated that wild vegetables could be harvested from communal rangelands or from the forest.

### Grasses

Many people use thatch grass for roofing their homesteads. People say it is part of the tradition that there should be one thatched house within the homestead. Thatch grass, when used for roofing, keeps the house cool when it is hot and warm when it is cold. It has high-income benefits even when traded through the informal market. One bundle/ head load of thatch grass (*inyanda*) is sold for about R14 depending on the species. Each *inyanda* is made up of 20 *iitungo* – bunches people tie together to make one head load. Some thatch grass species are less durable than others. The less durable species cost about R11 a bundle.

Thatch grass is collected in winter. It is a job done mostly by women who collect as many head loads as they can, depending on their capacity, sometimes up to four head loads per day. In 1999, people mostly collected thatch to repair their homes after heavy winter storms. Very few collected thatch grass to sell. The camp

that the Farmers' Association claims to own has plenty of thatch grass growing in it since it still has betterment-era fencing, albeit in a bad state.

Thatch grass will become scarce in future if fencing is not reintroduced. People are only able to get thatch grass at the moment because there is a controversy over the grazing camp which the Farmers' Association is trying to claim. The association is trying to prohibit people from grazing their livestock in the camp, something which helps thatch harvesters to gather thatch grass when they want to. If there were no feud about who should graze his or her livestock in the camp, thatch grass would be difficult to get, as livestock would trample it. Many people are concerned about how difficult life would be if thatch were to disappear.

Women have in some instances approached men to ask them not to graze their livestock where they collect thatch grass. In many instances men have taken heed of the plea, but the broken fences have complicated their co-operation. In this area, thatch grass is also collected from arable fields. Women in the past were given time to collect the grass before the fields were opened to everybody for livestock grazing.

*Urasha* (botanical name unknown) is grass which is used to make brooms. Brooms are sold by the few who can make them for R4 to R7 each, depending on how decorated they are. Broom makers sell these to other people in the village and at pension pay points. Some households which say piece jobs are their main source of livelihood use selling brooms as one of their livelihood strategies.

Many households which have expert broom makers (women in many cases) in making brooms collect *urasha* from the neighbouring farms. This was not seen as trespassing by many because they were dispossessed of the land and are claiming it back. Collecting from neighbouring farms is dangerous for some since they do not have permission to do so. In a study done by Kepe (1997) on environmental entitlements, he refers to the act of taking



what once belonged to you, and which you still consider legitimately yours, as *ukujola*. This means that people often steal resources like *urasha* that contribute to their livelihood. Those who usually collect 'common property resources' from the commercial farms are people who are employed from time to time to do occasional work on these farms.

*Urasha* is one useful resource that is in short supply in the villages. If people succeed in getting back their land, this grass species will be freely available again. Because it has become scarce, most people no longer use it, and there are no rules to manage its use.

*Incema* (*Cyperus marginatus*) is a reed used together with *urasha* to make meat platters for feasts, ceremonies and other cultural events. *Incema* is also used in making grass mats (*amakhuko*), which people mostly use for cultural reasons. Almost all the households have at least one platter, but because of its durability, people do not need to collect *incema* often. Like *urasha*, *incema* is scarce in the area. It is collected from neighbouring farms and there are no rules concerning its use.



### Trees

Black and silver wattle trees are used as a source of fuel wood. Because black wattle trees burn for longer, they are preferred for winter use. Silver wattles are more commonly used in summer. Wattles are used for cooking, heating and sometimes as medicine. The resource directory (Table 12) shows some of its other uses. All the households in the three villages under study use these tree species. People use wattle for poles (*iziqonga*) and droppers (*iintungo*) for fencing, building cattle byres and for building houses.

Wattles are used every day for cooking and heating. Women collect it when it is needed, sometimes once or twice a day. Some women, because of other commitments, take about a week to collect firewood. Others collect tractor loads that may last them for four to five months depending on whether it is summer or winter. Sometimes the winter cold is so severe

that they keep the fire burning from the time they wake up to the time they go to sleep.

Wattle trees are not common where the people of Mkemane presently live. However, they are abundant where the people lived before they were relocated under the betterment scheme in the 1960s. People attribute the abundance of wattle in their former residential area to the fact that many seeds were scattered around due to human activity. Under the betterment scheme, their former residential area was turned into a grazing camp.

Because of the abundance and the resilience of the wattle, there are no rules about its management in the study area. Officials in the Department of Water Affairs and Forestry see the tree as something that must be eradicated because it has been classified as an alien invasive species, but local people see it as a source of fuel, building materials and medicine. Under the DWAF Working for Water Project, people in Mvenyane are being paid to cut down wattle. Mkemane people want Working for Water to come to their area so that they too can benefit from paid work, but some have expressed concerns about how the project would change their lives.

People whose access to land was reduced to cater for others under betterment still have rights over resources on that land. This is the case especially where nobody was allocated the land. In Mkemane, a person may not collect firewood known to be on somebody else's land. People respect the fact that the land once belonged to someone else, and that the previous owner has full rights over resources on that land, even if the land is not occupied.

*Umbangandlala* (*Heteromorpha arborescens*) is a local tree that people do not use because it is believed that poverty will come to the home of anyone who burns this tree.

### Resource directory

The resource directory in Table 12 covers most wild resources, grasses and trees used in the study area. It gives their local names

and why they are used; the prices charged when they are sold and the units for the different prices.

The directory shows that many natural resources contribute to rural people's livelihoods. However, the monetary value

**Table 12: Resource directory**

Resource	Botanical name	Importance/ use	Unit
<i>Ibangelala</i>	Unidentified	Erection problems	R10/mug
<i>I-blekwanti</i> (black wattle tree)	<i>Acacia mearnsii</i>	Cancer Loss of voice Prison blanket manufacture Emetic	Not known
<i>I-blekwanti</i> (black wattle tree) (bark)	<i>Acacia mearnsii</i>	Diarrhoea	R20/750ml bottle
<i>Icena</i>	<i>Aloe maculata</i>	Livestock diarrhoea and wounds	R200 depending on livestock numbers
<i>Icima mlilo</i>	<i>Ilex mitis</i>	Burns Strokes	R25/1 litre bottle
<i>Idambisa</i>	<i>Kalanchoe rotundifolia</i>	Pain	R25/1 litre bottle
<i>Ilabatheka</i>	<i>Dioscorea dregeana</i>	Madness Fear	R25/1 litre bottle
<i>Impatshampatsha</i>	Unidentified	Stomach ache	R25/1 litre bottle
<i>Impepho</i>	<i>Helichrysum odoratissimum</i>	Incense for ancestors Relief of fatigue Lightning repellent Coughs Chest problems	R2/handful in metropolitan areas R1 000/wool bale
<i>Ingcelwane</i>	<i>Aloe arborescens</i>	High blood pressure	R60/750ml bottle
<i>Inkondwane</i>	<i>Helichrysum aureonitens</i>	Coughs	Not known
<i>Intlwenya</i>	Unidentified	High blood pressure	R80/bottle
<i>Intolwane</i>	<i>Elephantorrhiza elephantina</i>	Diarrhoea Loss of weight in livestock	R30 for humans R300–R1 000 for livestock, depending on numbers
<i>Iphakama</i>	<i>Tieghemia quinquenervia</i>	Luck/getting a better job Swelling of joints Miscarriages Love potion	R500 for luck/getting a better job; R25/1 litre bottle for other applications
<i>Iqwili</i>	<i>Alepidea amatymbica</i>	Asthma	R20/bottle



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Resource	Botanical name	Importance/ use	Unit
<i>Isaqoni</i>	<i>Rapanea melanophloeos</i>	To develop the foetus	R300/litre bottle
<i>Ishwadi</i>	<i>Boophane disticha</i>	To dress young men at the initiation school	Unidentified
<i>Isidumo</i>	<i>Ilex mitis</i>	Vomiting	R25/1 litre bottle
<i>Isidwadwa</i>	<i>Leucosidea sericea</i>	Prolonging of life during fatal illness	R25/1 litre bottle
<i>Isihlehle</i>	<i>Stapelia gigantea</i>	Internal injuries in livestock	R 200 depending on livestock numbers
<i>Isiqalaba</i>	<i>Faurea macnaughtonii</i>	Pain HIV	R25/1 litre bottle
<i>Isiqungwa</i>	Unidentified	Pain Repelling flies when lambs have been castrated	R25/1 litre bottle
<i>Isirhalarhala</i>	Unidentified	Binds soil Fuel	Unidentified
<i>Ithunyana</i>	Unidentified	HIV Toothache Cleaning of the womb	R25/1 litre bottle
<i>Ugobho</i>	<i>Gunnera perpensa</i>	Unidentified	Unidentified
<i>Umagaqana</i>	<i>Bowiea volubilis</i>	Purgative	R2 000/3 bags
<i>Umajikanelanga + ikhambi + umhlonyane</i>	<i>Malva parviflora + Plectranthus laxiflorus + Artemisia afra</i>	Diarrhoea in teething babies	R60/bottle
<i>Umaluleka + impepho + umnquma</i>	<i>Gerrardina foliosa + Helichrysum odoratissimum + Olea Europaea</i>	Strengthening of the knees of livestock	R50/bottle
<i>Umathunga</i>	<i>Eucomis autumnalis</i>	Constipation Injuries	R20/bottle
<i>Umbangandlala</i>	<i>Heteromorpha arborescens</i>	<i>Umlambo</i> (deficiency in immune system)	R25/1 litre bottle
<i>Umlhonyane</i>	<i>Artemisia afra</i>	Fever	R60/bottle
<i>Umsila wengwe + intolwane</i>	<i>Gnidia kraussiana + Elephantorrhiza elephantina</i>	Prevention of diarrhoea in livestock	±R300 depending on livestock numbers
<i>Umtshekisane</i>	<i>Euclea crispa</i>	Constipation	Unknown
<i>Umzaneno</i>	Unidentified	Food poisoning	R25/1 litre bottle
<i>Unonyongwana</i>	<i>Centella coriacea</i>	Stomach ache	R25/1 litre bottle
<i>Unozitholana</i>	Unidentified	Vomiting	R25/1 litre bottle



Resource	Botanical name	Importance/ use	Unit
<i>Unyene</i>	<i>Grewia occidentalis</i>	HIV Appetite Swelling Strokes High blood pressure	R25/1 litre bottle
<i>Urasha</i>	Unidentified	Brooms	R4–R7 per broom, depending on size and decoration
<i>Uzineke</i>	Unidentified	People struck by lightning	R100–R120/750ml bottle

of these resources was determined only by relying on key informants like herbalists. Methodological and other constraints meant that it was only possible to make a detailed investigation of the contribution made by fuel wood resources in the study area.

## Valuation of fuel wood

This report has demonstrated the importance and the role of common property resources in rural people's livelihoods. In spite of their centrality to livelihoods, their value has been consistently underestimated (Cousins 1999).

I took one of the natural resources on which rural people rely – fuel wood – and assessed its economic value to ten households purposively selected, based on their household composition and levels of wealth. I made a comparison of fuel wood use in winter and again in summer. In the valuation exercise I used substitution costs to calculate the contribution of fuel wood to people's livelihoods. Although fuel wood is currently abundant, the decay in institutions of management and the condition of rangelands in Mkemane mean that this abundance is threatened.

## Results

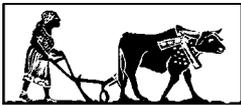
The first assessment was conducted in summer. Here the households were asked

to use fuel wood as they usually would on one day, and to use paraffin to perform the same tasks on the second day. I supplied the paraffin. The wood was weighed before use on the first day and the weight of unused wood and ash deducted to work out the number of thermal units used on that day. Similarly, the paraffin was weighed before use on the second day and the weight of unused paraffin deducted. Since paraffin is a market commodity with a monetary price, and a comparison could be made with the amount of wood needed for a household to perform the same task, this made it possible to assign a monetary value to a kilogram of wood equivalent to the amount of money 'saved' by a household collecting fuel wood for free instead of having to buy paraffin. During the following winter, I assessed the amount of fuel wood used by nine of the same households. The tenth household was unfortunately no longer living in the village. The valuation of the fuel wood was based on the concept of net economic value. It was calculated as revenue minus harvesting, processing and transport costs, including non-financial costs such as own labour (IIED 1997). Because in some cases the wood was weighed twice (in the morning and again in the evening), Table sometimes has two figures for fuel wood weight.

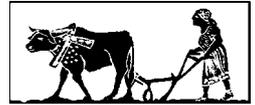


**Table 13: Valuation of firewood**

Name	Fuel wood weight (kg)	No. in the household	Start time	End time	Paraffin litres	Ash, half-burnt and unused wood (kg)	Unused paraffin (ml)
Summer season							
1) Mamqhinebe	4.5	4	03h00	06h00	1.5		
	5		19h00	21h00		1	
					2		200
2) Bod'ekhaziwayo	5.5	7	04h00	07h00			
	8		18h00	22h00		1.5	
					2		300
3) Nodaluthando	7.5						
	5.5	8	04h00	09h00			
			19h00	21h00		2.5	
					3		100
4) Msil'engwe	12	16	04h00	08h00			
	14.5		15h00	21h00		3.5	
					5		0
5) Ntab'etafile	10.5	4	07h00	09h00			
			18h00	20h00		3	
					2		100
6) Nobatha	5.5	5	04h00	07h00			
			19h00	21h00		0.5	
					2		100
7) Sbhuhhu	5.5	3	04h00	06h00			
			18h00	20h00		0.5	
					3		100
					3		0
8) Madala	5.5	8	06h00	09h00			
			15h00	19h00		0.5	
					3		100
9) Dontsela phezulu	15	3	03h00	07h00		0.5	
			18h00	20h00			
					2		100
10) Somagwala	10.5	4	04h00	08h00			
			18h00	21h00		0.5	



Name	Fuel wood weight (kg)	No. in the household	Start time	End time	Paraffin (litres)	Ash, half-burnt and unused wood (kg)	Unused paraffin (ml)
Winter season (August) Equivalents for paraffin are taken from the summer season figures							
1) Mamqhinebe	15.5	4	04h00	08h00			
			18h00	21h00		5	
2) Bod'ekhazimlayo	14.5	6	04h00	09h00			
			17h00	20h00		6.5	
3) Nodaluthando	29	12	04h00	08h00			
			18h00	21h00		4.5	
4) Msil'engwe	28.5	16	04h00	10h00			
			15h00	21h00		7	
5) Ntab'etafile	20.5	4	04h00	08h00			
			18h00	21h00		4.5	
6) Nobatha	18.5	5	04h00	08h00			
			15h00	20h00		8.5	
7) Sbhuhhu	13	3	04h00	08h00			
			18h00	21h00		6	
7) Madala	37	8	02h00	09h00			
			18h00	20h00		9.5	
9) Dontsela phezulu	16.5	6	02h00	09h00			
			17h00	20h00		5.5	
10) Somagwala was working on commercial farms at the time I visited this group to re-value their fuel wood in winter.							



Taking the case of Mamqhinebe, in summer she uses 8.5kg/day of fuel wood (4.5+5kg of wood – 1kg of ash, half-burnt and unused wood), which is equivalent in her case to 1.8 litres of paraffin (2 litres of paraffin – 200ml unused). If the cost of 1.8 litres of paraffin = R6.012 (1 litre @ R3.34 x 1.8), then the same value can be attached to 8.5kg of fuel wood. In other words 1kg of wood is equivalent to 0.212 litres of paraffin ( $1.8 \div 8.5 = 0.212$ ). In winter she uses about 10.5kg/day of fuel wood which is equivalent to 2.226 litres of paraffin (R7.428). The winter season runs over a period of four months in the area (120 days) and summer for the remainder (245

days). Other things being equal, the amount contributed by fuel wood in a year is  $(R6.012 \times 245) + (R7.428 \times 120) = R2\ 364.30$ .

Any benefit comes at a cost. People in the area work for R25–R30 a day. Recently, they were involved in a water project which installed standpipes in the area. People were employed five days a week and, on the assumption that such jobs were available throughout the year, this would mean that people would earn an average of R7 800 a year ( $R30 \times 5 \text{ days} \times 52 \text{ weeks}$ ). Of this, 3–6 hours (an average of 4.5 hours) of labour that could theoretically be invested in working for wages is spent collecting firewood. This is

done once in two or three days. At R30 per day for 8 hours, the hourly rate is R3.75. Using a conservative number of days per year for collection of fuel wood ( $260/2 = 130$  days), this provides an annual labour value of R2 193.75 (4.5 hours x R3.75/hour x 130 days). The number of weekdays comes to 260 (52 weeks x 2 days – 365), since people never collect fuel wood over weekends. According to conventional economic theory, labour is one type of cost. There is another type, which is capital or tools used to collect the resource (in this case an axe and ropes to tie the load). The cost of capital resources used to collect fuel wood further reduces the net value. This reduced net value is not included in the calculations. Using 6 hours as the assumption for people who collect fuel wood twice a day and skip one day,

the net value becomes negative:  
 $R2\ 364.30 - (R3.75 \times 6 \times 130) = -R560.70$ .  
The cost of tools is not included in the latter calculation.

The conclusion is that the value of the collected fuel wood is R2 364.30. This means that collection of fuel wood adds R2 364.30 to people's annual income, a considerable adjustment of their wealth. But they would be better off if they had paid work instead of having to collect fuel wood. If they had paid work and they switched to using paraffin, they could earn enough money to buy the paraffin needed for cooking and heating, and still have an additional R560.70 to use for other things.

The calculations above make assumptions that the costs and benefit issues in rural areas are straightforward as

**Table 14: Terms and concepts in agricultural economics highlighting aspects included and missed**

Concept/ term	Aspects included	Aspects missed
Household	Unit of production, consumption	Intra- and inter-household interaction
Household income	Major flows of cash and kind	Low value self-provisioning sources yet regular and important
Yield	Output from main field in main harvest period	Between season harvest; harvests from other sites
Farm production	Major production activities	Intermediate activities, such as processing
Food consumption	Major recorded items: meals	Seasonal variations; snacks
Resource endowments	Private assets and production factors	Access to communal resources (labour, land, etc.)
Labour	Person-hours or days, sometimes differentiated by age/sex	Variation in work intensity; differences between individuals
Capital information	Major asset acquisition	Small assets acquired, borrowed, loaned
Asset depreciation	Book-keeping value	Continued useability and recycleability
Efficiency	Single objective: production	Range of other, multiple objectives
Units	Conventional units	Local units

Source: Jodha 1986, cited in IIED 1997:31



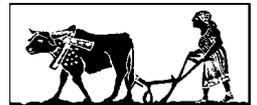
assumed by conventional economic theories like the one used here – net economic value. However, one informant stated that there is no need for a special trip to collect the resource he was referring to, *impepho*. He could collect it when visiting the rangeland for other purposes. This should suggest to the reader that there are nuances in valuation methods, especially in the rural context. IIED (1997) makes a distinction between aspects included in economic approaches for local-level valuation and aspects omitted.

Although some of the issues in Table 14 are not relevant in this study, they nevertheless show aspects that are omitted when looking at economic valuation. In asset depreciation, the conventional assumption in the case of Mamqhinebe (quoted above) is that she has to replace her capital (axe) because it depreciates. The conventional economic theory overlooks the fact that people share things in the rural context. If she happens to have an axe, she will use it over a long period of time, even though in conventional terms its value would long have been depreciated. She might be sharing this asset with a relative or a friend or a neighbour, in which case costing would be directed to the wrong person. Also, tying of the head load itself does not require new ropes. Also, in this case, women go to collect fuel wood as a group. These women assist one another whilst they share ideas on issues affecting the village at large. Fuel wood collection does not only involve the drudgery and chores attached to fuel wood collection, there is a broader, unrecognised value to it. Young wives connect to the broader village through networks with older women.

In the case of Mamqhinebe, labour was accounted for by attaching value using a local wage rate. This rate came from a (relatively well-paid) public works programme, the first in the area since I arrived there in 1998. It is very difficult for

anyone to obtain employment locally. This means that it is unlikely in Mkemane that anyone would forgo collecting wood, for example, because he or she does not want to miss out on a job opportunity. The opportunity cost used in conventional valuation methods does not apply in situations where there is so much surplus labour. In this case, the opportunity cost of labour is zero. Even migrant labourers are being retrenched in large numbers. Market prices of paraffin tend to go up regularly, in line with increases in the price of crude oil. If this were not the case, according to conventional economic methods, the cost of collecting fuel wood would have far exceeded the benefit of using paraffin because the price of the close substitute would be less. The true value of the resource should be assessed from the point of view of the resource user him or herself. Mamqhinebe, for example, cannot afford paraffin. Also, many people did not have paraffin stoves, so the idea of a ‘close substitute’ cannot be applied in this situation.

Conventional valuation methods overemphasise the cost factor (be it labour or capital cost) and also the substitution cost, because they assume that people could afford the close market substitute. Valuation should be made relevant to a particular case to avoid unrealistic undervaluation of resources in complex rural situation where many of the usual assumptions do not apply. Labour costs cannot be accurately estimated using local wage rates because there is a severe lack of local employment. For such studies to really reflect the benefits of common property resources to rural people’s livelihoods, and stand a chance of influencing policy makers to act to protect the natural resources on which rural livelihoods depend so heavily, an accurate picture must be generated, a picture which goes beyond conventional economic valuation methods.



**Table 15: Valuation results for all the households sampled in the valuation exercise**

Name	Daily value of fuelwood in rands (summer)	Daily value of fuelwood in rands (winter)	Annual benefit	No. per household	Annual benefit per household member
1) Mamqhinebe	6.01	7.43	2 364.3	4	591.08
2) Bod'ek hazimlayo	5.68	3.78	1 844.71	7	263.53
3) Nodaluthando	9.69	22.60	2 826.67	8	353.33
4) Msil'engwe	16.70	15.61	5 964.82	16	372.8
5) Ntab'etatile	6.35	13.54	3 179.21	4	794.8
6) Nobatha	6.35	12.69	3 077.81	5	615.56
7) Sbhubhu	9.69	13.56	4 000.27	3	1 333.42
8) Dontsela phezulu	6.35	4.81	2 132.33	3	710.78
9) Madala	9.69	53.27	8 765.83	8	1 095.73
Mean					R681.23

### Overall value of one common property resource

Following Mamqhinebe's example, the values in Table 15 were calculated for all the households except for Somagwala's because it could not be followed during the winter valuation exercise. On the basis of the argument above, I assume that the opportunity cost of wood harvesting labour is zero.

In calculating the amount contributed by fuel wood to rural people's livelihoods, I considered the points made above. I therefore took the average per person per year which is R681.23. This amount is more than 1/12 of the amount received from pension grants, but the reader should be reminded of other natural resources

from which people benefit. If the households in the table above were selected using probability sampling and the sample size were large enough, then an inference could be made for the entire village and the district. Assuming that the correct sample size was used and that probability sampling was used, for the whole village with 105 households the value of annual fuel wood consumption is R494 538.24, given that the average number of persons in each household from the sample is 6.9138. For the district at large, using the 1991 population figure of 160 777, the annual value of fuel wood would be R109 526 115.71, assuming that all the households used fuel wood as they do in Mkemane.



# Chapter 7: Land tenure

A study on land valuation is not helpful unless the South African land tenure context is clarified, because land tenure impacts directly on the value of common property resources.

**B**enneh (1987 cited by Toulmin & Quan 2000:1) says:

*One of the components of any land use or farming system is the land tenure system. The institutional arrangements under which a person gains access to land largely determine, one of the important among other things, what crops he [or she] can grow, how long he [or she] can till a particular piece of land, his [or her] rights over the fruits of his [or her] labour and his [or her] ability to undertake long term improvements on the land.*

The tenure system not only addresses the question of benefits accrued from arable land, but also the multiplicity of benefits from common lands, forests and other land areas that people use for a sustainable livelihood. In the South African situation, faced by widespread retrenchments, the only option open to many is to work the soil and harvest products for survival back in their rural homes.

Using the sustainable livelihood framework (Carney 1998), Adams et al. (2000) assert that where financial capital is lacking, social capital can provide the basis for a range of benefits including customary access to land.

Most land tenure systems in Africa are 'communal', but it should be understood that this in fact means a 'mixed' tenure with individual, family and group rights (Cousins 2000). This means that no individual can gain access to all areas of communal land. For example, one cannot have access over arable lands belonging to

another household except during drought or the winter season (Adams et al. 2000). Land rights may include rights to occupy a homestead and make productive use of the land, develop and improve it, bury the dead and harvest wild resources; rights to mortgage, lease and rent the land; rights to exclude others from the latter elements and rights to enforcement to protect the rights-holder (Adams et al. 2000:135). This becomes problematic if people, like those in the Herschel and Maluti districts of South Africa, do not consider themselves to be the owners of the land on which they live (Turner 1999:10). In cases like these, tenure reform is imperative to enhance and secure people's land rights (Adams et al. 2000). Adams et al. (2000:135, citing Adams 1995) defined land tenure reform as 'a planned change in terms and conditions (for example, adjustment of the terms of contracts between landowners and tenants, or the conversion of more informal tenancy into formal property rights)'.

Land in Mkwane is nominally owned by the state and held under communal tenure. It is a hybrid of residential plots and arable plots which are held by individuals and grazing land which is held communally. Individuals have certain rights to exclude others from their residential and arable plots.

To access a plot (residential or arable), a person has to go through a sub-headman, who takes the application the headman for it to be approved by the tribal authority. The tribal authority forwards the applicant's name to the district office of the Department of Agriculture. It is the district office that demarcates the plot and issues



the necessary documentation, a Permission to Occupy certificate in the case of most communal land. As mentioned earlier, Greenberg (1999) has alluded to the fact that accessing land in the district takes time and money because of the different stages an individual has to go through before an application is approved and the money he or she has to pay at each stage.

Mkemane is one of the villages in the Maluti district that was subjected to 'betterment'. Because of the area is mountainous, betterment could only be implemented in Small Location and Zitapile. Areas were demarcated for arable, residential and grazing purposes. This involved relocation of households to areas that were demarcated for residential purposes in the two villages where betterment was implemented. The rangelands of Zitapile and Small Location were divided into four camps each. Both villages shared, when betterment was still in effect, two additional camps which were reserved especially during winter time when grass in the camps could not sustain the number of livestock units present in the area.



The sections below show how tenure arrangements in Mkemane have changed in favour of a Farmers' Association in the area. This association now has access to semi-legal rights to use land at the exclusion and expense of the majority of Mkemane's population. By allocating land to a minority when the large number of the population is against the granting of private rights to communal land, chiefs have shown how against the common good they can be.

### **Tensions over land in Mkemane**

My contact person, a member of the Farmers' Association, arranged for me to meet with the association on my arrival. The purpose of the meeting was to introduce the purpose, aims and objectives of the community-based natural resource management study to the entire village. It was later evident that he had only extended the invitation to members of the

association. Halfway through my introduction, a conflict erupted between members and non-members of the association. Those who were not members had not been informed that the meeting was only for members of the association. It was clear that not everybody in the village was happy about the association requesting one of the four camps of the village be allocated to its members for livestock production, particularly dairy production. This turned out to be a transfer of the land into the ownership of the association for the benefit of its members alone. The chief and members of the village community who were present at that time approved the application. The association claimed that those now expressing their dissatisfaction were not present at the time the application was approved. It suggested that those who were not part of the process were bent on disrupting it. Consequently, people in the village are pulling in opposite directions. Attempts at development in the area have been made but, because of the conflict, some of these attempts have been fruitless.

After the non-association members had left, the members present at the meeting told me which issues they thought would be pertinent to my study. Three periods affected the management of natural resources, livelihoods and socio-economic aspects of the village. The association saw the period before betterment as a period with outstanding productivity in crop and in livestock production. Indigenous forms of management worked well and people respected them. The only thing the members of the association perceived as a mistake from those days was the practice of ploughing on slopes. For this reason they praised the betterment intervention. People did not like the way it was introduced, but they saw its productive results. Betterment improved their grazing area and now, because the fencing has collapsed, they want it reintroduced. Betterment made it easy for herders as fencing controlled the movement of livestock. Although the four villages

(Zitapile, Small Location, Mkemane and Mpofini) are all known by the name Mkemane and the latter three fall under one headman, each has its own grazing and arable land. Mkemane Village (encompassing the four sub-villages) forms part of Ludidi A, which is one of the 25 administrative areas of the Maluti District. Because fencing has collapsed, only the residents of the various villages are able to identify the village boundaries. One member of the association reported that there is a common understanding during winter that most of the Ludidi villages would graze their livestock at Small Location since it has better grazing resources than other villages at that time.

There is a reserve for six villages, including Small Location, Mkemane and Mpofini. Any of the six villages can graze in the reserve as often as they want. However, there is an understanding that grazing in other villages' reserves is not acceptable. However, because the fence has collapsed in places, this restriction is at times overlooked. Zitapile and other villages have their own reserve.

Another interesting point is that three white farmers are using the land. Before their land was taken, Mkemane neighboured Mvenyane Village. It appears that at first whites received land from the chief for entrepreneurial purposes, in this case a shop. They later requested the right to graze their livestock on the grazing land of the villages and were granted permission. As the story goes on, it appears that a cow belonging to the villagers injured a sheep that belonged to the white entrepreneurs. They took their sheep to the chief to complain about the incident. They requested a piece of land to avoid further incidents. The chief was apparently given a bottle of brandy and, when intoxicated, he signed the papers brought by the white entrepreneurs. The headman of Small Location refused to give the land along the Mkemane River to the white farmers, and he won this battle with the chief. Small Location is apparently the only one of the Mkemane villages which

still has the river passing through its land. The water of all the other villages passes through the white-owned farms. The villagers are eagerly waiting for their claim on this land to be processed by the authorities.

Members of the association are divided into dairy producers, woolgrowers and red meat producers. Some women from the village are also part of the association, and the chairperson of the dairy producers is a woman.

The information gathered at this meeting reveals many issues of concern. The quarrel that erupted in the meeting shows the difficulties of working with a group and the difficulties of intervening in communal areas. The controversy around the ownership of the piece of land given to the association complicates the situation even further. It reduces the livelihood options for people who had full rights to use the land before, but whose rights are now contested. People in the village, including some members of the association, claim that the piece of land was to be set aside for dairy production. The idea was that everybody with a cow that had given birth would be welcome. Villagers deliberately graze their livestock by on the land which the association claims as its own. The Farmers' Association has the full support of the police with regard to its rights to the piece of land. Also, the government policy formally supports those interested in commercial farming systems at the expense of communal farmers.

Agricultural extension officers believe that indigenous breeds give less production per hectare than commercial breeds. They therefore support the suggested legal land holding entities associated with different sub-groups, for example, communal land subdivided into different uses by different interest groups. Although this policy has not yet been implemented, it seems that this approach is favoured by the Department of Agriculture in the district.

Another interesting point emerging from this meeting is the three periods that



have transformed management of grazing resources. The period that has been studied widely is the betterment period. There has been a decay of natural resource management in the post-betterment period. Law-breakers are often not caught and people are nostalgic for the betterment era.

The following section gives more detail about the Farmers' Association and its acquisition of land. There are contradictions between the views of association members and the views of non-members. A member of the association provided the information below.

### The Farmers' Association land grab

When the Small Location Farmers' Association was established, the government recommended that its membership be restricted to 13 initially before the association was open to everybody. The intention was for this small initial group to train others who wished to join the association. When the association was opened to everybody, those who complained about barriers to entry were reluctant to join. At the time of the study, there were about 22 members. New members are from the neighbouring villages. Livestock owned in the association belongs to individual members of the association but there are plans to secure livestock that will belong to the association as a whole. Members of the association bring non-Nguni type breeds onto the piece of land they claim as belonging only to the association. Anything that a member owns, ranging from Jersey cows to up market rams, can be brought to the camp but their ordinary sheep, indigenous cattle breeds and goats graze in the commonage of the village. Some members of the Farmers' Association had intentions of securing a piece of land from the grazing reserve. They wanted the land for their sheep so that they could increase the amount of wool they produced, and in order to graze goats. By the time I left the area, they had been successful. At the time of the research, some members of the association were



affiliating to two farmers' unions, one Eastern Cape-based, and the other in KwaZulu-Natal.

Members of the association are also thinking of planting rye grass and *Eragrostis* species they have identified as good for livestock feeding. They have tilled a portion in their camp for this purpose.

The joining fee for the association is R45, and members get benefits, especially through their sheep being mated with rams belonging to members of the association. The government at first subsidised the buying of rams and informed members that the subsidy was for the benefit of the whole village. The intention was for all households in need of ram studs to be able to make use of them. Now that the subsidy has ceased, the association rotates the rams only amongst its own members.

Before completing the fieldwork, I discovered that some members of the Farmers' Association have managed to secure two camps from the reserves that are meant for villages in Ludidi A. The chief of Ludidi granted them permission to use the land.

A case study (Ntshona 2000a) shows that agricultural extension officers tend to advise people to farm with commercial breeds only and to dispose of their indigenous breeds. They neglect the multiplicity of benefits derived from indigenous breeds. The current trend towards land acquisition by Farmers' Associations comes at a cost for other rangeland users. If certain portions of the land within the communal area are privatised, then those using rangelands not only for livestock grazing but also for harvesting of various common property resources will lose out. This happened in one village where one of the four camps acquired by the Farmers' Association happens to be rich in the kinds of resources that people like to harvest. The Farmers' Association is planning to *sell* resources like thatching grass to harvesters. There are serious implications emerging from this. Firstly, the ownership

of communal land has fallen into private hands with the approval of chiefs. Secondly, the access to livelihood resources has been reduced tremendously for non-members. Thirdly, since the members of the association exclude non-members from the land, a potential for conflict has been created. The emergence of black commercial farmers is exactly what the Minister of Agriculture and Land Affairs has been proposing. Members of the Farmers' Association, together with some agricultural extension officers, are partly to blame for the potential for conflict. The confidence of people in agricultural extension officers has been greatly shaken because these officials support the views of the Farmers' Association. Their involvement has confused the situation even more – people believe that the association might have legal rights to the land because government officials support their actions.

The chief of the Ludidi area controls the activities in the area including the allocation of land. He recently allocated two camps, previously reserves for six villages including Zitapile, to be used by the Farmers' Association. A member of the association has nicknamed this land 'Sontor B'. The association is planning to put white rocks in the shape of this nickname on a nearby hill so that it can be seen from far away.

In fact, the same individuals have managed to get three camps under different names. One of these properties is one of the camps of Small Location. Two shacks have been erected: one in Sontor B, which is the name for two of the three camps, and the other in one of the four camps of Small Location (hereafter referred to as 'Jonathan' because the small hill in the camp is called Jonathan). Jonathan is a camp that was closed during the betterment scheme for eight to nine months and opened only during the winter season. People refer to Jonathan as *ikampu yonyaka* (annual camp). Jonathan is well-endowed with natural resources, especially thatch grass and *Eragrostis* grass. People

used to use Jonathan for grazing and to collect thatch grass. Because Jonathan was rested for a long time and warm for livestock in winter, it was the hope of the village, (not forgetting its natural treasure, thatch grass). The story of how that camp changed hands has already been mentioned. It started with agricultural extension officers advising a man to form a Farmers' Association in order for his commercial breed, a Jersey cow, not to be injured by indigenous breeds, which they said would happen if they were grazed together. When the villagers were approached about the matter before it was presented to the chief, the understanding was that everybody would benefit. Those establishing the association informed the villagers that the camp should be rested for cows that had given birth so that they could increase milk production.

Everybody welcomed the idea. They went ahead and established the Small Location Farmers' Association. After their letter had gone through the chief for a stamp of approval and then to the agricultural extension officers, they came back to the villagers to report that the agricultural extension officers recommended that the association consist of only 13 people. That is when trouble began. One extension officer has denied the allegations. EDA and the agricultural extension officers visited the camp and gave their advice, ignorant of the existence and extent of the feud that was brewing in the village.

The chief granted a letter of approval for the Small Location Farmers' Association to have exclusive rights to use the land. Letters of this nature have been used when requesting a residential plot or when there is a case that has to be forwarded to the magistrate's office from the tribal authority. In the Eastern Cape, chiefs are still recognised as having legal authority in the land acquisition process. This authority is recognised by agricultural and justice offices, among others.

The implications of granting the Farmers' Association exclusive rights to use the land are serious, not only for the



lives of people (through conflict that could potentially result in deaths) but also for the livelihoods of many people. The members of the association call people who challenge their exclusive rights to use the land 'non-progressive'. The association was unable to stop non-members from using Jonathan, so it brought in the police on the pretext that non-members had unleashed their dogs on members' livestock. The police visited the tribal authority and asked for government recognition of the Farmers' Association. It is true that a member of the association had his sheep attacked by dogs. Young boys use dogs to hunt wild animals. The member fired a couple of shots in the air when he saw the incident. When I visited one household, I was told that the boys now refuse to go anywhere near Jonathan for fear of being shot. The association is planning to sell thatch grass to harvesters because now they believe that other government offices respect their exclusive legal rights to the land.



People continue to graze their livestock without permission in Jonathan. People asked me to intervene but I refused because the situation is extremely volatile and my formal training is not in conflict resolution. One member of the association who is at the forefront of everything called on other members to take their commercial breeds out of Jonathan. There were allegations that one member of the association who is in charge of milking the Jersey cows was using the returns from selling milk for his own benefit. The man did not deny the allegations because members of the association do not help him to buy feed. He claims that he uses his own money to buy feed for the cows so that they will produce more milk. After every member had removed their livestock, the 'champion' of the Farmers' Association erected a shack in Jonathan and grazed his livestock there, particularly sheep. One member of the association complained that this individual had managed to exclude everyone else in order to graze livestock for the benefit of his household alone.

Although people were still being troubled by his actions, the 'champion' went again to the chief to request the two reserves for small stock units. He was granted permission to use the land, now known as Sontor B. He immediately erected another shack on this piece of land and asked for it to be fenced to exclude others.

## Conflict

The unclear land tenure situation in the country has not only affected people's livelihoods but is a threat to people's lives as well. People in the tribal authority and the agricultural extension officers acted hastily in the name of development without considering the consequences. Land tenure policy reform is needed in this country as a matter of urgency and the government has an obligation to protect the interests of the marginalised.

This privatisation of land has brought division to Small Location. The situation is bound to continue in the same way because when migrant labourers arrive, the strife starts all over again. People who stay in the cities have no control over what is going on back home. When they come back, they find things have completely changed, but it is difficult for them to challenge any change, as the most active member of the Farmers' Association owns a gun. The only migrant labourer who does not fear this 'champion' of the association also has a gun. The feud is further exacerbated by the involvement of the agricultural extension officers through their adamant stance that indigenous breeds must be replaced with commercial breeds.

The conflict is not only between members and non-members, but also among the members of the Farmers' Association. Some members believe that they are made puppets by their membership – they believe that the Farmers' Association benefits only a few of its members.

## Government policy

There has been a move by Minister Didiza (Minister of Land Affairs and Agriculture) to support emerging black commercial

farmers. There is nothing wrong with deracialising agriculture, but the new move comes at the expense of the poor and marginalised that do not have land. The land reform process was aimed at the poor, but the focus of the Minister seems to have changed. The process now appears to support emerging black farmers without making enough provision for them to access funds through banking institutions.

What is happening in the Maluti District could easily be supported by the national government. It is exactly what the Minister is proposing. But the experience in the field suggests that the Minister's recommendations would not bear any fruit. *Business Day* (11 May 2000) held that Minister Didiza's new policy shift concerning the emergence of black commercial farmers 'suspiciously resembles white farmer promotion under the former National Party government...' Big white commercial farmers were in many cases supported by apartheid government subsidies. By promoting black farmers to become 'commercial' producers, I believe the Minister wants to claim credit for some achievement. It is sad that this new approach is catered for in the land reform budget and there is little in the pipeline about independent financial institutions to finance this new type of farmer. It is also worrying that this step would be at the expense of the rural poor. It is ironic that the tension, injustice and

conflict arising in the area result from changes that appear to be directly in line with new land reform policies.

## Implications for livelihoods

The chief's 'stamp of approval' for the Farmers' Association land grab is bound to impoverish people even further. The thatch gatherers and other livestock owners have had their long-standing natural resource base reduced in size. They have two options. One is to comply with the requirements of the Farmers' Association (join them or buy natural resources from them as opposed to challenging their actions) in order to have access and rights to use the resources in the land. The second option is to challenge the acquisition of the land legally. There is a problem with this option. People are not aware of their rights as the government has failed to disseminate information to people on the ground on such issues.

If the Farmers' Association goes ahead with its plan to sell thatch to harvesters, then people would lose R11 to R14 per head load. The money is critical for the income of many people – especially women – for survival. Livestock owners who are not members of the association will lose grazing for their livestock and more importantly lose a sheltered place for their livestock during the winter season. Winters in the Maluti District can be severe enough to result in livestock fatalities.



# Chapter 8: The management of rangeland resources

The historical background provided above adds complexity to any typology of the property regimes found in South Africa. The betterment scheme formed a dysfunctional hybrid of common property and state property regime, effectively extinguishing many of the features of the earlier, indigenous common property regime. It is imperative therefore to look at the different kinds of regimes to see which definition fits the way in which natural resources are managed today in many rural areas of the country. This exploration of regimes would also give a sense of which regime the different practitioners in the field of natural resources see as an option for rural areas. Natural capital is a safety net for the rural poor. It is therefore essential to ensure proper natural resource management.



## Resource regimes

Ownership rights and natural resource management is vested in the state. National parks and military areas are examples of state property regimes (IFAD 1995). In South Africa, especially with national parks, there is an outcry from people who were dispossessed of the land and who now want to regain access and ownership, sometimes managing the parks in partnership with the conservation authorities (Turner & Meer 2001).

Private property regime rights belong to an individual owner, although in many cases these rights do not mean that landowners are free to do entirely as they wish with the land resource (IFAD 1995).

Open access pertains when 'no resource regime applies and no property rights are recognised' (IFAD 1995:5). This notion of open access has come about partly as a critique of the 'tragedy of the commons' concept. Literature over the past 25 years has argued how Hardin (1968), who developed the 'tragedy of the commons'

notion, failed to distinguish between open access and common property (Ciriacy-Wantrup & Bishop 1975 cited in Lawry 1990). Hardin painted a picture of his notion as follows:

*The tragedy of the commons develops in this way. Picture a pasture open to all. It is to be expected that each herdsman will try to keep as many cattle as possible on the commons. Such an arrangement may work reasonably satisfactorily for centuries because tribal wars, poaching, and disease keep the numbers of both man and beast well below the carrying capacity of the land. Finally, however, comes the day of reckoning, that is, the day when the long-desired goal of social stability becomes a reality. At this point, the inherent logic of the commons remorselessly generates tragedy. As a rational being, each herdsman seeks to maximise his gain. Explicitly or implicitly, more or less consciously, he asks, "What is*

*the utility to me of adding one more animal to my herd?" This utility has one negative and one positive component.*

*The positive component is a function of the increment of one animal. Since the herdsman receives all the proceeds from the sale of the additional animal, the positive utility is nearly +1. The negative component is a function of the additional overgrazing created by one more animal. Since, however, the effects of overgrazing are shared by all the herdsman, the negative utility for any particular decision making herdsman is only a fraction of -1.*

*Adding together the component partial utilities, the rational herdsman concludes that the only sensible course for him to pursue is to add another animal to his herd. And another... But this is the conclusion reached by each and every rational herdsman sharing a commons. Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all.*

But under common property regimes:

*...common property rights accrue to specified groups or communities of people. Non-members are excluded from their use. Sets of rules define the rights and duties of members and non-members with regard to access to, use and management of these resources by both groups.*

(IFAD 1995:3)

The historical background of betterment depicts a situation of a distorted common property regime, which was highly

influenced by exogenous factors – rules and regulations decided almost solely by the state. Under betterment, indigenous knowledge was disregarded and governance of common property resources was centralised in government. Lawry, who is sceptical about the effectiveness of autonomous local action in sub-Saharan Africa, argues the state can play an important role in successful natural resource management:

*...the modernisation process itself has reduced incentives for individuals to participate in localised collective arrangements, has undercut the economic viability of common property institutions, and has reduced the political legitimacy of local management authorities. Population growth and technological change have increased pressures on natural resources to the extent that minimum common property rules do not provide effective regulation... Local common property management will not emerge simply by giving greater official rein to local action.*  
(Lawry 1990:407)



Although state management has been found to be ineffective and local management activities often weak (Lawry 1990), this report argues for the co-management of resources between the local communities and other stakeholders like the state for a sustainable livelihood outcome. Natural capital, which is seen to be the safety net for most rural households, needs proper institutional arrangements if any benefits are to be accrued. These institutional arrangements must be seen, at least for the interim, to have the full support of the state.

## **CPR management theory**

This section focuses mainly on the applicability to the Maluti District of a synthesised theoretical framework on common property resource (CPR) management adapted from Shackleton et

al. (1998) and using the following elements:

- nature of the resource
- characteristics of the resource users
- institutional issues
- nature of rules, regulations and sanctions
- economic issues
- policy issues.

The framework is tested against evidence from the Maluti District (Ntshona 2000a) and adapted to suit the conditions in the study area. The adapted framework takes into account the legitimate concerns that betterment sought to address, but recognises the importance of the role played by the community. Each of the conditions for effective common property resource management identified by Shackleton et al. (1998) is presented in italics below. Comments are in roman text below the quoted portions of text.

### **Nature of the resource**

- ***Boundaries***

*Boundaries must be clear so that users can know their limits and exclude non-members. Boundaries are a necessary condition for common property resource management.*

Shackleton et al. (1998:14) argue that the situation in South Africa is complex. They argue that although many rural South Africans know the boundaries of their commonage, these are in many instances ignored.

- ***Resource size***

*A resource with small boundaries is easier to manage than a resource with large boundaries.*

Shackleton et al. (1998:15) argue that in a situation where the common property resource is large, considering different use zones may be useful because 'rules and regulations would then vary in strength and stringency depending on the zone'. Their suggestions is establishing zones of intensive use and zones of extensive use. If the Farmers' Association were in a

position to do so, it would subdivide the land for intensive and less intensive use.

- ***Supply-demand conditions and dependency on the resource***

*A high level of dependency on the resource results in more effective management structures to manage the resource.*

Lawry (1990) states that because of other sources of income and the open character of village economies the stimulus for collective action is reduced. These circumstances can lead to competition rather than co-operation around the use of communal resources. He also argues that for a sustained collective action, the resource in question should be scarce and 'of critical importance to the economic well-being of a large proportion of the community, and where the transaction costs associated with collective action are less than would be the case if resources were under individual control' (Lawry 1990:421).

- ***Indicators of common property resource conditions***

*Indicators of the condition of the common property resource as a result of regular use are important for common property resource management. These indicators could be used to raise awareness among the resource users of their collective or individual impact.*

Although this is important, it depends on whose indicators count. Scientists could come with their technical views of the situation, and the presentation of their views could be detrimental or helpful to the way these resources are used and managed. Also, the presentation of local views could be detrimental or useful for rangeland condition. Local knowledge together with scientific knowledge can produce effective results about indicators.

A joint effort by users and the government is needed. The government must take heed of what the users perceive as important, and the other side of the equation is equally true.



## Characteristics of the resource users

- **User group size**

*A small user group is more conducive to successful common property resource management because the costs of communication and decision-making are relatively low, rules are easier to enforce, and social sanctions tend to be more visible and effective.*

What the theory fails to state is how small the number of users must be for successful common property resource management.

Carney and Farrington (1998), writing about local forest management institutions, argue that, in order for a group agreement to hold, the group should not have more than 30–40 members.

- **Residence**

*It is preferable for users to reside in close proximity to, or in the same location as, the common property resource.*

This can be problematic in this country since most able-bodied men, who are in many cases decision makers, work as migrant labourers (Shackleton et al. 1998). Bromley and Cernea (1989 cited in Shackleton et al. 1998:18) argue ‘absenteeism ...is the downfall of many common property regimes’.

- **Eligibility**

*Members with ownership and access rights to common property resources must be defined, and agreed conditions for eligibility should exist.*

In Japan, villagers have to earn their eligibility to the commons through a period of established residence in the village (Shackleton et al. 1998).

- **Degree of homogeneity**

*Resource users tend to co-operate better when they are not strongly divided by*

- *Natural boundaries*
- *Different perception of risks of long-term extraction from the CPR [common property resources]*
- *Cultural antagonisms and*
- *Substantially different exposures to risk (Shackleton et al. 1998:19 citing Ostrom 1992).*

Lawry (1989 cited in Shackleton et al. 1998) argues ‘where interests are

heterogeneous and views towards appropriate resource use standards vary, sufficiently strong support for enforcement of many kinds of rules will not emerge’.

- **Local understanding and knowledge of resource characteristics**

*If a common property resource is a valuable resource worth the costs of managing it, the perception that benefits exceed costs is more likely to arise when members have relatively full and accurate information about: (i) the physical structure of the resource, (ii) the past actions of other users, and (iii) the relationship of demand to supply. They also need to know how the resource varies in space and time and the impact of use on it.*

- **Awareness of resource use issues**

*... awareness of the risk of resource overuse as well as the relationship between use behaviour and the state of the resource helps ensure compliance to resource management rules.*

*...education to raise awareness of the vulnerability of the resource, the consequences of its overuse, and mechanisms to combat this are likely to be an important part of any common property resource management strategy (Shackleton et al. 1998:22).*



## Institutional issues

- **Ownership status**

Carney and Farrington (1998) cite a case in Namibia where ‘lack of clarity about the legal status of land has led to semi-legal fencing of land by the elite...’ This study identifies a similar case in South Africa (Maluti District) where the elite have used government’s promotion of Farmers’ Associations for their benefit (by acquiring land) thus excluding other people from land that was communally owned.

- **Existing local organisations**

*Effective common property resource management is likely where resource users have had prior experience with minimal levels of organisation through:*

- *Presence of a civic organisation which addresses general issues in the village area;*

- *Presence of a specialised organisational structure related to the resource, for example a group of thatch traders; or*
- *Presence of nearby organisations that helped others to solve common property resource management issues.* (Ostrom 1992 cited in Shackleton et al. 1998.)

- **Centralisation versus decentralisation at a local level**

Resource users should not be prevented by central government from exercising local initiatives. Also, a centralised form of governance at local level (council, executive committee, traditional authority) is necessary.

### Policy issues

- **The characteristics of the legal and political environment in which the users reside**

*The state must protect the rights of people living on and using common property resources. If this is not the case, the “external threats to common property will not receive the same governmental response as would a threat to private property”* (Bromley & Cernea 1989, cited in Shackleton et al. 1998).

- **Relationship between users and the state; the role of the state**

*The state should play a crucial role in common property resource management.*

This has been partially referred to above. The suggested role of the state and resource users is co-management of resources, as this would prove more effective than purely a decentralised form of governance at local level or a purely centralised form of governance at national and provincial levels (Lawry 1990). The government is needed to ensure that outsiders do not ignore local initiatives. Lawry (1990:420) argues that co-management would be helpful when dealing with the problem of rule enforcement, especially when the rules have broad support in the community.



### Nature of rules, regulations and sanctions

- **Source of rules**

*Resource users should derive and agree on the rules and regulations.*

The development of rules and regulations should build on customary systems and beliefs and technical knowledge (Shackleton et al. 1998).

- **Flexibility of rules**

*Rules and regulations should be flexible to accommodate times of shocks and stress.*

Those affected by the rules should participate in modifying them through consultation (Shackleton et al. 1998).

- **Simplicity of rules**

*Rules should be simple and few, so that participants can remember them and be able to transmit them to others over time. The fewer the rules are to organise activities, the more likely that individuals can understand, remember and follow them. Also, rules must be less ambiguous so that the agreement among participants should be higher about what is and is not an infraction.*

- **Sanctions and punishment mechanisms exist**

*Clear systems and mechanisms of punishment for rule infringement must exist.*

Lawry (1990) argues that the state, as a body with authority, is needed to inflict punishment on those who break the rules and regulations set locally.

### Economic issues

- **Incentives for common property resource management**

*Effective common property resource management would emerge only if the “perceived benefits of organising and complying to rules exceed the perceived costs of collective action.”*

### Value of common property resources

It is “argued that the greater the economic value of a common

*property resource, the greater the incentive for collective management to conserve it.”*

Local management structures are decaying day by day. The lack of action to save the situation is a clear result of policy makers at national level not realising how important natural resources are to the livelihoods of the rural poor. The poor and lower middle income groups benefit more from natural capital in the study area than from other forms of capital, but if management of natural resources continues to be inadequate, then the sustainability of this capital will be jeopardised over time. In the long run this would affect the upper middle income group as well as poor management leads to a deterioration of rangelands and they would be forced to slaughter their livestock. Table 16 shows that the richest, not surprisingly male-headed, households are very dissatisfied with the present management of communal rangelands. This is not surprising, given that it is the rich who have the highest numbers of livestock. In fact, most of the households in all wealth categories are very dissatisfied with the way the communal rangelands are being managed. People with no opinion on the subject are mainly new to the area.

This dissatisfaction raises a question about whether there are any rules that govern the use of these rangelands and how these rules affect their condition. A full 50% of the rich people who indicated that there are no rules felt that rangelands were badly degraded (Table 17). Among the poorest people, 79% who said there were no rules indicated that rangelands were badly degraded. Others felt that rangelands were not degraded at all. The good rains they received during the period when the study was conducted influenced their view. Most people who said there were rules felt that rangelands were not at all degraded.

People were asked about what they consider the cause of degradation to be. A number of reasons were given but the role of people, lack of management and absence of fencing were emphasised by most households.

The lack of clarity about whether there are management rules and whether rangelands are degraded means government officials must commit themselves to assisting people in the management of natural resources. During the period when the study was conducted, there were good rains in the area. Some people, although they are aware that there are no rules, stated clearly that the rainfall



**Table 16: Management of communal rangelands**

Sex of the household head	Wealth category	Present management of communal rangelands				
		Very dissatisfied (%)	Somewhat dissatisfied (%)	Very satisfied (%)	Not applicable (%)	Total (%)
Male						
	Rich	100	0	0	0	100
	Upper middle	60	10	20	10	100
	Lower middle	80	6.7	6.7	6.7	100
	Poor	70	10	10	10	100
Female						
	Lower middle	70	10	10	10	100
	Poor	85.7	4.8	4.8	4.8	100

n=58

**Table 17: Condition of communal rangelands**

Rules	Wealth category	Rangelands condition						Total (%)
		Badly degraded (%)	Somewhat degraded (%)	Moderately degraded (%)	Less degraded (%)	Not at all degraded (%)	Not applicable (%)	
No (74%)								
	Rich	50	0	0	50	0	0	100
	Upper middle	66.7	0	0	0	33.3	0	100
	Lower middle	57.1	4.8	23.8	4.8	9.5	0	100
	Poor	78.6	7.1	0	0	14.3	0	100
Yes (19%)								
	Upper middle	33.3	0	0	0	66.7	0	100
	Lower middle	0	25.0	25.0	0	50	0	100
	Poor	0	33.3	0	33.3	33.3	0	100
Not applicable (7%)								
	Upper middle	0	0	0	0	0	100	100
	Poor	0	0	0	0	0	100	100

n=58



had improved the condition of their rangelands.

When asked about the contribution of communal rangelands to their livelihoods, 86% of the respondents indicated that it was most effective, 9% indicated that it was somewhat effective, 2% indicated that the contribution was less effective, and another 2% of people indicated that the contribution was not at all effective.

Livestock owners are likely to be affected negatively in future by the lack of effective management of rangelands. The decaying state of institutional structures preclude people from engaging in discussion about proper management. A total of 82.8% of the people interviewed favoured the betterment scheme, and 82%

also felt that it was very effective.

Betterment, which could be re-introduced in a different form, provided opportunities like market outlets, dipping of livestock and rotational grazing.

### Successful natural resource management

The following points are a reflection of the situation in the district based on common property resource theory. They cover boundaries, supply and demand conditions and dependency on the resource, user group size, residence, eligibility, homogeneity, local understanding and knowledge of resource characteristics, awareness of resource use issues, ownership status, existing local

organisations, and characteristics of the legal and political environment in which the users reside.

## Nature of the resource

### Boundaries

In many villages of the Maluti District, the boundaries that resource users recognise presently are those established under the betterment scheme. However, wherever people were dispossessed of land, they still regard that land as theirs. They trespass on the land which once belonged to them in order to collect natural resources. Because many ethnic sub-groups live near one another in the district, there is a risk that one group might disregard the regulations put in place by a neighbouring group to manage rangelands. In one of the villages, the Hlubi clan has made an application for permission to erect a fence, but the group fears that the Bhaca clan might cut the fence. Also, in situations where livestock grazes on land belonging to another village for a certain period of time, they are taken to the headman of the area on which they have 'trespassed'. After a certain period has elapsed, the government officers dealing with stock theft are called to take them away for impoundment. Although boundaries are clear, they are not well respected (Ntshona 2000a). Theory on common property resource issues states that boundaries are a necessary condition for CPR management, but in the South African rural areas most boundaries were imposed under the betterment scheme and therefore are not respected, especially now that the betterment scheme is no more. Enforcement of boundaries was previously made possible by the introduction of fences, but the betterment scheme has collapsed along with its fences.

### Supply-demand conditions and dependency

People across South Africa, including Maluti District, do not only focus their livelihood priorities on rangelands. Social grants, in the form of old age pensions and

disability grants, are the safety net for households with elderly people. These grants have diverted the focus from effective management of land and grazing resources for sustenance to products sold in market places. Very few people recognise the impact of good management of natural resources. People, especially those who cannot afford herding labour, get almost nothing from these resources because livestock theft is increasing every day.

The criterion 'high levels of dependency resulting in more effective control structures' (see page 64) is met in the study area, but the group that benefits most from a range of common property resources is the most influential group when it comes to CPR management issues. The elite, who are the most influential, have their priorities elsewhere – private ownership of land and management of communal grazing resources for their livestock. The influence of the elite is in many cases undermined by the lack of fences and attitude of the rest of the village population, so they struggle to impose their preferred management practices. A study of this nature can address the stereotypes of those natural resource users and policy makers who do not take the contribution of natural resources to livelihoods seriously enough.

### Indicators of common property resource conditions

The almost open access situation that exists in the Maluti District affects people who use communal rangelands to collect wild resources. People relate the current state of these communal rangelands, among other things, to the fact that rotational grazing is no longer practised because the fences have collapsed. They perceive communal rangelands (except for this year after heavy rains) as being in a bad state because some of the resources available during the betterment scheme are no longer available. People who depend



on certain communal rangelands for survival often clash with livestock holders – they don't want the resources to be grazed by livestock. Harvesters of wild resources easily achieved their goals when fences were still in place because grazing was controlled. Although the scarcity of certain species on the rangelands is raising awareness among users that some resources are becoming depleted, their long-time dependency on the government prevents them from doing anything about it. Furthermore, the resources that indicate this condition are wild resources used mainly by the lower middle income group and the poor, people who are not very vocal on most village issues. The criterion of awareness is present in the study area, but nobody is acting on this awareness.

### **Characteristics of the resource users**

#### **User group size**

In one village in the district, considered small by many, range management is dominated by the elite group of the village (mainly big livestock owners). They inform everybody in the village where to graze their livestock and when. Although many people understand this practice to be sound communal rangeland management, it is resented because of the clashes between the elite (mainly big livestock owners from the Farmers' Association) and the rest of the population. This study shows that the criterion is not met in the study area because clearly the number is not the issue. Certain underlying issues also need to be addressed.

#### **Residence**

The condition for people to reside in close proximity to the common property resource is generally met in Maluti. However, it obviously is not enough for successful common property resource management. Other factors combine to overwhelm whatever positive influence this particular condition may have – such as divisions among people who reside in close proximity.



#### **Eligibility**

There are well-recognised big families in each village. People apply for residence, which automatically entitles them to grazing and other rights. The problem arises with fields since they were reallocated to people who were present when the betterment scheme was introduced. Newcomers are unlikely to get access to arable land. The condition on eligibility is met in the area although some people gain access to the village through questionable means, for example, lying about their clan names.

#### **Degree of homogeneity**

In most villages around the district, there is a great degree of heterogeneity. Villages are highly stratified by social status. The people with the most livestock are the ones who contribute significantly to the management of common property resources. Overall, these conditions regarding homogeneity are not met in the Maluti District.

#### **Local understanding and knowledge of resource characteristics**

In the district, people who are vocal about the characteristics of communal rangelands and how they should or should not be managed are the few people who are members of the Farmers' Association. The association (the elite) pays little attention to the voices of other people. Although there are valuable resources in the area, the fact that there is a good supply for certain resources means they are not regarded to be particularly valuable. For example, the supply of trees used as fuel wood far exceeds the demand. The Working for Water project aims to eradicate wattle trees, among other invasive species, because they use large amounts of ground water. These trees grow in abundance in the area, but some residents feel that if they are eradicated, their future livelihoods will be threatened. Numerous benefits are accrued from these trees. Even for other resources that are not in good supply, there is an understanding of the characteristics of

those resources. However, there are many factors that overwhelm the management of these resources – factors that have been referred to above.

#### **Awareness of resource use issues**

Although people generally have not been educated about the vulnerability of natural resources and the consequences of overuse, they are aware of actions to take to combat the problem when there is a need. Their intended actions are however hindered by the lack of resources such as fences. People are aware that certain wild resources grew in the area when a particular style of management was adopted. The collapse of the style of management mentioned above culminated in the depletion of certain resources, which local people feel is a sign that productivity is declining. There are no conservation mechanisms that can be put in place because fencing is needed to return to what people think of as ideal management. Although there is awareness in the area, people do not act on this because they rely on a multiplicity of livelihood strategies (it is not the only priority), there are divisions among people in the villages, and people have a history of being dependent on the government (so they do not want to take action themselves).

The Farmers' Association in one village believes that it knows more than the rest of the population about rangeland management. This has created a huge gap between the two parties. There have been rumours that the government supports the actions of the association, but some government officials deny this. The land acquired by the association for private use has caused a feud in the area. If the government had created an enabling political environment for CPR management, issues like these could be avoided. Extension officers who spend most of their time in government offices could play a crucial role in protecting the interests of the marginalised if they spent more time working in the field within an

enabling political environment. Also, the issue of the multiplicity of livelihood strategies and people's dependence on what the government introduced in these areas has complicated the situation of CPR management.

#### **Institutional issues**

##### **Ownership status**

It has been proposed that land tenure reform should be piloted in this district. A joint effort to help people know their rights to land and be responsible for it would prove fruitful for many. If the process is well administered, effective management of rangeland resources and profitable investment in livestock can be achieved. The proposed land rights management functions according to the status of local rights holders (DLA 1998) might have brought about good governance of common property resources when finally promulgated. However, this draft proposal seems to have been shelved. The tenure situation of people in the area is threatened by the semi-legal acquisition of land by the Farmers' Association. Therefore this condition is not met. If an appropriate law were enacted, people would be assured of their land tenure.



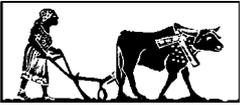
##### **Centralisation and decentralisation**

Chaos could erupt in Maluti if no clear policy guidance and a firm enabling framework is provided at provincial and national levels in order to make CPR management possible at local level. For example, the Farmers' Association has taken over one of the four grazing camps in one of the villages, and two of the four reserve camps that belong to six of the villages in Mkemane. Everybody realises that this might be illegal but, because the government has distanced itself from dealing with CPR management, nobody knows for sure what is going on. Although theory suggests a centralised body at a local level (meaning that management functions should be concentrated at the local level), this report further suggests that

a centralised body, at government level, should also be involved to protect the interests of the marginalised, among other things. Management bodies at local level have proved to be biased. Semi-legal land acquisitions by some members of the villages have gone through these bodies, for example the tribal authority or headman. Although their role is a critical one, a complementary form of management at provincial and national level is imperative. This is a policy question of major concern. An enabling policy and political environment for successful common property resource management still has to emerge. This condition as presented in theory needs involvement of an impartial, external body such as the provincial and national government because clearly institutions such as traditional leaders have failed the majority of their constituency.

#### **Existing local organisations**

In Maluti District, through the assistance of EDA, management has not been a major problem. This NGO's skill has ensured that community-based organisations have become capacitated. In spite of the fact that the process has been frustrated by the elite, assistance from EDA has ensured some co-operation and competence among local organisations.



## **Policy issues**

### **Legal and political environment**

The elite in Maluti District has taken all range management issues into its hands. These people decide on everything at the expense of those who own few livestock or no livestock at all, and they have acquired exclusive use of land on which others also depend. Rangelands are 'up for grabs', with people believing that government's new approach is for people to organise themselves into Farmers' Associations and have legal title to areas they want to use for farming. This is a very clear example of how the current government policies are likely to impoverish the poor still further.

Good governance of CPR at local level and the support of the government would ensure the sustainability of rangeland resources and the livelihoods that depend on them. In the present chaos, many are silent about these issues. Biased headmen and tribal authorities have discouraged many from investing in CPR in any way. People need a clear-cut position and assurance from the high echelons of governance to boost their confidence that communal rangeland management is being attended to. People need to be assured that all the rules and regulations they set will be protected by the government, and that information about common property resource related issues is well disseminated.

# Chapter 9: Livestock on communally-owned and managed rangeland

The livestock sector and the importance of livestock to households remain poorly understood.

Perceptions of cattle ownership under communal tenure range from the concept of a ‘cattle complex’ (Schneider 1957) or private unreason, which suggests that cattle owners act irrationally and attach importance to simply holding stock, to the ‘tragedy of the commons’ notion (Hardin 1968) or social unreason, which holds that resource degradation is the invariable outcome of communal land tenure.

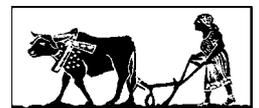
*These perceptions are due in part to fundamental differences in objectives of holding stock. Livestock in the commercial sector are regarded primarily as a source of income, while their role in communal areas incorporates both an income and a wealth function* (Hatch 1996:77).

It is a truism that people in communal areas invest in different types of livestock for different reasons. Low off-take from livestock in communal areas (Tapson 1990) and the fact that their productivity is often only measured using a single criterion, that of beef output (Scoones 1990), cause many to overlook the important role livestock play in rural areas (Hatch 1996). Hatch’s study was done in KwaZulu-Natal. Tapson (1990) argues that cattle in KwaZulu-Natal comprise ‘a valuable array of high-value goods in the household economy’ and that this explains the behaviour of livestock owners. Livestock in most rural areas are kept for numerous reasons including milk, sales,

investment, savings, feasts and ceremonies, cultivation, dowry, meat, manure and draught power. Studies have also revealed that per unit area, livestock in communal areas derive more benefits than livestock on commercial farms (Hatch 1996, citing De Ridder & Wagenaar 1986; Barrett 1992; Scoones 1992; Abel 1993:192). Communal grazers are seen as acting rationally, not in the sense of profit maximisation (Vink & Van Zyl 1991, cited in Hatch 1996), but in the sense of balancing ‘sustainable production levels and risk’ (Hatch 1996). This report seeks to unravel some of these dynamics with special reference to the multiplicity of benefits derived from livestock off-take, consumption, non-meat products and other gains derived from livestock.

Cousins (1996) gives reasons why common property institutions offer economic advantages, where extensive livestock production is a central component of livelihood systems:

- Firstly, livestock herds within village economies are multi-purpose in nature and yield more benefits per hectare when all functions are added together.
- Secondly, for these herds, high stocking rates make economic sense, and optimum stocking rates in these systems will be higher than those in single purpose (for example, beef) production systems; furthermore, these high stocking rates may well be ecologically sustainable. This is because livestock herders pursue ‘opportunistic’ strategies



based on mobility, to optimise their use of the variability of African rangelands (Sandford 1983, cited in Cousins 1996). Although this might be true for other countries, in South Africa managing the mobility of animals and using opportunistic strategies could be a tall order because of betterment boundaries. But since the fences are broken, animals cover large areas, crossing boundaries in the process to get pastures, especially during dry periods.

Data in this report discusses whether people are unreasonable in keeping so many livestock units per unit area. It shows why people keep livestock, whether keeping of many livestock units leads to land degradation or whether there are other causes of degradation that have to be taken into account (for example, weak institutions failing to ensure sound rangeland management practices).

There is a belief that Africans have ‘an irrational desire to accumulate cattle...’ (Yawitch 1981:10) meaning that cattle owners attach importance to simply holding stock. The multiple benefits derived from cattle remain poorly understood. Agricultural extension officers intervened under the betterment scheme to cull livestock because (it was said) the rangelands were stocked over their carrying capacity. This discusses households according to their main sources of livelihood and livestock holdings. There are poor households with five cattle or fewer who struggle to buy the necessary feed for their livestock in winter. This is the group that relies most on natural capital.

## Livestock production

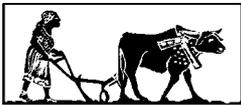
Table 18 presents the reasons why people keep livestock. The questions were asked using a structured questionnaire, as most of the questions were informed by the ‘aggregated diaries’ completed before the survey. Households with livestock hold the following types of stock: cattle (43.1%) and/or sheep (10.3%) and/or goats (37.9%). Most households in the sample prefer

cattle over other livestock. Cattle owners gave their reasons as follows: savings, daily subsistence in the form of milk, draught power, slaughtering for feasts and ceremonies, manure, cultural reasons and cultivation. In asking the questions, a distinction was made between slaughtering for feasts and ceremonies, and cultural reasons. Cultural reasons (*amasiko*) were explained to mean rituals, and ceremonies to mean parties and other activities not in honour of the ancestors. Meat is understood as slaughtering an old cow (*ukugugisa*) that does not have market value. People would never slaughter a young cow just for meat except for a major ceremony or a feast. In many households sheep are occasionally slaughtered.

All the reasons that people gave for keeping sheep were the same in most of the households. However, people gave different reasons when it came to goats. Cashmere, sales and mohair were the least favoured reasons. Agricultural extension officers introduced people to harvesting cashmere from goats, but the few who managed to gather a few kilograms did not get their money back, so they became discouraged. No households keep angora goats from which mohair can be obtained.

Table 19 shows the percentage of households with livestock by their main sources of livelihood. A total of 18.8% of households whose main source of livelihood is pension own sheep and 40% of households whose main source of livelihood is subsistence agriculture also own sheep. The table shows all taxi owners’ households own sheep, but this is misleading because only one taxi driver was included in the sample. Only households which depend on kin, herding livestock and a combination of natural resources and remittances do not own cattle. The same applies to goat ownership.

Table 20 shows all the households whose main source of livelihood is piece jobs own 1–5 cattle. The same applies to herbalists and households whose main sources of livelihood are spaza shops, security guarding and others. Among



**Table 18: Why people keep livestock**

Reasons people keep livestock	% of households with this type of stock	No. of households with this type of stock
Households with cattle (43.1% of sample)		
Saving	76	19
Aesthetic value	36	9
Sales	16	4
Milk	68	17
Draught power	80	20
Dowry	40	10
Slaughter for feasts and ceremonies	52	13
Manure	92	23
Meat	32	8
Cultural reasons	80	20
Cultivation	84	21
Households with sheep (10.3% of sample)		
Saving	100	6
Wool	100	6
Sales	66.7	4
Slaughter for feasts and ceremonies	66.7	4
Manure	100	6
Cultural reasons	66.7	4
Meat	100	6
Households with goats (37.9% of sample)		
Saving	90.9	20
Cashmere	0	0
Sales	22.7	5
Slaughter for feasts and ceremonies	40.9	9
Manure	81.8	18
Meat	68.2	15
Cultural reasons	90.9	20
Mohair	0	0



**Table 19: Households which own livestock by main source of livelihood**

Main source of livelihood	No. of households	% and no. of households with livestock											
		Sheep				Cattle				Goats			
		No %	No	Yes %	Yes	No %	No	Yes %	Yes	No %	No	Yes %	Yes
Pension	16	81.2	13	18.8	3	68.8	11	31.3	5	62.5	10	37.5	6
Piece jobs and handicrafts	13	100	13	0	0	84.6	9	15.4	4	76.9	10	23.1	3
Remittances	13	100	13	0	0	53.8	7	46.2	6	76.9	10	23.1	3
Kin dependency	1	100	1	0	0	100	1	0	0	100	1	0	0
Herding livestock	1	100	1	0	0	100	1	0	0	100	1	0	0
Herbalist	1	100	1	0	0	0	0	100	1	0	0	100	1
Unemployment Insurance Fund	1	100	1	0	0	0	0	100	1	0	0	100	1
Subsistence agriculture	5	60	3	40	2	20	1	80	4	40	2	60	3
Dead husband's pension	1	100	1	0	0	0	0	100	1	100	1	0	0
Early pension	1	100	1	0	0	0	0	100	1	0	0	100	1
Spaza	1	100	1	0	0	0	0	100	1	0	0	100	1
Combination of natural resources and remittances	1	100	1	0	0	100	1	0	0	100	1	0	0
Specific skill	1	100	1	0	0	0	0	100	1	0	0	100	1
Local security guard	1	100	1	0	0	0	0	100	1	0	0	100	1
Taxi owner	1	0	0	100	1	0	0	100	1	0	0	100	1



households which receive remittances, 16.7% have 21–25 cattle and 25% of households whose main source of income is subsistence agriculture (extensive use of arable fields) have 26 or more cattle.

From a study conducted on livestock in the area (Ntshona 2000c) and from the current study (data not shown here), those with few cattle seldom sell their cattle as opposed to the groups whose main sources of livelihood are subsistence agriculture and remittance. The same applies to sheep, with households whose main source of livelihood is subsistence agriculture. Table 21 shows that only three groups by livelihood category own sheep. Table 22 shows that 33.3% of households whose main source of livelihood is piece jobs have 16–20 goats, which is similar to

households getting remittances. Herbalists appear to own more goats than other households in the sample, but only one herbalist was included in the sample. It is worth considering how livestock ownership is distributed among the different wealth categories. Table 23 shows that all the rich and the upper middle income households have cattle, 60% and 62% of lower middle income and poor households respectively have no cattle, 4% of lower middle income households and 19% of the poor have no livestock whatsoever. Our use of the term 'livestock ownership' referred to ownership of cattle, sheep, goats, chickens and pigs. The story is different for sheep. None of the poor households own any sheep. Table 24 shows that 50% of the rich, 30% of the upper middle income group and 8%

**Table 20: Levels of cattle ownership by main source of livelihood**

Main source of livelihood	Households owning cattle according to different cattle categories										Total
	1 to 5 (%)	1 to 5	6 to 10 (%)	6 to 10	11 to 15 (%)	11 to 15	21 to 25 (%)	21 to 25	26 and above (%)	26 and above	
Pension	60	10	40	6	0	0	0	0	0	0	100
Piece jobs and handicrafts	100	13	0		0	0	0	0	0	0	100
Remittances	50	7	16.7	2	16.7	2	16.7	2	0	0	100
Herbalist	100	1	0	0	0	0	0	0	0	0	100
Unemployment Insurance Fund	0	0	100	1	0	0	0	0	0	0	100
Subsistence agriculture	25	1	0	0	50	3	0	0	25	1	100
Dead husbands' pension	100	1	0	0	0	0	0	0	0	0	100
Early pension	100	1	0	0	0	0	0	0	0	0	100
Spaza	100	1	0	0	0	0	0	0	0	0	100
Specific skill	100	1	0	0	0	0	0	0	0	0	100
Local security guard	100	1	0	0	0	0	0	0	0	0	100
Taxi owner	0	0	100	1	0	0	0	0	0	0	100

**Table 21: Levels of sheep ownership by main source of livelihood**

Main source of livelihood	% households owning sheep according to different sheep categories						Total
	1 to 5	16 to 20	21 to 25	26 to 30	46 to 50	>50	
Pension	33	0	33	33	0	0	100
Subsistence agriculture	0	50	0	0	0	50	100
Taxi owner	0	0	0	0	100	0	100

of the lower middle income group own sheep. The poor own no sheep. Table 25 on goat ownership shows a pattern slightly similar to cattle ownership. All the rich and 80% of the upper middle income group own goats, compared with

only 36% and 14% of the lower middle income group and the poor respectively own goats.

Households which received regular remittances were perceived as being of upper middle income and those that did

**Table 22: Levels of goat ownership by main source of livelihood**

Main source of livelihood	% households owning goats according to different goat categories						Total
	1 to 5	6 to 10	11 to 15	16 to 20	21 to 25	36 to 40	
Pension	33.3	16.7	50	0	0	0	100
Piece jobs and handicrafts	33.3	33.3	0	33.3	0	0	100
Remittances	33.3	33.3	0	33.3	0	0	100
Herbalist	0	0	0	0	0	100	100
Unemployment insurance fund	0	0	0	0	100	0	100
Subsistence agriculture	0	66.7	0	33.3	0	0	100
Early pension	100	0	0	0	0	0	100
Spaza	100	0	0	0	0	0	100
Specific skill	100	0	0	0	0	0	100
Local security guard	100	0	0	0	0	0	100
Taxi owner	0	100	0	0	0	0	100



**Table 23: Cattle ownership by wealth category**

Levels of wealth	Whether household has cattle						
	No (%)	No	Yes (%)	Yes	No livestock (%)	No livestock	Total (%)
Rich (3.4%) (n=2)	0	0	100	2	0	0	100
Upper middle (17.2%) (n=10)	0	0	100	10	0	0	100
Lower middle (43.1%) (n=25)	60	15	36	9	4	1	100
Poor (36.2%) (n=21)	62	13	19	4	19	4	100

n=58

**Table 24: Sheep ownership by wealth category**

Levels of wealth	Whether household has sheep						
	No (%)	No	Yes (%)	Yes	Not applicable (No livestock) (%)	No livestock	Total (%)
Rich	50	1	50	1	0	0	100
Upper middle	70	7	30	3	0	0	100
Lower middle	88	22	8	2	4	1	100
Poor	81	17	0	0	19	4	100

n=58

not receive them regularly as poor. The conclusion that can be drawn is that people who

**Table 25: Goat ownership by wealth category**

Levels of wealth	Whether household has goats						
	No (%)	No	Yes (%)	Yes	Not applicable (No livestock) (%)	No livestock	Total (%)
Rich	0	0	100	2	0	0	100
Upper middle	20	2	80	8	0	0	100
Lower middle	60	15	36	9	4	1	100
Poor	67	14	14	3	19	4	100

n=58



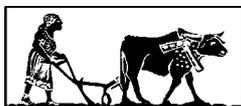
have their main source of livelihood as remittance and subsistence agriculture have more livestock units than those who have other sources of livelihood. People with sources of livelihood such as piece jobs, livestock herding, kin dependency and a combination of natural resources and remittances tend to own no cattle. Most people in these groups survive mainly from using natural resources, especially those who have piece jobs as their main source of livelihood. The kind of piece jobs they do relate to the skills they have

in transforming natural resources into marketable goods. Most of them are skilled in decorations using mud, and some make brooms, grass mats and grass platters for survival. What can be deduced here is that remittance and subsistence agriculture are significantly related to higher cattle ownership.

Natural capital (for the rich and the poor) in the form of grazing resources, land resources and wild resources, and financial capital in the form of remittances and pensions appear to make the greatest

contribution to a secure livelihood for the villagers. All respondents said they use at least one of the natural resources, but the contribution of these resources to their livelihoods ranged from 'high' in the case of poor households to 'low' in the case of richer households.

The high rate of retrenchments has forced many people to have to eke out a living in their rural homes. People quickly convert the money they have available to livestock holdings which they believe will support their livelihood in the long run. Although this is true in some cases, disease is a huge problem. Government can significantly help through livestock dipping and vaccination. Livelihood security would be promoted if anyone wishing to invest in livestock is assured of support through effective management of natural resources and assistance for adequate maintenance of livestock. The other problem for those own livestock is a market outlet where they can sell it. Many people struggle to sell their livestock for a good price, especially when they are pressed for money.



People were asked about their ability to pay to maintain the condition of their cattle, sheep and goats. Most of the livestock owners who did not have the

money to provide feed for their animals during winter were in the poorer categories. No poor households bought feed in 1999 although 4.8% of these bought feed in 1998; 50% of rich households indicated that they bought feed in 1998 and 1999; 40% of upper middle income households bought feed in 1998 and 50% in 1999; 8% of lower middle income households bought feed in 1998 and same percentage bought feed in 1999. It is interesting to note that very poor people also try to maintain the life of their livestock (except for 1999), since winters in the area are severe enough to cause stock deaths and stall-feeding is an expensive alternative. Table 26 shows the amounts people spent on feed in 1998. Only 4.5% of the poor managed to buy feed in 1998, as compared to 50% and 40% of the rich and the upper middle respectively. The amount that the poor bought was in the range R1–R100. For the richest, it was in the R1 101 or above category. Just by looking at the amount people spend on feed, it can be concluded that livestock is one fundamental livelihood source in the area that is more beneficial to the rich than the poor. Although this cannot be said for all the wealth categories, the attachment people show to this

**Table 26: Amount spent on feed in 1998 by wealth category**

Levels of wealth	Amount spent on feed (R) in 1998														Total
	1 to 100 (%)	1 to 100	101 to 300 (%)	101 to 300	301 to 500 (%)	301 to 500	501 to 700 (%)	501 to 700	700 or more	700 or more (%)	Do not know	Do not know feed	Did not buy feed (%)	Did not buy	
Rich	0	0	0	0	0	0	0	0	50	1	0	0	50	1	100
Upper middle	10	1	10	1	10	1	10	1	0	0	0	0	60	6	100
Lower middle	4	1	4	1	0	0	0	0	0	0	4	1	88	22	100
Poor	4.8	1	0	1	0	1	0	1	0	1	0	1	95.2	20	100

n=58

**Table 27: Amount spent on feed in 1999 by wealth category**

Levels of wealth	Amount spent on feed (R) in 1999														Total
	1 to 100 (%)	1 to 100	101 to 300 (%)	101 to 300	301 to 500 (%)	301 to 500	501 to 700 (%)	501 to 700	700 or more	700 or more (%)	Do not know	Do not know feed (%)	Did not buy feed	Did not buy	
Rich	0	0	0	0	0		0		50	2	0		50	2	100
Upper middle	0	0	20	2	20	2	10	1	0	0	0	0	50	5	100
Lower middle	8	2	0	0	0	0	0	0	0	0	0	0	92	23	100
Poor	0	0	0	0	0	0	0	0	0	0	0	0	100	21	100

n=58

livestock means the policy decision making process must respond. The benefits accrued from livestock do not only flow to owners but to non-cattle owners as well. A resource such as cow dung (dry or otherwise) is one example.

The rich, upper middle and lower middle income categories bought vaccines to inoculate their livestock in the previous two years. All the rich indicated that they bought vaccines, 50% of the upper middle and 4% of the lower middle indicated the same. People also use other forms of vaccines to inoculate their livestock, for example, plant medicines – 50% of the rich and the upper middle alike, 24% of the lower middle and 14.3% of the poor indicated they used natural resources for livestock health care. The story differs when an affordable natural resource is used. The lower middle group and the poor make use of such resources for their livestock. The availability of these resources has reversed something unaffordable (commercial vaccines) into something that can easily be found in nature for free. However, the effects of Western animal medicines and traditional animal medicines have not been compared.

Concerning livestock sales, in 1998 50% of the rich received R1 101 or more, 10% of the upper middle group received R200–R300, 4% of the lower middle group also received R1 101 or more and 4.8% of the poor could not say exactly how much they received. In 1999 the amounts that were received by all the wealth categories except for the lower middle group were R1 101 or more. A total of 50% of the richest, 20% of the upper middle group and 9.5% of the poor sold livestock in 1999 and all received R1 101 or more. To meet household needs, 50% of the respondents sold their livestock to local people, and the rest sold through other avenues such as in neighbouring villages, to relatives and at stock sales.

I set up a model with SPSS statistical software to interrogate the notion that rural people are irrational when they decide to keep many livestock units. To do this I had to ascertain whether there is any relationship between poverty and livestock numbers in the survey sample of 58 households. The livestock numbers were used as predictors of poverty in those households, and poverty was seen as an absolute state (that is, 'poor' or 'not poor'). I then looked at the number of cattle, sheep and goats kept by the households,



where applicable, as continuous independent variables. This statistical operation showed that when the number of cattle increases, the likelihood of being poor (by local people's definition) decreases. The model showed that the number of sheep or goats is not a significant predictor of whether the household is rich or poor (according to people's perceptions). It is therefore clear that there is nothing irrational about rural people deciding to keep many livestock units.

### Different livelihood sources for different wealth categories

My model showed a correlation between cattle-owning households and low levels of poverty as perceived by people. This section looks at the account given by people of the contribution of other livelihood sources across the different cattle categories. The categories are in multiples of five. In the case study area, people with ten cattle are perceived to be better off than those with five cattle. As Hatch (1996) puts it, the actual number of cattle counts. People with four to five cattle can plough their fields without necessarily being involved in work parties. Cattle disposal in this group is very rare (Ntshona 2000c). The fewer the number of cattle, the less likely it is for the household to dispose of them. People with five or cattle or less can be involved in work parties. As the number of cattle increases, the level of benefits accrued increases because people are better able to sell and or exchange.

Four sources of livelihood were selected – pension, piece jobs, remittance and subsistence agriculture. These sources were selected because many people make use of them. People used counters to indicate the contribution of these sources of livelihood, which was converted into an

ordinal scale to ascertain whether it is 'highest', 'high', 'low' or 'lowest'. All these were compared with the different cattle categories. Taking only the sources of livelihood with the highest number of respondents, 33.3% of upper middle people and 37.5% of lower middle income people who receive a pension and have five or fewer cattle indicated that pensions make the highest contribution to their livelihood. When the number of cattle increased, the contribution from pensions shifted from 'highest' to 'high'.

The contribution from fields was from 'high' to 'highest' for lower middle households with one to five cattle. For upper middle households with 6–10 cattle, the contribution from the fields was 'low'. For households with more than 11 cattle, fields made the highest contribution.

Natural resources, which in many cases inform the kind of piece jobs people are involved in, make the 'highest' (33.3% of people) and 'high' (66.7% of people) contribution for upper middle with 1–5 cattle. As the level of wealth decreases for the group with 1–5 cattle, the contribution shifts from 'highest' to 'lowest'. This could refer to grazing resources, particularly grass grazed by animals. People with fewer livestock units perceive the contribution differently to those with more livestock units. For groups with more than six cattle, the contribution from natural resources is perceived as 'low'.

All people in the different cattle groups receiving remittances indicated that remittances make the 'highest' or, in some cases, a 'high' contribution to their total livelihood.

Contribution from piece jobs mainly benefited the lower middle and the poorest. People whose main source of livelihood is piece jobs did not have many cattle.



# Chapter 10: Conservation, production and livelihoods on rangelands

Conservation in the area was driven by the government's wattle-clearing programme, the Working for Water programme run by DWAF. The programme was implemented in only two of the three CBLM areas – Mvenyane and Madlangala. The elite in Mkemane wanted the project in their area too, not because of conservation concerns but because of the money paid to people working in the project. The purpose of the project is to clear alien invasive species such as black and silver wattle trees: according to DWAF, 1ha of wattle trees consumes about 12 000m<sup>3</sup> of water every year and the cutting of these species could increase the water yield by 14% (DWAF 1998 cited by Tchale et al. 1998).

**T**hese plant species have both ecological and socio-economic effects: they affect the growth of other plant species and occupy land that could be used for human settlement, livestock grazing and agriculture (Tchale et al. 1998). Against this backdrop, DWAF sourced funding from the Poverty Relief Fund to implement the programme in areas infested by these alien species – wattle, Port Jackson, gum and blackwood trees.

The chapter on valuation has shown the value of fuel wood in monetary terms. In the three CBLM areas wattle trees are used for a number of purposes, but now that they have been declared as alien invader plants, the policy is to clear them. Chapter 10 does not re-emphasise the importance of these trees to rural livelihoods, but shows the nuances in conservation, especially in WFW. The arguments given in this chapter should be looked at against the value worked out for fuel wood in

Chapter 6, bearing in mind that the other benefits derived from wattle trees have not been valued here. The design of WFW has failed to balance the livelihood benefits accrued from wattle and conservation with the need to protect scarce water resources. All households in the research survey make use of wattle trees, but the jobs offered by WFW rotate and so do not benefit everybody at the same time. People in Mkemane have expressed concerns that the WFW programme does not provide sustainable jobs, and that it will make the wattle trees on which they all rely scarce.

## Implications of clearing

The total clearing of alien species will have profound results in terms of income (to those employed to cut down the trees) and improvement of water yield. The main problem it poses is the removal of rural people's main source of energy and a source of building and fencing material,



and a source of medicine. Recognising these concerns, EDA proposed a community-based approach to wattle management. EDA's approach is based on community empowerment to take up the responsibility of managing the wattle on a more sustainable basis. It ensures longer-term employment since communities will be capacitated to sell wood for fuel or as charcoal, and also to use the wattle resources for the manufacture of furniture, dwelling structures, arts and crafts, and other items that can be derived from these tree species (Tchale et al. 1998).

### Different approaches to the wattle problem

Tchale et al. (1998) used a cost-benefit analysis in contrasting three approaches to addressing the problem in the district. They worked in Mvenyane, one of the two villages where the programme was implemented.

The benefit of the no-clearing option includes the continuous flow of resource use resulting from the growth of wattle species. Another benefit is the saving of clearing costs (Tchale et al. 1998). However, the cost includes loss of land for agricultural purposes, reduced area for human settlement and livestock grazing, and loss in water yield (Tchale et al. 1998).

The benefits of the WFW approach include increased water yield, income to those employed on the project, and increased areas for agriculture and settlement (Tchale et al. 1998). The cost will be the community will lose a free source of energy.

The benefits of the EDA community-based management approach include a sustained flow of resource use, increased area for agriculture and settlement, sustained flow of water, and income from secondary enterprises from wattle resources. The cost to the community is the loss of wages from WFW for wattle clearing.

Tchale's analysis shows that the EDA approach is most appropriate. Using net

present value, the EDA approach gives a value of R48.9 million as compared to R44.4 million for the WFW approach. The gains of the EDA approach stem from increased agricultural land and long-term self-employment. EDA discovered that the non-clearing option is not viable because it gives a negative net present value of R46.4 million, implying that income, agricultural land, grazing land, and land for settlement will be lost.

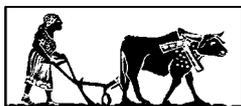
These approaches are based on the assumption that, among other issues, human settlement and agricultural land are affected in one way or another. However, the consideration of agricultural land being affected is unfounded. Trees grow easily on land that lies fallow. People do not resume agriculture just because land has been cleared. There are other factors prompting them to abandon their agricultural land in the first place – the absence of fencing, no money for seeds and uncontrolled grazing on fields that belong to others. The issue of human settlement is an institutional matter which is not affected by the presence of trees. When people are allocated sites they clear everything they do not want, including trees. The benefit of wattle management, however, will accrue to those with livestock because there will be more land for grazing.

### WFW's impact on livelihoods

A report compiled by EDA shows the impact of the WFW programme as reported by men and women alike. The information was collected in Madlangala during a household livelihood situation analysis. CARE South Africa and EDA Matatiele (EDA 1998) facilitated the exercise.

#### Benefits from WFW – Women's Group

- Food.
- Money for school fees and school uniforms.
- Improved shelter.
- Increased disposable income.
- Skills gained.



These livelihood outcomes led to happy and healthy children; good performance in school by children and good family relations.

### Costs from WFW – Women’s Group

- Increased disposable income led to increased alcohol consumption causing unhappy and strained marriages.
- Injury from unserviced machines led to expenditure on treatment and loss of income while on sick leave.

### Benefits from WFW – Men’s Group

- Safety and security for people and animals improved because of limited hiding places in the bushes.
- Residential and arable land made available.
- Disposable income increased.
- Ability to cultivate, purchase seed and manure increased.
- Health care improved.
- Dependency on extended family decreased.
- Money for school fees, bride wealth, clothes and entertainment more widely available.
- Self-esteem and acceptance by the community increased.

### Costs from WFW – Men’s Group

- The general labour force not recognised for promotion or subsequent re-employment.
- Inter-household conflict increased.
- No clear channels to air grievances in place.
- Strained relations experienced at community level.
- No proper selection procedure developed.
- Formation of cliques and possibility of strikes at the site.

The arguments presented should not be understood to mean that wattle trees do not affect ground water supply. However, policy makers should consider that the benefits from these trees and conservation

need to be balanced with people’s concerns on the ground. Not all the concerns given in the different approaches are founded on good grounds. Clearing for human settlement and releasing agricultural land are such examples. Programmes such as WFW are repeating the mistakes of the past by imposing policies without understanding the complexity of the livelihoods of the rural poor. People are only involved in the project because of the money they can earn if they are employed by WFW. EDA’s approach to wattle management is promising, although its future implications cannot yet be determined especially if the demand for wattle from the communities and market places exceeds the supply.

### Perceptions from a neighbouring village

Mkemane is one of the CBLM areas close to Mvenyane where the WFW programme was implemented. The fact that people in Mvenyane got employment through this programme prompted the elite to apply for the programme to come to Mkemane. Many people were excited by the idea that they might get employment, but others shared their concerns about the project:

- poles would be sold
- there would be increased competition for the remaining resource
- accessing wattle would be compromised since in this area wattle is found mainly on residential land
- the future implications are uncertain since the market demand for the resource might exceed the supply if the campaign to reduce wattle trees was successful.

Against these reasons, some people felt that they would oppose WFW because it would restrict the supply of what is currently an abundant free natural resource.

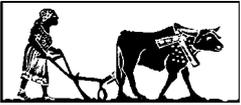


# Chapter 1 1: Local impact of policies and programmes

The CBLM programme concentrated on a number of themes during its implementation phase.

## Wattle and integrated catchment management

This theme was discussed in Chapter 10. EDA through its community-based approach to wattle management has tried to balance the need to conserve the land and water resources with the benefits accrued from the wattle trees. Its approach, although it shares the same unfounded concerns as other approaches (land released for human settlement and agricultural purposes), has taken rural livelihoods into cognisance. If the WFW programme had been implemented in the area without the CBLM programme, then the results would have been different.



## Environmental education and action

### Schools

The Community-Driven Environmental Upgrading of Schools package gave 25 schools basic sanitation, secure fencing, a secure water supply and productive vegetable gardens. The upgrading programme benefited areas outside the CBLM pilot areas as well. Schools also received training on health issues, specifically on the HIV/Aids pandemic. More than 25 school governing bodies have been capacitated in basic responsibilities of governing the schools and awareness around ownership of schools was also created. Other achievements of this programme were school governing body support and training for schools not funded under the Community Driven Environmental Upgrading of Schools programme;

recycling; involvement in the 2020 Vision project; soil conservation and tree planting during Arbour Week.

### Eco-tourism

Although this programme was not implemented in the Mkemane area, it was a success elsewhere. A local tourism organisation has been established in the form of the Ukhahlamba Tourism Association and it is recognised and supported by the Eastern Cape Tourism Board and by local and traditional authorities.

Such an initiative by EDA through its CBLM programme helped the resource users to put structures in place for management of natural resources in order to ensure the sustainability of the eco-tourism initiative. There is also a horse and hiking trail initiative in the area that will benefit local people without impacting negatively on the natural resource base.

### Range management

The intention of the range management programme was for all rangeland users to establish range management bodies and get information from farmer networks and research in order to achieve sustained benefits from the natural resource base. The programme involved the formation of land and range committees and focused on sustained benefits from livestock production. EDA provided technical and extension support to local farmers. Such a committee was formed in Mkemane but did not build on existing initiatives in its formation. In Mkemane, the Farmers' Association has taken control over issues of land and range management, especially

in Small Location. The newly-elected management structure's efforts were frustrated by the existence of the Farmers' Association. Although the reason for forming these structures is sound, many complicated factors need to be addressed before such structures are formed. These factors include the willingness of the broader community to manage the land and the demand for fences. Also, creating more new committees confuses people, given that a plethora of committees have been created by different organisations working in the area.

EDA was involved in other sectors including sheep, goat farming and livestock improvement. With regard to sheep and goat farming, the focus was on wool and mohair production. EDA facilitated, among other things, access to better marketing channels. Concerning livestock improvement, EDA linked Mkemane farmers with commercial farmers to facilitate stock improvement and exchange of information. The only problem with this link is that it was done through the Farmers' Association, which is not recognised by many people in the village. Rams introduced through these linkages were circulated among a few members of the association only. Other members of the Farmers' Association and non-members did not benefit as they were supposed to have done. Members of the Farmers' Association who benefit from the rams cited the lack of government subsidy as a major reason for not circulating the rams. The Farmers' Association claims it circulated the rams when a government subsidy was in place for them to do this. When the subsidy was cut, it circulated the rams only among a few of its own members.

Range management in the area is poor. Its evolution was affected by the imposed betterment scheme. Efforts of the CBLM programme outside an enabling framework could be frustrated because the different spheres of government are not part of the programme. This lack of participation implies that the recommendations of the

programme and its challenges will have no effect in ensuring co-operation between groups of land users and between land users and the government.

## Agricultural support

EDA assisted local people in the Maluti District to farm poultry. EDA's links with Hlangabeza in Queenstown enabled them to buy chickens in bulk. The people of Maluti were also advised on poultry farming medicines and feed. This venture is open to anyone interested in poultry farming. EDA agriculturalists visit different poultry projects when invited by members of these projects. No chicken project currently exists in Mkemane, but the good relations people have with EDA staff members will give them free access to information if they decide to farm poultry.

Another EDA initiative, working closely with the Department of Social Welfare, was to assist people secure funds for a piggery project. The project is designed so that as it develops, it employs an increasing number of people. Although one project in Mkemane has encountered a number of problems, EDA has continued to give the necessary support so that the objectives of the project can be realised. EDA agriculturalists and staff are more visible than the governments' agricultural extension officers, so many communities rely on them. On many occasions the agricultural extension officers consulted EDA on a number of issues and this rapport between the two benefited many villages.

The situation regarding the use of agricultural land in Mkemane is complicated by the fact that the fields are not fenced. Nobody in Mkemane village during the period of the study made use of their fields. Instead, they made use of their home gardens. The previous year, people grazed their livestock in the unfenced fields of the only two people who planted that year. In other villages such as Mpfofini and Small Location this situation was normal. Fencing is one issue where the CBLM programme needs support from



government structures to achieve its objectives. Fences, not the betterment scheme, are needed by people to keep animals away from their produce.

### **Institutional support**

EDA was involved in the district planning processes. Their involvement included the completion of the Land Development Objective process and the development of a vision and capacity building for the District Development Co-ordinating Committee. EDA also worked towards developing a relationship between traditional leaders, the District Development Co-ordinating Committee and local councillors.

A number of institutions in the district and the neighbouring Mount Fletcher district also received some support from EDA. The kind of support that these institutions received ranged from strategic planning to a needs analysis workshop. The institutions that benefited from the skills imparted by EDA are Itekeng, a community-based organisation that offers business training in the district; Ncedisizwe



Development Organisation; a number of advice centres; and Eastern Cape Rural Industries.

### **Land tenure**

The plan to pilot the Land Tenure Bill in the Maluti District followed a number of workshops EDA held with different communities on the Interim Protection of Informal Land Rights Act. EDA conducted these information dissemination workshops on behalf of the Department of Land Affairs, helping people to realise the implications of their insecure land tenure rights. In a workshop later in 1999, attended by a number of stakeholders including the DLA, a proposal was made that the Maluti District should be a test case. This proposal was nullified by the government's decision to freeze the Land Tenure Bill in 1999, thus frustrating EDA's intention of formalising land administration and land use arrangements. Although a new Bill is currently being discussed, it is not clear whether the Ministry will consider piloting the bill in the Maluti District.

# Chapter 12: Wider relevance of the study and the implications for local and national policy

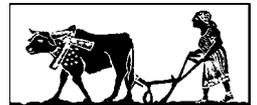
This study has shown the contribution that wild resources and natural resources in general make to rural people's livelihoods, yet, as it argued by ILED (1997) many natural resource management policies which affect wild resources and their habitats fail to consider their full economic benefits.

**T**he gap between government's intervention in the management of natural resources has widened since the collapse of the betterment scheme. Government failed to sustain its own programme and this has impacted negatively on the livelihoods of many people.

NGOs have a crucial role to play in facilitating development, but this they cannot do without government backing. Government has not shown full commitment to these initiatives and, when NGO funds run out, these promising initiatives collapse. Government has not used existing initiatives such as the CBLM programme to inform the way it approaches development in rural areas.

This study has shown how different people use different livelihood strategies and how different wealth categories, rich and poor alike, make use of communal rangelands. The value of fuel wood has been calculated in this study and the importance of a number of common property resources for different people has also been emphasised. The economic value of communal rangelands is socially differentiated, with different actors making use of different resources for different purposes (Cousins 1999). Many of these resources and values are significantly important for the rural poor, they

contribute to food security and to balanced nutrition (Cousins 1999:312). The issue threatening these economic benefits in the short term is the semi-legal privatisation of land brought about by the unclear land tenure situation in the country. Kepe (1997, cited in Cousins 1999) argues that there is a possibility of conflict and power relations among resource users and that equitable outcomes are not guaranteed. Benefits maybe captured by wealthy elites unless control over resources is vested in institutions which act in the interests and on behalf of the majority (Cousins 1999). Clearly, the traditional institution, as shown in this study, is benefiting a portion of the population at the expense of the majority and hence this study is calling for policy makers to intervene by creating an enabling environment for the management of these resources. It is evident from this study that there is decay in the institutions that are supposed to manage these resources and that a rethink on this issue is needed. A challenge for policy is support for appropriate institutional development at local level (Cousins 1999). Cousins argues that given the socio-economic differentiation of resource use, it is likely that resource management will be marked by struggle as different groups seek to impose or retain rules that benefit their



resource demands at the possible expense of others (Clarke et al. 1996:16).

This report raises many issues related to the livelihoods of rural people. In addition to tenure problems, another issue is the decay of common property resource management institutions. There is no clear direction concerning the rules that must be adhered to in managing these resources. I therefore argue that there should be an intervention by policy makers in managing common property resources, since common property resources are the most promising capital available in the area under study. But how would policy makers intervene effectively in the midst of this complex situation – unclear land tenure, poor institutions of management and contradictory ways of calculating the value of natural resources and their contribution

to rural people's livelihoods? This study therefore suggests that understanding the complexity of rural areas should be a priority in any policy intervention. If any policy intervention is to be made, especially recognising the value of common property resources to rural people's livelihoods, then the issues referred to in this study should be considered very carefully. National policy should look to the initiatives such as EDA's CBLM programme and the wide experience it has built up in rural development. The CBLM programme has looked at a wide range of issues and has identified (successfully in some cases, unsuccessfully in others) the key issues on land tenure, land administration, institutional dynamics and the benefits that are accrued from communal property resources.



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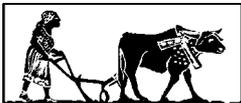
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