

**NATURAL RESOURCE MANAGEMENT AND LOCAL KNOWLEDGE
IN TRANSITION:
AN ANTHROPOLOGICAL PERSPECTIVE FROM
THE LAKA OF MAPELA**

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**NATURAL RESOURCE MANAGEMENT AND LOCAL KNOWLEDGE IN TRANSITION:
AN ANTHROPOLOGICAL PERSPECTIVE FROM THE LAKA OF MAPELA**

by

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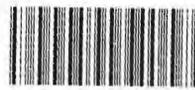
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FOREWORD

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SUMMARY

This study sets out to analyse the relevance of cultural values and perceptions, which form the basis of the “local knowledge” of grassroots people, in the natural resource management of the Laka of Mapela who live in the former Lebowa homeland in the Northern Province of South Africa. Due to the fact that political transitions affect the traditional authority system, it further explores the role of traditional leaders regarding control and decision-making over natural resources as well as the activities of oppositional groups at local level, and their attitudes towards land tenure issues. Natural resource management is approached holistically because, in grassroots perceptions, the natural world does not “stand on its own” and is not dissected into manageable units but forms part of a wider cosmos which is made up of human beings, nature and the supernatural. A happy life of people, fertile soils and rich botanical resources are inseparable from harmony in the cosmos. Misfortune, natural resource degradation and scarcity are consequently explained with a state of flux, or imbalance, in these cosmic relationships which have to be restored by people in order to survive. The general conclusions suggest that these local perceptions of natural resource management cannot be ignored from the development arena as well as by outside scientists and practitioners. Rather, in order to develop more progressive approaches for sustainable management in the former homelands, policies and plans have to be compatible with the worldview of local people to enhance their acceptance and implementation.

KEY TERMS: Natural resource management; local knowledge; transition; values and priorities; worldview; laws and ritual prohibitions; sustainability.

Contents

Page:

Chapter One: Introduction.....	1
1. Background to the study	1
1.1 Natural resource management “from below”	1
1.2 Choice of the study area	4
1.3 Purpose of the study	6
1.4 Statement of the problem.....	7
2.The conceptual framework.....	9
2.1 Resource management.....	9
2.2 Local knowledge	11
2.3 Transition	14
3. Methodology.....	15
3.1 Literature review.....	15
3.2 The field research	16
3.2.1 The pilot study.....	19
3.2.2 Participant observation.....	22
3.2.3 Interviews and discussions.....	23
3.2.4 Essay writing	26
3.2.5 Collection of plant specimens	27
4. Presentation of the material	28
5. Terminology in the text.....	29
Chapter Two: Contextual studies on resource management and local knowledge.....	31
1. The development discourse	31
1.1 “Nature” and “environment”	31
1.2 Resource management and local knowledge	32
1.2.1 The rise of “sustainable development”	33
1.2.2 Local knowledge research.....	38
1.2.3 Local knowledge in development practice.....	39
2. The anthropological discourse	42
2.1 Cultural ecology, ecosystems theory and new ecological anthropology.....	43
2.2 Development anthropology	44

3. The “African” situation	47
3.1 Synthesizing local and scientific knowledge	47
3.2 Relevant studies from South Africa	50
4. Summary	53
Chapter Three: The research setting	55
1. The historical setting	55
1.1 Introduction	55
1.2 The reign of the respective chiefs of the Langa of Mapela	56
1.2.1 The reigns of the early chiefs	57
1.2.2 The reign of Mankopane	58
1.2.3 The reign of Masebe	61
1.2.4 The reign of Malesela Hans	63
1.2.5 The reigns of Marcus, Alfred and Johannes	64
1.2.6 The reigns of Godwin, Hendrik and Cyrus	65
1.2.7 The reign of Atalia	66
2. The cultural setting	67
2.1 Kinship and descent	67
2.2 Economic life	71
2.2.1 Cultivation of crops	71
2.2.2 Livestock	72
2.2.3 Collection of food from the <i>veld</i>	74
2.2.4 Income generating activities	75
2.3 Education and the transmission of knowledge	77
2.4 The belief system	79
2.4.1 The belief in ancestors	79
2.4.2 The belief in a creator	82
2.4.3 Healing	83
2.4.4 Belief and transition	85
3. The environmental setting	89
4. The resource management setting	95
4.1 The local management level	96
4.2 The provincial management level	100
4.3 The national management level	101
4.4 The international management level	102
5. Summary	103

Chapter Four: Use and management of residential land.....	105
1. Introduction	105
2. Access to and the control of residential land.....	106
2.1 Access.....	106
2.2 Control.....	108
2.2.1 Family control.....	108
2.2.2 Control by traditional authorities.....	111
2.2.3 Control by other bodies	113
3. Uses of residential land.....	116
3.1 Establishment and protection of a homestead	116
3.2 Use of houses and huts	122
3.3 Use of the garden.....	125
4. Decision-making and relationships.....	129
4.1 The family and neighbours.....	129
4.2 Traditional and other authorities.....	135
5. Conclusions.....	140
Chapter Five: Use and management of agricultural land.....	143
1. Introduction	143
2. Access to and control of agricultural land	145
2.1 Access.....	145
2.2 Control.....	153
3. Agricultural activities.....	160
3.1 Location and size of fields.....	160
3.2 Selection of crops and cultivation methods.....	161
3.3 Relationships.....	172
4. Conclusions.....	177
Chapter Six: Use and management of other natural resources on the commonage	179
1. Introduction	179
2. Botanical resources.....	180
2.1 Access and control.....	180
2.2 Classification	184

2.3 Use of botanical resources.....	186
2.3.1 Fruit and traditional spinach	189
2.3.2 Firewood	192
2.3.3 Timber.....	195
2.3.4 Medicinal uses	196
2.3.4.1 Use of herbs by traditional healers.....	196
2.3.4.2 Home use.....	201
2.4 Decision-making.....	203
3. Grazing land.....	204
3.1 Access and control.....	204
3.2 Grazing practices and other uses of grass.....	208
3.3 Treatment of animal diseases	210
4. Water resources.....	210
4.1 Access and control.....	210
4.2 Uses of water resources	214
4.3 Decision-making.....	218
5. Conclusions.....	222
Chapter Seven: Natural resource management and local knowledge	226
1. Introduction	226
2. Local knowledge	227
2.1 Knowledge about soil types and soil fertility.....	227
2.2 Knowledge about climatical conditions.....	232
3. Transmission of knowledge.....	236
3.1 The family	237
3.2 The apprenticeship.....	241
3.3 The school	243
3.4 Re-evaluation and recognition of local knowledge	244
4. Managerial structures, values and priorities.....	247
4.1 Traditional authorities and decision makers	247
4.2 Agricultural extension officers	252
4.3 Modern structures	256
5. Conclusions.....	260

Chapter Eight: Findings and Conclusions	263
1. Grassroots people and the international arena	263
2. The anthropological perspective of resource management and local knowledge.....	264
2.1 Non-economic aspects of resource management.....	264
2.2 Impersonal causality: implications for sustainable development.....	267
3. Local knowledge: potential and limitations	270
3.1 Continuity of a meaning-giving philosophy.....	270
3.2. Transition: limits of local resource management.....	272
4. Practical implications and recommendations	274
4.1 The contribution of anthropologists	274
4.2 The role of people at grassroots level in development projects	277
APPENDIX A: GLOSSARY	292
APPENDIX B: POPULATION AND LAND USE IN THE NORTHERN PROVINCE ..	297
APPENDIX C: OVERVIEW OF THE SOUTH AFRICAN LAND POLICY	298
APPENDIX D: NORTHERN SOTHO NAMES OF BOTANICAL RESOURCES	300

LIST OF ABBREVIATIONS

ANC	African National Congress
CAMPFIRE	Communal Area Management Plan for Indigenous Resources
CSD	Commission for Sustainable Development
Dept. of Agric.	Department of Agriculture
FILSA	Federation of Institutes of Land Surveyors of South Africa
GtZ	German Agency for Technical Co-operation
ha	hectares
HSRC	Human Sciences Research Council
IUAES	International Union of Anthropological and Ethnological Sciences
Matric	Matriculation Exemption Certificate
NGO	Non-Governmental Organization
NTC	Northern Transvaal Cooperation
PPL	Potgietersrus Platinum Ltd.
PTO	Permission to Occupy
RDP	Rural Development Programme
SPCA	Society for the Prevention of Cruelty to Animals
TLC	Transitional local council
TLCs	Transitional local councillors
UN	United Nations
UNCED	United Nations Conference on Environment and Development
ZAR	Zuid-Afrikaansche Republiek
Z.C.C.	Zion Christian Church

LIST OF BOXES

Box 1:	Interviewees/Spokespersons	24
Box 2:	Key-word list for interviews.....	24
Box 3:	The chiefs and their regencies in Mapela.....	56
Box 4:	Manifestation of spirit possession	86
Box 5:	Legislative basis for the creation of homelands	90
Box 6:	Management organigram	96
Box 7:	Proclamation R.188 of 1969.....	114
Box 8:	The case of Asnath Modupe	150
Box 9:	Land reform laws.....	152
Box 10:	Disadvantages of <i>go gaša</i>	164
Box 11:	Perceived difficulties with tractors	165
Box 12:	The irrigation scheme.....	166/167
Box 13:	Idiomatic expressions.....	175/176
Box 14:	Children's illnesses cured at home.....	201
Box 15:	Perceived limitations of different soil types	231
Box 16:	Arguments against traditional leadership	258

LIST OF FIGURES

Figure 1:	The area around Mapela	5
Figure 2:	Eva, the interpreter, and pupils.....	20
Figure 3:	Key-informants during an in-depth discussion	25
Figure 4:	Raindoctor holding <i>legwama</i> plants	82
Figure 5:	The provinces of South Africa.....	89
Figure 6:	The Mapela area within the former Lebowa homeland.....	91
Figure 7:	Eroding river banks	94
Figure 8:	Cultivation of vegetables on red soil	117
Figure 9:	Different types of homestead gardens.....	125
Figure 10:	Mixed cultivation in the garden	126
Figure 11:	Hired labourer broadcasting seed.....	163
Figure 12:	Seed is spread on the unprepared field.....	163
Figure 13:	Woman removing grain from the maize cobs	167
Figure 14:	Women group gathering for fieldwork.....	173
Figure 15:	<i>Merôgô</i> is dried to enrich the diet during the winter months ...	192
Figure 16:	<i>Agave americana</i> around the homesteads	194
Figure 17:	<i>Sediba</i> next to a river	211
Figure 18:	Members of the Z.C.C. praying for rain.....	221

LIST OF TABLES

Table 1:	Qualitative methods	17
Table 2:	Time schedule for the field research.....	18
Table 3:	Tribal and trust farms under Mapela control	92/93
Table 4:	Dominant soil types in Mapela	95
Table 5:	<i>Fiša</i> -conditions causing heat	120
Table 6:	Labour requirements in the garden.....	127/128
Table 7:	Taboos relevant to the use of botanical resources	181
Table 8:	Important botanical resources in Mapela	186-189
Table 9:	Types of traditional spinach	191
Table 10:	Rivers at Mapela	211/212
Table 11:	Users of resources on the commonage	223
Table 12:	Soil types and perceived cultivation potential	228
Table 13:	Local knowledge about soil fertility	229
Table 14:	Celestial phenomena	234
Table 15:	Climatic phenomena	235
Table 16:	The seasonal calendar	236
Table 17:	Clashing of principles.....	255
Table 18:	Problems of agricultural extension work	256

"People are part of the environment and are the centre of concerns for its sustainability"

(Ministry of Environmental Affairs and Tourism, South Africa 1998).

Chapter One: Introduction

1. Background to the study

1.1 Natural resource management "from below"

World-wide, rural people have to manage natural resources in terms of allocation, access, control and utilization to ensure their survival. Some resources are plentiful while others are scarce. This depends on environmental as well as on human factors such as, for instance, rapid culture changes, poverty and growing population densities which lead to the exploitation of natural resources. There is thus a close link between socio-economic as well as cultural dynamics and the availability of natural resources.

Though human life is not dictated by instincts (De Beer 1995: 10), resources cannot be managed without a certain "body of knowledge" regarding their characteristics, their occurrence, as well as their usefulness. Such knowledge is usually not acquired, or generated formally, in educational institutions. It is transmitted in daily interactions with family members, within the community, or the wider social arena (see Guyer 1986: 92). It develops according to individual talents, through active and passive observation, improvisation or imitation (see Richards 1993: 62; Millar 1999: 8).

People who live in bands in the forests have detailed knowledge on forests while open spaces and grassland figure prominently in savanna people's culture. Therefore, knowledge cannot be isolated from the natural environment and the climatic conditions in which it is learnt and practised (see Mönnig 1983: 147; Hammond-Tooke 1981: 6; Richards 1985: 11; Reynolds 1996: xv; Bryant 1997: 35). Yet, what is perceived useful or valuable by one group may be useless or harmful for another. This implies that resource management is also related to cultural perceptions and values which results in

the “ethnological approach”¹ to resource management (see Malan 1988: 61; Omara-Ojungu 1992: 34; Schröder 1995: 1; Reynolds 1996; Haverkort et al 1999: 4). According to Omara-Ojungu (1992: 34) “the ethnological approach stipulates that cultural differences in part influence the way people perceive and use the resources of their environment”.

The importance of values for resource management is further elaborated on by Hjort-af-Ornäs and Lundquist (1999: 2): “Interaction between humans and the landscape is to a large extent expressed in values and symbols, ranging from identity and solidarity to property control and power relations. Values and norm systems are significant features of the management of resource flows and have an important impact on life and livelihood. The importance of values and ethics should therefore be duly considered in discussions about sustainable development, in environmental negotiations and for the success of governance at all levels of society”.

Managerial strategies which develop out of this context are usually adapted to local environmental, political, religious and economic conditions which implies the appropriateness thereof. Deteriorating natural resources world-wide, however, question the adaptability of local strategies and the “sustainability” of local knowledge, in other words the “continuance or persistence of an identified quality, activity, or system over a given period of time” (Goldman 1995: 301).² It was further realized that the more the human-environment relationship is disturbed and becomes unstable, local knowledge is less relevant and people are inclined to use some natural resources excessively, while others are left to proliferate. Under such circumstances local management strategies can then even be counterproductive (see Richards 1993: 72). The loss or “erosion” of local knowledge is therefore regarded to be causally related to a decline of biodiversity

¹ Other approaches are of economic or technological nature (Omara-Ojungu 1992: 18pp).

² Others consider the continuity of cultural beliefs and habits as constraints for development (see Netting 1974: 38; Cheru 1992: 21), or regard customary law as oppressive (see Fagan et al 1997: 99). The latter applies more especially to the current gender discourse in South Africa (see Bennett 1995: 21).

(see Atte 1992: 20; Gericke 1996: 41-42) which implies that local knowledge should not be “romanticized” (see Ellen 1986: 12).

The interpretation of environmental problems “from below” is, however, indispensable for a successful dialogue between local communities, outside practitioners and developmental experts. Though “culture”, as one of the most challenging enigmas in the discourse on sustainability, is still largely ignored by the international aid industry, national policy centres have become increasingly interested in this “anthropological point of view” (Dikeni et al 1996: 9). Field-Juma and Torori (1996: 9) note that “understanding how individuals and groups govern local resources is crucial to understanding how they solve their problems in general”. This implies the existence of indigenous management institutions at the local level which may not be overlooked (see Appiah-Opoku & Hyma 1999: 15-16).

This study therefore places great emphasis on methods, organizational structures and problem-solving strategies which are provided by the cultural environment. With this holistic approach an attempt is made to avoid the reductionistic use of local knowledge in a very limited “ethnoscience”³ sense which focusses on practical facts only, and which often serves top-down “development” interests (see Kotze 1997: 62-64; Haverkort et al 1999: 4; Millar 1999: 7). This rather restricted view, based on Western ideologies and premises, is rather unlikely to empower local communities to participate in development planning which is a precondition for the acceptance and implementation of sustainable management projects. Therefore, in the light of growing environmental problems in the former homelands of South Africa, a more complex approach to natural resource management and local knowledge seems to be indispensable. From an anthropological view point, this approach centres around the following assumptions, or premises:

³ Ethnoscience studies base on two anthropological fields, which are ethnobiology and cognitive anthropology, and often incorporate so-called “folk taxonomies” (see, for instance, Berlin et al 1973; Brown 1984).

- ◆ local resource management reflects values and norms,
- ◆ values and norms are transmitted from one generation to another and develop over a long time span in a certain area,
- ◆ experiences of environmental conditions over generations are reflected in grassroots perceptions of changes in the natural environment,
- ◆ values and norms are essential to control, allocate and use resources adequately and thus form guiding management principles,
- ◆ “holistic” knowledge is qualitative and cannot be “tested”,
- ◆ and local knowledge does not “stand on its own” but is supplemented by scientific “formal” knowledge or individual observations which have been made in other areas.

1.2 Choice of the study area

The interest to undertake the present study in the Northern Province of South Africa was stimulated during a discussion with delegates from South Africa, who work on local perceptions about the natural environment, at the conference “Livelihood from resource flows: awareness and contextual analysis of environmental conflict” in Linköping, Sweden, in August 1996. During the discussion about the situation in South Africa it became clear that there is a great demand for research at grassroots level to enhance the development process in the former homelands⁴. This is due to the fact that established strategies of local communities to control, allocate and use natural resources have to change in order to make resource management more sustainable. This is, however, unlikely to materialize as long as the motives and priorities of local communities are not well understood.

Owing to the demand for a comprehensive study on local people’s knowledge which generates distinct patterns of resource management, it was decided that the study would be undertaken in a rural community in the drought-stricken Northern Province. A basic infrastructure in the study area makes access throughout the year possible.

⁴ According to the Constitution (1996), a “homeland means a part of the Republic which, before the previous Constitution took effect, was dealt with in South African legislation as an independent or self-governing territory”.

Finally, the University of South Africa (UNISA, Pretoria) is a reasonable distance from the research area and facilitates discussions with academics and students.

Mapela, the setting chosen for the study is located in the former homeland Lebowa^{5 6}, an area with a dwindling resource base⁷ in the Northern Province of South Africa (see Figure 1 below). At Mapela, natural resource management has been affected by political transitions, more especially since the first democratic elections in 1994 and eventually drastic changes in the Constitution which formally determined the status and ascribed the role of traditional leaders⁸ and institutions (see Dikeni et al 1996: 10; Bennett 1995: 21pp). Moreover, alternative income generating activities at Mapela gain more importance in the light of the high unemployment rate in South Africa⁹ and declining crop yields which can no longer secure livelihoods.



Figure 1: The area around Mapela is dry and to a large extent depleted of old and big trees.
On the rocky mountain slope, two women collect firewood.

⁵ In fact, Lebowa became a self-governing state on 2 October 1972 and obtained internal self-government but was still part of the Republic of South Africa.

⁶ "Lebowa" is a Northern Sotho term and refers to the north of South Africa.

⁷ This was already documented by Fick in 1944.

⁸ Provision for the role of traditional leaders is made in section 212 of the South African Constitution.

⁹ This is due to a decline in urban and mining work opportunities. The tendency of the male populations to migrate to urban areas after finishing school is thus decreasing (see Dikeni et al 1996: 10; Kirsten 1996: 305).

1.3 Purpose of the study

The development situation in South Africa differs from Sub-Saharan Africa due to a long history of adverse relations between the black population and the white minority. The rural black farming community struggled with simple tools to cultivate some crops under harsh environmental conditions, to collect firewood for cooking and to supplement the daily diet with food from the *veld*. Apart from occasional workshops which were attended by a few male farmers, the majority had no access to scientific knowledge, bookkeeping courses or improved implements such as organic fertilizer, insecticides, certified seed and machines.

When labour migration increased due to a demand for a labour force in the mines around Johannesburg, men of working age left the tribal areas and rural women who stayed behind combined management tasks with household chores and even made it possible for their children to attend school. Following, the co-existence with nature was shaped by a struggle for survival with dwindling resources while, simultaneously, population pressure increased drastically (see Yawitch 1988: 102; Cross et al 1996: 174). Today, the ability of rural people to accomplish heavy and time-consuming tasks is still taken from the group-oriented approach to life which results in mutual support and assistance in times of economic, financial, physical or psychological crisis. The “buffering” of economic collapse by means of social relations has been substantially dealt with by anthropologists who note that African philosophies provide cognitive and emotional certainty in situations where the reliability of technology becomes irrelevant.

A number of authors also refer to the “sharing” and “co-operation” which are known to remain important values in most African societies despite some structural changes (see De Beer 1995: 1). Such strategies are even enforced during the times of insecurity and instability which South Africa currently faces. People who live under such circumstances feel uncertain about the future administration of their country, and most of all about their own lives. Faced with existential problems, they tend to emphasize their beliefs, values and norms (see Hammond-Tooke 1981: 83-84) so that some degree of continuity which

is of major importance for the social group in a changing environment is maintained. This concurs with Norgaard's (1994: 72) view that "unsustainability of past development has an epistemological explanation". This means that, in search for the roots of the environmental problem of the "Third World" and also in the present study, African thinking embedded in deep-seated cosmological values can no longer be ignored.

Owing to the fact that scientists trained in Europe are usually not aware of adaptive and holistic management strategies of rural communities, anthropologists can perhaps suggest progressive approaches to blend Western development ideas with the local knowledge of African rural communities. Studies on local knowledge of the South African setting from a holistic perspective are, however, lacking. My aim is therefore to unravel the complex interrelation of values and natural resource management strategies. A further purpose of the study is to stress the potential of local resource management strategies with regard to its compatibility with sustainable development and to determine its limitations in the light of growing environmental problems. The central questions are:

- ◆ What role do transmitted norms and values (local knowledge) continue to play in natural resource management (i. e. access, control, decision-making and use) in spite of transitions and which managerial activities are likely to adapt to changes?
- ◆ In what way can studies about grassroots perceptions on the environment contribute to the discourse on sustainable resource management?

1.4 Statement of the problem

In South Africa, academic disciplines which deal with environmental issues usually concentrate on particular (biological and climatic) aspects, and are interested in demarcating eco-niches in which sustainable management projects operate (see Tripp 1985: 117). Research on environmental degradation has thus often ignored issues central to an understanding of underlying human rationale which materialize when human beings deal with natural resources. The often used dichotomy "sustainable

(modern) versus unsustainable (traditional)” oversimplifies the cognitive skills of rural people because it largely ignores non-economic aspects of resource management. Consequently, this reductionist approach hampers the linking of scientific and local knowledge which is a precondition for the sustainability of project designs (Atte 1992: 21).

The African National Congress (ANC) has put forward the issue of people-driven sustainable development in the progressive Reconstruction and Development Programme (RDP) since 1994. The planning strategies indicated in the programme are the cornerstones of the development policy of the ANC government (Dikeni et al 1996: 9). Implicitly, these “new” policies require an ideology change, whereby people should adapt to the ideas of democratization and the market-oriented production of goods. The most difficult problem faced is that the success or failure of such endeavours depends to a large extent on the needed shift of rural communities, more especially of rural decision makers, from more passive “consumers” to pro-development activists. However, in some rural areas, such plans and programmes are not given the highest priority required so that co-operation with governmental organizations and development agencies has not yet been achieved.

Even worse, the lack of governmental funds or international donations results in the fact that the marginalized and poor cannot be reached because many development projects already stagnate in the planning phase. An exchange of ideas and ideologies between traditional, provincial and national decision makers only takes place in some politically oriented meetings which exclude the majority of the intended beneficiaries due to financial and time constraints. The fact that democratic principles are not yet regarded as legitimate by supporters of traditional leadership because such ideas are incompatible with local perceptions of government control and decision-making processes results in a disintegration of local communities once oppositional movements gain more influence in the rural areas.

This led to a call for research which is expressed in a column by Dr. Serote (1998: 36) who is the Chairman of the Portfolio Committee of the Department of Arts, Culture, Science and Technology in South Africa:

“We need to engage in research and training which uses indigenous knowledge as a basis for innovation. For this to happen, indigenous intellectuals must accept university-trained intellectuals as carriers of ‘developed’ knowledge. Conversely, university-trained intellectuals must accept that indigenous knowledge is based on a deep understanding and familiarity with the natural world; it is a social tool that has maintained and sustained people in a country which was otherwise hostile to them. Finally, indigenous knowledge, which needs legal protection, can contribute to the African Renaissance by being integrated into curricula at educational levels, and by being developed into enterprises”.

2. The conceptual framework

The following sections describe the conceptual framework which is employed for the present study. Emphasis is placed on the interrelation between the three key issues namely resource management, local knowledge and transition.

2.1 Resource management

Due to the dependence on natural resources, users develop a relationship with their natural environment. This is basically due to the fact that the natural environment provides people and animals with food, herbs for medicinal purposes, wood for construction and energy for cooking, as well as with places and ingredients for the performance of rituals and ceremonies. Apart from the use of natural resources, land has to be allocated and controlled in order to avoid conflict and chaos in the society. Consequently, the key management issues discussed in this study are access, control, decision-making and use of natural resources.

These key-issues encompass a number of non-economic aspects which is due to the fact that, for instance, rituals and taboos are involved in the questions of who is permitted to access land or which plants can be used when and where (see Owen 1973:

70). Concerning natural resources on the commonage, emphasis is also placed on the management of water in rituals as well as of herbs and trees for various purposes, i. e. herbal medicine. This includes a discussion about local perceptions of illnesses which usually have a supernatural cause (see Hammond-Tooke 1981: 83-111) so that they have to be cured by traditional healers.

In addition, in many African societies, deceased as well as living members are to a certain extent involved in resource management because of the fact that the belief in ancestors has a bearing on decisions which are taken, more especially during the cultivation period. This also implies that phenomena in the environment are interpreted with regard to their supernatural meaning which triggers a lot of non-economic activities, for instance, the magical protection of land to prevent misfortune. The belief in the supernatural world therefore has to be examined with regard to its influence on "cultural behaviour" (Kearney 1984: 53), in other words on the way local people relate to and interact with the natural environment.

Due to the economic, religious and medicinal usefulness of many natural resources, people regard them as important and attach value to them. This concurs with Mönnig (1983: 147) who concludes that interaction with the environment to produce livelihoods results in a very close association between man and nature. De Beer (1995: 1) gives an example of the religious meaning of land for the tribes of the Northern Transvaal which is still relevant today. He writes that "their ancestors are buried in it and sacrifices are made to the ancestor spirits Soil is also related to the symbolic conditions of 'coolness' and 'heat'. Coolness is regarded as normal, while heat refers to ritual impurity. It is believed that women who are ritually impure (polluted) will contaminate the soil which will result in crop failure".

Apart from that, the way resources are managed is fundamentally determined by social and individual interests. Traditional institutions restrict some of these interests and set norms of behaviour in order to avoid conflict and to maintain the harmonious operation of the social order. In Mapela, appointed headmen (*mantona*) "supervise" the

constituent wards on behalf of the traditional leader of the chiefdom, and traditional healers (*dingaka*) who, through their expert knowledge of herbal concoctions to which others have only limited access, exercise ultimate control over medicinal plants in the area.

Other constraints on resource management refer to limited labour and time of people who permanently reside at Mapela. Women who have to manage rural households in the absence of their migrant husbands and who often have to generate additional income, are to a large extent dependent on other people for the successful cultivation of crops and vegetables. This leads to the growing importance of neighbourhood support, work-groups and hired labourers in agriculture.

It is therefore apparent that, in order to grasp the complexity of natural resource management and to depict the integration of activities and beliefs as perceived by local communities, one has to focus on the relationship between humans and nature at the grassroots level.

2.2 Local knowledge

In the present study, informally acquired knowledge is differentiated from formally acquired scientific knowledge and is referred to as “local knowledge”. It is important for the growing of crops, the collection of firewood, the rearing of livestock as well as the correct performance of rituals and ceremonies for the success of these endeavours. It also plays a role during the preparation of herbal medicine when certain plants have to be chosen and mixed into a healing concoction.

It is generally presumed that local knowledge forms part of a complex array or network of thought and action (see Richards 1993: 72; Gonese 1999: 20) and assumes a role in the relationship between nature, humankind and the extra-human world. This idea is supported by the fact that many agrarian societies relate crop and livestock losses to failures to comfort the spirits which dwell in the natural environment (see Kieft 1999: 18).

Local knowledge is thus not regarded as “science” in the strict sense of the term. In other words, it is not based on the idea of invariable relations between elements in the natural world (see Hammond-Tooke 1981: 96). The testing of facts of the physical world thus plays a minor role. Local knowledge is rather related to questions of causal relationships which are developed to explain the relationship between humans and nature. There are, however, some similarities because local knowledge as well as science emanates from the process to create order out of disorder (see Berkes 1993: 3).

Local knowledge can be part of a shared and therefore general knowledge. It can, however, also be specific, and in this sense only be in restrictive, or limited, use. Such variations can be explained on the basis of gender, religious affiliations, group membership or expertise (see Hoffmann & Eckert 1998: 102). Such “expert” knowledge can be used as a means of influence and power, for instance, if people need advice or help from a traditional healer (see Blaikie et al 1997: 218; Reynolds 1996: 1, 13-15). From an anthropological point of view, local knowledge systems are thus inseparable from the performing actor or acting party.

As was stated above (see Chapter 1, Item 2.1), there are indications that local management strategies cannot be explained as being merely survival oriented. Local knowledge is rather the result of structured experiences and underlying values which are often unarticulated but which, to a large extent, guide the behaviour of people. In other words, the life of every cultural group is influenced by an underlying value orientation (see Bidney 1954; Coertze 1979; Kearney 1984; Horton 1993; De Beer 1995).

Coertze (1979: 1-10), who has a comprehensive view of these value orientations distinguishes truth values, moral values, aesthetic values and utility values. In this study cognizance will therefore be taken of these value-orientations among the Mapela people in their resource management strategies and the connections which these values have with the transmission of local knowledge.

Values are closely interwoven with the worldview of people because they reveal their cognitive idiosyncracies. This concurs with Haverkort and others (1999: 4) who note that a worldview forms the basic concept of life which “refers to the way a certain population perceives the world and cosmos. It includes assumed relationships between the spiritual world, the natural world and the human world. It describes the role of supernatural powers, the relationship between humans and nature and the way natural processes take place. It embodies the premise on which people organise themselves and determines the philosophical basis for intervention in nature”.

Worldviews differ from one cultural group to another so that, in the planning and implementation of development policies, contradicting worldviews are likely to cause misunderstandings and confusion among decision makers at different managerial levels. In South Africa, the fact that “new” ideas which are promulgated by opposition parties and development practitioners in the former homelands are often not coherent and logically connected to the worldview of rural communities, challenges the applicability of political transitions to local conditions. While capitalist ideologies increasingly interfere with deep-rooted community affiliations, the cultural framework has to be adaptive to maintain social cohesion. This, however, raises strong opposition and concern among the majority of people and leads to uncertainty about “wrong” and “right” procedures.

The continuous relevance of values is due to the fact that a worldview develops over generations and is inculcated in children through the process of enculturation and socialization. Ultimately, members of the same society or ethnic group “acquire what may be called primordial or original attachments to a particular way of life, and in the process value that way of life more than other ways” (Howard & Dunaif-Hattis 1992: 492). Values are eventually deeply-rooted in people’s minds and guide behaviour to such an extent that they are relatively resistant to outside influences (see De Beer 1995: 11). This challenges the conventional view that there is a causal relationship between environmental changes and the transformation of knowledge systems (see Reynolds 1996: 1). It can rather be assumed that environmental changes are met with well-known

problem-solving strategies which implies that growing problems do not necessarily cause a shift of behaviour.

2.3 Transition

In April 1994, the interim Constitution was ratified by the ANC dominated government. One major focus was to abolish former provincial and homeland administrations which were created under the apartheid regime.¹⁰ It was believed that an uncompromising acculturation of South Africa's people would ultimately lead to their "Westernization" (Bennett 1995: 1). On 11 October 1996, the Constitution of South Africa was eventually amended by the Constitutional Assembly. A key stone is the Bill of Rights which makes provision for the abolition of racial and gender discrimination (Fagan et al 1997: 93) but which also provides for the right of culture and cultural practices which may, however, not be exercised in a manner inconsistent with any provision in the Bill of Rights. The role of traditional leaders, as provided for in section 212(2), is "to deal with matters relating to traditional leadership, customary law and the customs of communities".

Simultaneously, the provision of services to local communities, the promotion of social and economic development and the promotion of a safe and healthy environment shifts to local governments which must be established "for the whole of the territory of the Republic" (see sections 151 and 152 of the South African Constitution). The hopes and aspirations which rural people have associated with political transitions and the new leaders have, however, not yet materialized and the interim transitional local councils (TLCs) were at the time of the field research not yet in the position to provide services (Fagan et al 1997: 97).

The RDP which planned to uplift rural livelihoods is said to be "incoherent, lacking in vision and pandering too much to dominant free market ideologies" (ibid.). Even worse, the living-conditions of the underprivileged people in the former homelands have

¹⁰ Each province now has its own Constitution and a provincial government which consists of the premier and a number of members of the Executive Council (MECs). The creation of new

deteriorated while the provision of basic needs, such as safe drinking water, have become a daily challenge. Traditional authorities who have already lost some of their managerial powers have become “paralyzed” in the light of the increasingly unpredictable and uncontrollable behaviour of people. This concurs with Adendorff (pers. comm.) who says that the traditional authority system is likely to forfeit managerial powers if people lack basic things like food and water. Following, tension among splinter parties in the former homelands increases. Today, resource management in the study area, which is no longer sustainable, underlies these contextual dynamisms. This challenges the relevance of local knowledge for the establishment and acceptance of natural resource management strategies as indicated above (see Chapter 1, Item 1.3).

3. Methodology

In the following section, the conceptual framework and the local concepts are operationalized for the data¹¹ collection in the field. A literature review preceded the data collection.

3.1 Literature review

The literature review presupposed a selection of relevant publications on the resource management - local knowledge interrelation to determine the theoretical framework. In spite of the fact that local knowledge studies are today well-established in South Africa in many academic disciplines and research institutes, the search for literature was not limited to South African authors. This is due to the fact that, more especially in the field of development anthropology and sustainable resource management, important studies have also been conducted in the USA and Europe (more especially from Dutch and British institutes). In addition to practical-oriented studies, postmodernist discourses with a more critical approach to international co-operation were consulted.

provinces intended not to concentrate on ethnic boundaries, but rather on distinctive economic regions (see Länderbericht Südafrika 1994).

South African “classics”, more especially monographies and narratives about ethnic groups who live in the Northern Province, provided a fairly comprehensive picture about the relationship between humans and nature as well as about concomitant perceptions which, as could be ascertained, still play a role in local resource management strategies. The UNISA library staff kindly helped with the search for relevant articles which have been published in South African journals.

While available literature on resource management issues was, as far as possible, scrutinized and studied, the most important research methodology was the field research. Apart from a description of the methods and techniques employed, additional remarks will be made about the difficulties anthropologists have to face before they can eventually begin with data collection in the field.

3.2 The field research

Sound field research and data collection are the basis of any anthropological study (Tripp 1985: 117). Important techniques which are the hallmark of anthropology and which have been taken over by other disciplines are in-depth interviewing of key informants and participant observation. However, as Pelto and Pelto (1970: 90) remark, there are no exhaustive answers on what to do and in what way. The field researcher therefore has to “design” his or her techniques beforehand, but has to adjust them as required in the field.

The methods and techniques chosen for the field research in Mapela tried to meet the requirements of a holistic approach in order to unravel the value system of people. I thus “worked down” the layers of culture from the observable to the deep-seated and unobservable perceptions which determine the worldview of a cultural group. Important tools were questions asked during discussions and interviews. With regard to a relaxed atmosphere required for such meetings, it was indispensable to first win the confidence of people.

Accordingly, techniques “developed” over a period of time from more general interviews and essay-writing to in-depth topic-related discussions with experts and the recording of maxims. Eventually the information was cross-checked, sometimes by means of falsification to obtain more clarity. For methodological reasons, a pilot study preceded the technical data collection. In Table 1 below, the main qualitative methods which were employed are briefly described.

Table 1
Qualitative methods

Activity	Method	Objective	Analysis
visits, informal introduction	open discussion, informal interviews	pilot study	identification of key resources and user groups
field trips in the area	observation	identification of dominant farming strategies	structured recording
participation (e. g. firewood collection)	participant observation	identification of other resource management strategies	structured recording
meeting with key-informants	in-depth interviews and discussions	identification of the “deep structure” of resource management	interpretative
meeting with school children	essay writing	validation of the transmission of local knowledge	interpretative

Following, the phases of the field research between November 1997 and February 1999 (see Table 2 below) are indicated.

Table 2

Time schedule for the field research

Time spent in Mapela	Phase of the field research
November 1997	Pilot study
December 1997-June 1998	In-depth study
January/February 1999	Cross-checking and validation of the material

The purpose of the combination of different techniques was to elicit a coherent “pattern” of natural resource management at Mapela. It was assumed that, notwithstanding the potentially heterogeneous interests and practices of user groups, comparable and repetitive structures of problem-solving strategies would emerge so that deviations (different ways of behaviour) and their effects could be determined. The major objective of this procedure was, however, to identify common and shared guiding principles of behaviour as well as their underlying rationale.

Apparently, researcher and spokespersons develop a relationship in the field which can, at best, be co-operative or, at worst, be counterproductive. During the time spent at Mapela, great emphasis was therefore laid on transparency and collaboration rather than on “exploitation” of valuable information for my own benefit (see Pink 1998: 11). This was enhanced by the fact that issues of tenure which have been substantially discussed and documented in the present study are a major concern of the local community. Therefore, many spokespersons shared my interest in bringing some clarity in the complexity of local resource management strategies in the light of growing environmental problems and reform processes. Consequently, it was decided that the chieftainness of the Mapela chieftom and school principals as well as other interested

people would get a copy of this study. This concurs with Fernea (1995: 2) who highlights that “handing a group of people a book about themselves may be presumptuous, but it is also a form of recognition, a token of esteem in most cases, a basis for cogitation even if it is wrong in particulars or in general according to local discussions”.

Relevant background information about the dynamics of the field research was mainly taken from the literature and was supplemented with own experiences which had been made during previous studies in Northern Nigeria. The Department of Agriculture, the Department of Environmental Affairs and Tourism and the Department of Water Affairs kindly passed on statistical background information as well as maps of the area. Many discussions held with extension workers (*balemi*) highlighted the difficulty of implementing development programmes at Mapela as envisaged by the government. Mr. Nico Hager who had been the magistrate of the Mokerong district during the time of the field research gave me more detailed information about the administrative situation at Mapela and heightened my interest in indigenous trees which grow in and around the area.

3.2.1 The pilot study

A four week long pilot study was conducted in November 1997 to identify the most vital natural resources which are of significance to the people of Mapela as well as management strategies which are predominantly employed. Groups of resource users such as crop and cattle farmers, traditional healers and women managers were visited. Children and teenagers were approached at school, in the shops and at sports events which many peer groups attend. After a first visit to individual families, appointments were arranged according to the time schedule of spokespersons. The same applied to the finding of an appropriate location for discussions and interviews. This was done to create, as far as possible, a well-known and relaxed atmosphere. Usually, women preferred to invite me to their homes while herdsmen were often accompanied to the grazing land. The chieftainess (*kgošigadi*) of Mapela as well as her closely related patrilineal councillors (*bakgômana*) were regularly met with in their offices at the tribal authority (*mošate*).

After the first arrival at Mapela, one of my promoters accompanied me to the tribal authority and introduced me formally to the chieftainess and her councillors. Later on, organizational matters such as accommodation, field trips, as well as the choice of an interpreter were discussed. At first it was decided to look for accommodation at Mapela itself to enhance better communication and working conditions for sound research. This is due to the fact that many ceremonies and rituals take place early in the morning, late in the evening or, in the case of for instance funerals, during the weekend. Moreover, people open up and speak about their concerns and worries after the daily work is finished. However, the chieftainess had serious reservations about my plans. Alcohol is especially consumed during the evenings and the weekends and she could thus not guarantee my safety. Her advice was accepted and accommodation was organized about 40 kilometres away from Mapela in Potgietersrus. An interpreter had already been appointed by the chieftainess. She considered Eva Mashiane (see Figure 2 below), her secretary as most suitable for the job because she speaks English, Northern Sotho, Tswana and Afrikaans fluently and knows the circumstances at Mapela very well.



Figure 2: Eva, the interpreter, discussing environmental problems with pupils

She has, moreover, a sound knowledge of local practices and beliefs as well as of the transitional process. Her image as a trustworthy person helped immensely during the field research because most of the people accepted us automatically and tried to find some time to talk to us. Eva and I agreed to meet early every morning to plan and

discuss our interviews and fieldtrips. A major reason was to avoid misunderstandings and misinterpretations during meetings or to consult Eva on certain issues. Both of us then had enough time to think about relevant issues on our way to spokespersons. From the beginning it was clear that we had to establish good communication in order to obtain the required information. The sound relationship which soon developed and which continued after I had already left Mapela was not affected by Eva's responsibilities as secretary.

The time of the pilot study helped immensely to get Eva and me to know each other and to talk about everything which aroused our interest. Different interview techniques could be practised and evaluated with regard to their efficiency. The pilot study was thus a month of mutual learning and teaching: I had to learn to be patient and to reserve enough time for others to understand and respond to my questions and to place more value on informal discussions which, eventually, made up an important part of the field research. More especially I had to perfect my "paraphrasing" skills on numerous occasions to make sure that we were not talking about different issues. In addition, Coertze (1993: 78) warned about an "aggressive tendency to ask questions at all costs" and rather recommended the development of skills of "attentative listening" and the practising of rules for constructive dialogue. Such training in communication skills therefore constituted an integral and important part of the ever developing field research. Eva did not have to learn as much as I did but, with regard to interviews, she had to learn to translate information as closely as possible to the original, i. e. "word-by-word". Apart from that, she had to keep extensive narratives in mind and not interrupt the spokespersons. Afterwards, she had to translate slowly for me to note the statements in direct speech to avoid distortions.

The pilot study was also used to get to know the rhythm of daily activities at Mapela, like morning walks to the fields, the regular collection of cattle from different owners by herdsmen, school breaks of children and office hours of councillors. Previously, however, the chieftainess was kind enough to invite the headmen (*mantona*) of the constituent wards to the tribal authority. Here, she officially introduced me and gave me

the chance to explain my work at Mapela. The chieftainess then asked the headmen to pass this information on to the people in their respective wards and to inform them about my visit.

During this first month in the field, key informants could be selected for the major part of the field research which started in January. Contact was also made with governmental departments which work at Mapela and with the magistrate Mr. Nico Hager. During the second phase, he introduced me to Johann Adendorff who had launched a number of agricultural development projects in the former Lebowa. As a freelance agricultural expert he is currently a consultant for a number of institutes in South Africa.

3.2.2 Participant observation

As Coertze (1993: 78) notes “participant observation emphasizes the achievement of *rapport* with one’s informant” which refers to a harmonious and co-operative relationship. Its use as a technique in qualitative approaches in the field varies immensely from one research project to another. This is due to the fact that, since Malinowski’s pioneering contribution in the 1920s concerning the way ethnographic fieldwork should be carried out for the better understanding of people, the extent to how far this technique can go varies from the extremes of “going native” to a visitor’s status in a village who participates in communal activities. This concurs with Pelto and Pelto (1970: 91) who emphasize that “participation is a matter of degree”.

However, a good working relationship cannot be enhanced by observation alone and has to be related to other methods of enquiry (Coertze 1993: 78). Coertze (ibid) therefore regards the technique of observational interviewing as being more appropriate for anthropological fieldwork because it would more aptly describe the extensive use of participant observation. The need to combine techniques was a helpful guiding principle for the present study because it was impossible to fully integrate into the target group by means of participant observation alone.

This was due to the fact that participation in its most exclusive form requires closeness to the people and language competence for accurate descriptions. For various reasons, this could not be guaranteed in the present study. Although I stayed most days from early in the morning until late in the afternoon in the Mapela community, I did not reside in the village as indicated above (see Chapter 1, Item 3.2.1). In spite of learning the basic phrases in Northern Sotho, I was by far not competent enough to follow discussions so I remained dependent on Eva as interpreter. However, through my basic knowledge of indigenous concepts I could direct interviews when informants deviated from the topic under discussion.

Yet, observation accompanied enquiries, and vice versa. This was especially necessary when certain issues were seldom articulated by people in daily interactions. On other occasions, they either did not regard these important or relevant enough to inform me or, they were simply reluctant to publicize their views. One farmer wittily explained this dilemma with the allegory “a beast doesn’t take all the digested food out of the stomach” (*kgômô ga e ntshe boloka ka moka*).

Regular walks were done at different times of the day through the wards, to the fields, the grazing land and the mountains. Striking observations could then be discussed immediately with people whom we accompanied. More significantly, some natural phenomena or practices could only be observed because people who knew my interests made me aware of them.

3.2.3 Interviews and discussions

The aim of the interviews and discussions was to establish recurring patterns of thinking within the great diversity, and to interpret present-day resource management with regard to the underlying perceptions and values. These management patterns enabled the formulation of a systematized paradigm of practices and their legitimation which has to be compatible with people’s motives and priorities. Particularly interesting were those issues which were raised by the community itself. It was ascertained that the information obtained differed strikingly in the beginning which was due to the variation in age and

profession of interviewees (see Box 1 below), but that the pattern gradually took shape as the study developed.

Box 1

Interviewees/Spokespersons

- ◆ young (under 25), middle-aged (25-55) and old women (above 55)
- ◆ young, middle-aged and old men
- ◆ school children and teachers
- ◆ shop owners
- ◆ members of the TLC
- ◆ traditional authorities
- ◆ traditional healers
- ◆ cattle and crop farmers
- ◆ herdsmen
- ◆ government officials

Interviews pertaining to key-words were conducted to record the use and management of residential and agricultural land as well as of other natural resources on the commonage. The following key words served as guidelines (see Box 2 below):

Box 2

Key-word list for interviews

- ◆ Residential land: access, control, establishment of a homestead, use of houses and huts, rituals, decision-making processes and neighbourhood relationships.
- ◆ Agricultural land: access, control, agricultural activities (ploughing, sowing methods, variety of crops and seed, weeding, harvesting, storage), labour groups, social relationships, decision-making processes, rituals and related perceptions.
- ◆ Other natural resources on the commonage: botanical resources (access and control, decision-making and use for the human diet, firewood, timber and traditional medicine), grazing land (access, control and use) and water resources (access, control and uses).

Explanations about the project, the interview itself as well as about the relevance of discussions usually preceded my questions. During an interview, different types of questions were asked in order to obtain more detailed information. Spradley (1979: 60) distinguishes three main types of questions. These are descriptive questions to collect an ongoing sample of an informant's language, structural questions to discover domains

which are the basic units of an informant's cultural knowledge, and contrast questions to discover the meaning of people's knowledge (ibid.). During the field research, these types of questions guided discussions. As the study moved on, however, more emphasis was given to knowledge domains and shared problems.

In-depth interviews were conducted with key informants (see Figure 3 below) and key groups which were identified during the pilot study. Important criteria were co-operativeness, communicativeness, openness, interest in the study and confidence in the research team. Furthermore, it was important to talk to people from different socio-economic backgrounds. Suggestions for potential key-informants were made by headmen who have a sound knowledge of the people living in their wards. During in-depth discussions the underlying rationale as well as skills and knowledge which pertain to resource management were discussed in detail.



Figure 3: Key informants during an in-depth discussion

In-depth interviews often took the form of open discussions. It happened, for instance, that individual experiences with land management were told, or that people revealed their personal view about political transitions at Mapela. Personal difficulties and traumas were dealt with confidentially and were not documented but nevertheless served as important background information. Frequently, informants corroborated their statements with proverbs or idiomatic expressions. Proverbs were, however, never

“tested” because they are directly related to a specific meaning-giving context. Throughout the text verbatim quotations are relied upon to convey the tone as well as the “insider view” of actors in the area.

3.2.4 Essay writing

Two schools were selected during the pilot study for essay-writing on certain issues by pupils. The purpose of working with school classes was to communicate with young people from different socio-economic backgrounds in a relaxed atmosphere in order to elicit attitudes and points of view concerning issues in the study. Contact was made through teachers I met during the pilot study. Together with the teachers it was decided to concentrate on Standard 8 (Grade 10) pupils. Relevant criteria were reliability, mutual understanding and respect. The age of pupils ranged from 15 to 25 years. The class was divided into four to five groups to stimulate (controversial) discussions and to give more confidence to those pupils who were too shy to speak in front of the class.

Questions were asked about relevant issues which developed during previous interviews or about observations which had been made. Often, information which had been obtained beforehand was falsified on purpose to check the local knowledge of pupils on natural resource management. Although roughly based on the key-word list for interviews (see Box 2 above), special emphasis was given to the transitional circumstances at Mapela as well as to the needs and priorities of young people in particular. Some of the essays therefore dealt with attitudes towards co-operative efforts, traditional leadership and control of tribal land.

At first, the school principal introduced Eva and me to the class. Afterwards, the purpose of the study and the assignments were explained by myself in English and were then translated by Eva into Northern Sotho. Each group was asked to appoint a boy or a girl to make notes on the major arguments during the discussion. The essays were written in Northern Sotho and were later translated into English. Before we started, the class only had vague ideas about a European student who would visit them to

discuss issues about trees and fields. This information was disseminated by the teachers.

During the group-discussions, the teacher, Eva and I continuously spoke to the groups to make sure that the questions were clearly understood. During the first meetings it became clear that pupils were not accustomed to working in groups and the open declaration of attitudes and opinions in the school environment. Once they got used to the procedure, however, they gained more confidence and contributed valuable ideas and remarks to the study.

Group sessions lasted about two to three hours. Breaks were taken as required. At the end of a session, sweets were distributed as a sign of appreciation and some time was reserved for pupils to ask questions about, for instance, my personal background or schools in Europe. During this time we got to know each other better and over the period of regular essay-writing sessions, a friendly and open atmosphere emerged. Sometimes when I arrived at school, pupils had already started to arrange their tables and chairs in groups so that we could begin without much delay.

3.2.5 Collection of plant specimens

After key botanical resources had been identified and assigned local terms it became indispensable to collect specimens for scientific identification. Unfortunately, my own scanty botanical background knowledge proved to be insufficient so that support from the magistrate Mr. Nico Hager who identified most of the specimens before they were checked again by the National Botanical Institute in Pretoria was highly appreciated.

Useful literature was the "Field Guide to Trees of Southern Africa" compiled by Van Wyk and Van Wyk (1997), the book from Venter and Venter (1996) "Making the most out of indigenous trees" and Steyn's (1994) "Identification guide for South African acacias". Additional information on medicinal plants was obtained from Dr. Carl Pretorius, Chairman of the Dendrological Association in Nylstroom, as well as from Kobus Pienaar from the Department of Environmental Affairs and Tourism in Potgietersrus.

4. Presentation of the material

Chapter two sets the theoretical framework for the study and deals with contextual studies and relevant schools of thought. The focus is placed on issues of sustainable development, the underlying and meaning-giving context of natural resource management as well as on the role of social science and anthropology in particular in development studies.

Chapter three describes the research setting and gives special attention to the settlement history of the people of Mapela, chiefly succession and disputes. Emphasis is further placed on the cultural setting, the environmental setting as well as the resource management setting. The latter describes the local, the provincial, the national as well as the international management level in which local resource management strategies take place.

The findings of the field research are presented in chapters four to seven. Chapter four deals with the use and management of residential land. It explores issues of tenure, perceptions related to the establishment of a homestead as well as the use of buildings, structures and homestead gardens. Special emphasis is placed on the development of social relations which support the maintenance of individual families. Such relations continue to be relevant because they are based on shared values and principles of reciprocity which are transmitted from one generation to another.

Chapter five discusses agricultural land with regard to the value and importance of crop cultivation, phenomena which are associated with misfortune, problems faced in organizing machines, labour organization and rituals which pertain to the agricultural cycle. It explores the background of the relatively homogeneous pattern of land use in spite of growing socio-economic differentiation.

Other natural resources on the commonage are dealt with in chapter six. The focus is placed on access, control and use of botanical resources, grazing land and water resources. Botanical resources do not only play a role for the regular firewood provision,

they are also important as timber for construction and for the preparation of herbal concoctions which are applied extensively. An example is the use of herbs which are highly valued for their “cooling” qualities so that they are important ingredients in curing people from “heat” which either refers to abnormal ritual states or certain diseases. This implies that, besides practical skills, super-empirical knowledge has a bearing on the use of herbs. The same applies to the use of water resources in purification rites.

The combination of empirical as well as of super-empirical knowledge is explored in chapter seven. It also discusses the transmission of local knowledge as well as the values and priorities of managerial structures. Moreover, it highlights the clashing of principles which are decisive for communication problems between local communities and “outsiders”.

Chapter Eight aims at summarizing the findings and conclusions of the field research. It highlights non-economic aspects of natural resource management which have to be taken into consideration when formulating sustainable development plans and policies.

5. Terminology in the text

Expressions and terms in the vernacular in brackets are given in Northern Sotho throughout the study as this is the spoken language of the people in Mapela. There is, however, one expression which is derived from the Nguni languages. This is the term for ward heads *mantona*. *Mantona*, and its singular form *induna* (*ntona*), are in current use in Mapela and therefore also appear in the text.¹² Northern Sotho expressions can be checked in the glossary (see Appendix A). The spelling was cross-checked in the “Groot Noord-Sotho-Woordeboek” compiled by Ziervogel and Mokgokong (1975) but the final corrections were kindly made by Prof. S. M. Serudu of the Department of African languages at the University of South Africa. There are a few expressions which are derived from Afrikaans, for instance *veld* or *kraal*. Such terms are also explained in the

¹² In fact, the Langa of Mapela speak of *manduna*. However, since the Northern Sotho orthography is used in the thesis, *mantona* is used throughout.

glossary. The bilingual dictionary from Bosman and Van der Merwe (1984) was used in this regard.

"When a knowledgeable old person dies, a whole library disappears" (African proverb).

Chapter Two: Contextual studies on resource management and local knowledge

1. The development discourse

This chapter raises some important opinions which have influenced the discourse on development and underlying cognitive premises. The discussion serves as a general theoretical framework for my own reflections on resource management and local knowledge.

1.1 "Nature" and "environment"

Since human beings use natural resources in order to survive (food, building material, energy), the relationship between humans and nature is dynamic. Discursive works have been provoked by Francis Bacon (1562-1626), one of the pioneers in the natural sciences. According to him, human beings in the Middle Ages considered themselves as having the right to use nature as they wished. This led to what Shiva (1992: 208-10) calls the cumulative desacralizations of nature which transformed the "living and nurturing mother to inert, dead and manipulative matter". A comprehensive historical overview of this relationship between humans and nature was written by Santangelo (1992) in his article "Culture, technology and the relation between man and nature".

With the rise of ecology as a discipline, alternative approaches where nature is dissected into its smallest parts and which focus on interrelationships making up the whole system oppose Bacon's heritage (Ophuls 1977: 231). Increasingly, the term "environment" replaced "nature" in order not to alienate humans from the latter. Sachs (1992: 26pp), however, criticizes the environment label which is given to the natural world and which makes all concrete qualities disappear and therefore restricts nature to a passive and lifeless role. Milton (1996: 32) presents alternative ways to understand

the role of the environment. Her concepts range from active roles like “capricious” or “fragile” to more passive ones which are “more amenable to people” (ibid.).

Harmsworth (1998: 3), for instance, states that the Maori regard themselves as “the guardians of all natural resources”. They feel intimately associated with the environment through ancestral links, and their dependence on it for food, shelter and medicine. Ranger (1989: 218-19) showed that the Matabele of Zimbabwe have other ideologies of conservation which reflect their view that nature is sanctioned by history, religion and custom. In this study, the term “nature” is used with regard to its cosmological meaning for the people at grassroots level while the term “environment” is conceptualized with regard to policy guidelines and development planning.

1.2 Resource management and local knowledge

The literature on natural resource management and local knowledge for development purposes is strongly influenced by three aspects which have dominated the approach of Western agents, scientists and practitioners for decades. This clearly demonstrates political implications and close links to political ideologies which eventually made the development discourse a political endeavour (Abram 1998: 11-13).

Firstly, it has long been an undisputed fact that local management strategies in rural Africa are distinguished by their high degree of adaptation to ecological conditions and their participatory ways of knowing nature. Furthermore, local techniques are often tested, locally available, cheap and effective. This led to a vast amount of literature on local knowledge, practices and skills to access and evaluate the information (see Berkes 1993: 2; Lalonde 1993: 56). Particular interest was expressed by scholars in Great Britain and in the United States (see Atte 1992: 2). In areas such as food security, human and animal health or natural resource management, local knowledge was subsequently operationalized for the planning of project designs predicated on the fact that most of the formal approaches had failed.

Secondly, the problematic use of scarce resources reflects a crisis for people who are actively involved in resource management. This asks for comprehensive research on structural conflicts at local, national and global levels (see Mazur & Titilola 1992: 274; Famoriyo 1986: 22; Schmidt 1998: 42). The euphoric intellectualization of local knowledge and its technical usefulness is therefore critically reviewed from different perspectives (see, for instance, Richards 1993).

Ultimately, as the Indian scholar and environmental activist Shiva (1992: 207) points out, nature's transformation into natural resources had to be followed by a transformation of culturally diverse people into skilled human resources. The sustainable management of natural resources thus became a key concept for development activities only after the uncontrolled human destruction of nature which had resulted in extreme resource scarcity (ibid.). This realization challenged social scientists to thoroughly investigate the problem of culture change, grassroots resistance and co-operation, as well as environmental limitations and potential. Yet, a number of projects which follow this premise still ignore the qualitative approach of the social sciences and rely rather on quantifiable and computable data. This implies that these approaches do not always agree on how to achieve sustainable development and this leads to a continuing debate.

1.2.1 The rise of "sustainable development"

After the collapse of modernization theories which were primarily designed for community development in the "Third World" countries in the early 1960s and which imposed Western thoughts and technologies on the disadvantaged and poor people without the desired effect, the demand for reforms altered the development discourse. New priorities and goals had to be defined by governmental and newly formed non-governmental organizations (NGOs).

A related trend of the 1970s, which developed in the face of growing international interest in environmental catastrophes, was primarily advocated in an ecocentric and "anti-modernist" (Sachs 1992: 30) manner by ecologists and reformists or revolutionary

environmentalists, and focussed on the conservation of nature (Milton 1996: 74-75). The public protests and demonstrations of activist movements eventually grew stronger and gained political influence, facilitated through their access to financial means and scientific methods (see Abram 1998: 9; Milton 1996: 78pp).

In 1972, "biodiversity conservation" became a consolidated development need for the survival of the planet earth which was emphasised during the United Nations Conference on the Human Environment in Stockholm. This conference marked "a crucial turning point in the crusade to crystallize mankind's thinking about his relationship with the environment" (Dorm-Adzobu 1980: 9). According to Sachs (1992: 27) "the Stockholm Conference was the prelude to a series of large UN meetings throughout the 1970s". Here, local issues and concerns were increasingly put into a global ecosystemic perspective by scientists (ibid.).

In the development arena, it was increasingly realized that local knowledge, as opposed to Western scientific knowledge, has to be a major component of local resource management strategies since people in all cultures had developed ecologically sensitive ways to cope more or less effectively with their natural environment for survival (see Beuster 1985: 33; Fox & Norwood-Young 1988: 25; Mazur & Titilola 1992: 279; Jerome 1998: 8). These strategies are based on a close dependency on natural processes and often involve certain ritual and spiritual concepts (see Huizer 1994: 59; Harmsworth 1998: 3; Crandall 1998: 107pp).

Various terms occur to describe local knowledge as "knowledge in use" or as a "social product" which refers to the way people interpret and apply meaning to their experiences. A comprehensive overview on the most commonly used English expressions and their respective implications has been compiled by Antweiler (1995: 24). A critical discussion on the definition has also been published in the "Indigenous Knowledge and Development Monitor" (Berkes 1999: 19).

A great deal of inspiration was derived from the Stockholm meeting (Dorm-Adzobu 1980: 9). One year later in 1973, the United Nations Environmental Programme (UNEP) had been established. In addition, significant publications were the "World Conservation Strategy" in 1980 which, for the first time, dealt with the close interaction between nature conservation, resource management and development (De Beer 1997: 229) and the "Report of the World Commission on Environment and Development" (the so-called "Brundlandt Report") in 1987 (Sachs 1992: 26-30). In the latter, living resource management for "sustainable development" was promoted, which was actually the first time that the latter phrase was widely publicized (see Fakir & Cooper 1995: 5; Barrow 1995: 11; Rees 1990: 18; Sachs 1992: 26-30). Major objectives were the linking of the environment and economic development as one domain ("no development without sustainability", Sachs 1992: 29; also see Schmidt 1998: 43), and the long-term availability of natural resources (Sachs 1992: 28).

In addition, it was not only the sustainable use of natural resources, but also their active conservation which was advocated. In the beginning, however, the premises were based on the assumption that the poor were the agents of destruction and therefore had to be targeted in an attempt to enhance environmental awareness. Ultimately, local communities were still reacting objects rather than acting subjects of sustainable strategies. This concurs with Sachs (1992: 29-30) who argues that "Brundtland thus ends up suggesting further growth, but not any longer, as in the old days of development, in order to achieve the happiness of the greatest number, but to contain the environmental disaster for the generations to come".

It was only in the 1980s and 1990s that the involvement of local techniques and skills as a major component of bottom-up strategies and participatory action research increased (see James 1991: 79; Falloux & Talbot 1993: 248; Kakonge 1995: 19, Huizer 1994: 68-71; Scoones & Thompson 1994: 6pp). One of the aims of participatory approaches of international donor agencies in planning was to elicit local knowledge "to provide a common ground for communication, thus creating a more effective dialogue between rural people and external development agents, and to help make plans more

appropriate for the local situation” (Waters-Bayer & Bayer 1994: 8-9). This concurs with De Sardan (1988: 217) who calls for more interactionist, contextualist and strategic approaches. Other related concepts which influenced the local knowledge debate were democracy, community, equity, empowerment and decentralization. These additional development domains were regarded as being closely linked to sustainability. Development experts assumed that, through their populist implications, these concepts could be used to strengthen the co-operation of local politicians, social movements, and civil societies at large.

During the Rio Summit of the United Nations Conference on Environment and Development (UNCED) in 1992, the global action programme “Agenda 21” with its 27 principles officially marked the new practical tendency for all the involved governments, donors and NGOs in their promotion of environmentally sustainable development (ESD) world-wide. Here, the yardsticks of the biodiversity convention were defined and finalized. However, the political implications of the convention provoked some criticism of scholars and activists in terms of the predetermined way it dealt with “nature” and “natural resources”, especially in the “Third World” countries (Shiva in Jerome 1998: 8). According to Jerome (1998: 8), the natural resources in the “Third World” countries were treated as “raw nature” which were exploited by unskilled and ignorant indigenous people and which are not economically valuable enough to be actively protected.

Eventually, an action programme for the 21st century was passed by 170 member states. The objectives focussed on the gradual improvement of the natural resource base in terms of biodiversity conservation and sustainable management. Sustainable development as a key concept now had to be “people-centred, environmentally sound and participatory in nature” (Kakonge 1995: 19). A commission for sustainable development (CSD) was founded by the UN which supervised the implementation of Agenda 21. In the same year, the United Nations Educational, Scientific and Cultural Organization (UNESCO) assembled trained scientists and important thinkers from various backgrounds to discuss the question of whether culture was the last frontier in development. In the year 1995, Dr. Javier Perez de Cuéllar, the Secretary-General of

the United Nations, edited the publication "Our Creative Diversity" which is the collective response of this discussion.

The concept of sustainability as a development priority developed into various new strategies (sustainable growth, sustainable management) and approaches (participatory, bottom-up) to combat the depletion of relatively irreplaceable natural resources (water, forestry, arable land) in the "Third World". The aim of these new approaches was that they had to be applicable and policy oriented. The slogan of "rural development participation" promoted the active involvement of the local people as the so-called "target population" in decision-making processes (Waters-Bayer & Bayer 1994: 6).

Practitioners then concentrated on the maintenance of biological diversity, pest control, recycling and fixation of soil nutrients and soil and water conservation strategies (see Lalonde 1993: 58). Simultaneously, the academic focus ranged from gender studies (see Fruzzetti & Östör 1990; Fagan et al 1997), household analysis (see Bryceson 1995; Bonvillain 1995) to ecological evaluations (see Berkes 1993: 2).

In the 1990s, Mazur and Titilola (1992: 265) proposed a model to comprehend the role of local knowledge systems (LKS) in achieving sustainable agriculture in Africa as a development priority. Accordingly, development is defined as supporting activities already initiated by farmers and rural households themselves rather than something done for or to them (*ibid.*). Real development should then "emerge from such an implementing process within a knowledge base viewed as legitimate and useful by rural people" (Mazur & Titilola 1992: 277). This definition presupposes the following conditions: firstly, that farmers by way of innovation and experimentation have already initiated a development process which is an improvement of conventional strategies. Secondly, the need to reach consensus among the involved participants from inside and outside the rural setting on "development" premises is of paramount importance. This is due to the fact that related perceptions can vary tremendously across cultures and communities. Yet, for the success and legitimation of development projects, the views of

local communities have to be compatible with the ideas of practitioners and other developmental experts. Lastly, implementing processes need to consider the concerns and problems of rural people. Not everything that is prioritized by “outsiders” meets local people’s requirements.

1.2.2 Local knowledge research

Today, development agencies right across the ideological spectrum, from large capitalist Western donor agencies to left-wing NGOs consider participatory development as an established orthodoxy in their policy guidelines (Mayoux 1995: 235). The practical oriented approach influenced academic disciplines which focussed on local knowledge while findings also found their way to practitioners in the field (see Dorm-Adzobu 1980; Brokensha et al 1980; Mazur & Titilola 1992; Mersman 1993; Baber 1996; Ngqaleni & Makhura 1996; Levin 1996; Fényes & Meyer 1996). A comprehensive overview on various local knowledge disciplines was compiled by Warren and others (1993).

Hopkins and Mehanna (1996: 1) draw attention to the danger of the simplistic link “if we know what people think, we know how they will behave”. Bearing in mind that local knowledge related to resource management can help determine where to plant or what to graze at which time, one should be careful of the wrong premise that this knowledge is static and reliable in the sense that it is always applicable for the design of a sustainable resource management strategy (see Mazur & Titilola 1992: 274). The fact that an accumulation of local knowledge studies can never be the ultimate and only remedy for complex environmental problems is today one of the guiding assumptions for research at grassroots level (see Treurnicht 1997: 94).

World-wide, more than 30 Indigenous Knowledge Resource Centres have been established where researchers analyse the role local knowledge plays in participatory approaches to sustainable development. In 1993, the newsletters of the Center for Indigenous Knowledge for Agricultural and Rural Development (CIKARD) at the Iowa State University were superseded by the “Indigenous Knowledge and Development Monitor”, edited in the Netherlands under the auspices of the “Centre for International

Research and Advisory Networks” (CIRAN; see Berkes 1993: 2). The Monitor provides everyone who has an interest with a balanced choice of articles on research (studies, methodology, co-operation and organizational aspects), theory, practice (dissemination of research results in the preparation and implementation of development projects) and policy (indigenous knowledge as an area of interest and a policy instrument for donors).

The dissemination of further information in the centres, databases and conferences aims at stimulating national and international co-operation. In Africa, seven of these centres have been established, including one in South Africa which is the “South African Centre for Indigenous Knowledge” (SARCIK; see Normann et al 1996). Two other national research institutions in South Africa deal with environmental management (De Beer and Vorster 1997: 3). These are the “South African Council for Scientific and Industrial Research” (CSIR) and the “Human Sciences Research Council” (HSRC) which is now incorporated into the “National Research Foundation” (NRF). Indigenous knowledge systems also form part of the research focus areas of the NRF.

In 1999, a group of academics and practitioners founded a new forum to discuss experiences with rural communities on the basis of indigenous knowledge. This programme is called “Comparing and Supporting Endogeneous Development” (COMPAS) and, under its auspices, a newsletter is published which targets the exchange of experiences in cosmovisions, sustainable land use and endogeneous development.

Notwithstanding the positive trends in research and project planning, the rhetoric of project designs often lacks the desired substance in practice. The World Bank boldly draws a “Year 2025” scenario which makes the following prognosis: “In Africa 2025...the basic needs of populations are met, the population rate is moving toward stability, and scarce resources are used wisely” (Grève 1995: 3). However, in 1997, the Agenda 21 of the UNCED was critically reviewed by the CSD in the general assembly of the United Nations. Thereafter, it was concluded that most of its strategies had, to a large extent, not materialized and had lacked implementation.

1.2.3 Local knowledge in development practice

To facilitate a serious dialogue with those who create and use local knowledge, Huizer (1994: 56) asks: "Can Westerners really understand indigenous knowledge systems without adopting - or at least coming seriously to grips with - the broader (politico-religious) worldviews of which these systems form an integral part"? Because of the fact that most of the approaches to sound and integrated development plans which claim to involve local communities in decision-making processes remain unsatisfactory (see White 1987: ix; Barrow 1995: 2; Antweiler 1995: 20; De Beer 1997: 231; Gardener & Lewis 1996: 26-29), this is a legitimate remark. Schmidt (1998: 42) concludes that "Cultural Anthropology is one of the greatest neglected disciplines in development". Jerome (1998: 9) concurs with this view and criticizes the top-down social construction of natural resources by Western donors which excludes the wealth of knowledge on resources of indigenous people and which therefore has to be regarded as the core of political struggles over biodiversity. Full schedules, pressure from donor agencies, a lack of interest to focus on the deep structure of human behaviour and, of course, the lack of a general and intelligible methodology lead to such impasses.

As a result, critical voices stirred up the conventional design of development projects which concentrate on the "easy-to-mobilize well-off farmers" while the disadvantaged and poor people who lack access and resources to partake are ignored (Elwert & Bierschenk 1998: 100). Mazur and Titilola (1992: 278) remark that in practice "there is virtually no recognition of the value of local knowledge beyond recognition that 'modern' technologies must be better adapted to local conditions through on-farm testing".

Detrimental effects of the limited focus of development projects on local knowledge are, for instance highlighted by Hoskins (1981: 27; also see Ki-Zerbo 1981) who revealed that women in Burkina Faso obviously had a wealth of knowledge about the place of valuable trees in their environment but that this had not been considered in the design of policies and programmes. Instead, scrub-bush land "that formed the basis of their emergency supplies" had been cleared to plant fast-growing exotic species which seemed to be more viable to the "developers" (ibid.).

Ferguson (1990), in his study on a World-Bank project for enhancing productivity in Lesotho, describes that the false premises of so-called development experts of local perceptions and ideas are likely to result in misconceptions, misunderstandings and even deteriorating conditions. Larsen (1998: 25-26), found out that villagers in Malaysia used the concept of development synonymously with construction of infrastructure and modern buildings and therefore held the notion that development has visual physical characteristics. The Chipko ("Embrace a tree"¹³) movement in India¹⁴ is perhaps the most prominent example of the potential adverse effects of misconceptions about local knowledge and development (see Hoskins 1981: 30). Referring to Chipko, Sachs (1992: 34) points out that "an ecology that aimed at the management of scarce natural resources clashed with an ecology that wished to preserve the local commons".

As can be concluded so far, at least two groups (the "developers" and "those to-be-developed", Hobart 1993: 2), confront each other with different ideas about the desired outcome of development processes (see De Sardan 1988: 217, Arce & Long 1993: 206). The situation is even more dramatic if the communication gap between grassroots and Western development ideologies cannot be overcome as projects move on (see Malan 1988: 61; Sachs 1992: 33; Barnes 1996: 29; Pink 1998: 11). Abram (1998: 4) refers to an "epistemological difference" which has to be analysed to solve conflicts (see Chapter 1, Item 1.3). This concurs with Hobart (1993: 2) who states: "What is signally absent in most public discussions of development are the ways in which the knowledge of the peoples being developed are ignored or treated as mere obstacles to rational progress. In order for them to be able to progress, these people have first to be constituted as 'underdeveloped' and ignorant. Conversely, without such underdevelopment and ignorance, the West could not represent itself as developed and possessing knowledge". De Beer (1995: 1) therefore advocates more consideration of cosmological values in the formulation of development policies.

¹³ "Chipko" is a Hindi word meaning "hugging". In fact, women virtually hugged trees to prevent their being cut down for commercial purposes.

¹⁴ The Chipko movement has been described, for instance, by Shiva (1995).

Today, studies which have been conducted world-wide demonstrate that a blending of scientific and local ideas can be successful if the necessary platform or forum is provided (see Green 1996: 51pp; Barnes 1996: 29pp). During the 1980s, for instance, the Kenyan government installed the "district focus strategy" which means that district development committees identify projects and submit requests for funding in the headquarters in Nairobi. Due to the participation of local communities in decision-making the strategy has stimulated "enormous enthusiasm and goodwill in development efforts of each district" (Omara-Ojunga 1992: 36). A more prominent example from Southern Africa is the CAMPFIRE programme in Zimbabwe which, as part of a governmental devolution process, aims to place the management and benefits back into the hands of local rural communities (Lalonde 1993: 60).

In South Africa, however, the black elite (politicians and bureaucrats) regard local customs and beliefs as a legacy of the apartheid era which are directly related to the apparent "backwardness" of rural communities in the former homelands. Once more, development issues are highly politicized so that attempts to restore natural resources rather divide than unite people at grassroots level. The perception that natural resources can be "owned", "reformed" and "claimed" clashes with the perception that nature is a living system which has self-generating capacities.

2. The anthropological discourse

In this section relevant theories which have been developed in the anthropological discipline to understand the human-nature interrelation and to interpret "cultural behaviour" are discussed. It further deals with an important sub-discipline, namely development anthropology, which mediates between local communities and development practitioners.

2.1 Cultural ecology, ecosystems theory and new ecological anthropology

From an anthropological viewpoint the interest in local and traditional techniques and skills is by far not a novel realization. The first painstaking documentations of local practices and knowledge were written as early as the 1930s by Audrey Richards in her book "Land, Labour and Diet in Northern Rhodesia: An Economic Study of the Bemba Tribe".¹⁵ Today, Richards is regarded as the pioneer who had first started the local knowledge discourse in Anthropology.

Other anthropologists like Wissler and Kroeber reduced the environment's function to a mere passive or possibilistic one (see Horowitz & Little 1987: 2, Milton 1996: 41-42). Hence, prominent contributions on the issue of a dynamic environment were not made until the rise of "Cultural Ecology" (see Steward 1955) and the related cultural ecological approach "Cultural Materialism" (see Harris 1979) after the 2nd World War. New insights then opened the field for an ecosystemic approach in cultural anthropology which is no longer based on an anthropocentric worldview.

Here, a systems approach is developed which is based on ecological premises to investigate the interplay of culture and ecology as human populations adapt to their ecosystems (see Milton 1996: 43-45; Sponsel 1997: 137). Among the more prominent predecessors of Steward who developed these new approaches are Vayda and Rappaport (see, for instance, 1968). In his book "Pigs for the ancestors", Rappaport (1968) eventually bridged humanist and scientist approaches and introduced *cybernetics* in Anthropology (see Homborg 1998: 3). According to Geertz (1970: 3) who stresses this new dynamism in an article on the ecological approach in Anthropology "the concept of an ecosystem thus emphasizes the material interdependencies among the groups of organisms which form a community and the relevant physical features of the setting in which they are found, and scientific task becomes one of investigating the internal dynamics of such systems and the ways in which they develop and change".

¹⁵ Richard's findings were re-assessed by Moore and Vaughan (1994) in their publication "Cutting down trees. Gender, nutrition, and agricultural change in the Northern Province of Zambia, 1890-1990".

Due to the influences of the mass media, labour migration and the concomitant introduction of “Western” values and practices from external agents, resource management is today no longer an exclusive matter for local communities who utilize nature in remote places where they remain unaffected from the greenhouse effect, commercial logging or environmental pollution. Several levels of authority which claim rights on local ecosystems are increasingly recognized (Gezon 1997).

Kottak (1999), an American anthropologist, therefore places emphasis on the re-definition of key concepts such as “ecological population” and “ecosystem” for a more progressive approach in ecological anthropology. Kottak’s (1999) article “The New Ecological Anthropology” first of all allows for the placing of ecological issues in a wider context than the systemic approach of the 1960s. Accordingly, new ecological anthropology is located “at the intersection of global, national, regional, and local systems, studying the outcome of the interaction of multiple levels and multiple factors” (Kottak 1999: 23; also see Biersack 1999: 8pp). This concurs with Ellen (1986: 9) who points out that many so-called “traditional” societies have participated in exchange systems which linked them to other groups and environments for many millenia.

In fact, what Kottak advocates is a more general change of anthropological research from single communities to recognizing linkages and to acknowledging the impact of differential powers on local entities (*ibid.*). The major aim of this approach is to mediate socially sensitive and culturally compatible strategies for achieving biodiversity conservation (Kottak 1999: 27). The assumed role of an advocate is also essential for development anthropologists. However, the latter build on different premises and infrastructures as presented in the following section.

2.2 Development anthropology

During the last decades, the ambivalent relationship between anthropologists and government sponsored development (especially in the United States and Great Britain) has changed significantly. During the 1950s, anthropologists were mainly employed to

diffuse improved technology by overcoming resistance among “underdeveloped” communities. In the 1960s, most anthropologists in the United States left the Agency for International Development (AID) since so-called “big-push” (mainly to drive up the gross national product) and “trickle-down” economic theories largely ignored investment in the rural areas (Hoben 1997: 113).

In the 1970s, at the time of a severe environmental crisis in West Africa - the Sudano-Sahelian drought (1968-1974) - and the failure of top-down policies, anthropologists who believed in the practical value of their discipline re-entered the development discourse through the foundation of the “Institute of Development Anthropology” in the United States (Horowitz & Little 1987: 3; also see Hoben 1997: 114). Here, the importance of local knowledge for the development of “Third World” countries started to gain an in-depth interest. After 1973, following the amendment of the Foreign Assistance Act (1961), attention was especially given to Sub-Saharan Africa when the United States Congress initiated a ten-year period during which projects had to replace top-down and capital-intensive interventions (Salem-Murdock et al 1990: 1). The dynamics of African production won anthropological interest on the height of the farming systems research approach in the 1980s (see Guyer 1986: 92pp; Nicholson 1994: 69). The focus of economists which long regarded rural farmers as reactive rather than active, now shifted towards more dynamic approaches in the field of risk management and coping with economic vulnerability (see Cashdan 1985).

Meanwhile, a number of influential publications with a strong anthropological focus on local knowledge systems (see Brokensha et al 1980; Chambers 1983; Chambers et al 1989) which have had an enormous impact on experts working in this field, as well as on the academic world appeared. Chambers (1983: 82-83), in particular, has critically reviewed most common development appellations and found them problematic. The (power-) relationship between anthropologists and institutions has recently been discussed by Gardener and Lewis (1996).

The idea of bottom-up participation as opposed to top-down modernization has challenged the anthropological discipline to make some adjustments. Therefore, in order for practitioners to take cognizance of the contributions anthropologists are able to make in the discourse, the cultural aspect of planning strategies and management schemes had to be emphasized. This includes an investigation of the meaning giving context of people. As part of multi-cultural and multi-disciplinary project teams, anthropologists are then asked to participate in communicating “insider views” (see Christensen et al 1997: 3; Salas & Tillmann 1998: 60).

During the late 1980s a critical perspective stirred up the anthropological discipline (see Martin 1998: 40; Myer 1998: 13). Contributions from “development deconstructionist” and postmodernists Escobar (1995) and Ferguson (1990) marked an epistemological challenge to development anthropology. In 1993, “An anthropological critique of development” was edited by Hobart. Herein, European anthropologists examine the relationships between indigenous and western knowledge and strongly argue against the separation of theory and practice.

Eventually, by deconstructing its dominant concepts “by deploying a Foucauldian analytics and by treating development as a discourse” (Martin 1998: 40) a design for an approach to foster cultural diversity without falling in the trap of a mere cultural relativism is created which asks for a critical anthropological view (Myer 1998: 13). Being critical in development anthropology means not to serve the interests of cultural homogenisation and modernisation without thorough reflection. Lewis (1998: 28) describes this as the “anthropological advocacy” which “may entail helping to mobilize concern and support in ecological and political emergency”. The relationship between a particular ethnic group and the anthropologist should therefore be firmly dialogic (ibid.).

Today, the work of an anthropologist in the development arena is considered as one of “an interlocutor in the process of expression and understanding of people’s vision of the future and past, a confident and engaged professional for the empowerment of cultural diversity as a legitimate human right” (Salas & Tillmann 1998: 62). Furthermore,

anthropological contributions should be translated for donors and organizations to guarantee a high degree of transparency.

The issue of the “ethnographer-informant-colleagues-other media” relationship is problematized by Christensen and others (1997). Ethnographers often fear that “teamwork would seem to threaten the loss of the engaged, one-to-one relationship between ethnographer and informant which spawned the great monographs and our resulting passion for the discipline” (1997: 4). Schmidt (1998: 43) argues that anthropology has so far failed to make a significant impact on development theory and practice because anthropologists were too long engaged in the study of people and cultures fixed in the colonial and pre-industrial past. Gudeman and Rivera (1990: 4), advocate a more lateral form of anthropological, intellectual kinship (see Schmidt 1998: 43; Rhoades 1986: 62). This concurs with Sponsel (1997: 139) who notes that anthropologists need to reach an audience beyond the profession itself.

However, although anthropologists have almost an obsessive concern about “being marginalized in the development discourse”, they are sometimes still reluctant to share their experiences with academics and practitioners from other disciplines. This, amongst others, leads to their image of being romantic while dreamwalking through the fields.

3. The “African” situation

3.1 Synthesizing local and scientific knowledge

Africa south of the Sahara is in serious trouble regarding the overexploitation of natural resources and desertification which is increasingly a threat to agrarian societies.¹⁶ Despite concerted efforts of more than 80 000 technical experts (Edwards in De Beer 1997: 231) the situation has deteriorated rather than improved. This concurs with Kirk (1999: 5) who notes that “a ‘green’ revolution comparable to the experience in Asia was never encountered in Africa, despite the efforts of international agricultural research

¹⁶ The dramatic situation in Africa is described by Timberlake (1986) in his book “Africa in Crisis. The causes, the cures of environmental bankruptcy”.

organizations". Malan (1988: 61) highlights the difficulty of reconciling differing ideologies and premises in the development process. In line with this, a number of relevant studies reveal that the root of the problem is ignorance of local perceptions, beliefs and worldviews in development planning (see De Beer 1997: 231). This presupposes the interpretation of human actions and reactions "from below" and the required compatibility with development projects.

Since the 1980s, authors have therefore started to pay more attention to local problem-solving strategies, managerial activities and tenure issues with regard to sustainable development. Magi (1989), for instance, explores the Black perspective on natural recreation resources. Shipton (1984: 618), argues that pressure on land results in a descent-based system of organization rather than a territorial, or locality-based one. This concurs with James (1987: 10, also see Delius 1983: 74) who states that inheritance practices count more than statutory land acquisitions in arid regions. Clarke (1992) and Cross and Friedman (1997) discuss land tenure by focussing on gender aspects. Lalonde (1993: 55) emphasizes the need to access "indigenous risk adjustment options" to protect indigenous societies and describes some positive management practices in rural Africa. Schultze (1998: 16) highlights the implications of natural and social structures on local knowledge systems.

Yet, only a few comprehensive studies on the deep-structure of resource management are available. In his book "Agricultural Revolution - Ecology and Food Production in West Africa", Richards (1985) studied the association between soil classes and the selection of rice varieties among local farmers in Sierra Leone. Another example is the use of local perceptions in crop sociology (Van der Breemer 1989). Van der Breemer (1989: 265pp) found out that the Aouan differentiate between the forest (*bo*) and the village (*kro*) which are closely connected to the earth goddess *Assie* and the god of heaven *Nyamien*. He shows that people's perceptions of the beings who reside in the forest (wild vegetation, animal life and forest spirits) and in the village (human life and reproduction) determine transgressions and the whereabouts especially of women: "The *kro* is the place where human life should be propagated as the *bo* is the place where

wild plants and animals should reproduce. ... Man has to rely on *bo* and his beings for his physical subsistence. ... Permission to go and live in a place and reproduce there is only given after this place has been marked as *kro* by the ceremonial planting of the tree” (Van der Breemer 1989: 271).

Van der Breemer (1989: 274) concludes that the Aouan people live in harmony with nature which is enforced by the stimulus to maintain both *bo* and *kro* as integral parts of the world. The rearing of sheep instead of goats is due to the fact that the latter tend to damage *bo*: “The ban on goats can be interpreted as an imperative to maintaining the differences of forest and village” (ibid.). Rice, on the other hand needs a great deal of sunlight for its cultivation and would require open spaces instead of a dense forest vegetation. Therefore, the Aouan promulgate a ban on rice to maintain *bo* and *kro* and hence the internal order of people (ibid.). Van der Breemer’s article exemplifies that specific sedentary patterns as well as certain restrictions and taboos on crops and animals cannot only be explained by “a neat correspondence between ethnicity and ecology” (Kottak 1999: 23), but that inculcated beliefs and values which are generated in a specific socio-cultural environment have to be analyzed with regard to their practical implications for resource management.

Local knowledge and grassroots perceptions also play a role in the transfer of technology to local communities in Africa. Mazur and Titilola (1992: 277), for instance, have compiled a number of studies for the successful combination of farmers’ knowledge and modern technologies. Examples are taken from a rice irrigation project in Malira, Niger where products of the Neem tree were used as bio-pesticides, also Kenya where local and modern practices were used to minimize postharvest losses and Rwanda where local knowledge played a role in reducing deforestation and soil erosion. Other authors have included the participatory approach by means of a methodological shift. Harmsworth (1998: 3pp), for instance, shows how indigenous values can be computed through geographic information systems (GIS) for more efficient land-use planning. Gündel (1998) focusses on local perceptions in participatory technology and innovation development.

Only scant attention has so far been given to the transmission of local knowledge. Most of the studies deal with passing on expert knowledge to apprentices. Reynolds (1996: xxxi), for instance, in her study on "Traditional Healers and Childhood in Zimbabwe" explored the nature of the "tutorial relationship" in the learning process. According to her analysis, the quality of the relationship between the "knowing" and the "learners" was essentially "phrased in terms of tenderness, care, attention, laughter, challenge, command, and demand" (ibid.). Instead of a formal learning structure or apprenticeship, the extensive knowledge of plants is acquired in childhood "through learning and living with healers" (Reynolds 1996: xxxvi). A few studies revealed that the transmission of local knowledge is not necessarily unstructured, arbitrary and individualistic (see, for instance, Ruddle and Chesterfield 1977). According to Ruddle (1993: 22), seven aspects of knowledge transmission have to be considered. These are age, gender, sequencing, location, duration, reinforcement and teaching labour.

3.2 Relevant studies from South Africa

Only a few anthropological sources from the first half of the previous century deal with the meaning-giving context of resource use in South Africa. Exceptions are, for instance, the studies of Schapera (see, for instance, 1941¹⁷) or Krige and Krige (1943¹⁸). Detailed studies only emerged in the 1950s with the rise of cultural ecology and the specification of anthropological issues. Local knowledge of people was, however, still only marginally touched upon. In the light of resource degradation in the former homelands, anthropological research was largely based on the assumption that the sustainable management of natural resources was virtually non-existent among Black local communities so that their cosmological values had to be adjusted to Western standards in order to implement management plans effectively (see Malan 1988: 61).

¹⁷ Also see Schapera's book "Rainmaking Rites of Tswana Tribes" (1971) which bases primarily on fieldwork which he conducted between 1929 and 1943.

¹⁸ In "The Realm of the Rain-queen", Krige and Krige (1982: 47pp., first published in 1943) refer to 500 plants which are used by the Lovedu for economic and other purposes.

Studies on values and beliefs, such as, for instance, the one from Hammond-Tooke (1981) about the worldview of the Kgaga people, a Northern Sotho group of the *Lowveld* revealed that knowledge of plant life and soils cannot be regarded as scientific.¹⁹ This was also reflected in the techniques which are based on a process of trial and error and which had been handed down in the communal stock-of-knowledge over the ages (1981: 96).

Eventually, in the 1990s, a number of studies were compiled which proved the importance of local values and perceptions for the design of development policies in the realm of nature conservation (see De Beer 1995). With regard to the implications on resource management, however, apart from exploratory investigations of certain resources (see Cartier van Dissel & De Graaff 1998: 9), only a few comprehensive studies are available. Examples are the doctoral thesis of Els (1996) and two studies which analyzed local perceptions on nature conservation (Baines 1994) and environmental awareness among pre-school children (Faber van Zyl 1994). In terms of resource management, however, only a few aspects have been substantially dealt with.

Much more attention had been given to the political implications on land management. A number of studies were, for instance, compiled which deal with race and gender discrimination in rural areas in the light of the reconciliation process in South Africa. James (1987) worked on inheritance practices and land shortage in Lebowa and links scarcity to historic conditions of refuge and resettlement. Cross and Haines (1988: 73-92) compiled a comprehensive historical overview of land tenure in South Africa's Black areas. Clarke (1992: 86-93) wrote an interesting article on the social and environmental costs of South Africa's troubled history. Meer (1997) edited a comprehensive book on gender issues. Articles also deal with land tenure (Cross & Friedman 1997: 17-34) and land rights in the former Northern Transvaal (Small 1997: 45-52).

¹⁹ Today, studies from other parts of the world, as well as from Africa, show that local knowledge is as diverse and specific as "Western" or "scientific" knowledge and that it covers all important aspects of the environment (see, for instance, Huber & Pedersen 1977).

An interdisciplinary study of British and South African scientists to explore the potential for creating additional livelihoods in agriculture and the rural on-farm sector was conducted in 1993 and published in 1996. The project was financed by the British Overseas Development Administration (ODA) and the Development Bank of South Africa. Three regional case studies were conducted in the Western Cape, KwaZulu-Natal and in the Northern Province.

Baber (1996: 276), a project participant who did research in the Northern Province, wrote an article about livelihoods in the Northern Province and introduced the concept of “split commitments” as a survival strategy. His findings also found recognition in a recent publication of the Washington-based International Food Production Research Institute (IFPRI; Delgado 1997: 145-73). Delgado (1997: 148) traces the idea of rural split commitments and “diversified incomes” to population pressure and the concomitant shrinking of smallholder farms over the past thirty years. Because of the increasing class and income differences, Delgado (ibid.) differentiates between resource poor, smallholder, progressive and large scale African farmers with the progressive ones being those who adopt modern technologies on farms ranging from 10 to 50 hectares. Other sources which are relevant for a study of the Mapela area are Jackson’s (1969 and 1982) publications as well as De Beer’s (1986) doctoral thesis “Groepsgebondenheid in die Familie-, Opvolgings- en Erfreg van die Noord-Ndebele”.

The Land and Agricultural Policy Center (LAPC) regularly issues policy papers, working papers and briefing papers on topics like “Community based natural resource management in South Africa” (Fakir 1996), “Environment and land reform in South Africa” (Turner et al 1997), “Land use and environmental policy in the rangelands of South Africa” (Dikeni et al 1996) and “Sustainable development, agriculture and energy” (Fakir & Cooper 1995). Data was mainly collected by means of rapid appraisals. Thus, local knowledge and perceptions are not substantially dealt with. These sources were mainly used to get relevant insights into agricultural policies in South Africa as well as into current research trends and new approaches.

Recent progress in biodiversity conservation in South Africa has been described by De Beer and Vorster in the 1997 issue of the newsletter of the "Commission on the Anthropological Dimensions of Global Environmental Change".²⁰ In the newsletter "South Africa and anthropological dimensions of change and development", De Beer and Vorster (1997: 2) state that the South African government is in the process of formulating coherent biodiversity and environmental management policies which also make provision for the strengthening of local knowledge and value systems at grassroots level. Meanwhile, the White Paper on Environmental Management of 1997 has been approved which means that the "provincial and local governments can start implementing the policies" (ibid.). The White Paper on the Conservation and Sustainable Use of South Africa's Biological Diversity of 1997 has, however, not yet been formalised into official policy and no legislation has been promulgated to give effect to it.

In January 1998, an international and multi-disciplinary conference on land tenure in the developing world with a focus on Southern Africa was held at the University of Cape Town. The aim of the conference was to contribute to the advancement of policy formulation and the development of strategies to address land tenure questions. Relevant contributions deal with the legal framework pertaining to land reform in South Africa (see, for instance, Horn 1998).

4. Summary

The development context which has been presented above emphasizes the recognition of local knowledge to enhance sustainable resource management in endangered areas. In addition, African people not only rely on *ad hoc* utilization of natural resources but employ resource management strategies which are compatible with local perceptions, beliefs, attitudes and worldviews. The capacity of local communities to allocate, control and use natural resources by means of established managerial structures was, however, often neglected in the discourse. Today, a shrinking resource base world-wide

²⁰ These newsletters are regularly published and edited under the auspices of the IUAES.

challenges the potential of local strategies and underlying beliefs. The fact that values play an important role in local resource management is further complicated by the fact that rural communities do not act as isolated units but are rather in a constant state of flux which enables them to buffer changes in the environment and to attach meaning to “new” technologies and experiences.

Since the 1950s, anthropological theories about the correspondence regarding the interaction of local communities and the natural environment have constantly been adjusted. Recent trends emphasize the need to understand cultural expressions and creations within a wider contextual framework which incorporates rural communities into global networks. Culture is today no longer regarded as a “mere adaptive tool” (Kottak 1999: 23-24) but plays a fundamental role in national land reform programmes, gender discourses or political transitions (also see Hall 1997: 498-99).

The situation in South Africa as presented above makes it indispensable to incorporate legal and political developments as well as the meaning-giving context in a discussion of local resource management strategies at Mapela. The holistic approach fits into the theoretical framework provided by the new ecological anthropology as formulated by Kottak (1999).

"As I see it, a society's culture of whatever it is one has to know or believe in order to operate in a manner acceptable to its members... culture must consist of the end product of learning: knowledge"
(W.H. Goodenough).

Chapter Three: The research setting

1. The historical setting

1.1 Introduction

The study is focussed on the Langa of Mapela who live north of the town of Potgietersrus in the Northern Province. The Langa of Mapela are of Nguni origin and, together with other chiefdoms in the region, form the Northern Ndebele section of the Transvaal Ndebele. In the following section, the Nguni name "Langa" is used to refer to the nucleus of the royal family while the Northern Sotho pronunciation "Laka" is used for stranger groups of Northern Sotho and other origins.

Besides the Langa of Mapela, the Northern Ndebele comprise the adjacent Langa of Bakenberg, various Kekana and Letwaba (Maune) chiefdoms and the Seleka. With the exception of the offshoot of Johannes Kekana, near Hammanskraal just north of Pretoria, the other constituent components of the Northern Ndebele all live in the Northern Province of South Africa. The various Kekana, Langa and Letwaba chiefdoms live north of Potgietersrus while the Seleka chiefdom is found on the northwestern border of the Northern Province with Botswana (Van Warmelo 1974: 67).

In the process of settlement in their new area the then ruling nucleus of Mapela followed an open system of citizenship, when they came into contact with surrounding Northern Sotho-speaking people. This resulted in intermarriages with, and assimilation of, Northern Sotho cultural elements to the extent that the Nguni origin of the Langa has disappeared to such an extent that today they speak predominantly Northern Sotho (see Jackson 1969: 1; Legassick 1969: 86pp; Hammond-Tooke 1981: 6). Even the ruling nucleus now allows types of kin to marry, practises circumcision, performs joint initiation

rituals and venerates a totem animal (the elephant; *tlou*) as do the Northern Sotho people.

1.2 The reign of the respective chiefs of the Langa of Mapela

The Northern Ndebele, like other Northern Sotho-speakers in the Northern Province, are organized into chiefdoms. The traditional authority system of chiefdoms forms the local administration in the rural areas of the province (De Beer 1997: 232). Following (see Box 3 below), the respective chiefs (*magoši*) and regents of the Langa of Mapela are presented.

Box 3

The chiefs and their regencies in Mapela



1.2.1 The reigns of the early chiefs

Mapela derived its clan name "Langa" (*ilanga* means "sun" in the Nguni languages) from the first chief and common ancestor of the ruling lineage *Langalibalele* (litt.: "there where the sun is hot", referring to the capital of the former chief, Jackson 1982: 3). The Langa as well as unrelated stranger groups which have become members of the chieftom through adoption, conquest, or negotiation, left the original Hlubi home under the leadership of chief Masebe I in KwaZulu around the middle of the 17th century, long before Shaka, the former Zulu king, rose to power in 1816 (Jackson 1982: 3). For a short while they resided east of Pietersburg at Bosega where their closest neighbours were the Kekana at Moletlane and the Matlala at the Matlala mountains northwest of Pietersburg (Jackson 1982: 4).

Masebe I and his successors Mapuso, Podile and Masebe II ruled and died at Thaba Tšhweu which is situated a few kilometres southeast of Pietersburg. On the basis of the sequence of successive age-sets it is possible to make relatively valid statements about the initiation of the early chiefs beginning with Podile who was probably initiated around 1690. Each age-set is normally led by the highest ranking son of the royal family and the usual time lapse between age-sets is estimated at six to eight years. Jackson (1982: 4) concludes that each previous chief was the head of an age-set.

Masebe II was succeeded by Podile's grandson Seritarita at Thaba Tšhweu in about 1775. Seritarita departed with his people and settled at Maleoko which is almost directly north of Potgietersrus. Ultimately, the Ndebele of Mapela settled near the Mogalakwena River at Moumong-wa-Matswake under chief Mapela, the son of Seritarita's third-ranking wife. Mapela became chief because of the failure of his father's principal wife to produce a son, and through the desertion of his higher-ranking half-brother, Makgenene. Mapela ruled well and his people increased in number and fame and in the course of time established a large farming community. This was achieved through the incorporation of a number of smaller Sotho chieftoms or lineages (Jackson 1982: 9). Towards the end of Mapela's rule, the Matabele of Mzilikazi arrived, and the Langa

suffered greatly at their hands.²¹ Mapela died in 1825 at his headquarters close to the Fothane mountain (Jackson 1982: 10).

1.2.2 The reign of Mankopane

Mankopane, the successor of Mapela, was threatened by the Mamaala group who were descendants of the son of Seritarita's second-ranking wife, Makgenene, who had left his father and failed to visit Mapela during his last years. Mankopane did not defeat the Mamaala and his group was eventually re-incorporated into the chiefdom. However, it is said that some of them once again broke away.

During Mankopane's reign, the whole area north of Potgietersrus was virtually controlled by the Langa who had the courage to fight any incident of betrayal or offence by stranger groups or neighbouring people. The Langa came into contact with the Afrikaner Boers in the aftermath of the Great Trek which started in the early 1830s. The first encounters were overshadowed by the killing of twenty-eight Boer people and others by Mankopane's people at Fothane. Before this, the Kekana of Moletlane under chief Mokopane had killed some Boer people at Moorddrift. During these fights, Hermanus Potgieter, a brother of the Trek leader Andries Hendrik Potgieter, was murdered at Fothane hill by the Langa which was then given the name *Moordkoppie* (litt.: murder hill).

The background to the violent and aggressive attack by Mankopane to frighten the Boers away, is provided by the fact that he and the neighbouring Kekana felt that the influx of the White settlers in their part of the country was becoming a threat to their sovereignty. While the Kekana were finally overcome by the Boers under M. W. Pretorius, the Langa retreated to a mountain called Magagamatala near Marken. The first Boer commando could not conquer them and only departed with a considerable number of livestock. Under cover of darkness Mankopane and his people were again

²¹ In 1837, when Mzilikazi was defeated by the Emigrant Boers, the Langa sent an expedition to speed Mzilikazi and his warriors on their way.

attacked in 1858. Due to the darkness, the Boers were able to kill a considerable number of Mankopane's people. After this defeat, Mankopane settled on Thutlwane hill.

The second encounter which influenced the history of the Langa Ndebele is related to the arrival of Paul Kruger near Potgietersrus in 1868. He acted against the Langa of Mankopane who had raided a number of White farms but could not conquer them completely. After killing many more of Mankopane's people, Kruger realized that his ammunition supply was too low to continue. He then withdrew to Potgietersrus and, while retreating, burnt some of Mankopane's outposts and crops (Jackson 1982: 23). Presumably, Kruger's withdrawal made Mankopane more arrogant than ever since he was not defeated by Kruger. The following negotiations resulted in the signing of a permanent peace agreement in 1869. In terms of this agreement, Mankopane was not required to pay an indemnity which he again regarded as a victory for himself.

Such periods of unrest in the area led to the departure of most of the Whites from Potgietersrus. Others died of fever. According to Jackson (1982: 24) the town was abandoned by all survivors in May 1870. No written records exist which indicate that Mankopane's Langa agreed to pay annual levies despite their subjection to the Zuid-Afrikaansche Republiek (ZAR).

Equally as important as Mankopane's struggle with the Boers is his relationship with delegates from missionary societies whose activities began to flourish under his rule. Missionaries were used as mediators in internal politics, they formally educated children in mission schools and also gave medical assistance. At the same time, however, they disrupted local customs and beliefs. It is well documented that missionaries opposed numerous old established customs such as, for instance, rainmaking as well as "heathen" rituals like initiation (see Hoffmann 1905: 100; Eiselen 1934: 65; Jackson 1982: 27). According to Jackson (1982: 24), Mankopane's motive for requesting a missionary in his country was neither to have his people converted nor to become a Christian himself. He rather sought a mediator in his dealings with the Emigrant Boers.

The first evangelist was a Sotho man, Seêle, of the Paris Mission who started his work earnestly but later became involved in the internal politics of the chiefdom after which his reputation declined. During the missionary work of Seêle, Berlin missionaries had no opportunity to establish mission-stations in the area since Seêle was reluctant to co-operate with the latter. When Seêle departed, however, the missionaries Kühl and Endemann of the Berlin mission society settled at Thutlwane and Malokong respectively in 1867.²² In 1868 they left the station since hostilities between Kruger and Mankopane were not settled. The latter was offended and, from this time on, treated the missionaries with animosity.

One reason for Seêle's departure²³ was that he supported Masebe, Mankopane's son, during an argument with his father. Apparently, Masebe offended his father by taking meat from game he shot for his father-in-law although etiquette prescribed that this meat should have been brought to Mankopane. Friction increased when one of Mankopane's high-ranking councillors suggested to Mankopane that his son wanted to kill him. The same threat, i. e. that Mankopane wants to kill Masebe, was posed to the son. Masebe managed to escape, but some of his followers were caught and executed. Masebe tried to talk the Emigrant Boers into sending a commando against Mankopane.

Eventually, Commandant-General Schoeman of the ZAR demanded that Mankopane hands over Masebe's cattle and property. Masebe returned to Thutlwane only in 1877 one year before his father died. Mankopane fell ill at the beginning of 1877. He adopted a hostile attitude towards the missionaries after being told that they were responsible for his illness. Shortly before his death he consulted traditional healers whose medicines were, however, of no avail and Mankopane eventually passed away. He was buried in his cattle *kraal* on the Thutlwane mountain.

²² In 1882, however, the Thutlwane missionary station was abandoned due to a lack of water, and was never occupied again. Outposts were established at such places as Kgano, Magope, Masenya's and elsewhere in the Mapela area (Jackson 1982: 31).

²³ Another was the war between Moshesh's people and the Free State Republic in 1866/1867 in Lesotho which cut off Seêle from the parent mission station.

Mankopane is still recalled as one of the great and admired heroes of the Langa of Mapela who had a strong impact on the history of his people. His last place of settlement and burial, the Thutlwane mountain, is regarded as a sacred mountain which entails, among others, that access is restricted to members of the royal family (De Beer 1999: 22).

1.2.3 The reign of Masebe

After continuous friction with Mankopane, Masebe returned to Thutlwane in 1876 when he seemed to have regained his father's favour. Masebe's succession had led to a number of clashes among the Langa. When Mankopane died, Masebe was only second in line after Tokodi, the son of Mankopane's first wife. When Tokodi said that he accepted Mankopane's decision for Masebe to succeed him it appeared at first as if a struggle could be averted. Yet, Tokodi was still regarded as a threat and he was consequently killed by Masebe's men in 1878. Trouble over his death continued for some time. Yet, Masebe was not prosecuted after Tokodi's death by the authorities who were, at this time, engaged in a campaign against Sekhukhune, paramount chief of the Pedi. Because of this, they dared not risk having to fight the powerful Langa at the same time.

Another enemy of Masebe was Makhwibidu. The latter was a son of one of Mankopane's wives and therefore also a claimant to the position of chieftainship. Makhwibidu feared Masebe's vengeance because he was temporarily placed ahead of Masebe as successor to the chieftainship (Jackson 1982: 28). This had created hostility between them. The situation worsened when the neighbouring chief of the Vaaltyn Kekana granted sanctuary to Makhwibidu. Masebe obviously regarded this as an act of betrayal which bedevilled relations between the Mapela and the Kekana.

According to Jackson (1982: 28), Masebe III, who ruled from 1877 to 1890, was the first Ndebele of Langa who acknowledged the supremacy of the White government. According to written records, the missionaries were relieved that Masebe regularly attended church services and wore European clothes. Masebe, due to Christian

influence, reformed some of the customs of Mapela. One example of this is that he buried his father, Mankopane, not in a sitting position and covered in a hide but stretched out and covered with blankets. In addition, nobody was killed to accompany the late chief (Jackson 1982: 27).

Masebe's open and friendly attitude towards the church, however, also provoked strong opposition among his subjects "who were very much against such departures from tradition. Worst of all was Masebe's refusal to have the rainmaking rituals performed" (Jackson 1982: 29). Eventually, he had to return to the lifestyle which was preferred by his subjects. Opposition even led to the establishment of a national church that approved of tribal customs. The church, half-heartedly supported by Masebe, did not, however, last long due to reasons such as distance of the church building from the living quarters of people and the death of one of the main instigators. This was regarded as an unfavourable sign by those who had formerly encouraged and supported the national church and who then left the area to work on the Kimberley diamond fields (Jackson 1982: 31).

When Masebe's father-in-law, Thys Kekana, a convert and important tribal functionary, who had a strong impact on the latter, died in 1882, Masebe permitted traders to sell their wares in his country and regularly purchased brandy for his own consumption. After a time he must have become addicted to liquor since he became violent and unpredictable (Jackson 1982: 33). He also ill-treated members of his family which led, amongst other things, to the departure of his eldest son, Hans, to the Kekana. Relations between Masebe and the Kekana worsened in the aftermath and resulted in a war which was only "brought to an end by President SJP Kruger" in 1886 (Jackson 1982: 34). After a few years, Masebe recalled Hans and a wife was married for him through the initiative of his father. In 1890, Masebe was visited by a missionary who found him in a pitiful state. Shortly after this visit, Masebe died.

1.2.4 The reign of Malesela Hans

A crucial event in the history of Mapela occurred in the year 1890, when the Langa chiefdom was divided into the Mapela and the Bakenberg sections which disrupted the ruling lineage of the Langa (Jackson 1982: 67). The partition followed another succession dispute after the death of Masebe III between his sons Hans and Bakenberg (Jackson 1982: 6, 37). Friction arose when Masebe himself favoured both his two high-ranking sons to succeed to the chieftainship. While Hans was in exile, however, Masebe was more lenient towards Bakenberg and only recalled Hans shortly before his death.

According to Jackson (1982: 39), the subjects were asked by the interfering government whom they would prefer as chief whereby they had to stand either on the “western” or on the “eastern side” of a line which was drawn on the ground by a government official. As Jackson (*ibid.*) points out “the result of the division was that almost all the Sotho subjects of the Langa supported chief Hans, whereas the majority of the Langa clansmen supported Bakenberg. In this way the chiefdom that went to Hans is comprised of a high percentage of people of alien (mainly Sotho) stock and a small percentage of Langa clansmen”. Hans became the first chief of the Mapela section. The Langa then formed a small percentage of the total population in the southern region to where Hans and his relatives moved in 1890. Hans built his capital (*mošate*) at the foot of Magope Hill (Jackson 1982: 65).

The turn of the century was overshadowed by the Anglo-Boer war of 1899 to 1902. During this time, Hans’ men continued some raiding expeditions against Boer farmers. According to Jackson (1982: 44), many Boer cattle are said to have been looted and houses burnt during these raids.

Hans married 29 wives. However, he did not always comply with the customary marriage requirements. It is reported, for instance, that he wished to marry a girl from the Mamaala group by force and that he was only stopped by chief Bakenberg’s intervention. He also committed incest with one of Masebe’s daughters (his sisters). He was taken into custody and died in Pretoria in 1905. According to records, Hans was a

haughty and violent person who caused a lot of unrest among the Mapela (Jackson 1982: 58).

1.2.5 The reigns of Marcus, Alfred and Johannes

Alfred Sedibu, the successor to be, was still a child when Hans died. Hans' uterine brother, Marcus, who was next in genealogical rank succeeded him. His regency is said to have been constructive and peaceful (Jackson 1982: 60). A number of Langa relatives came from Mokopane's country and elsewhere and settled at Mapela under chief Marcus. The farm Zwartfontein 818 LR was purchased and registered in 1913. During 1918, a devastating influenza epidemic struck at Mapela as in other parts of South Africa. Marcus relinquished his regency in 1918, when Alfred Sedibu was old enough to succeed.

Alfred ruled from 1918 till 1937. He was as violent and undisciplined as his father which eventually led to the departure of some members of the royal family. He even sold the cattle which tribesmen had collected to marry a principal wife, and spent the money elsewhere. In 1926 and 1927, four farms were bought and registered by the Mapela. The funds for Bavaria 678 LR, Blinkwater 680 LR and Scirappes 681 LR came from the sale of mineral rights on Zwartfontein and the farm Abbotspoort 201 LR was purchased with tribal funds (Jackson 1982: 61).

Alfred died in 1937 and was succeeded by his uterine brother, Nkgalabe Johannes Langa. Members of the Langa royal family immediately started negotiations to marry a principal wife for Johannes. However, before the marriage could be finalised, the prospective wife died and a principal wife was never married for Johannes.

In 1941, the farms Blinkwater 820 LR, Leyden 804 LR, Overeyssel 815 LR and Vaalkop 819 LR were purchased by the South African Development Trust, and were transferred to Mapela in exchange for Bavaria, Blinkwater and Scirappes which were about fifty kilometres north of the area, in order to consolidate the tribal lands (Jackson 1982: 61).

Two further farms, Neckar 183 LR and Martinique 171 LR, were added in 1943 (Jackson 1982: 62).

A few years later, the Mapela tribal authority was formally established and its area of jurisdiction described by Proclamation 2612 of 24 December 1954 in terms of the provisions of section 2 of the Black Authorities Act 68 of 1951 (Jackson 1982: 89). The area of jurisdiction of the Mapela tribal authority falls within the boundaries of the district of Mokerong created by Government Notice 894 of 26 May 1972 in terms of the provisions of section 2 (a), (f) and (h) of the Magistrate's Courts Act 32 of 1944.

Chief Johannes died in 1957 after twenty years of peaceful rule. After Johannes' death, "both the sons of the last principal wife were now dead" (Jackson 1982: 62). After thorough searching by the *bakgōmana* two sons of Hans' fifth wife, Godwin Matope and Hendrik Madikwe, were considered as successors.

1.2.6 The reigns of Godwin, Hendrik and Cyrus

The eldest son, Godwin, eventually succeeded Johannes but only ruled for a few months before he died. When Hendrik succeeded, the matter of a principal wife was again raised. Tribesmen collected *magadi* (bridewealth) cattle for Atalia Thabantši Langa, daughter of Marula Langa of Mmamolla's lineage (Jackson 1982: 64). The succession dispute was, however, not solved with this marriage.

Hendrik ruled until his death in 1990. He is recalled as a kind and gentle person by present Langa spokespersons. Even blindness in his last years could not distort the positive image of his chieftainship, although he needed a lot of support from the current *mokgomamogolo* (senior male member of the royal lineage), Ephraim Langa, and the son of his first wife, Cyrus Langa. From 1990 to 1993, Mapela was officially ruled by the latter. In 1993 Cyrus lost power in favour of Atalia Langa, Hendrik's principal wife, without the dispute about succession having been solved.

1.2.7 The reign of Atalia

After a year-long succession dispute about the regency following Hendrik's death in 1990, his principal wife, Atalia Langa, became regent and chieftainess (*kgošigadi*) of the chiefdom in 1993. Atalia is the first female chief, or chieftainess, in the history of Mapela. According to key informants, she started off quite effectively with strong support from her followers who assisted her in the administration of the chiefdom. During the last two years, however, Atalia had to cope with male prejudices against female rule ("women talk too much and know nothing", or "women hear too many voices", also see Jackson [1982: 39 and 49] who mentioned the proverb "those who are guided by females fall into ditches"). Since June 1999, Atalia is an elected member of the national parliament and resides just outside Pietersburg at Koffiefontein. She only spends weekends at Mapela and, during her absence, is represented by Johannes Laka, her confidant and messenger or representative (*motseta*).

Atalia acts on behalf of her only son, David, who was not living in the area during my research.²⁴ Some spokespersons, however, do not seriously consider David as the rightful heir and prospective chief of the Mapela chiefdom. Other factions of the royal family underpin their arguments with detailed genealogical evidence of the royal family. According to Wiid (1982: 13), there are three factions in Mapela fighting with each other over the designation of a regent for the chiefdom. Two of the factions married tribal wives virtually at the same time. One of the factions with John Nkopo as leader and supported by the sisters of the former chief, Alfred, and a section of the *bakgômana*, married a certain Queen Rosina Langa as tribal wife. Most probably, Queen Rosina is the same person Jackson (1982: 64) was referring to in his book as Rosie Kwini.

The other faction under the leadership of the former acting chief Madikwe Hendrik and comprising the rest of the *bakgômana* and headmen married the present acting chieftainess Atalia Langa as tribal wife. Both these tribal wives gave birth to successors to the chieftainship. The third faction consisting of the sons of Godwin, the former acting chief and brother of Madikwe Hendrik, regards their own mother, Ngwana Mabusela, as

the rightful tribal wife and is claiming the chieftainship for her eldest son, Ditlora Marcus. They insist that the previous regent, Madikwe Hendrik, who is also the *rangwane* (father's younger full brother) of Ditlora Marcus was designated to act until the latter was eligible to succeed to the chieftainship. Although Atalia and her supporters still have the upper hand in the struggle, the other factions are attempting to usurp the chieftainship. A new argument centres around the fact that Atalia is now in parliament and not present in Mapela. The presence of a chief in the chiefdom is, however, a customary requirement for successful chieftainship.

2. The cultural setting

The cultural phenomena which will be focussed on in this section include kinship and descent, economic life, education and transmission of knowledge as well as the belief system of the Mapela chiefdom. This will give sufficient background of the cultural setting in which resource management and the transmission of local knowledge takes place in Mapela.

2.1 Kinship and descent

The people of Mapela recognise a wide network of kin in their everyday life. These kin include patrilineal and matrilineal relatives as well as those related through marriage. Of these kin, the patrilineal relatives, especially those belonging to the same patrilineage, play the most important role in the life of the Mapela people.

Lineage membership is through birth and, in exceptional circumstances, also through adoption. Both the living and the deceased are members of the patrilineage and one's rank in society is also determined patrilineally. The patrilineage forms the genealogical context in which relations with ancestors are maintained. It is also one of the pillars of the collective spirit and the group solidarity among lineage members. In other words, one's understanding of ancestral worship is directly related to knowledge of the

patrilineage. This refers to the ability of members of a patrilineage to trace their descent to a common male ancestor a number of generations back. This means that both men and women are members of a patrilineage although membership is passed on only through men. Daughters thus belong to their father's kin group even after marriage but they do not pass on this membership to their children.

The lineage system is reflected, for instance, in the political organization of the chiefdom which can be exemplified by the relation between the patrilineage and the headmanship. The chiefdom consists, for administrative purposes, of a number of wards which are ruled by headmen. In the case of the Mosoge ward and the Abbotspoort farm, they were ruled by high ranking headmen of the ruling lineage. The other wards are ruled by high ranking men of foreign patrilineages. Headman status was usually given to the leaders of such foreign lineages when they joined the chiefdom or when the royal family deemed it to be good for the administration of the chiefdom (De Beer 1986: 110-11). Headmen are thus not always linked genealogically to the royal family. Jackson (1982: 127) lists four wards which are regarded as the "great wards", namely Mabusela, Tshaba, Masenya and Mabuela. This is explained by the fact that the early headmen of the respective lineages were important functionaries in the chiefdom at that time. One's status and rank in society is therefore determined by two principles namely

- ◆ genealogical rank (seniority) and
- ◆ length of group membership of the chiefdom.

The influence of kinship is still prevalent, for instance, in marriage negotiations, patrilocality and the composition of households. Marriage is an important social institution because it establishes bonds between two kin groups rather than between two individuals. This is emphasized in the mutual obligations of one group towards the other group. Apart from the betrothal agreement, this can be reflected in the occasional exchanges of presents, food and services.

Lineages also act as controlling bodies in such marriage agreements and thereafter (see Mönnig 1983: 236). After the dissolution of her marriage, a woman falls under the authority of her family of birth and her father who, as a representative of his patrilineage, obtains control and supervision over her. Where the children are awarded to the woman after the dissolution of a marriage, they also fall under her family's authority (De Beer 1989: 103).

The groom's eldest maternal uncle (*malomê*) plays an important role during the marriage negotiations. His power is substantiated in the saying *malomê ke mojadihlogo* which literally means that the mother's brother eats the heads (of other people during negotiations), in other words he has a vital say in marriage negotiations. Even if the *malomê* has left the Mapela area, he is called to discuss the issue with his own and the groom's kinsmen. Mutual obligations between the groups refer to the contribution to *magadi* which was traditionally paid in cattle but is now increasingly paid in money which is transferred from the groom and his group to the bride and her group. The bride, on the other hand, has to leave most of her relatives behind after the ceremony to move to the husband's parents while the bonds with her family of birth remain strong. There is an expression which is told by a mother to her daughter's in-laws which says *tšea maoto, hlogo ke ya ka* meaning that they (the in-laws) can take the feet but not the head (of the daughter).

Patrilocality in the Mapela context means that the youngest son is entitled to live with his wife (*ngwetši*) in the parental homestead up to the father's death and beyond. Custom, however, requires that each son and his (first) wife first have to live in the parental homestead before establishing their own home thereby supporting the elderly people. This means that most of the couples start married life as members of a larger household. Today, the process of Westernization has, however, resulted in lessening control over the *ngwetši* which can lead to a great deal of friction between her and her in-laws. Yet, if the *ngwetši* proves to be barren and unable to provide an heir, her in-laws can marry an ancillary wife on behalf of their son (Jackson 1982: 8). Polygyny is rare although not unknown (see Fagan et al 1997: 98). Polygynous marriages are

expensive as a result of soaring *magadi* amounts that fathers ask for their daughters. Being married to more than one wife means the husband has to build as many houses as he has wives. It is idiomatically said that hens cannot lay their eggs in one nest (*tša hlakanela mae di a lwa*; litt.: sharing of eggs will give rise to fighting).

The nuclear family of a man, his wife and children is called *motse* but seen from a woman's point of view, the unit belonging to herself and her children is a *lapa*. While the head of a *motse* often migrates to urban areas for labour employment, another kinsman as the male representative of the lineage is usually attached to the *lapa* to support the woman-headed family. Observations showed that it was usually the father's *rangwane*, rarely an unmarried senior kinsman, who took over parts of the household responsibilities on behalf of the household head. The composition of the extended family further changes if women follow income generating activities outside the homestead and, in this case, the grandparents care for the children.

Outside the conventional household set up, there are other forms of the household which proliferate in Mapela. One example is unmarried women (*matita*, sing. *letita*) who raise their children without the economic support of the biological fathers and who often maintain relationships with married men outside the Mapela area. The term *matita* has a derogatory meaning which concurs with Cross' and Friedman's (1997: 32) view who note that single women tend to be viewed as a social problem who are often treated with denunciation, or at best with pity and generosity, and who are often very poor. In Mapela there are rumours of some single mothers who also have liaisons with married men from the area who support them financially. Although this could not be confirmed, such rumours obviously contributed to married women distrusting single mothers.

During the time of my research, there were quite a number of *matita* households in Mapela which was explained by the increasing reluctance of girls to get married while they begin to recognise their strength and the right to make demands. They live in small houses close to their families because single women, as opposed to single men, face no difficulties in obtaining a residential site from the tribal authority once they give birth

to children. Even if a single woman has founded her own independent homestead on land she obtained from the tribal authority or through the custom of *go fiwa* (litt.: to give or bestow; see Chapter 4, Item 2.1 below), however, she remains under the control of her family of birth and her father until her marital status changes.

2.2 Economic life

In the past, Mapela had a subsistence economy and the procurement of food was the sole matter of the household organization. Dryland maize and cattle farming were the dominant survival strategies while hunting and gathering played a minor role. Today, however, natural resources which formerly secured livelihoods are too scarce to secure a living for the growing number of people (see Kirsten 1996: 326; Dikeni et al 1996: 5pp; Agricultural Statistics 1998: 9). Though food produced by using the surrounding natural resources still plays a role, economic commitments are increasingly split (see Baber 1996: 276).

Therefore, non-farming activities, especially wage labour, which makes households more resilient, account for a growing independence from yields of the maize farming sector (see Small 1997: 46). Pensions also contribute to a large extent to the household economy. Especially those families which suffer from irregular remittances or low wages are supported by pensioners. Exact figures are, however, difficult to obtain and studies on the economic role of old people still have to be conducted.

In the following section, local economic activities are briefly described, particularly those where natural resources play a major role as well as alternative activities used to generate income.

2.2.1 Cultivation of crops

Maize (*mafela*; *mealies*) is the staple crop in Mapela and is preferably cultivated in the black fertile soil where it is often mixed with leguminous plants. Sorghum (*mabelethoro*), despite its greater drought resistance, is less favoured because it is vulnerable to the

ravages of birds. In addition, sorghum is not favoured to make porridge which makes up the staple diet.

Cultivation methods are determined by low technical inputs such as fertilizer, insecticides and machinery. Apart from the plough, the hand hoe is used to weed and thin crowded crops. Members of the same household usually cultivate the arable land allocated to the unit. In the absence of men hired labourers are often employed to clear virgin land. Occasionally, women groups are formed to weed and harvest the crops. Such groups are referred to as *letšema* parties. They used to share beer and porridge after the work was finished. Today they receive a cash income from the field owner which is saved for social occasions by the treasurer of the group. Depending on the season, children are expected to support their mothers during weekends and school holidays.

An increasing number of farmers own tractors for ploughing. They usually rent out the tractor together with one or two labourers as a “ploughing unit”. Not only are these farmers regarded as clever, they are also renowned for their enterprising spirits and their understanding and knowledge of the commercial “White way of farming”.

2.2.2 Livestock

According to a 1995 planning report of the Department of Agriculture, about 4000 cattle, 12 000 goats, 10 600 poultry and 500 donkeys are kept in the Mapela chiefdom. Donkeys only play an active role in the local economy during the ploughing season when they are either used as draught animals or to cart barrels of water. A few pigs and sheep are kept. Members of the Zion Christian Church (Z.C.C.) which makes up the dominant religious denomination in Mapela are forbidden to eat pork. Sheep, on the other hand, are said to be stolen easily because they are slow and dull in comparison to goats. Sheep also need more high-quality grazing than goats which browse the shrubs in the *veld* and are said to eat nearly anything. Most of the animals, except poultry, are reared by men. Women are customarily debarred from milking, herding and slaughtering. Exceptions do, however, occur in the absence of men.

Dominant cattle breeds in the Mapela area are Nguni, Bonsmara, Afrikaner and Brahman while mixed breeds also occur. Brahman bulls are preferred for breeding. Because of poor grazing and inadequate care, cattle are often in a bad condition. Herd numbers vary from ten to fifty animals. Although inspectors from the Department of Agriculture are supposed to limit the stocks according to the carrying capacity of the *veld*, this is seldom enforced and herds remain largely uncontrolled. No visible efforts have yet been made to re-establish the dipping station against ticks which collapsed around 1994. Consultation with professional veterinarians is regarded as being too expensive while local medicinal treatment cannot cure all the diseases which occur.

Today, fewer people keep cattle than in the past which can be ascribed to the high number of stock thefts and the low grazing potential in the area. The latter is due to severe overgrazing. Many people also refer to severe droughts in the 1980s and 1990s which had a devastating effect on cattle herds. As a matter of fact, those farmers who stick to extensive cattle farming, do not comply to organized rotational grazing methods as is suggested by officials from the Department of Agriculture. Grazing camps are thus non-existent and herdsmen have, especially during the dry season, to trek long distances to find sufficient grazing within the commonage. A lack of communication between owners and herdsmen further gives rise to a lack of co-operation in terms of grazing arrangements. This is due to the fact that herdsmen and owners are rarely one and the same person. Usually, owners hire elderly men from the area to tend their animals. The hired men differ vastly with regard to their responsibility and knowledge of grazing resources.

Another commonly practised strategy by cattle owners is the *mafiša* agreement which entails the farming out of cattle to a man who has either no cattle or only a few. The advantage for the owner is, for instance, a lesser chance of losing all his cattle to disease, the finding of good grazing for his cattle, making people dependent on him and enhancing his prestige generally. Calves born at the holder's place usually belong to the owner. The holder, on the other hand, enjoys rights such as, for instance, the consumption of milk (Mtetwa 1982: 230).

The dry season can cause dramatic losses to cattle owners, more especially during July and August when the cornstalks in the fields are finished and grazing is poor before the summer rains. Though most of the farmers buy supplementary fodder, mainly lucerne (*furu*), this is often of low quality and insufficient to keep cattle in a good condition. However, instead of selling some of the animals, owners rather take the risk of cattle dying as a result of poor grazing. This may be explained by the cultural value attached to cattle which is closely interwoven with the accumulation of wealth (*lehumo*) and the acquisition of prestige. The importance of cattle as *magadi* and the slaughtering of a beast during certain rituals can also be explained against the background of their symbolic value (see Coertze 1986: 131pp).

2.2.3 Collection of food from the *veld*

Women and children often collect fruits, seed, leaves and roots in the *veld* to complement their diet. Such *veldkos* resources are referred to as *dijo tša naga* (litt.: food from the land or *veld*) and are mainly used for household consumption, in other words, they are rarely marketed.

Of major importance is the traditional spinach (*merôgô*; sing.: *morôgô*) which serves as a side-dish for porridge. It is collected during the rainy season. Surplus yields are dried and stored for a dietary change in winter. Traditional spinach is further regarded as a source of vitamins and plays an important role in children's diets. Various types of traditional spinach are prepared by old women who subscribe more to *veldkos* than younger ones who prefer to eat vegetables such as potatoes, onions and tomatoes with the porridge.

As opposed to other formerly important *veldkos* resources, traditional spinach is freely available since it grows virtually anywhere around the homesteads and the fields where it can be collected. Leaves of cultivated leguminous plants, such as beans, or pumpkin leaves can also be processed into a nutritious side-dish. In fact, many old women stress the importance of traditional spinach when they mix crops and legumes in the garden.

The most prominent fruit which is processed in a number of ways is the one of the maroela tree (*Sclerocarya caffra*; *mokano*). An important social event is the making of beer when their juice is extracted and fermented. Other trees which play a role in the local diet are limited due to the excessive use of wood as firewood and for building purposes. Despite the ongoing promulgation of tribal laws to protect such species, this is often ignored due to a lack of effective law enforcement and the need to provide energy for the growing population. Apart from the use of botanical resources as a food supplement, many species are used in local medicines.

2.2.4 Income generating activities

As was indicated above, the subsistence economy can no longer ensure local livelihoods and provide for the basic necessities of life such as food, clothing and school fees for the people of Mapela. Wage labour plays a major role in the economic survival and involves migrant labour and farm work.

According to May (1996: 13), the labour market in South Africa is segmented into a primary and a secondary market. The first is defined as that in which jobs are well paid and secure so that workers (professionals, managerial workers, production foremen in manufacturing and agriculture) have prospects of career advancement. The jobs in the secondary market, on the other hand, are those which are lower paid and which offer little opportunity for upward mobility (*ibid.*).

In Mapela, migrant labour outweighs the number of farm labourers on commercially run cattle or tobacco farms. Fewer and fewer people are employed as farm labourers because of new labour legislation which sets basic minimum standards for all employees, including farm labourers. This includes the limiting of working hours and the introduction of minimum wages which, in many cases, leads to the seeking of cheaper alternatives for the agribusiness. Most of the working men in Mapela are employed in the urban areas of the Gauteng Province. The jobs range from relatively secure ones in the primary market to petty trading or even illegitimate activities such as drug trafficking.

The majority of the migrant labourers return home once a month, usually the last weekend when wages are paid. Most of the time the family is thus separated and the mother acts as family head and organizes the household. Once a migrant labourer retires, he is inclined to return to a rural lifestyle (e. g. cattle and/or crop farming) rather than becoming a businessman as might be expected. Most of the migrant labourers remain food producers and enjoy what their fathers taught them. Others state that they are too old to start a local business.

Another income generating activity is, for instance, provided by the running of a *shebeen* by a self-employed owner (May 1996: 13). Such a *shebeen* is an informal drinking place where alcoholic drinks are sold illegally and where men engage in social drinking. The leisurely consumption of canned beer especially attracts young people. *Shebeens* are run by both men and women and are usually only open at night.²⁵ For an additional income, owners take the risk of not running a licensed business and being caught by police patrols. The greatest fear are, however, robberies and aggression by heavy drinkers who may damage properties. Though basically alternative places of social gatherings, the excessive consumption of alcohol can lead to dangerous attacks. During the time of my research, two young boys were stabbed to death while under the influence of alcohol.

Women, apart from occasional participating in day-labour during the growing season, are also engaged in home industries which they usually organize themselves. Home industries refer to homemade wares such as embroidery, the making of clothes, the brewing of beer as well as the baking of cookies and other foodstuff for monetary exchange. Many women sell their home-made articles at the road side. Though some women associations, for instance, the knitting association, were established on chieftainess Atalia's initiative under the auspices of the ANC women's league, and were sponsored by the Department of Health and Welfare, they usually have a short life-span. The main reason for the short period of their existence are inter-group and intra-group disputes over financial income.

²⁵ That is why most of the *shebeens* are not recognizable as such during day time.

2.3 Education and the transmission of knowledge

Formal and informal education belong to different domains in Mapela. This is the result of the distinct environments in which knowledge is transmitted. While formal education is primarily institutionalized and works according to prescribed models and schedules, informal education is largely spontaneous.

There are also different kinds of informal learning. The development of intellectual capacities (e. g. language) and the absorption of cultural values and norms, do not require active training. They are learned by means of the process of enculturation and socialization from early childhood (see Geertz 1973: 44). Such cultural learning forms the frame of reference for the understanding of economics, health, social, political, descent, religious and legal systems. The need to transmit customs and values for the continuity thereof is substantiated in a Langa proverb which says *rutang bana ditaola le se ye natšo badimong* (litt.: teach your children how to read the bones before you go to the ancestors).

In contrast to unconscious enculturation processes, agricultural techniques, for instance, require deliberate and conscious practice or training, improvisation and imitation to get accustomed to local procedures. The most important setting where children are initially oriented and trained in etiquette rules, norms and values as well as in labour techniques, is provided by the nuclear family, more especially the mother and the grandparents. Extended family members do, however, also play an important role. It was observed that some children visit their relatives during school holidays where, according to the parents, they are supposed to broaden their experiences. This can be in the field of crop and cattle farming but also in religious education or child care.

Children often take turns in duties so that they are not overburdened. Boys, for instance, tend goats when they return home from school and usually take along some friends to play with for entertainment. Girls, on the other hand, help their mothers with household duties. Depending on their age, they take over tasks which suit their physical and

intellectual capabilities. Perceptions of “work” as a voluntary and playful activity therefore dominate the attitude of children and teenagers during school days.

In the initiation schools, communal values and ideas are formally passed on to the next generation (Hammond-Tooke 1981: 36). Today, it is, however, only boys who occasionally attend the schools in a secluded place (*bodika*), usually in the mountains. They are also circumcised during this period. After getting permission from the tribal authority, such schools are usually organized by the headman and are conducted under the control of a traditional healer. As Hammond-Tooke (1981: 36) points out, important functions of the rites are to teach boys relevant taboos and laws and to create feelings of group solidarity. Only after completion of the school are young men fully recognized so that they can participate in political discussions (*ibid.*). Increasingly, parents are reluctant to send their sons to initiation schools which is due to health risks during circumcision and the mysterious beliefs which are transmitted. Some boys also told me that they are only prepared to attend school if they obtain a certificate after completion. Nevertheless, a number of young people could give me details about the initiation schools which can be ascribed to the high regard in which they are still held.

Formal “Western” education may begin voluntarily at the age of two or three in a *crèche* (pre-school). There are two *crèches* and three kindergartens in Mapela. Only the *crèche* regards the pre-school education of children as an essential preparatory stage and therefore provides facilities. In the kindergartens, supervision of children is the major aim as this allows mothers to attend school or to earn an income. Compulsory education begins at the age of six in primary school. All children are encouraged to try and obtain matric after twelve years which opens the way to higher education at a university or technikon.

Poor socio-economic circumstances often cause children to interrupt their schooling for a few years but most of them try to catch up as the situation at home improves. Reasons for these interruptions are pregnancies, alcoholism, or a lack of support and control from the family. Due to this discontinuity, most of the pupils finish school when

they are over twenty years old. The passing rate for matric is poor and there are consequently only a few people with a university or technikon qualification. In spite of this there is, however, a high level of literacy in Mapela.

Most of the teachers are urban-based and leave Mapela when the school closes. Nevertheless they have a strong influence on school children since they promote scientific knowledge and technical skills as a key to rural development. Local habits and beliefs are thereby stigmatized as being “traditional” and “old-fashioned”. Many teachers state that local living-standards can only be raised by means of formal education and that children and teenagers who attend school “know more” or “know better” than their parents.

As a consequence, many teenagers, due to their basic literacy, feel superior concerning formalized procedures which, for instance, require the filling in of forms or the interaction with government officials. However, situations in which the older generation maintain the upper hand still dominate social interaction. Many young people continue, for instance, to respect the elders during marriage negotiations and the solving of disputes.

2.4 The belief system

The Mapela worldview is reflected in the beliefs in ancestors and the creator, the perception of illness and related healing practices. Since their belief system has been affected by Westernization and particularly by the process of christianization, attention will also be given to the transitional aspects of their belief system.

2.4.1 The belief in ancestors

The most significant beings in the superhuman world are collectively referred to as *badimo* which designates the forefathers or deceased members of the patrilineage. This entails that the members of a lineage honour the ancestors on the father's side (see Chapter 3, Item 2.1 above) which still play an important role in the lives of Mapela people (Kriel in De Beer 1997: 236).

The *badimo* are usually associated with human personalities through which the invisible beings virtually become perceivable. Their human attributes form the basis of the belief or veneration of ancestor spirits and the communication between the living and the dead. Firstly, human life is surrounded by various souls, spirits and powers. A living person is not only composed of a physical body (*mmele*) but also of invisible entities which are referred to as *moya* (soul, wind or breath) and *seriti* (shade, soul). Though these components are inseparable, it is believed that the invisible parts are received from the creator, *Modimo*. *Moya* is associated with the concept of human life (*bophelô*) and is, according to Mönnig (1983: 59), connected with certain body parts such as the lungs or blood. This implies that *moya* is not independent from the physical body.

Seriti, on the other hand, can leave the the physical body temporarily (Mönnig 1983: 50). It is thus the *seriti* which wanders around while the body is sleeping and which is able to visit other places or people. Such visions or dreams are referred to as *pônô* and account for the influence of the ancestors on their patrilineal offspring. After the death of a person, his or her *moya* and *seriti* leave the body eventually and continue their existence as a single and united entity. In the perception of the people of Mapela life can thus continue after death in a changed form (see Eiselen 1934: 66; Mbiti 1982a: 165).

The belief that ancestor spirits attain superhuman powers so that they are able to influence the life of families forms the basis of the *go phasa* ritual where the ancestors are worshipped. The worshipping includes the showing of respect, the honouring and information of the ancestors about any incidence in the homestead. This implies that the ritual takes place any time a family is in trouble or has to take important decisions.

In addition, during certain times of the agricultural cycle, the ancestors have to be given their favourite food, usually beer and snuff or, on some occasions, a goat or a chickens has to be sacrificed. The importance of the ancestral spirits to the farming community and the strict compliance with certain behavioural norms in the environment can be traced back to the fact that the spirits are perceived to be in control of the natural forces.

In this respect the spirits are regarded as the guardians of plants, soils and rivers. If, for instance, important fruit trees are cut for firewood during the growing season, the transgressor will be admonished by the saying *badimo ba tla go fura lela*, which literally means that the ancestors will turn their backs on you.

To visibly incorporate the ancestors in the family life, their spirits are represented by a certain plant, the *legwama* (*Boophane disticha*), which is planted in the homestead area (see Figure 4 below). The *legwama* then forms the focal point of the ritual, in other words the shrine of the ritual and the locus to worship. The shrine is usually centred within the surrounding walls of the *lapa* which is necessary because the ancestors are known as “capricious old men” who have to be “pampered like children” (see Kopytoff 1971: 129). It is also said that “they are curious and want to know everything”, that “they are always afraid they could be forgotten” (*badimo ba lebalwa*) and that “they are jealous” (*badimo ba na le lehufa*).

It is of major importance for the correct performance of the ritual that the *legwama* plant is not replaced by any other plant which grows in the *veld*. Horton (1960: 204) makes an important remark in an article about African beliefs where he states that “one of the most important preconditions for one thing becoming the symbol for another is the regular association of the two in collective experience”.

There are wards which are known to comply more with the ancestor worship than others, for instance Phafola or GaMohlohlo. Here, it could be ascertained that a number of ancestor related rituals are regularly performed by the majority of the households. It was observed that this was enforced by the headmen in these wards who regarded the worshipping of ancestors as an important prerequisite for the harmonious life of the ward members. Consequently, knowledge about the correct procedure of *go phasa* was widespread in Phafola and GaMohlohlo. In other wards, presumably, the influence of headmen with regard to the ritual is less strong.



Figure 4: A raindoctor holding *legwama* plants in his hands which he wants to take to his yard

The performance of rituals has not lost importance and still attracts people despite the growing number of Christian denominations in Mapela. Among some young people, ancestor worship and the concomitant rites are almost reaching a cult status. During these rites a lot of beer is consumed and the gathering often lasts till the next morning. It was observed that school children, in comparison to teenagers who have finished school, do not feel in the same way attracted by the ancestors. They wish rather to distance themselves from “old people’s belief” and described themselves as being “modernized”. A reason may be the pressure of peer groups in school or the influence of some teachers who try to manipulate the behaviour of pupils. The moment school days are, however, over, teenagers seem to return to the rituals they witnessed during their early childhood.

2.4.2 The belief in a creator

The giver of all life and the highest “owner” of the universe is referred to as *Modimo*. He is closely associated with the elements of nature, such as wind, rain, hail and lightning. This is also reflected in the use of the noun stem “-dimo”. *Ledimo*, for instance, means a storm or tornado (Ziervogel & Mokgokong 1975: 156). It is therefore generally stated that *Modimo* created the world and all animal and plant life upon it. *Modimo* is, however,

not concerned with daily life and does not play a role, as the *badimo* do, in daily interactions with people and the environment.

Modimo, or sometimes *morena*, is also used in the Northern Sotho translation of the Bible. It is therefore difficult to ascertain to what extent the concept of *Modimo* is influenced by Christian beliefs (see Eiselen 1934: 78; Hammond-Tooke 1981: 85). Perhaps it is this blending of perceptions which led to the fact that there is no distinct elaboration of the concept of *Modimo* (Mönnig 1983: 45pp). It is only stated by the people that he is male and that he has "more power than the *badimo*".

There are no regular rituals dedicated to *Modimo* in comparison to the frequency of ancestor worship. Since, however, *Modimo* is perceived to be the highest ranking being in the cosmos he is approached and pleaded for mercy (*go rapela*) when serious climatic conditions, e. g. a lack of rain, threaten the growing of crops and the grazing of cattle. In other cases, *Modimo* is not called upon directly but is rather approached through the ancestor spirits who should then mediate between human beings and the creator.

2.4.3 Healing

The only traditional specialized profession which is still practised in the Mapela area is that of the traditional healers, the *dingaka* (sing.: *ngaka*). Most of the healers are men who received their calling from the ancestor spirits while they were asleep. As a consequence, healers are renowned for their mystic bonds to the superhuman world. The ongoing attraction of the traditional healers is supported by the fact that, in the perception of the people, there is a causal relation between some illnesses (*malwetš*) and supernatural influences.

Apart from active healing by using local medicines and other treatments of people, traditional healers have a strong impact on communal life with respect to the following:

- ◆ they decide on the termination of impurity, e. g. ending of the mourning period,
- ◆ they are experts on the correct performance of rituals to appease the ancestors,
- ◆ they give psychological support when misfortune strikes a person or a family,
- ◆ and they also provide protection when a new *motse* or *lapa* is built (*go thekga motse/lapa*; see Ziervogel & Mokgokong 1975: 1328).

The main *materia medica* of the healers in the curing of illnesses is herbal medicine. The most important feature of such medicines is a power entity, or quality, which is referred to as *maatla*. The healing principle rests upon the perception that *maatla* can be transferred to somebody's *seriti* during the treatment (Mönnig 1983: 51). Since such powers are believed to reside in natural objects such as herbs (mainly tubers and bulbous plants), herbal concoctions symbolize a high concentration of *maatla* which can be applied to manipulate the spirits of human beings.

Although *maatla* is unchangeable it is not imperishable. Power substances in medicines (*dihlare*) and amulets (*dipheko*) which include *maatla* therefore do not have an enduring effect. Ritual acts during which powerful medicinal compounds containing *maatla* are used have to be continuously repeated (Kriel 1992: 110). This has implications for resource management because herbal medicines are usually not stored and herbal plants are therefore rarely cultivated in the gardens. Traditional healers rather emphasize that they collect the herbs on request. Anybody who uses herbs like a pharmacist is regarded as a traditional healer who lacks the appropriate skills and knowledge.

Closely related to the contraction of illnesses is the observance of various taboos (*diila*; sing.: *seila*²⁶) by the people of Mapela. If a person disregards a taboo he or she can fall ill and become ritually impure or "hot" (*go fiša*) which implies that he or she is also dangerous to others. Taboos entail the ritual avoidance of certain persons, places and objects. They therefore have a regulatory function since they include prohibitions on the utilization of resources, on the eating of certain foods and on contact with certain

²⁶ This word is derived from the verb *go ila* which means "to avoid".

kinsmen or persons who are, for instance, in special ritual states. Breaking them can also release the wrath of the spirits in the form of droughts, strong winds or other environmental hazards. The widespread fear of ancestral wrath implies that taboos continue to be authoritative and, moreover, why taboos are rarely purposely challenged.

Scarcity can, however, force a person to disregard taboos and to utilize some of the protected natural resources. In the case of firewood scarcity, for instance, fruit trees are cut in summer despite the taboo that no green tree may be harmed for such purposes. As far as could be ascertained, the transgressor of a taboo is usually aware of the consequences but believes that scarcity is an excuse which is understood and accepted by the spirits. Due to a lack of alternatives, those taboos which affect botanical resources are more frequently disregarded and "excused" than those affecting the social interaction among people.

2.4.4 Belief and transition

Since the influence of missionary churches in the 19th century (see Chapter 3, Item 1.2.2 above; also see the "Tomlinson-report"²⁷ 1955: 21-23), profound changes have taken place concerning the religious life of the Mapela people. While on the one hand, syncretic movements and sects have proliferated since the early twentieth century (see Eiselen 1934: 76-77), there is today also an opposing tendency observable which focusses on the re-evaluation of the work of diviners, witchcraft and magical powers.

Such syncretisms are possible since the people of Mapela tend not to make clear-cut distinctions between the profane (atheistic) and sacred (supernatural, holy, spiritual) world. This implies that Christian denominations do not necessarily cause a person to ignore the ancestral spirits and even the influence of magical powers while he or she moves around in the environment. Therefore one can say, as much as people belong to the supernatural, the supernatural belongs to the people and forms an essential part in daily life. In other words, hardly anybody can be found in the area who is indifferent to

²⁷ This is the "Summary of the Report of the Commission of the Socio-Economic Development of the Bantu Areas" which was published in 1955.

ancestral spirits. Even if a married woman, for instance, is compelled to join the denomination of her husband and his family, she would most probably change and return to her patrilineal kin's customs should the marriage be dissolved.

A striking example of transitional aspects is the *malôpô* (sing.: *lelôpô*; litt.: spirit sent by an ancestor, person possessed by an ancestor) cult. A *lelôpô* is predominantly a female diviner who is said to be possessed by an ancestor spirit before she starts with her profession (see Hammond-Tooke 1981: 104pp; Olivier 1985: 1). In other words, a *lelôpô* is usually called by the ancestors to become a *ngaka ya malôpô* (*malôpô*-doctor). Such a *lelôpô* is therefore a favourite of the ancestor spirits in the sense that she has been chosen as a medium through whom they can speak to the people.

A *ngaka ya malôpô* is a specialist in the exorcising of benevolent and sometimes alien spirits which have taken possession of a person (*o na le badimo*; see Box 4 below).

Box 4

Manifestation of spirit possession according to Olivier (1985: 2)

- ◆ somatic symptoms: swelling of feet, diarrhoea, eczeme
- ◆ psychological symptoms: tendency to roam, tendency to talk to oneself, disorientation, tendency to neglect children or household chores, aggressiveness, restlessness
- ◆ other symptoms: pain in the body, decreased level of activity, seizures (conscious level decreased), loss of appetite.

The *malôpô* doctors form a cult group in Mapela. They participate in prolonged singing and dancing sessions during the time a person is possessed by an ancestral spirit.²⁸ Once the patient falls in a trance, he or she is instructed to communicate with the ancestors in order to find relief. Through the mediation of the *lelôpô*, the wishes of the

²⁸

Apart from the dance, an additional method is the rubbing of the patient with a specific herbal concoction. The latter is prepared by the *lelôpô* in advance on instruction of the spirits.

spirits can be satisfied whereupon they withdraw from the afflicted person (Mönnig 1983: 87).²⁹

Similar sessions are also held by the *izangoma* of the Nguni people. According to Hammond-Tooke (1989: 127) there is, however, an important difference: “Nguni divination is an example of spirit mediumship in which the diviner acts as a conduit as it were, for the ancestors, but in which there is no possession. In the possession cult on the other hand, it is believed that the personality of the possessing spirit itself has taken over it’s host’s body”.

Today, the *malôpô*-doctors in Mapela, though they seem to be shunned by the community during the day, are especially frequented by teenagers who, on such an occasion, consume enormous amounts of beer which speeds up the process of falling in a trance. Striking are also the conspicuous fancy dresses of the dancers which are multicoloured and gaudy. Sometimes, they also wear feathered head-dresses.

The attraction of the *malôpô* diviners is probably as a result of the difficulties young people in Mapela have to face with regard to the high unemployment rate in the area and the resulting economic insecurity. They probably find temporary release from pressure during the dances with others who share their problems with them for a time. Another reason, according to a *lelôpô*, could be that there are a few other entertainment facilities in Mapela where young people can socialize at night. According to Boersema (1984: 32) the *malôpô* cult originated as a result of changing socio-economic circumstances which represents an uncertain “snatching back” at the past. This can be understood as an organized but radical attempt to eliminate conflict with the spirits.

The Z.C.C. which was established in 1925 by a Pedi man (Sundkler 1976: 66), on the other hand, is ranked highly among the members of the royal family of Mapela.³⁰

²⁹

It is a firm belief in Mapela, when a person is possessed by an ancestral spirit, that no medical doctor in the clinic can treat him or her effectively. This was even confirmed by staff members of the local clinic who explained that the ancestors do not like such things as syringes.

According to Pauw (1974: 434), a striking feature of the Z.C.C. is that the starting point for joining a Zionist group is usually an illness which, for the Zionists, implies the possession of the Holy Spirit. This concurs with Sundkler (1976: 66) who notes that “the term ‘Zion’ is used for churches which emphasize the guidance of the spirit and healing as central concerns” (see Thorpe 1996: 111).

Rivers, and water as such, are central in associated rites such as purification or baptism. Certain food avoidances and other taboos also play an elementary role in the lives of the Zionists. An important feature of the beliefs of the Z.C.C. is therefore the integration of traditional and Christian beliefs. An example is the belief that there is a connection between the Holy spirit, ancestor spirits and angels.

The fact that religious movements as well as cults have a strong communal orientation is also reflected in the growing number of associations which are formed in Mapela. One example is a burial society (*kopano ya polokano/sosaiite sa polokano*) which was only founded around 1994 and which still functioned successfully during the time of the research. This society not only organizes burials for its members but also helps the family members of the deceased to organize a funeral, such as the erection of the tent or the provision of food and drinks. The main feature of the association is the elaborate saving strategy through which members can afford lavish burials which cater for a large number of people. Approximately thirty to forty people belong to this burial society.³¹

Although both men and women attend monthly meetings, the initiative is mostly taken by women. First the subscription fees for the coffin (*tšhelete ya lepokisi*), which are about R5 a month, are discussed. Thereafter, the men leave and women discuss subscriptions for firewood (*tšhelete ya dikgong*, R40/funeral) and *mealie meal* (*tšhelete ya bupi*, R2/month). When the society started, women used to collect *mealie meal* from the households. Due to the fact that some women did not have enough *mealie meal* available, this strategy was soon abandoned in favour of the subscription fees.

³⁰ Other important Christian denominations found in Mapela are the International Pentacostal Church (IPC), the Anglican Church and Apostolic Churches.

³¹ Such a society exists in many wards.

Members of the Mapela community therefore have an increasing number of choices in terms of their religious outlook on life. While the communal orientation, which is so characteristic of African people, still has a strong impact on social interaction, an increasing process of individualization can be observed. The irregular and lax performance of the first-fruits ceremony (*go loma lerotse*) today is only one example. In other words, there is no longer any communal obligation or chiefly dictate which regulates and controls religious life. Another striking tendency among the believers is the combination of different religious worlds, namely the African and the predominant Christian Western one.

3. The environmental setting

The Northern Province comprises an area of about 9,8% of the total surface of South Africa (De Beer 1997: 232) and is one of the poorest provinces in the country (see Figure 5 below, also see Appendix B).

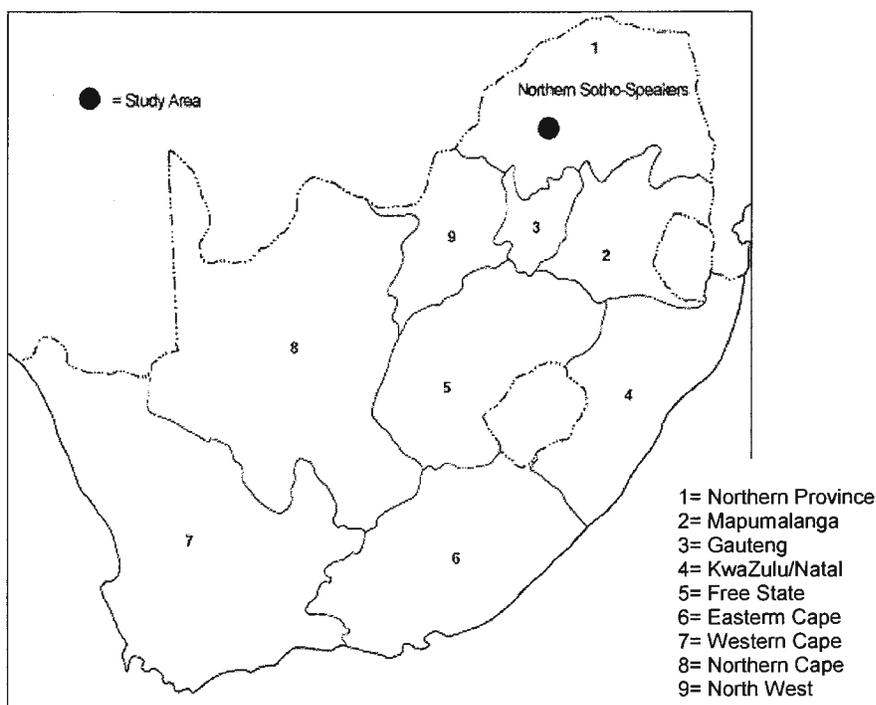


Figure 5: The provinces of South Africa

Almost 70% of the population live below the poverty line which is estimated at R740/month or R8880/annum (see Kirsten 1996: 306; Pinstруп-Andersen et al 1997: 22). The white farming community which grows tobacco and cotton or farms with cattle for meat production in the Northern Province still owns most of the land despite the fact that the black population comprises about 98% of the total population in the Province.

The ex-homelands of Venda, Gazankulu and Lebowa thus accommodate nearly 90% of the population in only 30% of the total land area, while only 10% of the population is resident on some 5000 farms in the former white, commercial farming area (see Dikeni et al 1996: 19; De Beer 1997: 232). Two land acts (1913, 1936) laid the foundation for these separate areas which were first called *Bantustans*. However, the constitutional development of these into the later homelands for the different ethnic groups was promoted by four other laws (see Box 5 below, also see Appendix C).

Box 5

Legislative basis (enactments) for the creation of homelands

- ◆ NATIVES LAND ACT, 1913
sought to prevent Africans in Natal and the Transvaal from acquiring or hiring land or interests in land
- ◆ NATIVE TRUST AND LAND ACT, 1936
“released” areas³² were added to “scheduled” areas, black areas thus amounted to 15 million hectares or 13% of the total area of South Africa
- ◆ BANTU AUTHORITIES ACT, 1951
formed the basis of the three tiers authority structure
- ◆ PROMOTION OF BANTU SELF-GOVERNMENT ACT, 1959
reserves were regarded as separate geopolitical entities
- ◆ ACT ON THE CITIZENSHIP OF BANTU HOMELANDS, 1970
made provision for the allocation of citizenship to people of a particular homeland
- ◆ CONSTITUTION OF THE BANTU HOMELANDS, 1971
made provision for the constitutional development of every homeland to reach independence

The white community, on the other hand, contributes largely to South Africa's agricultural output which is a testament in a sense to the expertise of the farmers because the natural resources are poor. Now, they fear expropriation without adequate compensation. Yet, the decision makers in the black communities who are increasingly

influenced by a politically, not yet economically empowered youth, urgently need to improve the small-scale farming sector both for subsistence and the creation of jobs and incentives for the future generation.

The headquarters of the Mapela chiefdom is situated 40 km north of Potgietersrus in the centre of the Mokerong district of the former homeland Lebowa which today forms part of the Northern Province of South Africa (see Figure 6 below). The Mapela chiefdom comprises an area of 20 734 hectares (Department of Agriculture 1995). Today, 28 farms belong to the Mapela tribal area (see Table 3 below).

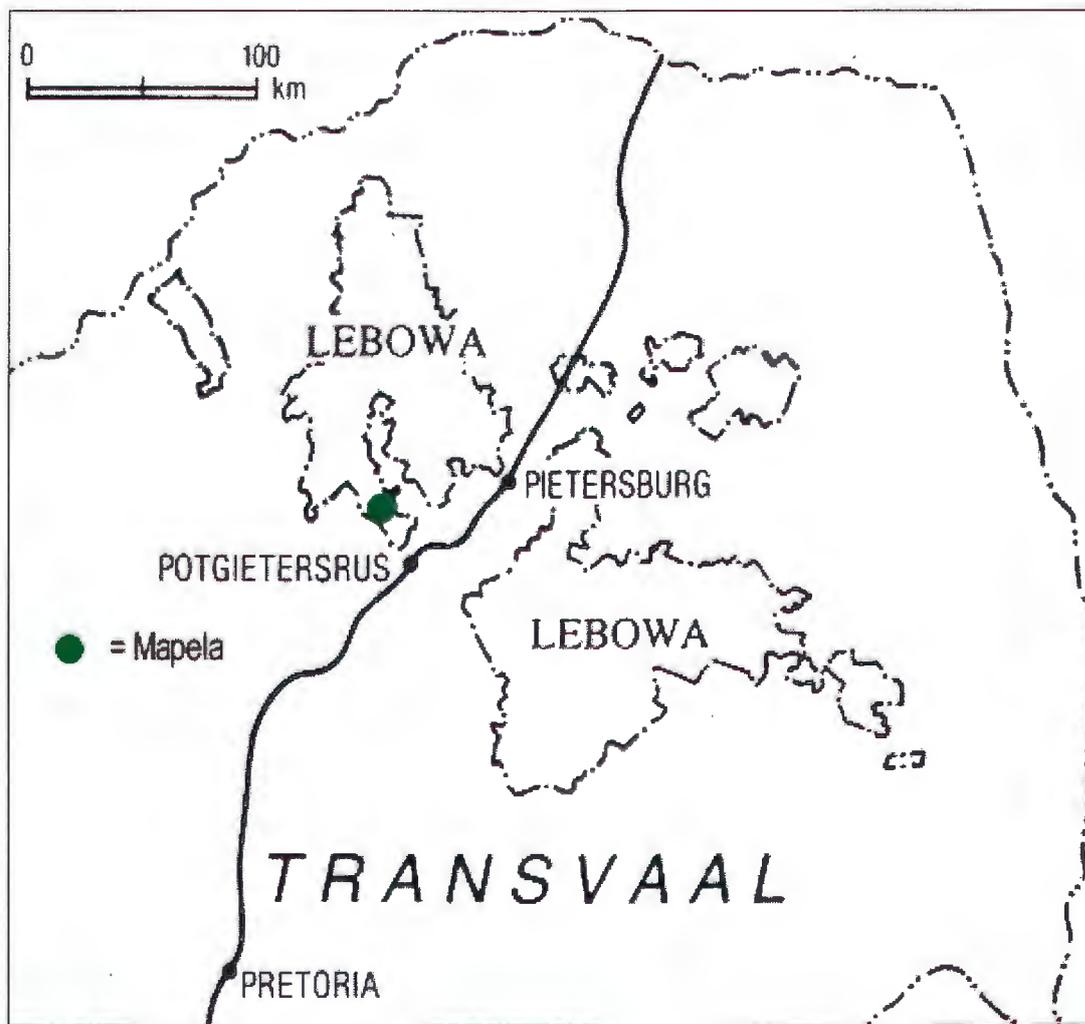


Figure 6: The Mapela area within the former Lebowa homeland

Table 3

Tribal and trust farms under Mapela control

Farm	Tenure Type
Inhambane 802 LR	tribal
Moordkoppie 813 LR	tribal
Molendraai 811 LR	tribal
Zwartfontein 814 LR	tribal
Zwartfontein 818 LR	tribal
Commandodrift 208 KR	trust
Overeyssel 815 LR	tribal
Gezond 235 KR	trust
Sandsloot 236 KR	trust
Vaalkop 819 LR	tribal
Blinkwater 820 LR	tribal
Mozambique 807 LR	tribal
Drenthe 778 LR	tribal
Leyden 804 LR	tribal
Eldorado 208 LR	tribal
Klipfontein 797 LR	tribal
Olifantsklip 810 LR	tribal
Verdooringdraai 803 LR	tribal
Skilpadkraal 779 LR	tribal
Abbotspoort 201 LR	tribal
Richardslager 123 LR	tribal
Thornland 126 LR	tribal
Rooiport 2 173	tribal
Disappointment 170 LR	tribal
Neckar 183 LR	tribal

Martinique 171 LR	tribal
Rooibokfontein 821 LR	tribal
Rietfontein 720 LR	tribal

Though reliable figures are lacking, it has officially approximately 50 000 inhabitants (ibid.). A clinic provides services for patients with minor ailments. In cases where the patient has to undergo an operation, he or she has to be taken to Bakenberg, the adjacent chiefdom to the north, which is about 10km away. There are furthermore a number of food stores and general dealers as well as two butchers in Mapela. The community hall at the *mošate*, numerous churches and schools are used for recreational activities.

Potgietersrus is the nearest town centre with modern industries, various public facilities and shops. The Potgietersrus district is, however, primarily an area for extensive cattle farming for meat production on the commercial farms of white farmers. Large scale mining can be found in the area around Potgietersrus and the mining industry's association with Potgietersrus goes back to 1920 when platinum was first discovered in South Africa.

The Mapela land unit is situated between 23° and 24° latitude and 28° and 29° longitude (Department of Agriculture 1995). The region is generally referred to as the *Bushveld* which is situated within a larger semi-arid savanna biome (see "Tomlinson-report" 1955: Map 18). In the centre of the *Bushveld* lies the arable Springbok Flats (see Schokalskaja 1953: 348), or *Springbokvlakte* area, where cotton, maize, wheat, sunflower and groundnuts are cultivated (Kirsten 1996: 307). According to Acocks (1988), the Mapela area falls under *Veld* Type 12 which is the Springbok Flats Turf *Thornveld* between the Waterberg and the Elands-Olifants valley which extends northwards beyond Potgietersrus. Kirsten (1996: 307) notes that although the deep fertile soil of the *Springbokvlakte* is regarded as good arable land, small and variable rainfall often results in crop failure.

Open plains with various degrees of grass, thorny shrub covers and single trees as well as forests on the mountain slopes are noticeable in the region. Elevations within the Mapela area range from 660 to 1100 metres. The average rainfall varies from approximately 50-60 mm in winter to 400-560 mm in summer. The area is hot with a maximum summer temperature of nearly 40 degrees Celsius. In winter, the temperature can drop to a minimum of 3 degrees Celsius at night. Frost occurrence is, however, light.

In the Mapela area, the deterioration of land, more especially soil erosion and denudation of land, is conspicuous due to decades of enforced overpopulation in the rural areas which resulted in the drastic expansion of arable and residential sites and informal squatting around established villages. Around the poorly constructed houses, naturally resources are critically exhausted which indicates their excessive use.



Figure 7: Eroding river banks in Mapela

Thus, large patches in Mapela are eroded due to the removal of the vegetation cover, more especially trees, for firewood or construction (see Figure 7 above). Erosion usually starts on a small-scale with little furrows. If no countermeasures are taken, they become ditches and eventually *dongas*. Overgrazing also denudes the soil and causes more imbalance in the delicate environment. The soil temperature is thereby increased and

causes evapotranspiration. Where the topsoil has been washed or blown away, erosion leaves the remaining soil sandy, coarse and infertile.

The soil types vary strikingly even within small patches (see Table 4 below). The diversity of trees is much higher on the less accessible mountain slopes than in the *veld*. The nature of the soil against the hills and *koppies* is more or less of the same type as against the mountain slopes. Maize fields are situated within the *veld* area. There are, however, a few wards which are situated next to a mountain, GaMohlolo (Zwartfontein 818 LR) being one of the exceptions. Here, the soil is more sandy and some farmers prefer to cultivate sorghum instead of maize (“we plant sorghum in Mohlohlo because the soil is sandy and sorghum survives even if it doesn’t rain”). There are no plantations or woodlots in Mapela.

Table 4

Topography and dominant soil types in Mapela³³

Topography	Dominant soil types
Mountain slopes	Sandy loams and clays on quartz gravel overlying weathering granite; coarse grey stony soil
<i>Veld</i> and watersheds	Complex of shallow red, reddish-brown, brown and moderately deep or deep red soil; fertile black turf

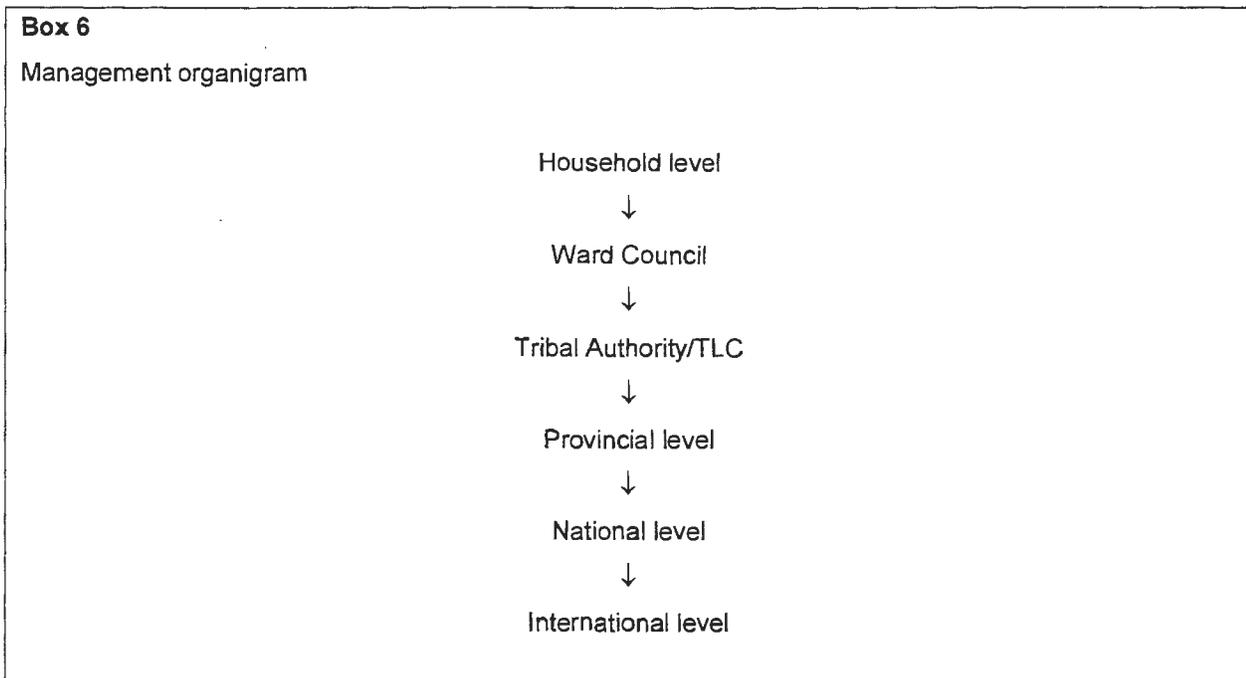
4. The resource management setting

Land, on which natural resources occur, is divided into

- ◆ residential land
- ◆ agricultural land (fields)
- ◆ and grazing land (“the commonage”, *veld*).

³³ Data is taken from the Loxton report “The Natural Resources of Lebowa” (1973).

Natural resources are managed, i. e. controlled, allocated and utilized, by various persons and groups, for instance headmen, in Mapela. Apart from that, various other decision-making bodies on the provincial, national and international level have to be taken into account in the discussion of natural resource management. The management organigram (see Box 6 below) reflects the bottom-up approach of this study. This means that it first deals with the management of resources at the household or grassroots level in Mapela. Thereafter it focusses on increasingly complex management levels such as the councillors or provincial departments until the level of the international arena is reached.



4.1 The local management level

The smallest but most significant economic unit is the household. The majority cultivate some agricultural land though it must be noted that numerous fields (*mašemo*) lie fallow due to reasons such as scarcity of labour and time. Fewer households are engaged in cattle farming. The lesser form of cultivation, namely gardening, is practised by every household.

All independent households need residential sites which include an attached garden, as well as crop fields. Once a site has been allocated to a household, the right to use the land is vested in the household members who share the work. This does not imply that the overall control over allocated resources is left with the household. In fact, this only applies to the domestic sphere. The distinct political setting in Mapela accounts for the fact, that the household is, according to customary law, controlled by the chief and his advisory councils. This is especially true of grazing land and maize fields and becomes apparent in the solving of disputes.

A collection of households makes up a ward which is under the authority of a headman. The headman and his councillors (*lekgotla la induna*) form the ward council of elders which administers the ward and can be convened for advice or when problems arise. This most important institution in a ward is alternately known as the *kgôrô* or the meeting place.³⁴ Here, men discuss affairs and try minor cases such as disputes over grazing land or crop damage.

Residential sites and agricultural land are allocated by a headman in his capacity as representative of the tribal authority. The allocation of residential sites therefore starts at the level of the tribal authority. The latter refers an application to the headman, for instance, where space is available or where the applicant wishes to stay in a ward. Restrictions only affect bachelors who cannot apply for residential sites. Single mothers, however, may apply for agricultural land though not a single application was received during the time of my research. Headmen are obliged to report all matters regarding residential sites to the tribal authority for finalisation. Since 1995, the TLC also has to affirm the application of sites on "trust land", i. e. land which is held in trust by the South African government for the tribal authority (see Table 4 above).³⁵ This results in an overlap of certain functions.

³⁴ Usually, the meeting takes place in the *induna's* homestead.

³⁵ During the time of the field research, the need to inform the TLC about land allocations did not apply to tribally owned land.

Grazing land is not formally allocated but remains under the immediate control of the respective headman of the ward. This is necessary for the solving of conflicts which may arise if more than one party wants to use the same open grazing ground at the same time, more especially during the dry season when grazing becomes scarce. Depending on the importance of the matter, a headman may feel obliged to discuss the dispute extensively with his councillors in the *kgôrô*.

The controlling function of the headmen is, however, not without problems and some headmen even say that they are helpless when it comes to disputes within the ward. This can be ascribed to the yet ineffective interplay between the modern statutory structure comprising officials working at the TLC, and the traditional councils which include some of the close patrilineal kin of the nucleus of the chiefdom. One of the major concerns of the traditional leaders is the fact that the TLCs (transitional local councillors) are financially and psychologically supported by government consultants who come from outside the area, thereby attaining insights into knowledge domains and procedures which are unknown to the headmen. In addition, financial means for infrastructural development have usually been denied to the tribal council since 1995.

The TLC was established in 1995 in Bakenberg as a transitional institution to introduce the new era of local governments across South Africa "for decentralization purposes and to render better services" (pers. comm. Pila, Chairperson of the TLC Bakenberg). Mapela and the neighbouring chiefdoms of Ndebele origin, Bakenberg and Mokopane (Vaaltyn Kekana), fall under the Bakenberg TLC. The system of Local Government is particularly concerned with the upgrading of people's living standards in various sectors such as water provision, health and education (see White Paper on Local Government 1998: v). Due to this, the TLCs must of necessity interfere in domains which were formerly the responsibility of the traditional councils (De Beer 1999: 24). The TLC has followers and supporters all over the wards who actively oppose the traditional ward

system. De Beer (1999: 24) mentions the Civic organization³⁶ in this respect which is strongly supported by young people.

Such struggles about assets and (control) functions have detrimental effects on the management of natural resources since resource users feel uncertain about the local hierarchies and domains. This means that the solving of disputes is no longer institutionalized by customary means. The traditional management system regulated and controlled resource use before the introduction of the TLC which is also reflected in a number of maxims. Today, headmen do not have the same influence and control over people as before and the modern statutory structure provided by the TLC is not yet ready to replace local customs.

The tribal authority which is represented by the chief and a statutory council³⁷ (*lekgotla*) meets three times a week at the *mošate* and solves disputes and administrative matters beyond the headmen's competence. The tribal authority also has the overall control over tribal land and all the natural resources in the area. The measures of control, for instance, in terms of herbal medicine and firewood, are manifested in tribal laws (*melaô*; sing.: *molaô*), beliefs and ritual prohibitions (taboos) which regulate access and use. However, since allocation and control procedures have become increasingly complex and, as has already been mentioned, involve the TLC in Bakenberg, some people tend to exploit the situation and, in some cases, do not refrain from bribery and manipulation. In this way the interaction between the TLC and the tribal authority is further complicated and confounded and the formerly regulative effect of the tribal institution is increasingly affected.

³⁶ The Civic organization is a "division of the ANC at local level which operates nation wide" (De Beer 1999: 24)

³⁷ At present, the council only has male representatives. There are, however, plans to include women in the near future which is in line with constitutional requirements. According to spokespersons, women will probably be recruited from the ANC women's league in Mapela.

4.2 The provincial management level

Important agencies of the provincial government, which existed before the introduction of the local government in 1995, are represented by governmental departments which act in terms of provincial legislation. These agencies are the Department of Agriculture, the Department of Environmental Affairs and Tourism and the Department of Water Affairs. However, some inter-departmental changes have taken place after the change of government such as, for instance, the amalgamation of certain assets and functions. Offices of all departments are located in Potgietersrus. The majority of the departmental officers are natural scientists and others have an administrative background. As far as could be ascertained there are no social scientists working in the departments which probably explains the top-down approach.

Since 1995, the Department of Environmental Affairs and Tourism, in its urge to achieve environmental sustainability, has worked on the amalgamation of the five statutes in terms of the Nature Conservation Acts of the former Transvaal and the former national states. These are

- ◆ the Transvaal Nature Conservation Ordinance, No 12 of 1983, Sect. 5 (2)
- ◆ the Venda Nature Conservation and Natural Parks Act, No 20 of 1986, Sect. 32 (2/2)
- ◆ the Gazankulu Nature Conservation Act, No 5 of 1975, Sect. 24 (3)
- ◆ the Lebowa Nature Conservation Act, No 10 of 1973, Sect. 24 (3)
- ◆ the Proclamation of Nature Conservation in Black Areas, R6 of 1987, Sect. 50 (1).

The new joint Nature Conservation Act has not yet been promulgated and first has to be approved by the cabinet of the Northern Province. This means that the former statutes are still valid and that the Lebowa Nature Conservation Act of 1973 still applies to the Mapela area. However, due to a lack of personnel and finance, law enforcement or environmental education provided for in the Act are largely non-existent. The same applies to the Department of Agriculture which, despite its branch office in Mapela, cannot provide services so that departmental officials are hardly known in the area. This

is not true, however, for the TLC in Bakenberg where it seems that co-operation, at least in the planning phase, was more or less achieved. This can probably be ascribed to the fact that financial means from the province have been channelled by the departments concerned to the TLC.

The Department of Water Affairs which formerly guaranteed water supply now only supports the TLC and the water committees in the wards with water provision which has to be organized by the people themselves. An extension worker who stays in Mapela now does minor repair works previously done by the Department of Water Affairs. The most serious problem faced by the water committees is that they have to collect money from every household to maintain machines and pumps and to purchase diesel. This is not understood by some people who believe that water is a gift from the supreme being which should be accessible to all. The Department, in this respect, only gives half-hearted advice to assist committee members who then have to change the conservative attitudes of people.

4.3 The national management level

Since 1994, millions of South Africans have participated in the development of a new environmental policy for South Africa. The need for action was especially urgent when seen against the background of the shrinking and deteriorating natural resources in the country.

The basis of policy papers which deal with natural resources is section 24 (1 and 2) of Chapter 2 in the Bill of Rights of the Constitution of 1996. Environmental rights of which mention is made in these policy papers are strongly focussed on human health and well-being (Turner 1997: 17).

Accordingly

“everyone has the right

- (a) to an environment that is not harmful to their health and well-being; and
- (b) to have the environment protected for the benefit of the present and future generations, through reasonable legislative and other measures that –
 - (i) prevent pollution and ecological degradation;
 - (ii) promote conservation; and
 - (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development”.

Also important is section 30 which makes provision for the right of everyone to use the language and to participate in the cultural life of their choice, but no one exercising these rights may do so in a manner inconsistent with any provision in the Bill of Rights.

This implies that strategies which are related to cultural values and practices have to be assessed in terms of their environmental impact. This could result in a dynamic and participatory approach in development projects by targeting the *de facto* utilization of resources which should be in harmony with the natural ecological cycles of renewal.

4.4 The international management level

South Africa signed the following international conventions³⁸ and thereby actively subscribed to internationally agreed endeavours regarding the conservation and sustainable development of natural resources world-wide. With the signing of such conventions, the international and the national arena are formally linked. According to Kidd (1997: 79-81), the conventions signed are the following:

- ◆ Convention on International Trade in Endangered Species of Wild Fauna and Flora 1973 (CITES); this convention regulates the trade of endangered species in order to assist conservation of the species in question. A system of appendices differentiates

³⁸ Some of the conventions were signed during the UN Rio Summit in 1992 in Brazil on Environment and Development (see Chapter 2, Item 1.2.1 above).

between species of differing status as far as regulation of trade is concerned, and a conference of the parties to CITES meets periodically to assess these and other issues.

- ◆ Convention on Biological Diversity 1992; this convention is aimed at ensuring the conservation of biological diversity and sustainable use of its components, and the fair and equitable sharing of the benefits of the utilisation of genetic resources.
- ◆ The Southern African Regional Commission for the Conservation and Utilization of the Soil (SARCCUS); this regional convention involves regional co-operation in the sub-continent in matters relating to soil conservation and related issues.
- ◆ The Framework Convention on Climate Change 1992; this convention is aimed at stabilizing greenhouse gas concentrations in the atmosphere, requiring states *inter alia* to take steps to limit emissions of greenhouse gases by humans. It should be noted that South Africa has signed but not acceded to this convention.

5. Summary

The history of the people of Mapela is largely shaped by the history of the royal family, the Langa, who moved to the area north of Potgietersrus where they were involved in conflicts and disputes with neighbouring chiefdoms and the Boer people during the eighteenth and early nineteenth centuries. The large farming community which was established had a subsistence economy, grew mainly maize, practised cattle farming and was centrally controlled by the tribal authority.

Today, many households split economic commitments so that agricultural activities lose importance for household sustenance. This means that women who manage homesteads in the absence of household heads (migrant labourers) try to generate additional income to pay school fees and to buy *mealie meal*. This enables families to become more independent from weather vagaries, potential droughts and severe crop losses.

Yet, in the worldview of people, land remains the most precious resource for people because it links them symbolically with their ancestors whose invisible spirits continue to influence decision-making. Knowledge about ancestral spirits and rituals to worship them are transmitted informally and are still relevant despite the influence of school education, the mass-media and Christianization.

The Mapela area forms part of the Sprinkbok Flats in the Northern Province. The black turf fields are notable for their fertility and agricultural potential. Because of this, the Mapela area was also favoured by farmers from less fertile regions who migrated there for better ploughing conditions. Today, however, population pressure and inadequate agricultural methods have exhausted the soil to such a critical extent that yields continue to decline. Other valuable land gets lost due to the expansion of residential land in the settlement areas. As a result of the growing population, the *veld* is increasingly depleted of botanical resources which are used for various economic and non-economic purposes. The people ascribe this development to poverty and the burdens of rural life.

For traditional decision makers at the communal level, resource management is largely a political issue. This is due to the fact that the tribal authority has lost power to control the land for the benefit of the members of the chiefdom as a result of political transitions. Traditional leaders and TLCs have not yet solved the problem satisfactorily which is, ultimately, not only to the detriment of the people but also to that of the natural environment. This implies that different authorities have an interest in the use of the natural resources of Mapela. Local resource management therefore does not take place in isolation but is influenced by and embedded in provincial, national and even international systems.

"A woman is a baboon, she is eaten by her arms" (*mosadi ke tšhwêne o lewa mabogo*).

Chapter Four: Use and management of residential land

1. Introduction

Land in the Mapela tribal area is divided into residential land, land for cultivation and the commonage. In this chapter attention will be given to the use and management of residential land. Most of the residential land is used for housing purposes. Public facilities in the residential area such as the offices of the traditional authority and courts, schools and shops are therefore not included in the discussion.

Residential land plays an important role in local resource management because it provides the locus for numerous managerial efforts, for instance, the acquisition of land to establish a homestead, the maintenance and (magical) protection thereof and the growing of vegetables. In addition to economic activities, residential land is used for various group activities and forms the place for the *go phasa* ritual to communicate with the ancestors. The settlement of families and kin groups on residential land also results in the development of mutually supportive relationships between neighbours who support and help each other.

Attempts to protect homesteads magically presuppose the belief that potentially harmful spirits can threaten the peaceful and happy life of people. An indication of this is misfortune which strikes one or more residents (e. g. illness or barrenness). Such a state of abnormality is usually ascribed to the harmful intentions of other people so that harmony within the community is of paramount importance in the social interaction of people. A major preoccupation of people is thus to maintain order so that they can eventually gain control over malevolent forces. Another concern is the prevention of potentially harmful (ritually impure) persons from entering the lands because they can also be extremely dangerous to people, lands and crops.

Concerning the high value ascribed to equilibrium in the cosmos, i. e. harmony between people, the environment and the spiritual world, it is of crucial importance to take cognizance of the worldview of people as this determines or prohibits certain decisions and their outcome. Management of residential land therefore not only tries to satisfy physical human needs but also seeks to provide conditions necessary for normality and order within the boundaries of the homesteads.

This chapter deals with elementary management issues such as access to and control of residential land. It further explores decision-making processes on different authoritative levels as well as the nature of reciprocal social relationships, including the relations between neighbours in the constituent wards. The latter, in particular, pertains to the co-operation between women as this plays an essential role for the successful management of residential land, more especially in the absence of men.

2. Access to and the control of residential land

2.1 Access

Access, according to the Oxford Dictionary (1989: 7), is defined as a means of approaching or entering a place. It further describes the opportunity or right to use something or approach somebody. In Mapela, a discussion of access to residential land includes the allocation of residential land by the tribal authority, which is in control of the land, to the people at grassroots level in order that they use the land to the exclusion of other people.

With regard to the allocation of land, the customary procedure is that a married man, usually immediately after the conclusion of marriage, approaches the local headman together with his parents or other senior representatives from the lineage, to request land for the establishment of a separate homestead. The headman then calls the senior people of his ward and discusses in the *kgôrô* council the matter of where the couple wants to set up the homestead (see Chapter 3, Item 4.1 above). Once the *kgôrô* agrees to the application, the matter is taken to the statutory tribal authority, of which the

chieftainness is also a member, where permission has to be granted. Such an allocation presupposes access to all the members of the household. Land is then allotted for a specific purpose to particular persons (such as a wife and her children). This implies that they require the right to use that particular allotment to the exclusion of other members. Where a man is married to more than one wife, all wives are provided with a site to establish a dwelling unit (*lapa*) for themselves and their children.

Once land has been allocated, access to land is controlled by the household head as the representative of his family group and not in his individual capacity. Those who hold the right to access residential land have to adhere to what is considered appropriate behaviour by the local community. A stranger who is not introduced (*go bega*) by a friend or a relative is viewed with suspicion and prohibited from obtaining access. Residents are especially attentive and watchful at night when most crimes occur and night-witches and other evil spirits roam around.

Access to land at Mapela is free of charge for members of the chiefdom and forms an essential part of the people-centred approach to land management. The customary application for land, however, entails the paying of a small monetary fee to the chieftainness which is, according to spokespersons, similar to *go lotšha* (litt.: to greet by clapping with the hands to pay ones respect to) gifts, which have to be donated after a person has returned from migrant labour to retire at Mapela or after a person returns from a long journey. Where a person wishes to apply for land in another ward he will most probably not be denied land provided that it is available and provided that he was introduced by a member of the ward (Jackson 1982: 140). With the contribution of *go lotšha* the applicant pays tribute to the tribal authority and indicates that he is prepared to obey the tribal laws and customs and that he will live in harmony with his neighbours.

In addition to the usual land allocation procedure discussed above, land can also be obtained through the custom of *go fiwa* (see Chapter 3, Item 2.1 above). This custom entails a non-monetary agreement for use of land between the owner of the land (the representative of the family who obtained the land from the tribal authority) and the

person who wishes to make use of it. The agreement has to be approved by the headman of the ward of which the applicant's family of birth are members or in which the applicant's family resides. The *go fiwa* custom is especially relevant to enable single mothers (*matita*) to establish their own homesteads. Despite the fact that access to residential land cannot be denied to unmarried women with children, the tribal councillors frown upon those girls who ignore the social importance of marriage.

2.2 Control

There are three levels of control in Mapela of which the tribal authority is the most important with regard to land management, namely the division and allocation of land. At grassroots level, individual families use the land under immediate control of the head of the household. At ward level, control is exercised by headmen as representatives of the tribal authority. At the top level of control are government bodies which are situated outside the Mapela area and which are, for instance, represented by the district magistrate and extension officers from the Department of Agriculture.

2.2.1 Family control

After allocation to the various households, the individual homesteads are numbered and registered at the tribal authority. A homestead is usually registered under the name of the household head who is the person in charge of the residential land. The latter would then exercise control over the residential land on behalf of his family and others would have to respect the family as the rightful owner of the land (*monyé mabu*).

With the transfer of control over residential land to the head of the household, the latter is responsible for the maintenance, fencing and protection of the residential land. The duty to control residential land on behalf of the tribal authority further entails that he makes provision for his absence which is usually the time he spends as a migrant labourer in the urban areas (see Chapter 3, Item 2.2.4 above). In addition, the head of the household has to inform his neighbours and the headman about his absence so that they can support and care for his family if necessary.

When the head of the household migrates to his place of work he has to leave sufficient financial means to enable his wife and all other people under his care to maintain and make use of the land for their survival. Even if the head of the household does not live at Mapela for a considerable time, he maintains control over residential land. He may interfere with, rectify or regulate decisions of other household members any time he is on a visit and observes what has been done and what has been forgotten. In his absence, he is expected to send regular remittances for his wife to buy *mealie meal*, to pay school fees and to remunerate some hired labourers for repair work or for the ploughing of the garden. However, many women complain that their husbands fail to send money regularly which, eventually, results in them having to generate additional income at Mapela (see Chapter 3, Item 2.2.4 above). Nevertheless, a wife continues to recognize and accept her husband's control of the land. Even if she wished to obtain control she would customarily not be entitled to interfere in her husband's affairs until his death. Exceptions do, however, occur, such as if the husband makes no efforts to return to Mapela or even wishes the dissolution of his marriage.

Once a migrant labourer eventually retires, he usually assumes a senior status and is referred to as *mokgalabjê* (litt.: old man), one who has accumulated useful skills, experience and knowledge and who, in his position as a senior man, also gives advice to others with regard to land management. Such "urban skills" which could develop through contact with people from other areas include, for instance, some clever ways to make money. It is most striking, therefore, that after some time in the cities, rural habits and traditions are rather perfected than replaced. It can be assumed that this gives migrant labourers more certainty in unknown environments and that these activities keep them busy after working hours. Such behaviour could also be due to the fact that deeply-embedded values are not discarded even if a person stays in an urban area for a while. According to spokespersons, the majority of returned labourers do not change much during their absence and easily get used to rural life again. So, on his retirement, a man is less likely to withdraw much from activities pertaining to the use of land. He rather resumes active control of the management of land, namely, to instruct others on

what to do and to instruct young people who reside on the land on how to best fulfil their ascribed roles.

Once the landowner dies, the land is usually controlled by his wife until the youngest son (*mošalalapeng*) assumes the status of a household head after marriage. In one case, a brother of the deceased husband moved into one of the houses in the homestead to protect the family. According to customary law, however, residence on the land is not a requirement to exercise control over land (pers. comm. Vorster).

If a widow, during her marriage, has failed to give birth to a son who would be the prospective male successor of the head of the household, she is in a vulnerable and insecure position and can even lose control of the land. During discussions it was ascertained that some of the widows have to defend their rights to the land against claims from other male members of the husband's kin who have not been living on the land but who try to take over control. Women further indicated a loss of respect shown for old people and the trend of young people to remain in Mapela and try to establish independent homesteads even if they are not yet married. The tendency to remain at Mapela after leaving school is usually ascribed to the high unemployment rate in South Africa which prevents young people from trying to find employment in the urban areas (see Chapter 1, Item 1.2 above). Another reason mentioned by the women interviewed is the scarcity of residential land which could be made available to young people who wish to settle separately from the parental homestead.

In case the owner dies and leaves no wife or son behind to take over control of the homestead, the residential land has to be returned to the tribal authority (see Cross & Friedmann 1997: 19). This is due to the fact that, despite some informal land transfers described above, residential land can customarily not be sold or redistributed nor can it be negotiated with third parties without notification of the headman and the tribal authority. The tribal authority would then most likely re-allocate the residential land to another applicant.

2.2.2 Control by traditional authorities

Land, as indicated above (see Chapter 3, Item 4.1), belongs to the Mapela community³⁹ and is, according to indigenous public law, controlled by the chief and his or her advisory councils. Together, they divide the land into individual stands and thereby regulate the use of land for housing purposes. This means that the tribal authority is in a position to decide which parts of the land have to be left for other purposes, for instance, for grazing or for the cultivation of crops. In fact, the administration of land by the tribal authority is one of its main functions in Mapela.

After consultation with the appointed headmen in the wards, who have a more detailed knowledge about the residential land in their area, the tribal authority selects those sites which are within a reasonable distance of arable land and public water pumps. Another concern is to place new residents in the appropriate residential area of a ward. This explains why a homestead would never be built entirely apart from other people. The tribal authority thus ensures that the residents can support themselves by providing them with basic resources as well as locating them in proximity to others.

After allocation to the various agnatic groups, the chieftainess and her councils are, however, not freed from their regulatory control function over residential land. Traditional authorities rather continue to be in charge of land because the allotment of land to family groups makes provision for the return of land if it is no longer needed. Responsibility for the sustainable use of land can further be explained by the fact that the royal family is basically responsible for the well-being and the security of the people who are members of the chiefdom. This duty entails, amongst others, that they have to protect members of the chiefdom from criminals and have to help them to maintain the homesteads. This applies, for instance, if roofs have been blown off by a storm.

It also includes the right of residents to seek advice in legal matters from the tribal court with regard to disputes over residential land, for instance, the damage to fences or

vegetable gardens by neighbouring livestock or the illegal expansions of land. At court, tribal laws (*melaô*) enforce the rights of residents with regard to the land which was allotted to them. This gives people certainty of a protected residential status as long as the tribal authority is in control of the tribal area. The success of this support system can be threatened if residents are manipulated by transitional political bodies, such as the TLCs, and begin to doubt the qualification of the tribal authority. During the time of the research, the TLCs were, however, not yet in the position to apply for financial aid from potential donors so that they could not support people substantially (see De Beer 1999: 24). This means that the tribal authority remains an important “crisis centre” for immediate help and, at present, also remains in control of residential land. Many examples indicate that, for the chieftainess and her councils, it is an inculcated belief that land cannot be governed without recognizing the needs of people. During a longer discussion the chieftainess told me:

“When a roof has been blown off by wind, those people who have previously attacked us now come back and ask for help. I remember 1993 when a storm damaged some of the houses in this area. I tried to make means to contact the provincial government. The governor came to Mapela to inspect the damage. He came from Pietersburg and offered his support. He gave us some tents where those people whose houses were affected found shelter. While the houses were repaired I wrote down all the names of these people so that the social workers knew whom to help. But then the Civics came and started to act against us. They also said that they are going to help people and they also wrote down the names of those who were hit by the wind. In the end they were not able to do anything. They have no power. But they still continue to manipulate people. Meanwhile I asked the World Division for money and they granted R5000. We bought food and soap. This is the reason why people still approach the tribal authority if they are in need”.

The right to control land is conferred by the tribal authority on the headmen which were appointed by the chieftainess and her councillors to administer the wards in order to address the needs of people even in remote wards (Jackson 1982: 92). The latter then have to act on behalf of the tribal authority and have to consult the councillors if they have difficulties in deciding on a matter. The advantage of the delegation of functions to

³⁹ The fact that communal tenure (tribal land) still coexists with state-administered forms of tenure (former betterment and trust tenures) has no bearing on customary procedures with regard to land allocation.

smaller institutions is that residents have easy access to a headman who is in a position to assist them. The headman can usually be approached early in the morning when he is supposed to be available to answer queries from the members of his ward.

The headman is usually well-informed and supported by his wife who is often in charge of women's organizations and committees in her ward. In addition, the headman usually has a sound knowledge about the complexities of the residents living in the ward, the soils which form suitable building land as well as the available water resources. The relative independence of the wards and the control of local headmen who know all the families in their wards results in the tribal authority being reasonable to assign land to new members. Another precondition for successful control of residential land is that the headmen give regular reports to the tribal authority so that the latter is always informed about any movements taking place in the tribal area. Reports are made during monthly meetings at the *mošate* where all the headmen are summoned to convene.

2.2.3 Control by other bodies

The formation of square living areas in some wards at Mapela⁴⁰ is a result of the comprehensive betterment programme of the previous government in the 1960s which targeted the improvement of administration and services in the former homeland areas (Thorp 1997: 37, also see Baber 1996: 271). One of the effects of the statutory measures was that the constituent homesteads of the former settlements (*kraal* complex; *thetamotse/thetematse*, litt: fence surrounding a village in form of a circle) were no longer localized and that people moved to stands on demarcated residential land (De Beer 1989: 102). Today, households are attached to each other in lines and the settlement pattern forms square living areas with small roads and footpaths separating them.

To reside on the land, it then became necessary for the people to obtain a Permission to Occupy (PTOs) which formed part of a statutory procedure under this programme to streamline land management in Black areas. PTOs served as valid certificates to use

demarcated land for arable or residential purposes. They were promulgated by section 53 of Proclamation R.188 of 1969 (see Box 7 below). The proclamation entails that after the death of the holder of a PTO the land reverts to the commonage and becomes available for re-allocation. This is true in so far that there is no widow; if the deceased leaves a widow she continues to occupy the land until her death or remarriage. During 1991, administration of PTOs was assigned to the provincial government.⁴¹

Box 7

Proclamation R. 188 of 1969

Section 53 (1): Upon the death of the registered holder of an arable or residential allotment such allotment shall, subject to the provisions of subsection (2), revert to the commonage and become available for re-allotment in accordance with the provisions of subsection (3).

(2): Any Bantu woman who, by virtue of her marriage to or customary union with the registered holder on an arable or residential allotment, occupied such allotment with such holder at the time of his death, may subject to the obligations imposed on such holder in respect of such land or under these regulations, continue in occupation of such allotment until her death or remarriage or entry into another customary union, (...).

The usual procedure was that a person who applied for a piece of land for residential purposes had to approach the headman of the relevant ward who took the matter to the tribal authority to assign land to the prospective resident. A form was completed which had to be checked and approved by the Department of Agriculture and which, eventually, had to be registered with the local magistrate. The Department of Agriculture surveyed new stands and also exercised considerable control over the number of livestock kept at the homesteads.

Rents for housing on trust land, that is land not occupied under PTOs, which are payable to the district magistrate were another statutory measure. However, rents were not being paid during the time of the research. A spokesperson said:

⁴⁰ The betterment programme took effect only on trust land at Mapela.

⁴¹ During a meeting of traditional leaders and councillors of the Western district, it was agreed "that the word permission to occupy should be changed to free-hold title" (information obtained from the minutes of a "Steering Committee" meeting held in 1996).

"For sites on trust land, people were asked to pay R1-3 per month for residential, arable and grazing sites. People paid this before. The money was given to the magistrate by the tribal authority. But then, people stopped to pay. This was around 1993. They (the youths) told the community that the government said the community should stop paying for land which is their own. And all the farms around Mapela are also our own and that we will get them back from the Whites".

In fact, there was some confusion about the paying of tribal funds (see Chapter 4, Item 2.1 above) and the paying of the so-called rents on trust land. After 1994, the situation became even more unclear when the then newly established TLC also started to stake a claim on funds from people for the development of the area, or, more likely for the allocation of sites. As far as could be ascertained those people who gave money to the TLC stopped paying funds to the tribal authority. The councillors of the tribal authority do not understand why the TLC encourages people to deny customary money for the administration of tribal land to the chieftainess. They state that "they (the TLCs) spread the information that the chief was stealing the money from people. But now they claim this money. We don't understand this".

It is further assumed that the issuing of PTOs by TLCs was abused for political purposes while, in fact, they hardly served the intentions of better land management planned in the beginning. This concurs with Pretorius (1997: 11) who notes that a PTO certificate is an untrustworthy indicator of tenure rights. In April 1998, the chairperson of the TLC made the following remark which must be seen against the background of diverging theory and practice:

"The problem is that some people occupy a piece of land, without a PTO or any other title deed. We want all the land being demarcated and numbered for easier control. The Department of Agriculture is ignored by many people at the moment. Someday in future, when the Department co-operates with us, they will regain some influence. At the moment the people from Potgietersrus (the officers from the Department of Agriculture) send applicants to us and vice versa. There is no co-operation. This has to change. It is planned that the TLC is going to be a full-time job for us next year. At the moment, our councillors only work part-time. In future, all the land is going to be converted to communal and private land".

Theoretically, since 1995, the allocation of trust land should have been administered by land officers. During the time of the research, officers from the Department of Agriculture had, however, not yet been informed by the TLC and did not know about plans to co-operate. New sites were also not demarcated during that time.

Furthermore, since the new government came to power in 1994, all agency functions previously performed by the magistrate were taken away and given back to the relevant departments with the result that magistrates lost administrative authority over these departments and from then on kept themselves busy with judicial work only. Even so, the statutory provisions were amended, e. g. the provision of the Trust Land Proclamation (R. 188 of 1969) which provided that the magistrate must sign PTOs. This means that the Department of Agriculture and the local magistrate no longer have authority to influence decisions with regard to the demarcation and use of residential land.

3. Uses of residential land

3.1 Establishment and protection of a homestead

For the successful establishment and maintenance of buildings on residential land to protect and shelter the residents, people at Mapela combine empirical knowledge about the environmental conditions in the area with spiritual or super-empirical knowledge about phenomena. The latter is based on moral or ethical values which allow a human being to distinguish right (normal/cool) from wrong (abnormal/hot) conditions and adequate from inadequate situations. With regard to environmental constraints, on the other hand, people rely on logical correlations which, according to Bidney (1954: 400), underlie the way human beings comprehend the real nature of things by means of their brainpower and senses.

According to their logical understanding of the environment, spokespersons said that they cannot build houses on the black turf (*se/ôkô*) as this does not provide solid ground for buildings. Turf is extremely muddy after the rain and develops deep cracks in the dry

season which can destroy houses. In addition, a homestead should be established on soil which is suitable for the growing of vegetables in the adjacent garden, preferably on red soil (*sehwibidu*, see Figure 8 below), or, if the owner wishes to cultivate sorghum, on sandy soil (*mohlaba*). The growing of crops and vegetables on a small-scale is very important because gardening contributes considerably to subsistence and enables people to bridge temporary food scarcities. Lastly, informants mentioned that they dislike residential land if a maroela tree grows there. They said that the strong roots of the tree can damage buildings and that children can suffocate if they eat the sticky fruits.



Figure 8: Cultivation of vegetables on red soil

Super-empirical knowledge to keep a homestead cool and normal entails the management of boundaries to ward off evil spirits, the debarring of ritually impure people and the regular worshipping of ancestors. Together, these efforts can be interpreted as magico-religious measures to gain control over forces which can be dangerous to people and which can threaten mutual relationships.

Boundaries are, first of all, important to the Sotho worldview because they arrange things so that they are, at least cognitively, in place (Hammond-Tooke 1981: 127). This has to be seen against the background of a complex and disorganized environment in the perception of the people which can cause disharmony if not taken cognizance of.

So, walls and fences have a meaning beyond the demarcation of residential land. It is therefore logical that boundaries make up a very sensitive structure at the homestead because, for the people who live on the land, they separate the manageable from the unmanageable and should therefore be treated and maintained with care as a necessary precondition for a happy and peaceful residence.

Previously, it was a common procedure to magically protect the boundaries by means of special medicines which were sprinkled at the corners of the dwelling unit (*go thekga motse*) by traditional healers. The aim was to prevent evil spirits and witchcraft (*boloï*) which could damage a homestead and harm the residents. According to spokespersons, malevolent witchcraft is closely associated with jealousy (*mona*). The latter is then personified by people as a woman holding bewitching powers which can be extremely dangerous to others. So, if a witch begrudges another for possessing goods or for being successful, she is able to re-direct *mona* to the better-off person or family who will then suffer from the evil spirit sent by her. Spokespersons said that witches can direct bad weather conditions, such as a storm or lightning, to a homestead and that they can even cause the death of a person by using poisonous herbs which are mixed into a concoction and are given to the person (see Schapera 1955: 275). Women who were asked about witches said that the latter have distorted views of life. This concurs with the perception of a shop owner who said: "The awareness of material differences is caused by jealousy and not the other way around". The belief in witchcraft continues to play an important role in social interactions. Measures to chase away a witch or to kill ("necklace") her have increased considerably in the Northern Province. De Beer (1997: 236) notes that "the execution of people by burning them to death has become so serious that a Commission of Inquiry was appointed by the provincial government of the Northern Province in 1994 to investigate the cause of the problem". Simultaneously, the magical protection of boundaries to keep a witch out of the homesteads has, however, lost relevance.

As a traditional healer remarked, the protection of boundaries had previously been the most lucrative business for him because he sometimes charged up to R600 for this

service. Today, however, there are only a few people left who move to new stands and want the boundaries to be protected before they enter. Others only call a healer after some time of residence if they experience a crisis which makes them uncertain with regard to the normality of the place where they live. It could therefore be ascertained during the field research that the *go thekga motse* practice is still recalled even by school-going children but that people rarely act accordingly and call a healer. This is generally explained by a lack of money and distrust in healers' qualifications because some do not hold certificates which can only be obtained after attending professional training in traditional healing.

As opposed to *go thekga motse*, the observation of taboos to prevent ritually impure people from entering residential land is still adhered to by the majority of the people at Mapela. This belief entails that residential land, once occupied by a family, may not be polluted by "heat" (*go fiša*)⁴², i. e. by a person who is ritually impure and therefore in a state of abnormality (see Chapter Three, Item 2.4.3 above). Because of the association with dangerous powers such a person can cause conflict and imbalance in a homestead if he or she enters a homestead, eats and talks with the residents (see Hammond-Tooke 1981: 130). Spokespersons said that the *fiša* state can either be the result of a journey, a death in the family, attendance of a funeral, sexual intercourse with a menstruating woman or even a sickness which naturally makes a person ritually impure or "hot", for instance fever (see Table 5 below; also see Hammond-Tooke 1981: 121). Taboos to prevent ritually impure people from entering residential land have to be observed until the person who is dangerous to others is cured by a traditional healer. The latter applies special concoctions so that the affected person can return to a normal state and participate in communal life again.

⁴² The condition of ritual hotness is substantively described by Schapera (1941: 194pp.) and Hammond-Tooke (1981: 140pp) and is mentioned in most of the ethnographic descriptions of the Northern Sotho-speakers in South Africa.

Table 5

Fiša-conditions causing heat of one or more persons

<i>Fiša</i> -condition	Persons which can be dangerous to others
death of a relative	widow and mourners
sexual contact with a hot woman (e. g. if she is menstruating)	partner of the woman, menstruating woman
pregnant woman	pregnant woman, husband
abortion	woman who aborted as well as the foetus if not buried in the shade
miscarriage	mother and father
after a journey	person who returns from a journey

An additional danger can be the abortion of a foetus in the *veld*, more especially if the foetus is not buried in a cool and shady place.⁴³ Spokespersons said that a girl who aborted is "hot" and can be extremely dangerous to the family living with her in a homestead.⁴⁴ This is even more harmful if the girl hides the secret from her mother. Because of the fact that an unmarried girl is customarily accompanied by her mother to a traditional healer she cannot be cured as long as she does not inform her mother about the incident.

The third precondition for maintaining harmony in the homestead is the regular performance of rituals to appease the ancestors and to prevent their wrath. It is consequently of utmost importance to establish and maintain a shrine in the centre of the residential land, namely the *lapa* where the *legwama* plant has to be placed or planted (see Chapter 3, Item 2.4.1 above).⁴⁵ It is believed that the ancestors can cause the same danger to the residents as evil spirits do if they feel ignored or are not treated with utmost respect. As a preparatory measure for the ritual, women are inclined to

⁴³ Abortions are induced with aloes and other poisonous plants which can be found in the *veld*.

⁴⁴ It is difficult to obtain information about abortions because this is one of the most sensitive issues to be discussed. Some women even used a pseudonym to talk about a foetus, namely "black ox" (*pholo e ntsho*).

⁴⁵ Even modern houses which are built in a Western style by contractors could be found having such a traditional *lapa*.

regularly renew the earthen floor with a mixture of coarse soil, cattle dung and water. It is taboo, however, for a woman to smear the floors during the rainy season. Such activities are left for the winter months when women take a rest from strenuous fieldwork. Another reason is that most of the rituals to appease the ancestors take place in winter and the floor in the *lapa* must be specially prepared for this occasion.

In addition, the *legwama* must be kept alive and may not dry out completely. A dead plant could negatively affect the success of the ritual because it lacks *maatla*. Some people could be observed watering the shrine, others said that they have to replace the plant from time to time. According to custom, the shrine is collected by the head of the household. A farmer explained:

“Women are not allowed to collect a *legwama*. This is a taboo. If they do it the ancestral spirits will be upset. We go in summer when we easily find it. We walk before sunrise so that we don't meet the spirits out there. We say that after taking the plant you are not supposed to look back (*ge o etšwa go epa legwama o se ke wa gadima morago*). If the shrine in the *lapa* is old, you have to look for a new one but you should throw the old one far away. The *legwama* likes sandy soil”.

In case the head of the household is not available, his wife is, however, allowed to collect the *legwama* on behalf of him. Once placed in the centre of the homestead, the shrine symbolically re-incorporates the ancestors in the family and reinforces kinship ties because every family group worships the spirits of its ancestors (see Chapter 3, Item 2.4.1 above). The ritual usually takes place early in the morning and is largely a family affair.

Apart from crop and vegetable sacrifices to thank the ancestors, for instance the first fruit ceremony around January (*go loma lerotse*), the *go phasa* ritual is performed any time sickness, barrenness or financial shocks hit the family. Such a condition is referred to as a time the ancestors are crying (*badimo ba lla*). The initiative to perform *go phasa* is usually taken by the head of the household after consultation with a traditional healer. In his absence, this ritual can also be organized by the senior woman of the house though it is good manners to invite senior male members of the lineage as

representatives of the household head. Sometimes a white goat is sacrificed and, on other occasions, a chicken is slaughtered. Of major importance is the pouring of blood, beer or water and snuff over the shrine which is supposed to have a cooling and tranquilizing effect on the ancestors. Hammond-Tooke (1981: 90) emphasizes the central role of the husband's sister (*rakgadi*) in this respect. The same importance could be observed at Mapela because her attendance, or at least her knowledge thereof, was of utmost importance for the successful performance of the ritual. The latter refers to the management of the crisis, in other words the recovery of the residents as well as their return to a normal and happy life.

3.2 Use of houses and huts

The modern homestead is usually made up of two or three attached multiple-roomed houses with corrugated iron roofs. Most of the homesteads have two or three bedrooms, a living room and a kitchen where the food and dishes are stored. Only a few houses have a bathroom. So, for washing, water is usually drawn outside from one of the pumps and then taken inside. Children are sometimes washed outside. Most of the simple toilets are outside in the yard and were, according to spokespersons, established by the previous government in an overall sanitation campaign as part of the betterment programme (see Chapter 4, Item 2.2.3 above). Today, many old people complain that they are afraid to walk outside at night because of the high crime rate at Mapela and that they try to make means available to establish a toilet inside the house. Most of the houses are equipped with heavy furniture and a radio but only a few have a television. This is due to the fact that the area is not yet electrified and only a few better-off residents can get access to electricity. Those who have electricity usually have a fridge and an electric stove. In summer, most of the activities take place outside. If it is hot, people rather tend to rest under a tree than inside. In the yard a person can communicate with neighbours and greet passing people. Only in the cool winter months do people prefer to remain indoors.

Built entirely apart from the modern houses, the traditional cooking hut (*morala*), a cylindrical mud and dung building with a conical thatched roof, can still be found in many homesteads and continues to be used for various purposes. Firstly, the hut is used for the daily preparation of the porridge (*bôgôbe*). Despite the fact that many homesteads are equipped with a paraffin stove, the simple iron stove is still used here because paraffin is expensive and not always affordable. In addition, the paraffin stove is rather used for the preparation of side-dishes than for porridge because the latter is prepared in a large pot which cannot be placed on a little stove. Due to the fact that a cooking hut has no windows, some women tend to use the *morala* only if it is raining because of the smoke which effects the eyes and the respiratory tracts. On dry days they would rather prefer to cook outside.⁴⁶

Apart from cooking, the *morala* is used as an additional bedroom for old people (“usually our grandmothers sleep in the *morala*”), for visitors who wish to spend the night there or as a room for sick people who need a warm place to recover. Some people also store maize for immediate consumption in the *morala*. According to spokespersons, it is dry inside and the maize therefore less likely to spoil or to be affected by insects. Another use is that people sometimes tend to gather in the cooking hut in winter because it is the warmest room. With regard to sick people, it was observed that a weak old woman who was unable to walk outside any longer stayed in the *morala* while the relatives awaited her death. Although it would have been more convenient for her to sleep in the main house she insisted in spending her last days in the cooking hut. Here, she said, she feels close to the ancestors because the *morala* symbolizes a place where the traditional rural lifestyle, which she connects with warmth, food and harmonious social interaction, can still be felt and experienced. The maintenance of this structure therefore reflects the adherence to traditional practices which are not easily abandoned because they continue to be useful and of high value to people.

Another essential structure in the homestead is a simple shelter or drying platform (*sehlaha*; litt.: temporary hut in the lands) in the yard which is used to dry maize after

⁴⁶ The cooking place outside is usually a simple corrugated iron shelter (*mokuku*).

harvesting. The *sehlahla* is a simple construction made of some wooden poles which are set on stones so that the water can flow away. Once the crops are dried, they are thrown in bags and taken to the Northern Transvaal Cooperation (NTC) in Potgietersrus for storage and grinding. Such a shelter was previously established next to the fields where people stayed until the end of the agricultural season. Today, all the people working in the fields return home at night which is due to the fact that distant fields are no longer ploughed and also that people are afraid of criminals. A proper thatched storage hut (*lehlohlo*) to store the crops for later consumption no longer plays a role. Another strategy which has fallen in disuse is the storage of crops in baskets (*sešego*; litt.: grainbasket, granary) which were buried in a pit in the cattle *kraal* so that they could be kept cool and could not be stolen because only the owner of the cattle knew where the baskets had been placed (see Jackson 1982: 107).

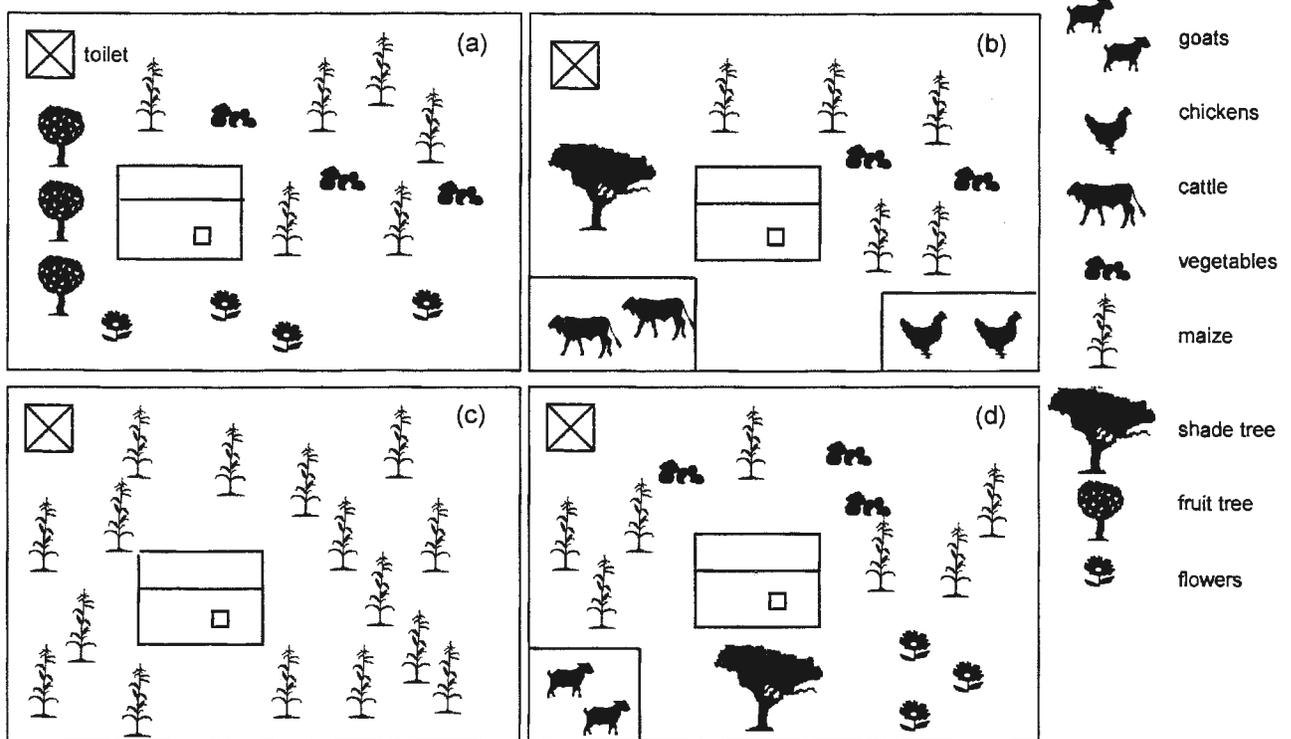
Spokespersons said that they have to take the maize to the NTC because they have forgotten how to medicate the crops so that they are not affected by insects. Others said that it is easier for them if the NTC grinds the maize because they have no time to do it themselves using simple grinding stones. Young women said that they do not even know how to process maize into *mealie meal* and that this is old-fashioned and backward to them. It could be ascertained, however, that in 1998 when the harvest was extremely bad, some old women ground the maize themselves. They said that they harvested so little that they could not fill enough bags to take them to the NTC.

Some part of the residential land is always used for the keeping of livestock. Traditionally, such a cattle kraal (*lešaka*) was built in front of the huts which is usually still the case today. Many people keep either donkeys or cattle but hardly anybody has space for both kinds of animals. Goats are also frequently kept because they are used for economic (skin, meat) as well as religious purposes (sacrifice). Women like to keep some kind of poultry such as chickens, pigeons or ducks in a simple shelter (*sethopa*). While chickens primarily serve as food for special occasions, for instance, if visitors come to the house, they are also frequently sacrificed to the ancestors and therefore

play a central role during the *phasa* ritual when the blood is poured over the ancestor shrine.

3.3 Use of the garden

The Northern Sotho term for garden is *jarata* which is derived from the English word “yard” (Ziervogel & Mokgokong 1975: 474). The lack of a Northern Sotho term can be ascribed to the fact that the garden in its present form was only introduced during the time of the betterment scheme in the 1960s. A garden is a piece of land around the homestead and has approximately the size of 0,25 to 0,5 acre⁴⁷ though bigger gardens are also found.



(a) many people who have access to a borehole at the homestead plant fruit trees and flowers; (b) due to the adverse grazing conditions at Mapela, only a few people keep cattle today; a tree with a dense canopy provides shade so that people can take a rest or gather for meetings (c) poorer families, or those without agricultural fields, use the garden only for the cultivation of staple crops to ensure subsistence; (d) a number of people like to keep goats in the garden for various purposes.

Figure 9: Different types of homestead gardens in Mapela

A major part of the garden is used for the production of staple crops such as maize and sorghum but some people also plant some fruit trees next to the homestead (see Figure 9 above). The cultivation of a variety of vegetables which suit the climatic conditions namely watermelons, pumpkins, cowpeas, mung beans, sweet potatoes and green peppers is widely spread. Beetroot, broccoli, spinach, onions and tomatoes are well known but are only cultivated occasionally, for instance at one of the crèches at Mapela. Some people mix vegetables with maize and sorghum (see Figure 10 below).



Figure 10: Mixed cultivation of crops and vegetables in the homestead garden

When the first rain falls in late September and early October, the time referred to as *selemo* (litt.: ploughing time), the garden cultivation begins. The soil is hoed and prepared by hand, the seed is broadcasted and vegetables are planted, usually by men who have retired from migrant labour. In the absence of men and if money is available, some people also hire a donkey plough for about R30/garden for soil preparation. Weeding (*go hlagola*) and harvesting (*go buna* or *go roba mabêlé*) is done primarily by women. The harvest time begins in December and January when edible leaves from beans (*merôgô ya dinawa*) are mature. In March immature maize (*sefela se setela*; litt.: green maize) and most of the vegetables are harvested.

Many people fertilize vegetables with compost, cattle manure or small amounts of inorganic fertilizer purchased in Potgietersrus. According to spokespersons, inorganic fertilizer is expensive and cannot therefore be applied in the fields but it ensures higher and stable yields in the smaller gardens. Occasional watering of vegetables can be organized without major efforts by using public water facilities. Some households have private boreholes and even sell buckets of water for a few rand. Gardens can be fenced at a reasonable cost using indigenous thorn trees, and are easier to manage and protect from theft and wandering livestock than distant fields. Women with many other tasks can attend to the garden in between other duties without major efforts and highly appreciate vegetables which complement the porridge. Land use types may thus be distinguished on the basis of distance from homestead, size, irrigation, means to sustain fertility and related management intensity.

Cultivation in the garden is marked by a high degree of flexibility in terms of labour and costs. In addition, the growing of vegetables and maize at due times, in other words when the first rain falls, enables people to harvest high value crops before the crops in the fields are mature around June/July (see Table 6 below). Spokespersons said that they live from April to June of immature crops harvested in the garden.⁴⁸ The husking and shelling of beans and crops is usually done with the help of neighbouring women.

Table 6

Labour requirements and crop harvest in the garden

Month	Labour requirements in the garden
September	sowing, planting and hoeing/ploughing
October	sowing, planting and hoeing/ploughing
November	
December	picking of spinach
January	picking of spinach
February	

⁴⁸ Landless people can complement food intakes with vegetables while they rely on *mealie meal* purchased in the shops.

March	harvesting of immature maize and vegetables
April	harvesting of immature maize and vegetables
May	
June	dry season (harvesting of field crops)
July	dry season (harvesting of field crops)
August	dry season, soil preparation

No dirt or rubbish is thrown in the gardens which means that gardens can be better kept than distant fields which cannot be continuously controlled and which are sometimes devastated by thieves stealing crops and wandering livestock. Some people say that the character of a person is reflected in the way the garden looks. As a matter of fact, gardens are observed by neighbours and jokes are made if a seedbed looks shabby and untidy. The worst thing in the community are lazy people (*metlapa*; sing.: *motlapa*) who do not work in the garden at all. They are frowned upon because they are regarded as the cause of poverty which urges children to find food elsewhere (*motlapa o tla ja tšhila tša thaka tša gagwe*; litt.: a lazy person will eat the dirt of his friends; fig.: indolence knows no excellence).

Apart from the section which is used to cultivate vegetables and crops, another part of the garden is usually planted with fruit or shade trees (see Figure 9 above). Only rarely do people plant flowers for decorative purposes. According to spokespersons, this can only be “afforded” if the garden is not needed for the cultivation of vegetables and maize or other economic purposes. Medicinal plants are not cultivated because it is believed that they would lose their *maatla* if they do not grow under “natural” conditions (see Chapter 3, Item 2.4.3 above). A number of social activities take place under the trees where men and women usually meet separately. Of major importance is the occasional visiting of neighbouring women and friends who share work and food and who look after each other’s well-being. In winter, when women take a rest from the work in the fields, they sit together in the garden, watch the children play and gossip about anything of concern to them. Hospitality is expected from everybody and a neighbour or any other

well-known person can usually be certain to get food and something to drink during a visit.

Apart from these informal meetings of women, there are other more formal assemblies for particular purposes. Some women discuss issues of the burial society or make preparations for a wedding or a funeral. Others have formed a committee and deal with local affairs which belong to the domain of women, for instance church duties, water provision, shopping, sanitation, nurturing of children and education. Formal meetings often take place in the *induna's* garden and are then often chaired by the headman's wife. If another woman is leading the group she would most likely invite the women to her own garden. As a rule, such meetings take place in the morning after the children have left for school and the yard has been swept and cleaned.

The *induna's* garden is also used by the senior men of a ward as a gathering place to solve conflicts and to discuss issues which are of concern to the ward members, for instance, the application of a prospective resident described above (see Chapter 4, Item 2.1). Such a meeting is usually held when necessary. The headman beats a gong or piece of metal (*tšhipi*) in his garden as a signal for the elders to convene and he then tells them the reason for the meeting. Once the men have taken a seat under a shade tree it is, according to custom, bad manners to disturb them while they are talking. Women would thus stay away from the meeting until the discussions have come to an end. The same rule applies to youngsters and children who are not supposed to hear what the men discuss. Once they have left their place under the tree anybody is free to interact with them normally.

4. Decision-making and relationships

4.1 The family and neighbours

Most of the daily decisions are taken by the family in the homestead. There are, however, also some decisions which presuppose the notification of and discussion with the kin group. Family affairs are customarily decided on by the head of the household if

he is permanently residing at Mapela. This includes, for instance, the buying of tools and implements to maintain buildings on the residential land, the hiring of labourers to work on the land, the sale of animals belonging to the homestead or the purchase of animals for the family.

Other decisions which are taken are a question of personal interest and expertise rather than of assumed status. This applies, for instance, to the garden which is most probably managed by the woman because a man would hardly be interested in the growing of vegetables. Exceptions do occur, however, for instance if a bachelor has to cater for himself and has, out of necessity, to learn the basics of food preparation. Two unmarried brothers observed at Mapela cultivated some vegetables and crops in their garden. Asked about their attitude towards the cultivation of vegetables they said that they like gardening but that they were still looking for a woman who would do this on their behalf. So, usually the woman would decide on her own about the varieties selected for cultivation, the combination of vegetables as well as about occasional watering and fertilizing. Garden clubs where women are consulted on and empowered through the growing and sale of vegetables by extension officers from the Department of Health and Welfare are usually only short lived. Most of them collapse due to financial mismanagement.

The decision about the combination and planting of trees and flowers in the garden cannot be ascribed to either husband or wife. Spokespersons said that either of them select the trees according to their personal preferences. Sometimes, trees are chosen and planted on the occasion of a cheap and convenient deal, for instance, if a seedling can be acquired free from neighbours or friends or if there are special offers in a nursery. Flowers are, however, rather chosen by women because they are more interested in the decoration of the garden than men. With regard to the keeping of poultry, it is also women who are in charge of them because men are more interested in cattle and goats than in chickens, pigeons and ducks.

Traditionally men were preoccupied with the keeping of livestock while women worked in the fields, collected *veldkos* and firewood. Cattle have always been of great value to a man because through them he not only gained prestige but was also able to deliver *magadi* (see Chapter 3, Item 2.1 above), to pay fines and render compensation, to sacrifice to the ancestors and therefore to fully participate in the cultural life of the group. This adherence to tradition would thus play an important role in a man's decision to make arrangements for his absence and not to involve his wife.

The right to take a decision can also be determined by a taboo which prohibits a member of the family to get involved in another's domain. This applies, for instance, to the management of cattle. Because of the fact that it is taboo for a woman to enter the cattle *kraal* she is, in the absence of her husband, most likely to confer the right to decide about the animals to another male member of the family or would hand over the cattle to another person under the *mafiša* agreement (see Chapter 3, Item 2.2.2 above). This applies more especially if her husband did not appoint a relative to take over decisions with regard to his cattle during his absence. The appointed person would then be in charge of the animals until the head of the household wishes to sell cattle or to take them to his own homestead again. Only old women who have reached menopause and therefore no longer have to observe the taboo could be seen entering a *kraal* and dealing with cattle. As far as could be ascertained, a young or middle-aged woman would thus only be interested in selling milk to neighbours or in processing the milk.

With regard to the absence of the head of the household there are certain regulations which usually apply with regard to decision-making. Normally, decisions are taken on his behalf by his wife. Once his first-born son is old enough to take rational decisions, he is most likely to assist his mother in decision-making. In a few cases, the woman is also supported by one of the husband's brothers as a representative of his patrilineal kin group. On his return or visit, the household head is then supposed to be informed about all the decisions which have been taken. If his wife has access to a telephone she is most likely to brief him immediately if the matter is of importance to him.

The usual procedure is that the woman, in the absence of her husband, approaches the patrilineal kinsman assisting her. Together, they then discuss the matter. Generally, it was ascertained that women are more reluctant to take decisions on their own than men are. This is also substantiated in the saying that anything a person plans has to be discussed with somebody else (*sa re swalo o bolele mohlala wa motho ke molomo*; litt.: if something passes or happens suddenly, talk about it because the witness of a person is his own word; fig.: there is no smoke without fire). This not only guarantees that wrong or selfish decisions can be avoided but is also in line with their group-oriented approach to life. In addition, it is also regarded as good manners to inform the family and discuss decisions with them so that they do not feel ignored but rather take an active interest in the management of the homestead. Discussions and negotiations therefore also have a regulative control function because the person suggesting something has to hear and accept other ideas. The same wish to discuss matters also applies if the head of the household is permanently at Mapela. In such a case, as a spokesperson told me, he would always involve his wife in the decision-making process. Exceptions do, however, occur. In one case, the woman was suffering from an unhappy marriage where she had no power to influence her husband's decisions.

After the death of the head of the household, it is eventually the *mošalalapeng* (see Chapter 4, Item 2.2.1 above) who would make decisions with regard to the management of residential land because he is the one who would remain in his parental homestead whereas his brothers would have to establish independent homesteads. This is due to the fact that, theoretically, the status of a household head can only be transferred to a male successor. A daughter can therefore only assume this status if her father died before a male successor was born to the family and if she has not yet married and moved to another place.

Until the last-born son reaches the age to get married, his mother will act on his behalf and will later remain in the background once the *mošalalapeng* has found a girl he wishes to marry. After the conclusion of the marriage and the move of the girl, the status of the mother is then that of an old woman (*mosadi*) who is supposed to be consulted

and informed about any decisions taken with regard to the management of residential land. She would thus be in the position to advise the younger couple though her power is definitely not as strong if her daughter-in-law does not consult her. So, even if the old woman has more experience and knowledge about decisions which have to be taken, she could be ignored as a result of declining respect shown to older people (see Chapter 3, Item 2.1 above).

Decisions which are of concern for the kin group include the performance of rituals and ceremonies as well as the magical protection of boundaries described above (see Chapter 4, Item 3.1). The performance of the *go phasa* ritual is usually instructed by and decided on by a traditional healer. This is done after consultation with the healer in cases of sickness, barrenness or financial problems. The healer would also decide about the sacrifice, in other words, about the animal which has to be offered to the ancestors to appease them. He would give instructions if a beast, a goat or a chicken has to be slaughtered and would also determine the sex and the colour of the required sacrifice. After receiving the instruction from the healer, the person is then expected to inform all members of the household and decide about the matter with them. According to custom, he or she is also obliged to involve the *bakgalabje* of the patrilineal kingroup in the discussion. Due to their seniority, their voice has to be heard and has to be accepted.

Apart from kingroup affairs, there are also decisions which cannot be taken without the previous notification of the neighbours. This includes the performance of festivities and ceremonies, the sharing of certain resources (e. g. maroela fruits), committee activities and visitors or strangers who wish to stay overnight at Mapela. This is due to the fact that the group of neighbours (*baagišani*) usually support and protect individual families, more especially in the absence of the head of the household, if they can be sure of the reciprocity of the service. The use of secret phrases, for instance, *sebatakomo*, enables members of the group to indicate solidarity and, at the same time, to exclude outsiders or strangers. In the group, it is believed, decisions can be corrected and normal (cool) states can be maintained because a monkey cannot see that he has a big

forehead (*sa re swalo, o bolele, mohlala wa motho ke molomo*). In other words, a group decision is less likely to be harmful to other people and to cause disharmony. An old man said: "It is only when we meet that we can decide about things. We have our committees. Although some of us have never been South. During meetings we help each other and give advice". Another spokesperson said:

"If you try to achieve something and you don't co-operate you will never come to a decision (*tau tša hloka seboka di šywa ke nare e hlotša*; litt.: lions that are not united are outrun by a buffalo that is limping; fig.: unity is strength). I mean, if you want to do something we all have to sit down first, discuss it and then draw a conclusion. If a person came and said 'I do this or that', the others would say 'no, because we did not talk about it'".

De Beer (1989: 103) further mentions the role played by neighbours in legal matters with regard to the solving of disputes and participation in acts of reconciliation. This is substantiated in the saying that land talking or disputes are heard by neighbours on both sides of the fence of branches or reeds (*mahlaku go swa mabapi*; litt.: the fence of branches [between the dwelling units of neighbours] burns those who are near; De Beer 1986: 410). Another idiomatic expression emphasizes that a person would not only act for his own benefit but also for the well-being of his neighbours (*motho yô ke agileng le yena ke ngwanešo*; litt.: the person near whom I have built is my brother; De Beer 1986: 145). This neighbourhood support system not only influences decision-making but also applies, for instance, when a person falls ill and, at the same time, vegetables and crops have to be harvested or husked. In such a case, neighbouring women are the ones who are approached first. Relationships which then develop enable women to share tasks and duties (*tšhomišano*, litt: teamwork or *tirišano*, litt.: co-operations).

The customary involvement of neighbours in the use of residential land, for instance, the sharing of maroela fruits and the brewing of maroela beer, is based on the perception that two people are better than one (*botee ke bobedi*; litt.: one is two). So, despite the fact that trees which occur on residential land are owned by the residents of the land, access is usually free for neighbours provided that the household head or his wife gave permission to share the fruits. In addition, a person known to the owner of the land or to

his family may not be denied assistance and support. It is feared this could fall back on the owner himself and he or his family could be denied access to the neighbouring land.

Apart from the shared uses of certain resources on residential land, neighbourhood co-operation and support also refer to the sharing of food after the harvest is taken home, shopping lifts or assistance when an animal is slaughtered. Co-operation also applies when neighbours share tasks during funerals and other ceremonies. Women would then convene, collect firewood, cook porridge and meat and wash the dishes. Another example, occasionally observed during the field research, is the helping out by a boy in a neighbouring garden or in the herding of livestock. To compensate parents, the recipient of the service either gives the boy a goat when the season is over, or he or she supports him with the payment of school fees, the buying of the uniform or, sometimes, with *mealie meal*. It can be assumed that such services and co-operation have changed in form and function. However, the collective spirit remains to form the frame of reference for actions which require group solidarity and mutual help. De Beer (1989: 103) points out that despite some effects of the changed settlement pattern, this is not so extensive that kinship groups are losing their meaning within society. This is also substantiated in the proverb that wherever you go you have to report to your relatives so that you can return (*laela morago o tšwago gore e re di go šita pele o yago, o kgone go boela morago*; litt.: when you trek from people, bid them goodbye, so that if life is difficult where you land, you would be able to come back to them; fig.: the present is sometimes better than the uncertain future). The same may be said for the bond and co-operation between neighbours.

4.2 Traditional and other authorities

The chieftainess as the *ex-officio* ruler of the chiefdom carries out her duties with regard to the land with the support of various advisory institutions which constitute the traditional and tribal authorities. During the process of decision-making, the group-oriented approach to life plays an important role. So, for the rulers of the chiefdom it is indispensable

- ◆ to reach consensus after extensive discussions,
- ◆ to inform high-ranking people of the chiefdom about the decision,
- ◆ and to make decisions to the benefit of the community (or group).

This means, that the chieftainess can only decide and act in concert with her advisory council. Once the latter is opposed to a matter, the chieftainess, at least theoretically, has to accept this.

Those authorities which act in the name of the chieftainess are

- ◆ her advisory (royal) council (*lekgotla la bakgômana*)
- ◆ the tribal authority (*lekgotla la go seka molato*; litt.: the council to thrash out or resolve disputes)
- ◆ the headmen-in-council or tribal council (*lekgotla la bakgômana le mantona*)
- ◆ the *pitšo* (meeting of the adult men of the chiefdom; see De Beer 1986: 92-97)

In addition, the traditional councils used to be supported by the district magistrate, Mr. Nico Hager, who had an impact on all decisions which were taken. As a trained jurist he also assisted the tribal authority in legal matters and advised the chieftainess in her dealings with the PPL (Potgietersrus Platinum Ltd.) mine. Mr. Hager retired in 1998 and information about the co-operation of his successor with the tribal authority could not be ascertained. Other authorities with decision-making powers such as the governmental departments (Department of Agriculture, Department of Water Affairs and Department of Nature Conservation and Environmental Affairs) have largely ceased to intervene in Mapela's affairs since the beginning of the 1990s as a result of inter-departmental structural and financial difficulties. In addition, extension officers are increasingly rejected by the younger people at Mapela because the latter feel their rights to freely dispose about the available resources threatened. The decision-making of the extension-officers focusses on the economic development of the area, the conservation of endangered species and the sustainable use of natural resources. With their top-down approach of decision-making based on scientific knowledge and theories, officers,

according to spokespersons, have increasingly ignored high-ranking people at Mapela and, eventually, failed to achieve rapport with the community.

Decisions over residential land are usually taken at ward level in the *kgôrô ya* or *lekgotla la induna* which is chaired by the headman. Apart from the allocation of residential land, the elders make all relevant decisions with regard to the use of land within the ward boundaries. The *kgôrô ya induna* therefore not only solves disputes and promulgates some tribal laws (*ngwana wa monna o tšea molao tseleng*; litt.: the child of a man is taught the law on the road; fig.: a clever person gleans wisdom everywhere), the men also discuss the boundaries of individual stands as well as residential land, talk about waste or misuse of residential land, rain prayers and infrastructural development. The *kgôrô* is also held responsible for the maintenance of an economic balance between residential land and grazing respectively arable land within the ward boundaries. As a *kgôrô* member said:

"You see all our fields around the ward. Nobody is allowed to build a house here. Because of our *kgôrô* (which decides about the use of land within the ward boundaries). Because this is our authority. The *kgôrô* decides about rights and duties of the people. We realize that the young people don't like the *kgôrô* (because they are excluded). Because they don't know the use of it. Once they are old enough to understand, we know that the *kgôrô* will survive".

Women are customarily excluded from the meetings and are only accepted as representatives of their deceased husbands. Unmarried men are not accepted because they lack experience and can therefore not be heard during the discussion. Yet, an unmarried man is not rejected if he attends on behalf of his father. A spokesperson said:

"The *kgôrô* is the place where men meet to settle problems. Because not all the problems can be solved by the family. Some problems concern all of us. Water pumps, schools and communal works and duties – these are some of the issues we discuss: There are only a few unmarried men who attend the meeting. Last time there were two of them. And those were sent by their parents who stay far away".

The idea of the *kgôrô* is to solve problems within the ward and to keep administration going because, as a proverb says, a limping animal cannot climb a mountain (*o se re o bona e hlotša wa e nametša thaba*; litt.: do not cause a limping animal [domestic] to climb a mountain; fig.: do not add fuel to the fire). A spokesperson said that matters should not be allowed to explode and then be taken to the *mošate* because this could threaten the good reputation of the ward and could question the ability of the headman to fulfil his function in the way expected of him. Once the *kgôro* has come to a conclusion, the decision is usually announced by the headman. If, for instance, a person has illegally extended the boundaries of his residential land and thereby caused friction, he would be summoned and asked to return to the place which was given to him.

Yet, there are some implications that the political opposition of TLCs have for the *kgôrô* institution. A headman gave an example and said that he was usually in charge of introducing a visitor to the *kgôrô* and presenting his request to the elders as representatives of the group (*badudi*; litt.: inhabitants). So, if a wood seller wished to do business in his ward, the headman would ask permission from the *kgôrô* on behalf of the former. The *kgôrô* would not talk directly to the wood seller or any other person wishing to trade in the ward. Thereby, the elders expressed their confidence in the headman's ability to convey the information to them and to wisely influence the consequent negotiation. Yet, in some wards, this tradition has nearly collapsed and a person who wishes to obtain or sell resources in a certain area would, in cases where he is supported by the Civics or TLCs, rather speak directly to high-ranking people of the ward without notifying the headman beforehand.

Notwithstanding such developments encouraged by the ANC politicians and Civics and facilitated through the temporary absence of the present chieftainess (see Chapter 3, Item 1.2.7 above), old (*batho ba bagolo* or *batšofadi*) and young people (*batho ba bafsa*) are still perceived as the cornerstones of society. Despite inter-generational conflicts, their relationship continues, to some extent, to be of a reciprocal nature. This, in short, means that old people seek to maintain the natural order of things and to provide the next generation with land to have a good life. On the other hand young

people have to support elderly family members, help them if they are weak, respect their senior status and accept their decisions. The importance of young and old people for the benefit and the stability of the chiefdom is substantiated in the saying that, to build a *kraal*, the person has to use old and young branches so that the wind cannot harm it (*mahlaku a mafsa a ema ka a matala*; a new *kraal*'s poles are supported by the old ones; fig.: old age is an embodiment of wisdom). So, to make an event special, for instance, a soccer match, the youth would be most likely decide to invite some senior representatives of the traditional authority. Only then would the organization of the event be in order because, as a young man said, "there has to be an old person among the children" (*mogolo ga a hlokwe baneng*; litt.: an old person should always be present amongst young ones; fig.: old people are a spice of the youth).

Of major importance for sound decision-making is the close interaction between the different authorities. For the communication not to be interrupted, a headman appoints a *motseta* who regularly reports ward matters to the tribal authority. Monthly meetings (*dikôpanô*) of the headmen at the *mošate* further ensure that the information flow is not disturbed. With regard to the relationship with members of the TLC, some of the latter continue to respect the traditional authorities. This concurs with the view expressed by a young ANC politician working for the TLC. He said:

"Here in my office next to the *mošate*, we are one thing. We are working together. The ANC supports the *magoši*. It is our tradition. We regard the land as the land of the *mošate*. We have to inform the *ba mošate* (litt.: those at the tribal authority) about all our movements. We have to inform them before we do anything. Otherwise, they won't help us if we have a problem. The *kgoši* is our big tree (*moremogolo ke kgoši*)".

Even the TLCs, who work a considerable distance away from their headquarters in Bakenberg, admit that they continue to discuss relevant issues with the seniors at the *mošate*. They even need the approval of the tribal authority if they have drafted a paper which they wish to present in Bakenberg. Exceptions do, however, occur and increasingly threaten the good administration of residential land. There was a case where a shop owner wished to obtain a residential stand which was not agreed to by the

tribal authority. The person then approached the TLC and, according to rumours, paid some money. Eventually, he built a house on the land without prior notification of the headman. The latter felt unable to interfere because he was not supported by the chieftainess and even lacked back-up from the community in the ward which feared the influence of the youth. Others seemed to have become apathetical because they were not concerned about the issue and only wished not to be bothered with this problem. In this case, the political transition at Mapela obviously had a paralyzing effect. The major concern of the tribal authority with regard to illegal land occupations is that their authority is gradually undermined and that strangers and thieves (*magôtlô*, litt.: mice, rats) can no longer be excluded from the Mapela territory.

5. Conclusions

It was ascertained that, notwithstanding political transitions which have an impact on land management, deeply embedded values which have a bearing on allocation, control, decision-making procedures and use of residential land do not change easily. This applies to the various management levels of the chiefdom.

The worldview of decision makers at Mapela is clearly anthropocentric and places the well-being of people over and above the sustainability of natural resources. Free access to land is thus customarily guaranteed to all married members of the chiefdom so that they can establish an independent homestead and allot portions for specific purposes to other family members. Due to the increasing population pressure, the housing areas have expanded in the last years and have caused a dramatic decline in the natural resource base in the area of the Mapela chiefdom.

Once a stand is occupied, a reciprocal support system then ensures that neighbours and others who are entitled to use the land can share some key resources on the residential land, for instance, the fruits of the maroela tree. Apart from the development of strong neighbourhood bonds, the vital unity of the group is maintained and re-enforced through a mutual supportive relationship between the old and the young

generations. Another fundamental role for the forming of groups and the group-oriented approach to land management is played by patrilineal kin.

Customary practices, personal interests or expertise play an important role in decision-making. Market-oriented and individualistic values do not as yet considerably influence the behaviour of the majority. The need to reach consensus and the reluctance of people to act without the support of others results in processual management and the long time span which usually passes until a plan is put into operation. This is even more apparent, if a matter is of interest to the kin group, the ward or the community at large. With respect to senior or absent members who have to be consulted, decisions are often postponed or lose relevance after some time.

At the communal level, the importance of the group also remains important which is reflected in the strong focus still being placed on the benefit and well-being of the group. This results, for instance, in the protection and maintenance of properties on residential land which presupposes that, ultimately, residential land remains under the control of the tribal authority even if immediate control is exercised by the head of the household. This implies that individual families can rely on help from the tribal authority if, for instance, a storm has blown off roofs. This not only enables such a family to save money but it also gives them more certainty in coping with difficulties under harsh conditions.

Yet, with the growing influence of oppositional groups, the sovereignty of the tribal authority is weakening because many young people with radical views doubt the willingness of traditional leaders to democratize governmental institutions in the former homelands and to relinquish power to “modern” politicians. This results in some people believing that traditional leaders will be incapacitated to support people in times of a crisis in the near future by opposing factions. So far, the tribal authority can, however, still maintain the upper hand and continue to render support to members of the chieftdom because of the fact that the TLC is not yet ready to deliver services in the wards. It remains questionable what will happen if the TLC establishes a similar

supportive network and is able to take over some of the functions of the tribal authority at grassroots level.

Despite the constant diligent work of traditional leaders and the senior members of the chiefdom, it was ascertained that free access to residential land has already become uncertain as a result of the political transformation process. The TLCs sometimes allocate land on Mapela's territory without discussing the matter with the traditional decision makers. Consequently, land is used without taking the socio-cultural context into account which has a detrimental effect on social relationships. This is due to the fact that the headman and his councillors will no longer be able to regulate the settlement of families within the ward if such allocations occur more often in future. Another effect is that poor families who enjoyed free access to residential land have now become uncertain about their protected status with regard to land tenure.

“Only a few people depend solely on ploughing. Most have a job. But almost everybody has a garden and a field” (*Lekgotla* members, Mapela 1998).

Chapter Five: Use and management of agricultural land

1. Introduction

According to custom, traditional authorities assign to each family which resides at Mapela a portion of arable land to plant crops for subsistence. This custom not only ensures citizens free access to land, but also allowed the integration of stranger groups from less arable areas further north who migrated to Mapela during the last decades in search of fertile arable land. Population pressure increased in the aftermath of this migration and, today, all turf fields have been allocated so that newcomers have to find other means of subsistence. The traditional authorities can only offer less fertile land and fields a distance away from residential sites or those which have been abandoned. A married man who has relatives at Mapela can, however, try to obtain better land from his kingroup. Informal transfers of land such as the custom of *go fiwa* and inheritance have thus gained importance with regard to access to arable land.

The illegal occupation of arable land by Civics or other action groups does, however, threaten this security of customary tenure which was previously under the sovereign control of the chief. This also has a tremendous impact on the local people's declining interest in crop production. Simultaneously, the need to generate income to meet the demands of the household have led to the trend of abandoning fields which are too far away from the homestead or which presumably do not make any human effort worthwhile. So, cultivation of arable land is frequently only half-heartedly performed and many fields of lower quality are choked with weeds or even lie fallow.

The majority of the farming community is poor and can only produce staple food for a few months. Thereafter, people have to purchase *mealie meal* from the shops at

Mapela with the money received from state pensions or migrant remittances. There is hardly any money left to invest in agriculture. The findings of the field research elicit strikingly uniform patterns of use of arable land. Another reason for the relative uniformity of methods is that women who perform major tasks in the field have never had agricultural training and can hardly perceive alternatives to the practices and implements they have been used to. If given a choice, however, they think it is more important to further reduce labour requirements than to apply more sustainable methods.

Ultimately, however, conservative behaviour with regard to the cultivation of crops has to be seen in the light of deeply-embedded values, such as the strong focus on the well-being of the group, which continue to be important for land use despite structural changes in the area. So, many people support each other and even work on another's field in return for a little maize if the person cannot afford hired labourers. This view necessarily conflicts with the scientific approach of the Department of Agriculture which promotes the cultivation of cash crops in order to participate in South Africa's market economy.

The management of agricultural land at Mapela thus entails much more than economic activities such as production, distribution and consumption. The group-centred approach to life imprints itself on the management of arable land in so far as it influences relations between people as well as between people and land (see Smith 1992: 117). This has both advantages and disadvantages. With regard to the first, the group is able to support a person in case he or she is not able to perform duties adequately. On the other hand, the group with its tremendous impact on people's behaviour also narrows perceptions about agriculture and thereby limits the freedom of choice considerably.

This chapter tries to explore the management of fields from the local people's point of view and takes cognizance of the difficulties and problems the majority of the farmers have to face. The individual sub-sections deal with tenure issues such as access and

control of fields and describe important agricultural traditions and social interactions which have a bearing on the decision-making processes.

2. Access to and control of agricultural land

2.1 Access

According to a 1995 report of the Department of Agriculture, there are about 5455 families with land rights at Mapela. Each family enjoys access rights to one to three fields but only half of the arable land at Mapela is currently under dry land cultivation (pers. comm. Lekgau, local extension officer of the Department of Agriculture). Only about sixty farmers have access to the irrigation scheme (*sekime*) near the Mohlosane river in the ward of GaMasenya.

Fields within the Mapela boundaries do not therefore belong to individuals but rather to groups of families. The right to access land is customarily discussed by the senior male members of the family in the family council. The council then agrees to confer the right to make use of the land to male successors in the family. This usually applies when a young man indicates a sincere interest to engage in farming and his father simultaneously wishes to rest from field work. Such an agreement of use between family members (*go fiwa*) ensures that young men can produce some crops for subsistence once they are old enough to plough arable land. This is even more relevant when a young man marries and establishes an independent homestead. Customary ownership of arable land, in this regard, has to be understood as the right to use the land for an unlimited time, in other words, until it is no longer needed. When this happens, the field has to be returned to the tribal authority for re-allocation. As opposed to private land holdings, the customary agreement for the use of arable land makes no provisions for the sale or lease thereof. A spokesperson mentioned the reason why this is still presently outlawed:

“You are not allowed to sell tribal land (*mabu ke a mošate*). Then, *mošate* will fight with you. Although the field belongs to you, you don't have the right to sell it. *Mošate* is represented by the *kgošigadi*. She is here to rule the area. Everything we need we have to approach the *mošate*. The whole tribal area is controlled by the *kgošigadi*”.

In addition, it is a strongly held conviction that land transfers for money would affect the harmonious relationships between people because such transfers can cause envy and friction from the disadvantaged parties. Some farmers even state that monetary transactions would negatively influence the efficacy of the crop production. In other words, if a man charges from another money to cultivate a field on his behalf, this could cause a decline in soil fertility once the field is returned to the beneficiary. Crop losses which cannot be explained empirically are then ascribed to malevolent forces (e. g. witchcraft) which punish non-conformist behaviour of the person who is in charge of the field. This concurs with the explanatory pattern described above (see Chapter 4, Item 3.1), namely, that witchcraft is perceived to be caused by a person begrudging another good fortune or success.

A man who is customarily entitled to access land is most likely to allocate a field to his wife who would then cultivate it on his behalf. Most men at Mapela only devote a little time to fields and then only take on work women are incapable of performing (e. g. clearing or ploughing). This can be ascribed to the high rate of migrant labourers at Mapela and their preference for cattle and small-scale trades once they retire. Where a man is married to more than one woman, all wives under his jurisdiction may participate in crop cultivation and cannot be excluded from access. During the field research, some women also referred to fields which were allocated to them by their husbands as their own fields. They said that they got them from their in-laws after the conclusion of their marriage and consequently referred to a land transfer between *bogadi* and *dingwetši*. This perception has to be seen against the background of the absence of the husband during the ploughing season after the conclusion of the marriage. However, a woman's tenure right is highly insecure because it can be challenged at any time by stronger (male) factions of the family who wish to use the field for their own purposes, more

especially if the husband is not interested in farming and fails to send money for seed and fertilizer.

Under exceptional circumstances, the right to use land can also be transferred to a person other than male successors of a family. In this case, the rightful owner (*monyemabu*) is lending (*go adima*) the field to another who wishes to cultivate some crops but who has no field available. This non-monetary agreement of use is on the mutual understanding that the time the field may be used is limited and that it must be returned at the end of the time which was decided upon. The normal procedure is to notify the headman of the ward of which the field forms part about the access rights which have been conferred so that he is aware of the changed situation. In addition, the headman can only intervene in case of a land dispute if he is well informed about the conditions of the transfer.

The lending period is usually five years, though theoretically, a field can be reclaimed any time. The usual procedure is that the owner reminds the other party to return the field after four years. In case the latter denies access to the first, the matter is taken to the headman. If he and his advisory council are unable to solve the case, the tribal authority is consulted for advice. A dispute about a field could even result in a court case whereby the owner of the field lays claim to the land. To avoid such friction, fields are preferably loaned to close family members which is also substantiated in the proverb that those who do not know each other do not trust one another (*di sa tsebanego di a wêlana*).

Apart from the *go fiwa* custom and *go adima* transfers of land, fields can also be inherited after the death of the owner. In case the latter had more than one son, the fields are usually given to the youngest son who will remain in the parental homestead, or, they can also be distributed if more than one is really interested in farming. Daughters cannot inherit land from their fathers because they are expected to marry a man who will then assign a field to them. An old woman explained:

“Once you got a plot of land when you get married, your in-laws won’t give you anything else. My parents didn’t give me anything. This is all for the *dingwetš*”.

The fact that today not all (youngest) sons receive a portion of land has three reasons. Firstly, some of them are not really interested in farming. Secondly, some leave the Mapela area and seek their fortune in the urban areas. Lastly, due to the scarcity of fertile fields, the land may have been given to others before the son was old enough to make use of the land.

Families who migrated to Mapela and who have no relatives to provide them with arable land, families who lost land for various reasons and those who wish to expand their fields can apply for support at the tribal authority. The usual procedure is that fields are allocated to the head of the household by headmen in their position as appointed representatives of the chief in the wards. The following is a description of the customary land allocation as given by a spokesperson:

“I was born next in Potgietersrus. Then, I moved with my parents to another place. I was still a girl during that time. Then we settled on the farm of a white man. By this time I was already a mature girl, a *mosadi*. The white farmer gave us a plot of land where we could grow groundbeans and maize. Because I didn’t attend school I cannot tell you when I got married. But during this time I had already moved to Mapela with my parents. We moved here because the white farmer left the place and moved to town. We immediately enjoyed Mapela. And we already knew some people who had also worked for the white man. We came here during the time of *kgoši* Alfred. People accepted us. First we had to build our house. We were so fortunate that my father was elected as a *motseta* of one of the *mantona*. The *induna* took us to the *mošate*. Because our father had chosen a place. He was taken by *induna* Mabusela. During the olden days there were no payments required if you applied for a plot of land. Today, if someone is new in Mapela and comes to *mošate* he has to pay a small amount of money to do *go lotšha*. The *induna* in the olden days did *go lotšha* for us with empty hands. The *induna* was sent back to my father to inform him that the *kgoši* accepted the place he had chosen for the building of a *lapa*. Thereafter, we also had to ask for a plot of land for ploughing. The *induna* asked us: ‘Where did you see a plot of land?’ Then he had to go to the *mošate* again. And once again the *induna* was sent by the *kgoši* to tell my father: ‘Alright, you can plough here’. But before you are allowed to start ploughing they will show you the boundary because usually you get a field between other fields. You have to be careful, because even if the fields look like grazing land they might belong to somebody. You never really know. I prefer to have arable and grazing land in the vicinity”.

Today such a land allocation is less likely to occur because newcomers can rarely choose a field they wish to plough because most of the fertile fields have already been given to others. Without agricultural land, it takes more time for migrants to become integrated into the community. They can even be teased that their umbilical cord was not buried at Mapela (*kalana ya gago ga ya wela mo*) or that a migrant comes with a truck (*o tlile ka lori*) indicating that he or she has no roots at Mapela. Some people even referred to the abovementioned as “defects” which are used to differentiate “true” Mapela people from others.

Even if a field is not under cultivation for a while, it still belongs to the family it was assigned to and cannot easily be claimed by migrants who dearly wish to plough. A headman would thus most likely be forced to suggest land outside the boundaries of the ward he is administering or to allocate land on less fertile soil. If a field is situated outside the ward boundaries, the headman of the ward of which the field forms part has to be informed and asked for his approval. Land which is allocated through headmen is thus not as much favoured as fields which are obtained through inheritance or the *go fiwa* custom. Some spokespersons who were not born at Mapela and who got arable land from the traditional authorities state that their fields are too far away for them to cultivate. This could be validated during the field research. There are indeed fields which are up to 10 kilometres from the homesteads. Others complained that the fields are useless because of the stony soil which cannot be easily ploughed.

There is only one case known at the tribal authority where a woman got access to a field without her husband applying for it. Asnath Modupe is a mother of five children and cleans the tribal yard at the *mošate*. In her spare time she ploughs a field which formerly formed part of the royal tribute fields (*mašemo ya mošate*; see Box 8 below). In her case, the customary formal application and the paying of *go lotšha* could be avoided because Asnath is in good terms with the chieftainess. This could be due to the fact that the chieftainess is also a widow who has to care for a minor daughter and was therefore sympathetic towards Asnath.

Box 8

The case of Asnath Modupe

Asnath was born at Bochum and came to Mapela in 1963 where she was married to Abraham Modupe. She gave birth to five children. Abraham was ploughing a number of fields at Mapela. But then, his fields were taken by the tribal authority to use them as tribute fields. This was after ten years of their marriage. The tribal council promised Abraham another field to plough which was, however, already ploughed by another family. Asnath believes that the tribal authority has a dispute with this family because they ignored them in their plan to allocate the field to Abraham. Abraham never made a serious attempt to get hold of the field. He respected the family who was ploughing it and ascribed more value to the maintenance of a harmonious relationship to this family than to the ploughing of a field. Asnath likes farming as well and enjoyed to work on Abraham's fields which he had in the beginning. When he left her, only two of the children were already married. They never sent her money. So she started to work at the *mošate* to buy food for herself and the remaining three children. The *kgošigadi* then allowed her to plough a portion of the tribute field which was already lying fallow for a while without charge. This was an informal agreement of use between the chieftainess and Asnath. The matter was not discussed with the advisory council. Asnath can now use the land until the *kgošigadi* asks her to return it.

According to custom, however, women cannot yet apply for agricultural land at the tribal authority although, theoretically, access cannot be denied to women with children (see Chapter 3, Item 2.1 above). As one of the tribal councillors said, single mothers are not likely to apply for a field because they tend to be overburdened with household duties and the upbringing of their children. He also indicated that a single mother is already struggling to plant vegetables in the garden. Bachelors cannot apply for arable land and can only plough a portion of a family field.

Statutory measurements for the allocation of fields which include the application for a PTO (see Chapter 4, Item 2.2.3 above) are not employed. It can be assumed that people are reluctant to get their fields demarcated because this would limit free access to land and persons who illegally expand fields could easily be identified. The Department of Agriculture should, in fact, demarcate arable land but this has never materialized. The extension officer from the Department of Agriculture confirms that only residential land has been demarcated on request and that he never came across a PTO which was issued for the use of arable land.

The impact of reform measures, such as the upgrading of customary tenure rights, is similarly low although the councillors are well aware of planned governmental initiatives to open access to land to people who are customarily excluded. Information thereof could, however, not be ascertained. This can be ascribed to the fact that most of the White Papers and Government Gazettes are not available at the tribal authority. The TLCs who work at Mapela, are better informed and use their knowledge as a trump-card in their attempt to usurp the traditional administration of tribal land. This can be ascribed to regular meetings at the TLC headquarters at Bakenberg where they are enlightened and motivated to introduce democratic principles at Mapela. The way this is implemented, however, is rather unprofessional which can be ascribed to a lack of training of the TLCs in monitoring skills. Further, most TLCs only have vague ideas about democratization processes and only repeat slogans they hear in the political meetings.

It could be ascertained, that the TLCs proclaim that tribal land no longer belongs to the chief but to the people (*batho*) who cannot be denied access to any natural resource in the tribal area. They state further that rules imposed by the traditional authority are no longer important and that traditional law enforcement in ward councils has lost relevance. So, land administration has increasingly become a political issue which tends to polarize attitudes and perceptions related to it. The transitional period therefore has a separating effect with regard to the homogeneity of the community. In addition, what is promoted at Mapela, has, in fact, very little to do with the long-term land reform processes envisaged by the ministry of land affairs with its focus on the restoration of land (see Horn 1998).

Land reform which was initiated in 1994 encompasses three separate sub-programmes: the case-specific restitution of land, the redistribution of land and the tenure reform programme (Horn 1998). Land reform aims at rectifying the effects of the racial land policy during the period of apartheid and the replacement of tribal land laws and practices which are not conducive to the land reform process and which are repugnant to the Bill of Rights (Zulu 1996: 240-42). It attempts to achieve these aims within a strict

legal framework (White Paper on South African Land Policy 1997: 37, see Box 9 below).⁴⁹

Box 9

Land reform laws to standardize landholdings and to secure tenure

- ◆ The Restitution of Land Rights Act, 22 of 1994, which provides for the restitution of rights in land to those dispossessed of land in terms of racially based policies of the past (see Chapter 3, Item 3 above).
- ◆ The Provision of Certain Land for Settlement Act, 126 of 1993, which provides for the designation of land for settlement purposes and financial assistance to people acquiring land and for settlement support.
- ◆ The Development Facilitation Act, 67 of 1995, which introduces measures to speed up land development, especially the provision of serviced land for low income housing.
- ◆ The Upgrading of Land Tenure Rights Act, 112 of 1993, which provides for the upgrading of various forms of tenure.
- ◆ The Land Administration Act, 2 of 1995, which makes provision for the assignment and delegation of powers to the appropriate authorities,
- ◆ The Land Reform (Labour Tenants) Act, 3 of 1996, provides for the purchase of land by labour tenants and the provision of subsidies to this end.
- ◆ The Interim Protection of Informal Land Rights Act, 31 of 1996, is a mechanism to protect people with insecure tenure from losing their rights to, and interest in, land pending long-term reform measures.
- ◆ The Communal Property Associations Act, 28 of 1996, enables communities or groups to acquire, hold and manage property under written constitution.

The future of the most fertile lands in the Northern Province, the Springbok Flats, is highly dependent on the outcome of the land reform process. Obviously, this also raises the deepest concern of the White farmers who live next to Mapela and see their tenure rights threatened. Recent developments indicate that the Mapela tribal authority has been partially successful in their lodging of claims. With effect from 1 January 1999, the tribal authority could already allocate land on the farms Rietfontein 720 LR (1840 ha) and Rooibokfontein 821 LR (1876 ha). The farm Bultongfontein 239 LR (2352 ha) belongs to the Kekana of Mokopane but it is used by the people of Mapela until the

⁴⁹ For a critical discussion of the South African land reform policy see, for instance, Horn's (1998) article on the restitution of an identity in land.

Mokopane people obtain the title deed. These farms are used for the grazing of cattle and no fields are ploughed for agricultural use.

2.2 Control

Theoretically, control over a group owned field is vested in the family council which is presided over by its senior male members. A family field which has been handed down from generation to generation is regarded as ancestral land which is carefully watched over by its deceased members who punish any deviation from tradition. The council, on behalf of the first cultivators of the land (*batho ba kgale ba be ba phela ka tša tšhemo*; litt.: people of long ago live from cultivating their agricultural fields), discuss issues of tenure, namely the rights of access and use thereof. In fact, however, such a council only convenes if a field is to be handed over to a male successor as was indicated in the previous section, or, in case there is a dispute over a field with another family. In the perception of people, crop losses or unknown crop diseases can be ascribed to discontented ancestral spirits which are not happy about the performance of their descendants. The council would then resolve to counteract the wrath of the spirits through, for instance, a sacrifice at the ancestral shrine in the dwelling unit. In many cases, a traditional healer is first consulted to recommend the appropriate means of calming the spirits.

Immediate control, on the other hand, is exercised by the prime cultivator who is directly in charge of a field. Normally, this would be the head of the household to whom the field was assigned. Due to the temporary absence of migrant labourers, control could be vested in an appropriate representative who has acquired the necessary skills and knowledge to watch over a field. It could be observed, that senior women with considerable experience dedicated most of their time to fields during the ploughing season and inspected crops regularly after they had germinated. Others, consequently respected them as the "chiefs of the fields" and, ultimately, as the people controlling fields and, more especially, the fieldwork of others. This is due to the fact that old women are unable to perform all duties connected with the cultivation of land and that they have to rely to a considerable extent on the assistance of younger members of the

family. Old women could be rather fussy and domineering when they rebuked children who did not work with the expected diligence. Once, a young girl dared to contradict her grandmother because she did not want to work in the field in the heat. The old woman, however, maintained the upper hand and laughed about the girl once she eventually departed to the field.

It was ascertained, that old women are also suspicious of hired labourers who plough fields and who, occasionally also sow seed. They say that the young men who work as labourers waste seed in order to finish their work quickly because they are lazy. So, the women would most likely wait next to the field and control the performance of the labourers. They also check the fees which are charged for a tractor for ploughing so that they are not cheated. Lastly, they appeal to family members to obey the tribal laws and not to use land illegally as this could lead to a loss of the reputation of the group.

The strong influence of old women can be ascribed to various factors. Firstly, they have more time than younger women who are often preoccupied with household duties, the upbringing of their children and the generation of additional income at Mapela. Secondly, while old men are more interested in cattle farming once they retire, old women tend to be dedicated cultivators until the end of their lives. During in-depth discussions, old women were the only ones who stated that they love ploughing and who were convinced that the economic problems of the people at Mapela could be solved if they would only live a decent life and concentrate on farming.

So, there is no doubt that old women have considerable control over fields. Yet, it was ascertained that a particular field would still be associated with a family or with the head of a household (e. g. Mabusela's field). Even if the latter has passed away, his recognition as the land owner continues until a younger male member of the family succeeds to his position. The same applies if a field was allocated by the tribal authority. Regardless of the fact that a man would less likely engage in crop cultivation, he would be registered as the person who is rightfully assigned to a field. The practical implications of this association are, however, only dramatic if a woman controlled a field

on her own without the support of any other person and was then threatened with the loss of access to the field because of the claim of younger people who wish to plough it. During the time of the research, there were no cases known where an old woman had lost a field but the insecurity of land tenure was always a hotly debated issue, more especially in the light of the scarcity of fertile fields.

On a higher level of control, ward headmen enforce customary land laws on behalf of the tribal authority to ensure a harmonious co-existence between crop and cattle farmers and to protect the interests of the people at Mapela against invading stranger groups who could illegally occupy tribal land for their own benefit. This concurs with Van der Walt (1992: 76) who refers to a distinct land use ethic which forms the basis of customary land law in South Africa. This ethic, in short, entails that the interests of the group have to be protected against the interests of individual beneficiaries. At Mapela, the law, as substantiated in a proverb, is perceived to be the protector of the people (*molaô ke sešireletšo sa batho*). In line with this perception, most of the people spoken to said that control measures are necessary instruments to guard the community.

Customary land laws regulate that animals could only be allowed to graze the stubbles after the harvest around June and July. Previously, fields were therefore officially "openend" by the chief for this purpose. Under the present chieftainness, this custom has lost relevance. Stubble fields and those which lie fallow may be grazed even by cattle belonging to another ward and, in such a case, there is no need to obtain permission from the owner of the field. Yet, the field may not be used for cultivation as long as the owner shows an active interest in the field and it has not been abandoned for a period of more than five years.⁵⁰ In such a case, the owner is most likely to lose his right of access because he wastes land which could benefit another family (see Jackson 1982: 93). In other words, the right to claim land has to be exercised by the relatively permanent cultivation thereof and that there is no way of vaguely referring to its use in another season. This attitude is also expressed in a proverb which says that what one possesses is what one uses and not what one may use in future (*sa gago ke sêo o se*

jelêgo). According to reports from women farmers, most of them are anxious not to have their rights brought into question. Consequently, they regularly cultivate their fields to ensure sustained or continuous possession thereof.

Other laws prohibit the illegal expansion of a field, the setting of bush fires, crop theft as well as the cutting of trees within field boundaries. Headmen further control that agricultural land within their wards is not disposed of to third parties or strangers. The latter have to be excluded from the occupation of land as long as they are not attached to the chiefdom as rightful citizens. According to spokespersons, most of the conflicts with regard to agricultural land are caused by wandering livestock, illegal ploughing of fields, and increasing crop theft. The perpetrators are seldom prosecuted because most of the thefts occur under cover of darkness. The growing number of crop losses through theft was ascribed to the extreme poverty of some people which forces them to steal food. Amongst other reasons, this can be ascribed to the fact that the *mašemo a mošate* (tribute fields) which supported poor members of the group, are no longer ploughed⁵¹ so that the latter have to find food elsewhere.

Enforcement of law is, customarily, a matter of degree and there are no strict rules which have to be applied with regard to, for instance, the nature of a fine. There are, however, some norms and guidelines which help the elders in the *kgôrô* to reach consensus. First, the victim has to be compensated adequately and must be satisfied with the fine. Secondly, the person who caused damage on another's field has to render the compensation after the amount payable has been decided on. Thereafter, the two parties shall sit down and share food to indicate that their relationship has returned to a normal state and that the incident has then been neutralized with immediate effect. There are indications that the paying of a goat or a beast for crop damage has lost relevance although it cannot be fully excluded. More frequently, a crop farmer today charges the money he spent on the cultivation of the portion of the field which has been

⁵⁰ There are certain types of shrubs which develop after long fallow periods (e. g. *Dichrostachys cinerea*) which indicate that a farmer has lost interest and control over a field.

⁵¹ According to Jackson (1982: 107), the crops from the tribute fields were also used to serve visitors with food at the *mošate*, or, the crops were stored for consumption in dry years.

damaged. This could include the fees for a tractor for ploughing as well as expenses for hired labourers, certified seed and other implements.

The tribal authority only deals with disputes over agricultural land if a ward council is unable to reach consensus to the satisfaction of the parties involved. The tribal authority is further preoccupied with maintaining control over tribal land so as not to lose their sovereignty to the TLC in Bakenberg. So, tribal councillors are not usually concerned with minor cases. The control by the chief over tribal land is largely dependent on regular reports of headmen and other people who witnessed trespassers (see Hammond-Tooke 1981: 124-25). In addition, serious crimes and those in which stranger groups are involved are reported to the police station next to the Marken road near Groenfontein hotel. Today, policemen have, however, lost considerable control over the Mapela area which can be ascribed, amongst others, to insufficient funds to buy petrol and to the lack of personnel. During the time of the field research, the police turned up the next day only in two cases of murder.

Before the change of government in 1994, the tribal authority was also in close touch with rangers and extension officers who worked for the Department of Nature Conservation and the Department of Agriculture. They enforced statutory laws which had a bearing on land use. According to the tribal councillors, rangers and traditional leaders even worked hand in hand. They explained that rangers and extension officers could only reach the people at the grassroots level by building upon the traditional structures which were more knowledgeable about how to effectively promulgate laws at Mapela.

The aim of laws enforced at Mapela before 1994 was therefore twofold: while extension officers and rangers targeted the conservation of nature, traditional leaders interpreted the law as serving the continuity of rural lifestyles and the avoidance of conflict and disharmony. Laws, in the perception of traditional leaders entail moral qualities which have to be inculcated in people. This can be ascribed to the fact that good and bad behaviour as well as obedience and disobedience are always interpreted in relation to

others, namely to the human as well as to the extrahuman/spiritual and natural world. These entities constitute the central pillars of the cosmos in the worldview of the people (see Kearney 1984: 42-47; Gonese 1999: 20). De Beer (1995: 1) refers to the deep structure of culture in this respect. With regard to the use of agricultural land this means that people are anxious not to challenge the spirits and cause danger for the group and imbalance in the cosmos. The protection of nature and the conservation of resources are of less relevance to people.

Despite the perceived importance of the laws to use land in the right way to the satisfaction of the community and despite the fact that the chief and headmen still have the greatest influence on the farming community, laws are today increasingly ignored. This can be ascribed to a number of factors. Firstly, rangers and extension officers no longer come to Mapela. According to the youth, they were chased away in the beginning of the 1990s because they imposed "White" laws which they regard as being repugnant to the new dispensation. Another reason, as indicated by governmental officials, is the lack of financial means and personnel to work effectively in the former homelands.

So, law enforcement and control of land is largely left to the tribal authority and the headmen. The traditional leaders lack scientific knowledge, however, on nature conservation efforts and are not yet in the position to replace trained specialists from the previous government. Some of the headmen are further afraid of warning the youth not to misuse the land by setting fires, stealing crops and animals and damaging the environment. According to a spokesperson, despite the fact that during the last two years crime has been curbed to some extent in the Mapela area due to the gun-free measures, some of the young people are known to use knives to enforce rights as the youths see them. Increasingly, violent incidents happen under the influence of alcohol which is consumed in the *shebeens*. Robberies as well as the illegal expansion of agricultural land and the damage to trees on the commonage are a common occurrence today.

The TLC, preoccupied with the development of the infrastructure and other eye-catching projects, has not yet addressed the problem substantively. TLCs who work at Mapela, however, make efforts to usurp the traditional control system. According to them, transitional measures have been implemented with regard to land tenure after the establishment of the TLC in Bakenberg. Such statutory measures entail that each customary land allocation has to be finalized and agreed upon by the TLC. According to the chairperson of the TLC, the customary tenure of land will be replaced by statutory tenure in the long run in order to secure the rights of people and to empower those people who are still marginalized. TLCs therefore strongly claim authority over tribal land. During the time of the research, only those people who were in close touch with the transitional councillors knew about such transitional measures. It remains an open question as to whether their plans will materialize and the struggle over land will be solved.

Meanwhile, there is, so to speak, a legal vacuum which has not yet been filled with sound plans to protect the rights of people and to sustainably develop the area at the same time (see Small 1997: 46). The authority and control system with regard to the use of agricultural land thus only functioned to the satisfaction of the people until the change of government in 1994. According to spokespersons, the number of cases the authorities were unable to solve has increased drastically since then. The chieftainess, on reflecting about environmental changes, said that people have left their culture (*re tlogetše setšo sa gaborena*) and that the future of customary land holdings which put emphasis on the well-being of the community is in jeopardy. In line with her, other traditional authorities fear that they could lose access to tribal land if wealthy people pay (bribe) the TLC to get access to the most fertile fields. In such a case, it would most likely happen that traditional farmers with insufficient financial means lose access rights to fields which have been handed down from one generation to the next.

3. Agricultural activities

3.1 Location and size of fields

Family fields within the ward boundaries are situated in a circle around the homesteads. Other fields which were allocated by headmen (see Chapter 5, Item 2.1) can be up to 10 kilometres away from the place where the owner lives. In such a case the bond between the cultivator and the land is rather loose. This can be ascribed to the fact that a field which is far away is most likely to be neglected due to the long distances which have to be walked by foot to hoe the field or to inspect the crops. Women who are responsible for the major portion of the household chores state that they already walk far to collect firewood and, once they return home, can hardly depart again and leave their duties undone. A number of distant fields therefore lie fallow or are handed over to a person who lives closer.

The average size of a field was formerly 1,44 hectares (ha; Jackson 1982: 98). According to Jackson (*ibid.*) the smallest was 0,6 ha and the largest 3,7 ha. During the time of the research, such large fields under cultivation were no longer to be found. Most of the fields are 1-2 ha in size. According to spokespersons, larger fields (4-10 ha) like the tribute fields cultivated by the various wards on behalf of the chief were abandoned for various reasons. Some headmen could no longer plough for the chief due to a shortage of land in their wards. Other former tribute fields lie fallow or are split up for individual usage due to the illegitimate disposal of crops by the interim leaders after the death of chief Hendrik in 1990. After her succession in 1993, Atalia could not re-establish these fields. One reason was a lack of money to buy seed and to hire a tractor for the ploughing of fields. Another was the reluctance of the younger generation who had become accustomed to the benefits of wage labour, to work free of charge for the chieftainess.

3.2 Selection of crops and cultivation methods

Hybrid maize has almost entirely replaced the cultivation of sorghum as the staple crop at Mapela. One major reason mentioned by spokespersons was that school-children do not have to scare off birds from the fields because maize fields remain unaffected from their ravages.⁵² In addition, many women prefer to cook white instead of brown porridge because their children dislike the strong sorghum taste. With regard to the selection of maize seed, some cultivators despise the yellowish variety which they say is chickens fodder and prefer the white type (*peu ye tšhweu*). The majority retain some maize from the previous harvest to use as seed. The amount of seed needed for the coming season is measured in 20 litre tins and is usually decided on by the old women of the house. Only a few people can afford to buy more productive certified seed from the NTC in Potgietersrus.

Cash crops suitable for dryland cultivation, e. g. sunflowers or groundnuts, play no role at Mapela. Recommendations of the Department of Agriculture to abandon staple crops for subsistence and to produce more market oriented varieties has not yet influenced the decision-making of the farming community. The general opinion of the cultivators is that the agricultural use of land at Mapela is not to generate money but to produce food ("we only plant what we can eat"). Another concern is the unpredictable climatic conditions and the small size of the fields.

The actual cultivation period begins around September with the inspection of the agricultural land to roughly remove the mass of weeds (*bjang bja mo megoleng*) and to have a look at the condition of the fields. During the cold winter months (June-July) after the harvest, fields are rarely attended to and stubbles and corn stalks remain on the fields for the animals. The majority of the cultivators state that they purposely give the fields a rest to recover from intensive use which heats the soil. They believe that the winter wind cools the soil (*go bethwa ke phefo*; litt.: to be hit by the wind) so that the land returns to a normal state and can be used again.

⁵² In the vicinity of mountains, scarecrows are set up to prevent baboons from attacking fields.

Land which lied fallow for a longer period is, however, cleared of shrubs and small trees (*go epa dihlare kua mašemong*) with a pick-axe or a simple axe before September so that the field is ready for ploughing. Other soil preparation, such as the tilling of fields (*go kgatha*) after the harvest to incorporate crop residues and to loosen the soil (*mabu a be boleta*), is only done by tractor owners who hold the monopoly over the machines. Liming and ripping is an unknown practice at Mapela.

In the past, the beginning of the ploughing season was officially announced by the chief around August/September before the first rain fell. He used to summon the headmen to spread the information that the time for ploughing had come (*bjale ke nako ya go lema*; Jackson 1968: 107, also see Hammond-Tooke 1981: 21; Mönnig 1983: 159) and that people should prepare themselves (*dikgole iphuteng*). After the fields had been prepared, the community was instructed to take out the seed (*re ntšha dipeu*). Today, this custom has lost relevance and it is up to the individual family to decide about the sowing date. Most of the people broadcast when migrant labourers return home for Christmas holidays and are able to participate in the field work. The ploughing time has thus been postponed from early summer to November or even December and two or three months of the rainy season pass by without being effectively used.

The dominant sowing method is the broadcasting (*go gaša*) of a mixture of maize and the desired quantity of bean seed out of a plastic bag, an enamel bowl or a hat on the surface of the field (see Figures 11 and 12 below).⁵³

⁵³ Crop rotation is not practised although this method is well-known and frequently applied in the garden to maintain the fertility of the soil.



Figure 11: Hired labourer broadcasting seed

Thereafter the seed is ploughed to a shallow depth with a tractor pulling a mouldboard plough. The advantage of this method is quite considerable because it is the most simple and time-saving (see Chambers 1983: 85-86).



Figure 12: Seed is spread on the unprepared field

Most people therefore adhere to this method and have replaced the more time-consuming accurate placement of seed (*go bjala*) with the hand hoe (*sekobana*) despite the fact that extension officers from the Department of Agriculture predict declining yields if *go gaša* is done over a lengthy period of time. Their major argument is the lack of soil preparation, the waste of seed and the unsustainability of this method. For the

Mapela people, however, the advantages of the *gaša* strategy justify the negative effects on the agricultural land of which they are fully aware of (see Box 10 below).

Box 10

Disadvantages of *go gaša*

Go gaša takes too much seed because of the necessary thinning out when crops are crowded (*motlele*). It needs a lot of fertilizer because, otherwise you only fertilize drills (*go rotiša*).

You have to cover the seed immediately so that birds cannot take it, therefore you need a tractor the very same day. Sometimes we only have one tractor for a whole ward and then you have to delay ploughing for a long time.

Doing *go gaša* means sowing the wild way. We do it because good methods are expensive.

By doing *go gaša* we cannot influence the depth of the seed as opposed to *go bjala*. Seed can be deep down in the soil and therefore it cannot germinate uniformly.

The origin of the broadcasting strategy is difficult to reconstruct. According to the majority of the farmers, the use of oxen as draught animals in the beginning of the century enabled the ploughing of fields so that laborious hoeing was no longer necessary and people could broadcast seed. Oxen were replaced by tractors in the 1970s when cattle numbers per household declined and tractors were introduced (see Baber 1996: 286; Cross & Haines 1988: 82). Donkeys are today only used for the ploughing of fields if the soil is stony so that machines could be damaged.

Today, there are about 25 tractor owners at Mapela. Since this number is insufficient to plough all the fields at Mapela, some White farmers support them on the initiative of the Department of Agriculture. The ploughing costs vary from R130-150 per hectare. According to calculations from the Department of Agriculture, the costs for one hectare of sustainable maize cultivation would then amount to R518. This is made up of the ploughing costs (R130) which have to be paid twice (in winter for soil preparation and before planting). Additional expenses include a planter (R80/ha), two bags of fertilizer (R130) and 10 kg of certified seed (R48). No farmer could be found at Mapela who was prepared to spend such an amount of money for the cultivation of his land.

If a family has only little or no bargaining power and cannot afford the payments for ploughing, there is the possibility of a share contract which entails that the tractor owner may use one of their fields instead. A tractor owner said:

“We always plough our own field first. Then we look after the neighbouring ones. Or, I look for people who give me a portion of their land for the ploughing”.

Tractor owners are therefore usually the ones with access to the most fertile fields at Mapela. This means that better-off farmers gain control and use more productive land while poorer farmers are forced to use less fertile fields.

If households apply for a tractor, they are listed by the tractor owner. Though most of them work according to the list, some friends and neighbours are usually favoured and get their field ploughed before the people on the list. This means that some farmers start sowing late although they have made provision for a timely start for the cultivation of their fields. This was also stressed by a woman who said that only those farmers who have tractors or who have friends with tractors can broadcast seed immediately after the first rains have fallen (see Box 11 below).

Box 11

Perceived difficulties with tractors

It happens that we cannot plough our field if the tractor is too expensive. This happened last year. But this year we will be able to hire one. For two hectares we will have to pay R240.

In my place we have two fields. But the one we gave to my grandfather. The other field we keep. Perhaps one day we are going to plough again. My father is very interested in farming. And he has a tractor. That's why he is able to plough without taking the risk of losing a lot of money. Because if you don't have your own tractor you could spend a lot of money to hire one. And if it doesn't rain, you only lose. But my uncle and my grandfather work together. They even expanded their fields recently. I don't know what will happen to all the fields if the old people die and we young people have no money.

Farming was our first and original job here. Now people try to do *tšwelopele* (development) with farming. This means that they want to make money with it. Even with the tractors. Before, everything was based on co-operation if there were not enough people in the family to cope with the work.

It was raining seriously the last three nights. But people didn't start farming yet because the tractors cannot work in the deep and wet soil. There are only a few tractors in Mapela. They are shared by many people. They have got to register for the tractor. They will plough late if they are the last on the list. The tractor owner is very rich. If it has rained a lot, they need more tractors because more people want to plough. For one hectare they charge R130. And you have to consider that the boys can plough three fields in a day.

As was already indicated, the majority broadcast seed. However, about a handful of farmers are independent from tractor owners and sow and continue to till the soil manually with the *sekobana*⁵⁴. By bending down, the soil is hoed about 10cm deep and the seed is trodden into the soil with a seed distance of a small step length apart. The major reason to employ *go bjala* is the lack of money to hire a tractor for ploughing. Other explanations, such as the independent and timely start of sowing and the belief in better yields ranked lower. Only a few farmers at the irrigation scheme who have access to a planter sow in drills (*go rothiša*; see Box 12 below).⁵⁵ *Go rothiša* requires less seed and allows the control of the seed depth and distance.

Box 12

The irrigation scheme

The irrigation scheme at Mapela was initiated in 1966 as part of the betterment planning. The scheme is situated near the Mohlosane river in the ward of GaMasenya (Zwartfontein 814 LR) and is simply referred to as *sekime*. The farmers who have access to the scheme are the experienced (*boitemogelo*) master farmers of Mapela because they attended agricultural training and participated in on-farm trials. The fields are irrigated by using water from the Vaalkop dam which was constructed between 1968 and 1972. Due to erratic rainfall, the dam sometimes dries out (this happened, for instance, during the 1997/1998 ploughing season). The scheme today has a size of 97,7 ha allowing about sixty farmers each to cultivate about 1,5 ha, predominantly various types of vegetables and maize. The irrigation scheme is primarily cultivated by men because only a married man was allowed to access the land after the establishment of the scheme. If a woman is seen in one of the fields, she is usually a widow taking over her husband's work. Yet, there is one field (1,5 ha) which is used by women only, namely the women's field (*tšhemo ya basadi*). They usually cultivate vegetables such as cabbage, tomatoes and various types of spinach. Some of the vegetables are sold, others are shared. Money is usually saved by the treasurer of the group for the

⁵⁴ The *sekobana* has a short handle (about 30 to 40 cm), is light in weight and can be held in one hand while the other holds the seed. The *sekobana* is also used if a resowing is necessary. Another kind of hand hoe is the *tšheku*. The disk is much broader and more oval than the one of the *sekobana*. The *tšheku* is no longer in use since it is heavy and rather unwieldy due to the handle length of about one metre. The older generation, though, remembers that the field was tilled with a *tšheku* before the seed was sown. According to spokespersons, the *tšheku* got a more manageable shape over the time and is today referred to as the small plough (*mogomana*) which can be used for gardening. The handle of the *mogomana* is as long as the one of the *tšheku* but it has a more sophisticated roundish disc (*seatla sa mogoma*, litt.: the palm of the *mogoma*). Women also use the *mogomana* to collect soil, more especially the stony *lekgethe* which is used in the *lapa*.

⁵⁵ Information about the *go rothiša* method was obtained from farmers who cultivated fields at the irrigation scheme in GaMasenya.

purchase of seed or for the hiring of machines. Attempts to cultivate cotton during the 1970s failed due to high labour requirements. There are only a few dealings with the tribal authority, usually only administrative matters which have to be discussed with the tribal councillors. More influential is the Department of Agriculture which used to provide a planter, a disc plough and a harrow for the irrigation farmers. Yet, since 1993, this can no longer be guaranteed due to a deteriorating financial situation at the Department. Today, the extension officer whose office is situated next to the scheme can only consult the farmers. Instead, the PPL mine allows interested farmers to purchase certified seed, fertilizer and machinery on credit (*dipoelo*).⁵⁶ Sometimes, agricultural experts also hold workshops on the initiative of the PPL. The farming community has founded a committee (*komiti*) which is in charge to keep in touch with the extension officer and the managers at the mine. As far as could be ascertained, the committee is often uncertain how to separate ward matters from issues which are of sole interest to the irrigation farmers. This can be ascribed to the fact that the ward of GaMasenya is identified with the scheme not only by outsiders but also by the ward members themselves. So, it happened that the committee discussed, for instance, the building of a new school.

In June and July, the mature crops are harvested (*go buna*) and transported to the homesteads by *letšema* groups who also help each other to remove the grain from the cobs (see Figure 13 below).



Figure 13: Woman removing grain from the maize cobs

⁵⁶ This "PPL farmers support programme" was launched in October 1996 and involves, apart from the local agricultural extension officer, two agricultural technicians which were sent by the Agricultural and Rural Development Corporation (ARDC). The first workshop was attended by 397 farmers (Lekgau 1997).

Most of them are remunerated with food or, sometimes, with crop residues which can be used as fuel for cooking or with a share of the harvest. The harvest time is referred to as *lehlabula* (autumn) or the time of food abundance. The grain is dried in the sun, put into bags and taken to the NTC in Potgietersrus where the bags are weighed and stored (see Chapter 4, Item 3.2 above). According to spokespersons, yields usually range from ten to twenty bags of maize. Each bag weighs 80 kg. In 1998, however, yields were much lower due to a severe drought ascribed to the El Niño climatic phenomenon. After the weighing, the farmer receives the appropriate amount of *mealie meal* in return. He or she has, however, to pay an additional R50 which is the charge for grinding the maize.

Unlike the garden cultivation where people are more likely to test new crops or methods, the cultivation of fields demonstrates the most conservative behaviour of people who rather stick to methods which had been applied by their parents than experimenting with more sophisticated implements. A frequent statement with regard to field cultivation is “we do it like this because we found our parents doing it this way”. This can be ascribed to the fact that fields not only contain material entities of the natural environment but also reflect an important symbolic value, namely the belief in ancestral spirits who guard land and who have to be satisfied as a precondition for the crops to grow well.

A person who cultivates a field would therefore put more effort into the reconciliation of the spirits to maintain minimum yields than invest in the maximization of production as suggested by the Department of Agriculture. This concurs with the fact that inorganic fertilizer is rarely applied and that people would prefer to spend money on other things. It also explains the continuity of strategies which are rather irrational from an economic point of view, e. g. the maintenance of fields which do not yield well or which are difficult to plough. Attachment to the farming community, social integrity and continuity of small-scale farming on land which was obtained from the family is thus most valuable for the people.

Other perceptions influencing the use of agricultural land include the belief in potentially harmful spirits which can cause a drought or hail if people do not adhere to a number of taboos to protect the soil. To avoid conflict and disharmony with these spirits, field work has to be interrupted when the sun is at its zenith because the spirits take a rest at noon and do not wish to be troubled. Women are thus likely to sit under a tree for a while and hired labourers try to plough one field in the morning and another one in the afternoon. Another important taboo is the *seila sa pula* which entails that after rain or hail a farmer is not supposed to go to the fields. The killing of the hammerhead bird (*mašianoke*; *Scopus umbretta*) as well as the use of its nest for medicinal purposes is also prohibited. The breaking of a taboo could lead to the damage of crops if the transgressor walks on a maize field.

Even weed or insect infestation can be traced to ritual pollution. In this case, the field can be protected by applying certain precautionary measures. A common treatment is the use of a herb, namely leaves of the *mololo* tree (*Pouzolzia mixta*). The leaves are stamped and mixed with water. Thereafter, the water is sprinkled over the crops which have been affected by insects or a disease. So, there are indeed occasions where people try to attain control over the effects of pollution. If these measures fail, however, the disregard of a taboo must have been more serious so that the precautions taken were not sufficient. The traditional healer would then be called in to apply a concoction made from rainwater, *mealie meal* and various herbs (see Hammond-Tooke 1981: 89) to “cool” the field which can be rather costly.

Apart from pollution, crops can be bewitched (*go loya*) if herbs are used for evil purposes by a person who has malevolent powers. Legends around the impact of witchcraft on the cultivation of land vary quite a lot. The following is an example of how witchcraft is perceived to materialize:

“Witches smear medicine on their legs. This medicine they take from the roots of different trees and mix it with oxide and animal fat. They then walk through the fields and bewitch them. They can spoil all your crops. If they don’t use medicine, they walk to our field and take a clod. They return

home and bewitch the clod. Once they go back to the field and put this little bit of soil on it, the whole field will be bewitched. This even works before ploughing”.

The effects of pollution caused by witchcraft can only be neutralized by traditional healers. According to a spokesperson, this is more difficult than to restore the fertility of a field after a person has broken a taboo. Although a healer would apply a concoction, the success of this treatment cannot be guaranteed. Failures would then most likely be ascribed to the fact that there are still some evil spirits manipulating the field which have not yet been detected. So, it is of utmost importance that the owner of a field makes sure that his life, and that of other people working in the field, is in a normal state in order to provide good conditions for countermeasures. If a field still cannot be restored and yields continue to decline, it is believed that the whole ward is likely to be held responsible for this. A spokesperson said that there are too many stock thefts, cases of adultery and abortions at Mapela and that he is sure this must have had dramatic effects on the condition of the land. Only a few cultivators referred to the legacy of apartheid as the reason for difficult agricultural conditions.

The belief in the hot-cool dichotomy is also reflected in the division of agricultural land into infertile (hot) and fertile (cool) fields. Hot fields need more frequent rainfall because the water cannot be absorbed easily. Coolness, in the perception of people, is thus not stored. The black turf fields, on the other hand, are automatically cool and even produce sufficient yields in drier years. A farmer even referred to the black soil as manure and said that the application of inorganic fertilizer could be counter-productive and burn (heat) the crops. Since various soil types are found in one field, patches of it, where the soil is less fertile and crops do not develop in the expected manner, are also regarded as hot. This also applies to crops which do not germinate well because of the broadcasting strategy and the uneven distribution of seed.

Other phenomena which appear to be inexplicable on empirical grounds, for instance lightning, are referred to as magic (*maselamotse*). Though the concept of magic cannot be perceived separately from witchcraft, the first is never deadly but rather describes nasty tricks or jokes. So, effects of *maselamotse* are rather regarded as annoying.

There are no clear perceptions, however, of the agents causing such tricks. Some people referred to young people who roam around doing nothing really serious, others referred to the strange actions of other unknown spirits who like to play around with people.

Previously, the relationship between spirits and natural forces was mediated through the person of the chief (see Delius 1983: 53). Today, the chieftainess is no longer preoccupied with rituals and the enforcement of taboos. This can be ascribed to the fact that, today, land use is largely a political issue and the chieftainess has to represent the interests of the community in the national parliament. So, it is left to the ward communities to organize public prayers as attempts to manipulate the spirits for better climatic conditions or to magically protect the ward boundaries (*go thekga naga*) to prevent malevolent forces from entering into the area. Although the outcome of such attempts still remains questionable, it could be ascertained, that they render some degree of certainty to the cultivation of land as a vital source of motivation. This assumption would then also explain why old people who adhere to rain prayers are more inclined to continue with farming than younger ones who state that farming conditions are too unpredictable and erratic to make it worth any human effort.

By concentrating on these impersonal agents, the human being has less influence on the outcome and the success of his or her agricultural activities. Any investment in fertilizer or other means to gain more control over the yields is regarded as an intervention which can lead to more pollution with the result that more seed burn. Rather, fields are regularly left alone to recover from human activities and tools would remain few and simple: different types of hoes, a sickle, a basket or bag to hold the seed for broadcasting and maybe an axe or fork to remove roots and shrubs. Old-established techniques pertaining to the traditional use of agricultural land thus seem to be more reliable than modern appliances. The use of a tractor for ploughing therefore does not have tremendous effect on the perceptions which dominate land use at Mapela.

Such facts support the conventional view expressed in relevant published material on agricultural production in Africa, namely, that meagre yields are, amongst others, a result of cultural factors inhibiting higher production by means of appropriate technology (Cartier van Dissel & De Graaff 1998: 8). In-depth discussions with the people of Mapela, however, showed that the need for a change is not perceived. In addition, although it is understood that better material could make work easier and presumably save more time, such a change would not be able to manipulate the spirits for better farming conditions. The effect on land usage is that field work is highly unpredictable from an economic point of view and that beliefs and rituals can hinder a person in the performance of necessary tasks during the cultivation period. Of comparable importance is the high value ascribed to the group and the impact of this on decision-making and work organization which is explored in the following section.

3.3 Relationships

A number of temporary working relationships develop during the ploughing season which leads to a great deal of social interaction in the fields. Such relationships usually work on the basis of temporary agreements and have to be renewed every year. The clearing of land and the tilling of the soil, for instance, is done by groups of men. Those who are available around September are usually young men without a permanent labour contract and who are on the look-out for employment. The ploughing season thus offers them a number of good job opportunities. In many cases, the labourers are hired by the tractor owner who is then in the position to offer complete ploughing units comprising a tractor, a plough and two young men. One labourer would then drive the tractor and the other would broadcast the seed or would remove stones so that the plough is not damaged. According to women cultivators most of the labourers are not really interested in farming and only enjoy the ploughing season because they can make a lot of money which is afterwards spent in the *shebeens*.

After this heavy part of the field work has been finished, women who are in charge of fields would observe the germination of the seed and then decide if some seed has to

be resown (*go kobokela*). The resowing of seed after the broadcasting is often necessary because some seed can be so deeply planted in the soil that it cannot germinate. After the second sowing has been completed, many fields are then weeded and hoed (*go hlagola*) by *letšema* women groups (see Chapter 3, Item 2.2.1 above; Figure 14 below). The working time of the *letšema* groups differs and depends on the instruction of the person who is in charge of the field which is to be hoed. Usually, the *letšema* group has a spokesperson who will make arrangements with the old woman who controls the field. The latter would be inclined to maintain good relations with the group so that she can rely on them when she needs help.



Figure 14: Women group gathering for fieldwork

Some womens' groups only work for one day, others continue the following day until the work is finished. Occasionally, women are remunerated with food and beer by field owners but nowadays the majority receive money as payment. This not only reduces the efforts to cook but also satisfies the increased demand for financial remuneration which has disrupted one of the most successful systems of mutual assistance at Mapela. This is because *letšema* ensures the proper weeding even of large fields during peak labour times at low costs. With the increasing demand for money, some people cannot afford to invite the group. If the group is, however, on good terms with the woman who is in charge of the field they would hardly deny support because it is an inculcated duty to

help each other. Apart from this, there are innumerable other methods of compensation for work done.

Despite this changed nature of remuneration, *letšema* parties still have to be differentiated from hired groups of young men or girls who are referred to as *setlamô* (litt.: contract, obligation, agreement) workers who do the same work on the basis of a temporary work contract. Whereas the latter collect their payment individually, women under a *letšema* agreement are likely to appoint a secretary who would save the money collectively for the benefit of the group. There are different purposes for which this money is used at Mapela. Some women mentioned that they had formed a burial society (see Chapter 3, Item 2.4.4 above), others referred to festivities organized for the participants. The collective saving of money is, however, not without difficulties and a serious conflict about the money can even lead to the disintegration of a group if the secretary is not reliable and cannot show a valid statement for the bank account.

Apart from the hiring of labourers and the summoning of *letšema* groups, the senior members of the family also instruct the children of the house to participate in field work and to take over minor tasks. They say that it is necessary for a child to learn the basic cultivation skills from about the age of eight years so that they are one day able to manage fields. Because of this, some children are even sent to other relatives during the Christmas and Easter holidays for practical training. Away from the home, as a woman told me, it is easier for the child to be disciplined and controlled. If a child is not sent away during holidays and is not needed at home, he or she can also work for neighbours or friends in return for a goat, clothes or food. These children who help others in the fields are referred to as *bathuši* (litt.: helpers, assistants). They have to be supervised, however, because some like to rest under a tree and fall asleep, some hide in the mountains to escape the heat and yet others play with their friends in the *veld*.

It could be ascertained that there are certain tasks which are not supposed to be done by children. This applies, for instance, to the thinning (*go tsikila*) and planting-in-between (*go kopêla*) of crops. If not done correctly, a person is likely to waste valuable

plants. It is further of utmost importance to replant just before it rains so that plants do not die as a result of the transplanting. So, in many cases this work is taken over by the old woman herself or by another reliable woman of the family who is able to decide which plants have to be thinned and whether some are worth to be planted again. Children would rather play around with the plants instead of working diligently.

Unlike children, who can in one or another way still be motivated to accompany old women to the field, the participation of teenagers is low and many express their dislike openly. They hate the hot sun, the hard work and the comparably low returns. Most of the old people tolerate this and believe this attitude will change once a person has to care for a family. The valuing of the land is thus regarded as part of a long enculturation process which is temporarily disrupted by school and the influence of the mass media. A spokesperson told me the following:

"I have a nephew. I am sure he will take over my fields one day despite the fact that he doesn't have the slightest interest in farming today. He only turns up when we harvest the crops so that he can take his share home. You know, parents only work for their children so that they can live. I always tell my nephew that he should come and help us. But he only smiles. We have to accept this".

So, old people are inclined to maintain fields until the day a young person is prepared to take over. They spend lots of rands from their pension money to pay school fees, clothes and other things for teenagers and can be extremely generous because the latter will have to look after them when they are old and have to nurse them when they are ill. This attitude is also reflected in a number of proverbs which deal with this generational conflict (see Box 13 below).

Box 13

Idiomatic expressions concerning inter-generational relationships

- ◆ A locust is killed by the one it has given birth to (*tšie e bolailwe ke tswalô*).
- ◆ A cow falls in the well because of the calf (*kgomo ka lengope e wetšwa ke namane*).
- ◆ A man without children is ignorant (*bohlale ba phala bo tšwa phalaneng*).

- ◆ Preparing a shady place under a tree doesn't mean that you are the one to sit under it (*mokgori wa moriti ga se modudi wa wona*). This means that parents have to build for the future of their children.
- ◆ Once grown-up, the child forgets about the one who raised him (*ka hlagolela leokana la re go gola la nthaba*).
- ◆ What the child tells you comes from the parents (*pinyana ge e re ping e kwele ping e kgolo*⁵⁷).
- ◆ The colour of the calf is the same as the mother's (*mmala wa namane o tšwa kgomong*).

Apart from the fact that old people fear they will not be cared for when they get weak and that nobody in the family will plough, they also fear the wrath of the ancestors who gave land as a gift to be made use of. Some said that the ancestors are already upset about this attitude of the youth to neglect cultivation of the soil and that they punish them by sending hail and storm.

Yet, even if old women are hard workers and barely rest during the ploughing season, there are many occasions a person cannot go to the fields in order to maintain good relations with others. This applies, for instance, if somebody is ill in the house and has to be nursed. So, before going outside, a woman would first attend to her ill family member. This is even more relevant if a death occurred in the family or in the neighbourhood. According to custom, the work then has to be interrupted until the corpse is buried. Between the death and the burial, the ward where the death occurred is most vulnerable and likely to be hit by evil spirits. In the perception of the people, things can easily go wrong if the behaviour of the mourners does not change for a few days. So, the whole ward is expected to show respect and signs of reverence to the mourning family. Together, they have to express their deepest concern that they have been unable to protect one of their people (*re paletšwe ke go diša*). Even children are not allowed to play noisy games at such a time. An ignorant person who still goes to the fields will have a crop failure or, at least, a bad harvest. If one fails to show any sympathy it can result in outcasting. A woman explained:

⁵⁷ Literally, this means that a small thing says "ping" when it hears a big "ping". According to Hammond-Tooke (1981: 35), *pinyana*, the diminutive of *ping*, refers to the Buffalo-weaver (*Bubalornis niger*).

"According to our custom, it is unfair if we leave the family alone in their mourning and go to the fields to work. We have to be with the grieving family until the burial".

The death of a high-ranking person such as an elder, a headman or the chief, is an absolute shock for the citizens. In such a case it is said that the soil has stolen him/her (*mabu a utswitšwe*) which indicates the association of land with people at Mapela. This association not only reflects the human-centred approach which dominates the management of arable land, it also shows that many people continue to feel lost without traditional leaders.

4. Conclusions

Customary land laws with their focus on groups of families under the jurisdiction of married men continue to regulate access and control of arable land to a considerable extent. The demand for more secure statutory rights-in-land is, however, a central concern of the post-apartheid government. The legal framework of the new policies is, however, detrimental to the worldview of the cultivators at Mapela. This can be ascribed to the fact that land reform ignores the symbolic value which the majority ascribe to the fields and the personal identification with the land. From this identification with land people derive the right to use a field for an unlimited time even if they lack title deeds. In addition, the quest for lease, mortgage, purchase and sale of land is detrimental to the perception of people that money and land are separate worlds which may never meet because this would create space for evil spirits. Deviations from customary land transfers and land use are held responsible for a decline in soil fertility and the frequency of dry years in the area.

The efficacy of decisions taken on a higher level of control is thus closely interrelated with the customary tenure type and the worldview of people. This can be ascribed to the fact that cultivation of land is perceived holistically and crop cultivation is regarded as a combination of spiritual and material inputs. The dominant symbol of this worldview is pollution caused by heat through deviating behaviour which is a constant danger to the cultivation of land. Unlike gardens where cultivation is more production oriented,

continuity of the human-extrahuman relationship is of paramount importance for the cultivation of fields and leads to processual decision-making in the sense that the consultation of others, particularly elderly family members, traditional healers and headmen, forms an integral part of the land use system.

It remains questionable, however, what happens if the last generation of dedicated small-scale cultivators dies and the new generation which grew up during the struggle and which has great expectations of winning all lodgements of claims attains more control over the land and has to decide what the land is going to be used for. It can be assumed that land, as long as it is instrumentalized for political purposes, suffers from inappropriate management. This has to be seen against the background of the perception of the youth that the South African government has to make them rich to compensate them for the wrongs of the past. This has a paralyzing effect on individual initiatives and motivation to engage in sustainable resource management.

This attitude of the youth also has an effect on the work organization and the performance of agricultural activities. Teenagers only participate in fieldwork if they are paid. This has also contributed to the abandoning of the tribute fields which were ploughed for the chief. The backbone of land cultivation at Mapela is thus not only work groups which have been founded on the basis of mutual help and reciprocity, such as the *letšema* group, but also young *setlamô* workers. The latter regard the ploughing season as giving them a lot of job opportunities in the light of the high unemployment rate in South Africa.

"He was born in the cooking pot from which we eat"
(*o belegwe ka pitšeng ye re jelago ka go yona*; a farmer about the
comprehensive knowledge of another farmer).

Chapter Six: Use and management of other natural resources on the commonage

1. Introduction

Every person who is a rightful citizen of Mapela enjoys access and user rights to natural resources on the commonage as an entitlement under the land right. The most important feature of resources which occur on the commonage is that they are indivisible and that they are not used productively. They are rather extracted for immediate use. The commonage is, so to speak, utilized by people and animals to satisfy their basic needs: water, fruits, food, grazing and wood.

Control was, for a long time, exercised by groups of people or individuals who shared resources and who made sure that stranger groups could not exploit their resource base. Behaviour was controlled by a number of traditional norms and taboos. The tribal authority hardly interfered and only supported extension officers from the Department of Nature Conservation in their law enforcement. However, with the increasing scarcity of resources and the deteriorating outside control, a lack of environmental management leads to a growing number of problems at Mapela which demands too much of traditional leaders. Theft, environmental damage and resource plundering by strangers at night have a detrimental effect on the orderly life at Mapela.

This situation thus also threatens the worldview of the people, which presupposes a harmonious relationship between nature, human beings and the spirits. Increasingly deprived of their resource base, people are permanently looking for cheap alternatives and even dare to disregard taboos and laws if necessary. Instead of a simultaneous erosion of values pertaining to the environment, however, the latter are rather re-enforced because they give inner stability to the people so that they are able to manage

the crisis (see Chapter 1, Item 1.3 above). Values also serve to explain the inexplicable and enable people to alleviate their fears and concerns.

This chapter deals with botanical resources, grazing land for animals and water resources. It firstly explores transitional issues such as control and access. Thereafter, utilization of resources as well as decision-making processes are analysed.

2. Botanical resources

The Mapela area is the habitat of many highly valued trees and other plants which supply residents with fruits and food, firewood, timber and medicinal substances. In the following section, attention is given to indigenous trees, shrubs and other plants which occur on the commonage, and excludes imported species which are planted in the homestead gardens.

2.1 Access and control

Citizens of Mapela enjoy free access to botanical resources on the commonage (*tlhago*; litt.: origin, source, nature and instinct or *naga*; litt: country, land, *veld*). The resources belong to all as long as they are not cut, bundled and taken home. Thereafter, they are privately possessed by the person who gleaned them. This means that botanical resources on the commonage cannot be stolen, neither can shrubs or trees be exploited. No one person holds exclusive rights over the resources on the commonage.

Under exceptional circumstances the right of free access to botanical resources also applies to agricultural land, e. g. if a field lies fallow and the owner indicates that he has lost interest in the land (see Chapter 5, Item 1.3 above). In such a case, the trees on the field may be cut and traditional spinach may be collected. If a field is, however, under cultivation, the owner of the field has to be asked for permission before making use of his resources. Herbs which are used by traditional healers may only be used for the benefit of the people at Mapela and may not be traded. If strangers, however, invade

the area at night and exploit the area for the trade in medicinal plants, traditional healers have no power to prosecute them because they do not form part of the management structures. Theoretically, the headmen-in-council on behalf of the tribal authority would have the power to fine invaders for any damage they cause. Due to practical difficulties this, however, hardly ever materializes. During the research, no case of a prosecuted resource plunderer was known.

Control is based on norms accepted by consensus which are pluralistic in nature. These norms entail taboos which are based on beliefs (see Table 7 below) and laws such as the Lebowa Nature Conservation Act (see Chapter 3, Item 4.2 above) and common sense gained from practical experiences in the environment.

Table 7

Taboos relevant to the use of botanical resources

Taboos	Effects
a woman is not supposed to enter the house with a headload of wood at midday	rain will be withheld
during the growing season, no green (fruit) tree such as, for instance maroela (<i>Sclerocarya caffra</i>), buffalo thorn (<i>Ziziphus mucronata</i>) and wild seringa (<i>Burkea africana</i>), is supposed to be cut	ancestral wrath releases misfortune (storm and hail, barren trees, only male calves will be born)
trees around graves are not supposed to be cut	ancestral wrath causes misfortune
if a tree was struck by lightning, the wood is not supposed to be used for firewood	ancestral wrath causes misfortune
<i>sepatho</i> (<i>Gymnosporia buxifolia</i>) is not supposed to be cut in summer	ancestral wrath causes misfortune
thatching grass (<i>morulelo</i>) is not to be cut at certain times of the year	rain will be withheld

Apart from the above mentioned taboos and rules, constraints on the choice of resources and on the time at which they are gleaned are non-existent. People would still be reluctant to leave the residential lands any time due to the fact that people are not always at ease on the commonage, in the *veld* and on the *koppies*, where they believe

the spirits dwell. Though most of the spirits are not harmful to living people, their very presence fills people with awe because they remain mysterious and unpredictable. As a rule, no activities are carried out on the commonage during midday when the spirits take a rest. The same applies to ceremonies and rituals (see Hammond-Tooke 1981: 93). After sunset, life on the commonage changes again and the spirits cannot only play nasty tricks on the people but can also be extremely dangerous to them if they are disturbed. Normally, people show great respect for the spirits and return home after the daily work has been finished, call their children and bring the animals back into the *kraals* and enclosures. As a warning, parents tell their children stories, e. g. about young men who fell from mountains at night and died. It is hoped that this will prevent them from leaving the residential areas after sunset.

The tribal authority has the power to punish people who abuse the resource base and arbitrarily make use of trees or who damaged them. In the wards, control is exercised by the headmen and elders. Traditional leaders are, however, known for their goodwill decisions with regard to resources on the commonage. According to headmen, a warning is usually sufficient if a person breaks customary rules and taboos, e. g. damages a valuable fruit tree. A councillor said:

“We once reported a case to the tribal council, but the person who has done wrong begged for forgiveness. So, we just warned him. This person had felled some *mošu* trees (*Acacia tortilis*). This tree is useful for us. We can use it for many things. And this tree does not infest our area like the *motetepe* (*Dichrostachys cinerea*) which may be cut without restriction”.

In addition, the influence of traditional leaders and user groups are declining and they have difficulty in preventing young people from breaking tribal laws and taboos on purpose. Disregard by people who have no other choice but to break a taboo to survive, is tolerated by the authorities.

After the change of government in 1994, extension officers from the Department of Nature Conservation were forced by action groups and youth movements (e. g. the ANC Youth League) to withdraw from Mapela and can no longer support traditional leaders.

Besides, the decline in law enforcement at Mapela has institutional reasons as a spokesperson from the Department of Environmental Affairs and Tourism explained:

"If you want to enforce law you need to be a competent person. You need to have a comprehensive knowledge about the enactments. Law enforcement is a dangerous job because you confront people who are armed with guns and axes. Law enforcement never officially stopped. The 1994 elections and the new dispensation, however, affected law enforcement. They amalgamated the former homelands with the rest of the Transvaal. This became the new Northern Province. In February 1995, the ANC appointed people and sent them into our province, people like Maruma. He was a private consultant. He was supposed to establish the new Department of Nature Conservation. All the former leaders of the five former authorities were already busy developing a new organigram. He then just came and swept everything from the table and said that we now have to start all over again. He had the political power behind him. He is a high ranking person in the ANC and a high profile person in the business. During the period of one year he was an outsider who came here to establish what we call the 'chess-board'. You know: black and white, male and female. He called this integration. But the former leaders had already tried to do this. But they knew that you cannot push it too fast. Integration is something you cannot speed up. Because there is a lot of knowledge needed. But this man appointed people away from their areas of expertise for reserve management, environmental education, law enforcement and conservation services. But you cannot take a person from one reserve to another. And with respect to environmental education, you cannot take a person out of his mother-tongue area and give him such an important job if he doesn't speak the language of the people. And he doesn't understand their culture and their habits. But they did this. The same with legislation. Although ignorance of law is no excuse, you cannot expect an illiterate person to know the law. So, sometimes it is better to train people regarding the law than to just prosecute them. Just warn them and educate them. But if the ranger doesn't know the law, how can he educate people? Law enforcement never stopped officially. It stopped because the people who were appointed don't know the law".

Yet, despite the fact that the exploitation of plants and trees is today probably far greater than what is sustainable, and control relatively ineffective, feelings of competition and disputes over group-owned resources among community members still remain limited. This has to be seen against the background of the human-centred approach of life which places people above the natural environment. In other words, the value system of the land resource ethic does not exclude anybody who is truly in need of natural resources because human needs come first, and group needs are more

important than individual interests. Even under serious pressure, the system of social rights and obligations rather opens up than shuts down access to herbs and other plants. This is also substantiated in the saying that they even share the head of a grasshopper (*bana ba motho ba ngwathelana hlogo ya tsie*; litt.: the children of a person break/bite off the head of a grasshopper for each other).

2.2 Classification

The people of Mapela make use of an extensive taxonomic system which brings order out of disorder and which organizes the complex natural environment. The taxonomic system further enables people to perceive botanical resources with regard to their cultural, economic, medicinal and religious importance. The most valuable feature of the taxonomic system is, however, that people can talk to each other about important botanical resources without making reference to individual species which are not known to all (see Atte 1992: 4).

Tubers and bulbous plants are referred to as *digwere*. Accordingly, those which are poisonous or which have a bitter taste are the ones which one should not eat, the *digwere tša ga se jewe*. A tree is a *sehlare* (pl.: *dihlare*), a shrub is a small tree known as *sehlašana*. The word *sehlare* is also used to designate herbal medicine (see Ziervogel & Mokgokong 1975: 416). This can be ascribed to the fact that tree substances such as roots, barks and leaves are indispensable for medicinal use at Mapela.

A differentiation is also made between indigenous trees which occur on the commonage, the *dihlare tša naga* (litt.: trees of the wild) and trees which bear fruits, the *dihlare tša dikenywa* (litt.: trees with fruits) which grown on the *koppies*. The latter have to be distinguished from imported species which are occasionally planted in the yard, e. g. mangos or peaches. With regard to the homesteads, these trees are known as the fruits of the home, the *dikenywa tša gae*. Young shoots, sprouts and seedlings which develop in spring time and which give evidence of the cyclic repetition of growth and

decay are referred to as *dimela* (*go mela* means “to grow”). A further differentiation is made between immature (*dikenywa*) and ripe fruits (*maumo*). Some people said that the term *maumo*, in fact, refers to wild figs but that most of them use the term for other wild fruits as well.

Thorn trees which are used for *kraals* and enclosures are called *dihlare tša gohlaba*. Succulents are called *dithoro*. The biggest succulent, however, the Baobab tree (*Adansonia digitata*) is referred to by its proper name which is “*mmoī*”. Bark (*matswamati* or *lodi*; the latter designates fresh bark), leaves (*matlakala*) and roots (*medi*) play a central role in the preparation of herbal medicine. Roots are known to contain enormous quantities of the power entity *maatla* because they absorb the most vital essence of life, *matlôdi*; (litt.: something nice or sweet) from the soil. *Matlôdi* is only vaguely described but it could be ascertained that people tend to perceive in it a healthy mixture of rainwater and soil nutrients which are soaked up by roots of trees found in untouched areas. The natural growth of trees is a precondition for *maatla* to be effective, in other words, only roots of wild trees play a role in medicinal concoctions. Any liquid exudate, whether watery or milky, is referred to as *lebese* (litt.: milk). Acacia leaves and pods, which are intensively browsed by goats, are known as *tlhalaoka*.

There are no clearcut distinctions made between the different habitats of tree species. Some trees are purposely left in the fields so that women and labourers can rest in the shade of their canopies but these trees are not referred to as “those of the fields”. Neither is mention made of trees of the *veld* or trees of the mountains. Emphasis is only given to dense vegetation which is either referred to as *lešoka* (litt.: wilderness, bush, forst) or *sekgwa* (litt.: thicket). The opposite, scattered and individual trees, are not named in particular.

2.3 Use of botanical resources

This section presents information about the most important trees, their occurrence and their use at Mapela. In fact, use of trees is limited because not all species supply people with things they need in daily life. Some species have a nutritional value while others are valued for their dense canopies which give shade to people. In addition, there are also those which are well-known in the everyday medical pharmacopoeia. This means that some botanical resources are exploited excessively while others proliferate.

Data was obtained from various user groups, mainly elderly men and women, and was cross-checked with school children and other spokespersons on many occasions during the field research. It was ascertained that knowledge about trees is strikingly evenly distributed across generations which can be ascribed to the importance thereof. Knowledge was only limited with regard to medicinal plants and herbal substances. This was usually kept as a secret by traditional healers and will be discussed separately under Item 2.3.4 below. Following (see Table 8 below), those trees and shrubs which are important to people are listed (also see Appendix D).

Table 8

Important botanical resources: use, occurrence and habitat in Mapela

Species	Use	Occurrence	Habitat
<i>letseta la naga</i> (<i>Gossypium herbaceum</i>)	medicines	common	<i>veld</i>
<i>mahlommutla</i> (<i>Rhoicissus sp.</i>)	fruits	common	mountains
<i>maroberobe</i> (<i>Ehretia rigida</i>)	fruits, leaves are browsed by goats	common	mountains and <i>veld</i>
<i>mmale</i> (<i>Kleinia longiflora</i>)	medicines	common	around the homesteads
<i>mmilo</i> (<i>Vangueria infausta</i>)	fruits, leaves are browsed by goats	common	<i>veld</i>
<i>mmoi</i> (<i>Adansonia digitata</i>)	bark yields fibre which is used for ropes, medicines	solitary tree in the <i>veld</i>	<i>veld</i>

<i>mmupudu</i> (<i>Mimusops zeyheri</i>)	firewood, fruits, shade tree	common	(rocky) mountains, along rivers
<i>modubu</i> (<i>Combretum erythrophyllum</i>)	firewood, shade tree, timber for construction	very rare	along the banks of rivers
<i>mogaba</i> (<i>Kirkia wilmsii</i>)	medicines	very rare	<i>veld</i>
<i>mogo</i> (<i>Ficus sur</i>)	fruits	very rare	along the banks of rivers
<i>mohlakauma</i> (<i>Dovyalis zeyheri</i>)	fruits	very rare	<i>veld</i>
<i>mohlanthajane</i> (<i>Diospyros lycioides</i>)	branches for the <i>sehlahla</i> and other constructions, leaves are browsed by goats, medicines	common	along the banks of rivers
<i>mohlatswa</i> (<i>Englerophytum magalismontanum</i>)	firewood, fruits (previously used to brew beer), leaves are browsed by goats, leaves are used for tea	common	mountains
<i>mohlukohluko</i> (<i>Cliffortia linearifolia</i>)	medicines	common	<i>veld</i> and around the homesteads
<i>mohlopi</i> (<i>Boscia albitrunca</i>)	fruits, medicines	rare	<i>veld</i>
<i>mohlware</i> (<i>Olea europaea</i> spp. <i>africana</i>)	firewood, leaves are browsed by goats, shade tree, timber for construction	common	mountains, along the banks of rivers
<i>mohwelere</i> (<i>Combretum molle</i>)	firewood, timber for construction, shade tree	very rare	<i>veld</i>
<i>mooka</i> (<i>Acacia gerardii</i>)	firewood, leaves are browsed by goats	rare	<i>veld</i>
<i>mokano</i> (<i>Sclerocarya caffra</i>)	fruits (also for the brewing of beer), leaves are browsed by goats	common	<i>veld</i> , in and around the homesteads
<i>mokata</i> (<i>Combretum hereroense</i>)	firewood, timber for construction	very rare	<i>veld</i>
<i>mokgalo</i> (<i>Ziziphus mucronata</i>)	fruits, leaves are browsed by goats, leaves are used in home medicine, timber for construction	common	mountains and <i>veld</i>

<i>mokgoba</i> (<i>Dombeya rotundifolia</i>)	firewood, flowers indicate the beginning of the ploughing season, medicines	common	<i>veld</i>
<i>mokgwaripa</i> (<i>Acacia mellifera</i>)	firewood, leaves are browsed by goats, timber for construction	very rare	<i>veld</i>
<i>mokgwegwerane</i> (<i>Grewia flavescens</i>)	firewood, fruits, leaves are browsed by goats, timber for construction	rare	mountains
<i>mologa</i> (<i>Croton gratissimus</i>)	firewood, leaves are browsed by goats, medicines, shade tree	common	mountains
<i>mololo</i> (<i>Pouzolzia mixta</i>)	bark yields fibre which is used for ropes, medicines	common	mountains
<i>molope</i> (<i>Schotia brachypetala</i>)	leaves are browsed by goats, shade tree	rare in the <i>veld</i> , common in the mountains	mountains and <i>veld</i>
<i>monakanekane</i> (<i>Terminalia sericea</i>)	medicines, timber for construction	rare	<i>veld</i>
<i>monamane</i> (<i>Cassine transvaalensis</i>)	firewood, fruits, leaves are browsed by goats, timber for construction	rare	<i>veld</i>
<i>mootša</i> (<i>Sterculia rogersii</i>)	leaves are browsed by goats, shade tree	common	mountains
<i>morakgwedi</i> (<i>Steganoaenia araliacea</i>)	leaves are browsed by goats, previously used for musical instruments	common	mountains
<i>morampopo</i> (<i>Melia azedarach</i>)	medicines	common	along the banks of rivers, <i>veld</i>
<i>moretlwa</i> (<i>Grewia monticola</i>)	fruits, leaves are browsed by goats, leaves are used for tea	common	<i>veld</i>
<i>morotodi</i> (<i>Pappea capensis</i>)	fruits, firewood, leaves are browsed by goats	rare	mountains
<i>mosehla</i> (<i>Peltophorum africanum</i>)	medicines	common	<i>veld</i>
<i>mošitšane</i> (<i>Elephantorrhiza burkei</i>)	medicines	common	<i>veld</i>
<i>mošu</i> (<i>Acacia tortilis</i>)	firewood, leaves are browsed by goats	common	<i>veld</i> and around the homesteads

<i>motse</i> (<i>Acacia nilotica</i>)	firewood, leaves are browsed by goats, timber for construction	rare	<i>veld</i>
<i>motšhidi</i> (<i>Ximenia caffra</i>)	fruits, medicines (seed)	common	<i>veld</i>
<i>motsupe</i> (<i>Ehrythrina lysistemon</i>)	leaves are browsed by goats, medicines, shade tree, timber for construction	common	(rocky) mountains
<i>motswiri</i> (<i>Combretum imberbe</i>)	firewood, timber for construction	very rare	along the banks of rivers
<i>moumo</i> (<i>Ficus thonningii</i>)	firewood, fruits, shade tree	rare	mountains
<i>mphai</i> (<i>Ficus glumosa</i>)	shade tree	rare	mountains
<i>mphamphepa</i> (<i>Commiphora marlothii</i>)	firewood, leaves are browsed by goats	common	mountains
<i>mphuphuntswane</i> (<i>Bridelia mollis</i>)	fruits, leaves are browsed by goats, medicines, timber for construction. medicines	common	mountains
<i>mopilikomo</i> (<i>Eucalyptus sp.</i>)	medicines, timber for construction (poles)	only planted next to the tribal authority	
<i>mpipi</i> (<i>Boscia foetida</i>)	fruits, shade tree	rare	<i>veld</i>
<i>sepatho</i> (<i>Gymnosporia buxifolia</i>)	firewood, leaves are browsed by goats, medicines	common	around the homesteads and along the banks of rivers

Note: "Fruits" are collected by women and are rarely marketed; "medicines" refer to roots and bark which are used by traditional healers; "timber for construction" is usually used for the cattle or goats' *kraals*; "shade tree" implies that spokespersons gave special emphasis to the dense canopy of a tree.

The above-mentioned varieties of trees and shrubs are the most valuable species for the people at Mapela because they enrich the human diet, are cut for timber and firewood and/or play an important role in herbal medicine.

2.3.1 Fruit and traditional spinach

Any person staying at Mapela is allowed to pick fruit and to eat it directly from the trees. A person is also permitted to take fruit home and to eat or process it in the homestead. The gathering of food and fruit is largely women's work. Men only pick fruit or dig out

edible tubers when they herd animals and get hungry or thirsty. Despite the fact that the importance of the gathering economy for household sustenance has decreased, many people still have a comprehensive knowledge about useful species.

Fruit is associated with health and vitality and enriches the maize based diet in summer when it is ripe. It is collected on the mountain slopes and, if grown in yards, is shared with neighbours. The collection of wild fruit is usually an *ad hoc* and unplanned activity and depends on the route of a woman from one place to another. Fruit is rarely sold due to the absence of an institutionalized market at Mapela. No woman could be found selling fruit in Potgietersrus.

The *mokano* tree was always singled out as being the most useful. The time when the fruit falls (*go wa mokano*) is eagerly awaited and interrupts the fieldwork routine of women. The fruit ripens in late summer, around February and March. It is never harvested but rather collected as windfalls which indicates its ripeness. Apart from the consumption of fruit, the juice is processed into the famous maroela beer (*bjalwa*) or is used to supplement the porridge. After extraction and sieving, the juice is poured into containers to ferment. Some women prefer to mix the beer with water while others like the beer to be very strong. Whenever beer is drunk, it is expected that a small amount should be poured on the ancestor shrine. After the flesh of the fruit has been removed, the maroela nuts can be ground, mixed with spinach and then used as a side-dish.

The *mohlopi* tree (*Boscia albitrunca*) has lost relevance for the human diet. Previously, the roots were chopped, dried and processed into a meal substituting the conventional porridge. The nutritious value of the tree is, however, still remembered and is also well-known among school-going children. Yet, to bridge food scarcities, people are today more inclined to fall back upon the pension payments of elderly family members to purchase *mealie meal*.

Traditional spinach plants such as *theepe* (*Amaranthus hybridus*), *tetele* (*Ornithogalum sp.*) and *lerotho* (*Cleome gynandra*), which grow on agricultural or residential land

belong to the owner of the land and may not be picked by any person who had not asked for permission. This does not apply, however, to fields which lie fallow and which are opened up for communal use until the owner resumes cultivation. Traditional spinach is collected in November and December and is dried for later use in winter (see Table 9 below, also see Figure 15 below). The leaves are usually stewed and eaten as a vegetable side-dish with maize porridge. Use is also made of the leaves of garden plants like cucumber, pumpkin and bean.

Table 9
Types of traditional spinach and time of collection

Traditional spinach	Time of collection
Pumpkin leaves (<i>mophotse</i>)	February till April
Melon leaves (<i>motšhatšha</i>)	February till April
Cucumber leaves (<i>phara</i>)	February till April
Bean leaves (<i>monawa</i>)	February till April
Traditional spinach (<i>theepe</i>)	November and December
Traditional spinach (<i>leroto</i>)	November and December
Traditional spinach (<i>tetele</i>)	November and December



Figure 15: *Merôgô* is dried to enrich the diet during the winter months

2.3.2 Firewood

The cutting of firewood (*dimela tša mollo* or *dikgong tša go gotša mollo*) and the selling thereof was previously controlled by the Lebowa government through rangers. Amongst other regulations, they enforced that women should only collect deadfalls and dry branches and that only headloads of wood were to be carried home (see Small 1997: 51). Rangers could, however, not be present everywhere and all the time. With regard to the prohibited cutting of trees, a spokesperson said:

“When the rangers came to Mapela, they informed us about the law that we were not supposed to cut trees. Some people then cut the trees when the rangers were not around. Their law was predictable in a way. Actually, we should live in a forest”.

As was indicated above, outside control is virtually non-existent at Mapela. Alternatives to firewood, such as paraffin are not available at reasonable costs. The overall electrification of the area is unlikely to materialize in the near future and only a few better-off residents can afford to electrify their houses. Alternative fuel such as cornstalks (*mahlaka*) and maize cobs (*dikgokgothi*) are only available after the harvest. The use of cattle dung (*dišu*) is not common and only a handful women said that they sometimes collect dung from the fields for cooking. Dried bark (*letswamati*; sing.: *matswamati*) is also only rarely used. Firewood which can be collected after land

clearings and *veldfires* is quickly finished. Regular and excessive cutting of trees for firewood therefore continues to put severe pressure on natural resources in the former homeland areas (Fakir & Cooper 1995: 19).⁵⁸

Firewood is usually collected by groups of three to four women who gather early in the morning to avoid the heat. Men rarely participate in firewood collection. They are only sometimes sent by their wives who know where useful trees grow which can only be cut with electric saws. *Combretum* (leadwood) wood, for instance, is favoured because, apart from its high burning quality, it provides charcoal which supplies heat in winter and which can be used to cook and warm up meals. Due to the fact that they do not bear edible fruits, they are neither protected by the tribal authority nor are there any taboos related to them. Therefore, *Combretum* trees are rare today.

Usually, women are equipped with simple tools, such as the bushknife (*tsedi*) and an axe (*selépé*) and can only cut light dry branches and twigs if there are not enough deadfalls available. Women are not very selective with regard to the species they choose for collection. Anything which seems to be useful, from *Acacia* species to dried leaves of the *Agave americana*, is bundled and taken home (see Figure 16 below). Much sought after are *Dichrostachys cinerea* and *Ziziphus mucronata* which are among the more favoured species. Thus, while women mainly rely on trees and shrubs which are not rare, men tend to exploit high value trees which are old, big and heavy.

⁵⁸ Fakir and Cooper (1995: 19) mention that there are currently about 17 million people in South Africa who depend on firewood for cooking and heating. This means that about 8 millions tons of firewood are collected annually.



Figure 16: If firewood is scarce, *Agave americana* is cut around the homesteads to cook food

The firewood which women carry home does not last long, sometimes only three to five days. The need to collect additional wood for storage is, however, not perceived. Wood is thus only stored occasionally, if men cut trees in the mountains or in the fields as mentioned above. Because of this, some women do not have sufficient firewood in the summer months when dry wood is scarce and they are not able to cut green trees with their tools. If they can still get wet wood, this is hardly useful for cooking because it generates a lot of smoke during the process and affects the eyes and the respiratory tracts. Moreover, cooking with wet wood takes longer and women have to attend to the fire permanently so that they cannot perform additional tasks.

To cope with firewood scarcities, women either borrow the required quantity from neighbours or they purchase wood from local firewood sellers. Firewood businesses are still in a developmental phase because they were previously strictly prohibited. Today, the sale of wood is either tolerated by the local authorities or its existence is denied. Wood sellers were, however, reluctant to tell me where they cut the wood. It can be assumed that part of the wood was obtained from private farms in the surroundings or that it was cut within the Mapela area. Firewood can also be obtained from the Department of Agriculture, on request, at low cost. It can be assumed, that only the

councillors at the tribal authority know about this offer because nobody else made use of this opportunity to obtain firewood.

2.3.3 Timber

A number of trees are cut for the construction of fences (*legora*), shelters (*sehlahla*) and *kraals* or enclosures (*mašaka*). Timber to erect homesteads has lost relevance because most of the houses are built by professional brick-layers and are covered with corrugated iron.

The people who have the required experience with useful species are old men who also know where they can find them. Because of the fact that construction wood is too heavy to be transported easily, men form groups and organize a tractor pulling a trailer so that they can share the costs. If men are not available to organize construction wood, it is most likely that wood is purchased in the local shops. Timber is preferably cut in winter, from July until September when most of the trees have shed their leaves and it is safer to walk into the mountains. Many men fear poisonous snakes which could hide in the tree canopies.

For *kraals* and enclosures, heavy stems are vertically planted into the ground to form a square. Most suitable is timber from *Combretum imberbe* and *Combretum hereroense* but these trees are rare in the area because they were heavily cut for firewood. Less strong is wood from the following trees: *Erythrina lysistemon*, *Olea europaea* spp. *africana*, *Acacia tortilis*, *Grewia flavescens*, *Terminalia sericea*, *Commiphora marlothii* and *Sterculia rogersii*. Thereafter, thorny branches (taken from *Acacia* trees and *Dichrostachys cinerea*) are intertwined at right angles.

Previously, wooden dishes were made from the wood of maroela trees (*Sclerocarya caffra*) and traded at Mapela. They have long ago been replaced by commercial wares and have almost completely lost relevance. During the research, mention was also made of the *sejoro*, a stringed instrument made from the slender *morakgwedi* tree (*Steganotaenia araliacea*). This instrument was light in weight and could be taken

anywhere that people wanted to sing and play the *sejoro*. Efforts to find one at Mapela were unsuccessful.

2.3.4 Medicinal uses

The people of Mapela have an extensive knowledge of illnesses (*malwêšši*). They also have clear perceptions of normal and abnormal conditions which have to be normalized by means of herbal medicine. According to Hammond-Tooke (1981: 94), there are four explanatory theories pertaining to the concept of illness: the belief in ancestors, the belief in the creator, witchcraft (*bolwêšši bja boloi*) which is ascribed to jealousy and ritual pollution which refers to certain mystical states of heat (*fiša*) which can ultimately even lead to death (see Chapter 4, Item 3.1 above).

Illnesses and diseases are thus usually related to supernatural agents and malevolent powers (Mönnig 1983: 79) which punish a person because of a deviation from shared principles and norms. This explanatory pattern is also reflected in the perception of some vaguely defined or unknown groups of perpetrators who are responsible for environmental degradation and who cause “illness” of the natural resources. Such “illnesses” refer, for instance, to plant diseases, insect or weed infestation which have to be “cured” by magical means. The consequence of the view of guilt being placed outside the influence of human beings is that people rarely feel responsible for environmental damage.

2.3.4.1 Use of herbs by traditional healers

The number of traditional healers in South Africa is difficult to ascertain since there are only a few full-time healers left.⁵⁹ The majority of healers split their commitments in order to generate a regular money income. It is estimated that there are about five to ten healers working in each ward in Mapela. The popularity of traditional healers

⁵⁹ There are more than 200 000 traditional healers in South Africa who are consulted by about 60% of the population (Gericke 1996: 38). Vorster (pers. comm.) estimates that there are nearly 300 000 healers in South Africa. Recent records state that their numbers are growing, more

continues despite the existence of clinics in both Mapela and Bakenberg. This can be explained by the fact that even minor illnesses and aches have to be discussed extensively and have to be related to the spiritual world for the patient to recover. This service is usually not provided in the clinics.

Most of the healers are capricious elderly persons with eccentric habits. Sometimes they are unusually dressed and are remarkable for the way they speak and interact. Even strangers could easily identify a traditional healer. Discussions revealed that traditional healers constitute the most conservative part of the community and that they have an existential interest in their profession. So, their secretive knowledge is only transmitted to selected apprentices they take into their confidence. Healers are concerned that their knowledge could be instrumentalized by strangers for financial gains. They are further anxious about development projects initiated by the Department of Health and Welfare which could ultimately lead to their marginalization from the group if they are no longer needed.

Traditional healing works on the principle that the physical well-being of a person is not only dependent on a balanced diet but also on a harmonious relationship with the ancestral spirits. Different healing principles and diagnosing methods co-exist at Mapela. There is differentiation between the *dingaka tša ditaola* (healers of the divination bones, *go laola* means “to diagnose”), the *dingaka tše tšhupša* (healers who prescribe medicine) and the *dingaka tša go alafa bahwana* (healers who cure bereaved persons).

The *dingaka tša ditaola* constitute the majority and throw a set of divination bones to make a diagnosis and to mix the appropriate herbs. Mönning (1983: 81) assumes that the Pedi use the bones as a method to control supernatural forces. Indeed at Mapela divination bones are also used to neutralize effects of ancestral wrath and dissatisfaction as the source of pains and illness. Of major importance in the set of bones are four pieces which represent an old man (*mokgalabjê*), a woman (*mosadi*), a

especially in urban areas. This is due to an increase in stress due to a fast living tempo and uncertain economic conditions.

son (*mošemane*) and a daughter (*ngwananyana*) and which indicate “life” when they fall with the surfaces upwards and “death” when they fall on the opposite surface (Mönnig 1983: 81). From the possible combinations and the directions in which the bones point, the healers draw their conclusions. Before, however, a healer would talk to the patient and would obtain intimate information. The patient would also be instructed to blow into the bag (*mokotla wa ditaola*) where the bones are kept so that his or her breath leaves an invisible fingerprint on the divination set.

The *dingaka tše tšhupša* make no use of divination bones. They rather diagnose the nature of an illness through observation of and communication with the patient. *Dingaka tše tšhupša* mix herbal medicine with “medicines” they buy from shops. Sometimes, doctors with a biomedical background are also referred to as *dingaka tše tšhupša*. Other spokespersons said that these healers work like homeopaths who rely on herbal medicines rather than on pharmaceutical products.

Widows make up a distinct group of patients so that they need special treatment from the *dingaka tša go alafa bahwana*. After the death of her husband, a widow suffers from the *makgoma* disease which causes swollen joints and impurity. She can then be extremely dangerous to others. After the funeral, the widow would approach the healer where she would be instructed to wash her hands in a mixture of cattle dung and water. Thereafter the healer would take a basin containing different dried herbs and would set fire to the mixture. The mixture of ingredients is kept as a secret by the healers but roots, leaves and bark from *Peltophorum africanum*, *Dovyalis zeyheri*, *Erythrina lysistemon* and *Aloe zebrina* are known to be most powerful and effective for the treatment. The widow would inhale the steam (*muši*) so that she starts sweating as an indication of the overcoming of the impure state. Some healers reported that they also make small incisions at the joints and rub the *tšhidi* (litt.: coolness) medicine in.

Traditional medicine usually works symbolically which means that herbs virtually “stand for” something which is believed to relieve the patient from his or her pains. Sweating and vomiting thus indicate that the patient is getting rid of the heat and inhaling implies

an infusion or absorption of magical powers. Many names of herbs also elicit associations and perceptions related to them. The name *matimadigale* means “fire extinguisher” indicating that this herb is used to cure ritual heat. Other herbs are known as *pelo ya theri* (litt.: heart of a vulture), *lemaatla* (litt.: this which gives power) or *diphalo tša pitša* (litt.: crust or porridge remains in the pot).

Many diseases treated by traditional healers start with rheumatic pains and swollen or sore feet (*go ruruga maoto/sefola*) indicating a pollution of blood or a blood disease which is referred to as *bolwetši bja madi* (litt.: sickness of the blood) or *madi a bollo* (litt.: hot blood). This state is often accompanied by depression and lethargy. After the diagnosis, a healer would look for bulbous plants and tubers, e. g. *mogaba* (*Kirkia wilmsii*), because they contain *maatla* which constitutes the essence of herbal medicine. The *mogaba* tree is difficult to find at Mapela and a healer said that he sometimes even has to search for it outside the boundaries of the Mapela tribal area. Some herbs, e. g. the *sekanama* (*Scilla natalensis*), are known to have a special blood purifying effect because they cause diarrhoea or vomiting. *Sefola* can also be treated with *monna ga apare* (*Adenia glauca*, litt.: naked man) or the *legwama* plant (*Boophane disticha*) which is also used for the ancestor shrine. Other tubers and bulbous plants which are medicinally used, *sebofo*, *magorometša*, *sekekolwana* and *sebokana*, could not be identified. The above mentioned are the most powerful herbs and are complemented with others, e. g. parts from the *Aloe* species and bark from different trees (e. g. *Peltophorum africanum*).

After the herbs have been collected, they are usually mixed, chopped and dried. Healers would then apply different methods:

- ◆ the fumes of the burnt herbs are inhaled,
- ◆ the herbs are mixed with animal fat and rubbed on joints and incisions,
- ◆ the herbs are poured into washing water,
- ◆ or the herbs are prepared as a drink.

It was ascertained that herbs which represent *maatla*, are preferably mixed with water which symbolizes coolness or ash which stands for purity and health (Hammond-Tooke 1981: 135). It seems as if these qualities of power, coolness and purity have to be combined to have the greatest effect.

Although *maatla* herbs may only be used for basic needs and may not be sold, the rate of exploitation is high. This can be ascribed to the fact that the healing power of these herbs is also known and appreciated in other areas so that extra-regional traders invade the area at night, steal herbs and sell them off in the urban areas. Healers are, however, not inclined to take any measures of control to punish illegal traders or to report to the traditional leaders even if they meet one because they themselves collect some herbs outside the Mapela tribal area if they need them. In addition, use of herbs by strangers who want to help others would not be restricted if asked for. A healer said:

“Some people come from as far as Johannesburg to get the bark of the *mmoi* tree (*Adansonia digitata*) because this tree is rare. We help these people from Johannesburg because they have to come with a person residing in the area and then they have to ask the *induna* for permission. These people only take a little bit of the bark. They cannot use the whole tree. You see, I found the tree here when I arrived and it is still growing. The tree is protecting itself because of its usefulness for the people (*sona sehlare ka bosona se itšhireleditše*). The *induna* acts on behalf of the *mošate*. And we know that *mošate* deals with both good and bad things. The *mošate* is like a dumping site (*mošate ke letlala*)”.

With permission, traditional healers may collect herbs in the neighbouring nature reserves. A healer said that the Whites are not interested in herbs. It may be assumed that some herbs are collected at night from private grounds but this could not be ascertained. In fact, only a few traditional healers referred to other places to collect herbs if they run short of them in Mapela. Healers tend to uproot herbs which are rare and store them at home where *maatla* automatically remains active for some time and substances are then available for *ad hoc* utilizations. In the yard the herbs are, however, not watered. A cultivation of herbs would be an act of demystification rendering *maatla* ineffective and the substances useless (see Chapter 3, Item 2.4.3 above).

2.3.4.2 Home use

Some minor illnesses are, however, also explained on empirical grounds and are not ascribed to supernatural forces (Mönnig 1983: 94). Such illnesses rather have a “natural cause” (*bolwetši bja tlhago*) and people can explain their origin and development. This concurs with Jansen (in Reynolds 1996: xxv) who notes that many Bantu societies differentiate between “naturally-caused” illnesses and those attributed to “human cause”.

Such naturally occurring illnesses are well-known and understood by people so that they do not have to consult a traditional healer for special treatment. People rather make use of home medicine (*dihlare tša gaê*) which is a mixture of cheap but effective remedies: herbs which are collected in the natural environment and medicines which can be bought in the shops, e. g. Vicks or garlic (*konofolo*). The most essential herbs are leaves, bark and roots. To prepare a creamy substance which can be rubbed in the skin, animal fats are used as unguents.

Home medicine is thus mainly used by women within the individual households. Concoctions are mixed spontaneously on the basis of common sense and the experienced older women are often consulted to diagnose the illness. These medicines are applied to cure or prevent children’s illnesses (see Box 14 below).

Box 14

Children’s illnesses cured at home

- ◆ umbilical hernia (*khubjana ya ngwana*)
- ◆ diarrhoe (*letšhologo la ngwana*)
- ◆ measles (*bolwetsi bja mmoko*)
- ◆ epistaxis (*mmokola*)
- ◆ toothache (*meno*)
- ◆ colds (*mokgohlwane*)
- ◆ constipation (*mala*)
- ◆ sprains (*thinyegele*)
- ◆ wounds (*dintho*)

Women who make use of home medicine show a high degree of flexibility in terms of the treatment and the mixing with pharmaceutical products. In case of a serious illness, the child is usually taken to the clinic. So, home medicine can be regarded as a local first aid scheme.

Home medicine is, for instance, ground and applied on the affected body part or herbs can be soaked in water and used to wash the whole body. This is done, for instance with donkey dung or *mohlokohloko* leaves (*Cliffortia linearifolia*). The latter is also applied when dogs have a rash on their skin. Other spokespersons said that they wash their dogs with the *mohlokohloko* mixture to prevent tick bites. Herbal medicine can also be smoked. The aromatic leaves of the *mologa* tree (*Croton gratissimus*), for instance, serve as “tobacco”.⁶⁰

Thola (*Citrullus lanatus*) roots are soaked in water and the mixture is given to a child who suffers from the *thema* disease and red spots appear at the back of his or her neck. Another symptom is that the child’s head is always pulled back. Afterwards, the roots are mixed with animal fat so that they can be smeared on the child’s body. For stomach ailments like cramps, distension and constipation, the green leaves of the *mphuphunthswane* (*Bridelia mollis*) are boiled and the patient has to drink the tea. It is important that the immature leaves are collected. It is generally believed that leaves lose *maatla* over time. *Mmale* (*Kleinia longiflora*) is stamped, soaked in water and then used to wash “sore eyes”. Some spokespersons also told me that they plant *mmale* around the enclosures of goats to keep out snakes.

The bark of the *mosehla* (*Peltophorum africanum*) is chewed for various reasons, for instance, when people return from a funeral. It is believed that this will protect the mourners from ritual pollution and the *makgoma* illness through contact with the widow. The roots of the *modikalehlaka* can be chewed in a similar way though they taste very bitter. This plant does not grow in Mapela and could therefore not be identified. Some traditional healers told me that they pick it in the area of Sterk River which testifies that

⁶⁰ The *mologa* is also used in the *pula pulane*, the rain making kraal.

some herbs are collected outside the Mapela area. Bark from the the *mogaba* (*Kirkia wilmsii*) is chewed to prevent stomach ailments. Even the tubers of the *mogaba* are boiled and given to small infants to make them strong and healthy. Herdboys who take *mogaba* tubers told that they never get hungry during the day but that they have to drink a lot of water because *mogaba* makes them thirsty.

For sprains, the leaves of the *thoba* (*Schinus molle*), a favoured yard tree, are boiled and then rubbed on the swollen joints. For wounds, *mokgalo* leaves (*Ziziphus mucronata*) are chewed and then applied to the wound. When babies teethe, garlic (*konofolo*) is applied and when women wean babies from breast-feeding they apply *Aloe zebrina* extract on their breasts. If a person caught a cold, the twigs and leaves of the *mošunkwane* (*Lantana rugosa*) or *moretlwa* (*Grewia monticola*) are prepared as a tea. Some people also believe in a good meal as a measure against (natural) diseases. This is also expressed in a proverb which says that a man is an elephant and has to eat everything (*motho ke tlou o ja mere yohle*). Another spokesperson told me about a herbal mixture which is used to cure a “sunken fontanelle”: an ostrich egg is grinded and mixed with the roots of the *mohlopi* (*Boscia albitrunca*) tree. Before the mixture is applied, animal fat is smeared on the infant’s head.

2.4 Decision-making

With regard to botanical resources, everybody decides for him or herself what is to be collected, dug out, cut and extracted. Decisions are not taken according to age, gender or social status. There is also no need to sit down and reach consensus with others about the use of botanical resources on the commonage which implies that no elaborate decision-making procedures apply. In the perception of people, natural resources are gifts of the supreme being which are guarded by the ancestral spirits. These gifts may be used by human beings to satisfy their basic needs. The only constraints are taboos which have been described above (see Chapter 6, Item 2.1). If these taboos are not observed misfortune may occur in the form of ancestral punishment (De Beer 1995: 6). The question remains whether there are other plants and shrubs subjected to taboos.

Traditionally, the observation of taboos and the respect of nature for being the gift of the supreme being leads to sustainable use of resources on the commonage.

Decisions are influenced by individual preferences (e. g. fruit) or by the suitability of a resource for the required purpose (e. g. firewood). Traditional healers consult the spirits or dream the night before they go to collect herbs and leaves. They also perform a ritual before collecting herbs. Most of the decisions are thus unplanned and are often taken on the spot at the place in which a person is. This is probably due to the fact that almost every botanical resource can be replaced by another. If a woman, for instance, walks to the field to look for a certain firewood tree but finds that she is too tired to walk any further, she will probably change her mind and take wood from another tree which is similarly useful. The same applies to herbal medicine. If a healer is in need of a main ingredient, he will most likely combine others to achieve the same effect. This attitude is significant for the way people deal with resource degradation. Although most of the people say that they face hardship in the light of the scarcity of some species, they have enough alternatives at their disposal so that initiatives to conserve the environment are not important.

3. Grazing land

3.1 Access and control

Free access to grazing (*phulo*) is an entitlement under the customary land right. Ward boundaries may be crossed for grazing because, unlike agricultural and residential land, grazing land is not assigned to individual wards. Different types of livestock (*leruô* or *diruiwa*), mainly goats (*dipudî*) and cattle (*dikgômo*) are regularly taken out for grazing by herdsman. Donkeys (*ditonki*) tend to roam around close to the homesteads but they are not allowed to enter private yards. Most homesteads are fenced to fend off animals.

Because of the unprotected status of grazing land and the weak lobby at the tribal authority, the expansion of residential and agricultural land has limited the grazing resources for cattle farming to a dramatic extent. Particularly in winter, the maintenance

of cattle is difficult. Agreements with neighbouring White farmers who granted grazing rights to those at Mapela have lost relevance since many of them have left the area. Despite this situation, cattle farmers cannot think of an alternative to the traditional tenure system and would see their rights and freedom threatened if access would be controlled by the Department of Agriculture by means of fences.

Free access to the water resources in the area is also granted to herdsman who are responsible for the animals. During the day, animals are watered in the rivers. In the morning and in the evening, animals are normally watered in the residential areas. Rivers can be accessed anywhere and there are no restrictions for use. However, water may not be used by herdsman who come from outside the Mapela area. In such a case, permission has to be obtained from the tribal authority.

Cattle are under the control of a herdsman (*modiši*) who acts on behalf of the owner of the animals. In case cattle damage crops or private properties, the owner is held responsible and can be charged for this. In case of a theft or loss of cattle during the day, however, the herdsman is liable for the incident. The owner of cattle, or, in case of his absence, his representative, is most likely to look for an elderly and reliable herdsman who would be able to keep the herd together. Only a few instructions are given to the herdsman: to keep cattle away from cultivated fields, to regularly take them to watering places, to find good grazing and to make sure that all of them return home in the evening. It could be ascertained that the majority of herdsman at Mapela do not have their own agricultural land and that some of them were bachelors so that they have enough time for the herding job. The payment they get for herding, about R100 per month, is their only source of income and they would hardly risk their job by not looking after the cattle carefully.

Today, boys and young men who previously looked after the cattle on behalf of their father or grandfather have only little interest in cattle farming. Cattle owners regard it as risky to entrust boys with the valuable animals. During the research, when cattle roamed around freely, this was usually ascribed to young wild boys who rather run around or

play with others instead of paying attention to the cattle. In addition, they do not know the best grazing areas and are too lazy to walk far away from the homestead. The time when boys look after animals is therefore limited. Usually they are asked to take them out during the weekends when the herdsman are not available.

Cattle are the least controllable resource users at Mapela and make unlimited use of water and grazing land wherever the herdsman takes them. The number of animals watered at Mapela's rivers is unknown. It can be assumed that rivers are more important today for herdsman because the public water reservoirs in the *veld* where all animals could be watered have dried out. Women do not interfere when herdsman approach a river with their cattle. This is, in fact, none of their business and even if they wished to interfere, a herdsman would not listen to them and rather refer to his free access to resources on the commonage.

Previously, the Department of Agriculture controlled the stock numbers of individual households in order to remain within the carrying capacity of the land. Some people even said that officials took some of their animals as a measure of control under the betterment scheme during the 1960s (see Baber 1996: 271). In the light of the high value ascribed to cattle, this must have been a traumatic experience for the cattle farmers. Officially, the extension officer still keeps a record of all the animals at Mapela. The figures he works with have to be seen, however, against the background of the difficult conditions under which they were obtained. This is due to the fact that a lot of people tend to deny the existence of some of their animals because they are anxious not to be fined for overstocking. The extension officer from the Department of Agriculture said that he is deprived of his power to interfere at Mapela because there is currently no authority supporting him at the local level. He said that the moment he tells a herder to move because the land is already overgrazed or if he recommends to diminish the herds, the herdsman would promise him to move the next day.

Today, only donkeys are sometimes "saved" by members of the SPCA (Potgietersrus branch) from brutal treatment during the ploughing season and are taken to

Potgietersrus to recover. Obviously, this raises animosity among the farmers who need the donkeys especially during the cultivation period. During the time of the research no donkey was taken from the farmers. I was, however, not allowed to take pictures of donkeys during the ploughing, more especially if they were bleeding from too tight ropes and the heavy harness equipment.

The tribal authority does not control the number of cattle. They are rather concerned about the declining quality of the grazing land and use this as a major argument for the lodging of land claims. Headmen only interfere in case of a dispute between a cattle farmer and a crop farmer or in case of stocktheft. In fact, the number of stockthefts have increased considerably at Mapela. Some people said that they do not dare keeping cattle because thieves invade the area at night and steal the animals even from the *kraals*. Most of the thieves are armed so that a man would less likely go outside at night even if the dogs start barking. After sunrise, the owner would rarely find his cattle again at Mapela. Most of the them would have already been slaughtered.

There are only a few taboos with regard to cattle. Previously, people were prohibited from keeping a white cow in the *kraal*. According to Hammond-Tooke (1981: 134), "white" symbolizes cleanness or attractiveness. He also notes that white ingredients are used to purify ritual states (Hammond-Tooke 1981: 136). In analogy, white cows also assumed a special status and were thus reserved for the chief. In case a white calf was born to a cattle owner, he had to take it to the *mošate* in order not to break with custom. Even if the breeder got nothing in return, this tribute seemed to be accepted as part of the services which had to be rendered to the chief. This is also substantiated in a proverb which says that even if the chief beats you, you may not be upset because you realize that he knows you (*le ge kgoši e be e ka mphetha ke be ke leboga ke re kgoši o a ntseba*). Such tributes are no longer rendered to the chief. A taboo which is still of relevance entails that a woman is not allowed to enter the cattle *kraal*. If this taboo is not observed the woman will suffer from a blood disease (see Chapter 6, Item 2.3.4.1 above). Lastly, a young man will not find a wife if he steps on fresh cattle dung.

3.2 Grazing practices and other uses of grass

Fenced grazing camps are non-existent and individual herds of cattle graze wherever they find fodder and wherever a herdsman takes them. Herdsmen do not inform the owner of the cattle, or another representative, about the place they intend to drive the cattle for grazing. They are even less likely to make arrangements with each other about their grazing routes although they try not to meet up while tending their herds. A herdsman explained:

“Everybody can come and graze his cattle together with mine. The main problem starts when we do not have enough water. Then we have to move to another place. But there are no agreements. We don't sit and discuss where everybody goes with his cattle. Everybody knows where to go. Usually we change our grazing area after five days”.

Grazing practices are determined by the season and the availability of fodder grasses and water. In summer, dense grass covers (*bjang*) alongside the rivers are the most suitable fodder resource for animals. Herdsmen mentioned *mphafa* (buffalo grass) and *mohlwa* (kweek grass) in this respect as it is of high nutritional value for cattle. Therefore, most of the animals are taken to the river banks during the rainy season. Because of its value as a grazing resource, grass may not be cut in summer. Another reason is that it is dangerous to perform any activity in the *veld* during summer because there are many hiding places for snakes, criminals and drunkards.

After the harvest, cattle are taken to the fields where they feed on stubbles and crop residues (*marega dikgômo di ja mahlaka*; litt: in winter cattle feed on cornstalks). In winter, after the stubbles from the fields are finished it is difficult to find sufficient fodder on the dry grazing land. Because of this, additional feeding (*furu*) becomes necessary. Most popular at Mapela is the use of lucerne which is bought from White farmers or co-operatives. However, not many can afford such additional expenses and are more likely to cut hay for the animals as alternative feed. There is no limit on the quantity of grass which may be cut in winter. Cutting of grass in summer can, however, lead to misfortune as was indicated above (see Chapter 6, Item 2.1). Grass can also be cut in another

ward provided that permission was obtained from the headman. There is also an agreement with the managers of the neighbouring nature reserve, Percy Fyfe, which is situated next to the Steilloop road. The agreement entails that half of the grass which is cut by Mapela people has to be given to the reserve. According to information obtained from the Department of Environmental Affairs and Tourism, there are not many people who make use of this offer. This could be ascribed to the fact that most of the people did not know about this or did not have transport available.

Previously, grass was also of high value for women who used the reeds and dried grass in the traditional homesteads for thatching (*go rulêla*) and for brooms (*go fiela*). According to its use, the types of grass are referred to as *morulelo* and *moswielo* respectively. Reeds (*mohlaha*) which grew alongside the rivers were used to weave traditional mats (*legogo*) and washing baskets (*manki wa wašene*). These homemade wares have lost relevance but thatched roofs can still be found at Mapela despite the trend to cover houses with corrugated iron roofs. Dry grass is therefore mainly used to maintain cattle when grazing gets scarce. Almost every winter, however, bushfires occur at Mapela despite prohibitions from the tribal authority, and these burn the easily inflammable grass. Theoretically, people who purposely set fires without permission can be punished by the traditional authorities. This rule is, however, difficult to enforce because nobody really knows the perpetrators.

Compared with the keeping of cattle, it is much easier to maintain goats and donkeys during the winter. Goats are known to eat anything and this is more than a truth during the winter months, when they take porridge remains, dried leaves from mountain trees or pods from acacias. Occasionally, they are also fed on weeds which grow in fields which lie fallow. Donkeys are fed with cabbage and porridge remains in winter and are otherwise left alone in the *veld* during the day. Only during the cultivation period are they kept in the *kraals* so that they are available for pulling the plough. They would then be left out at night. On numerous occasions the ploughing of fields and gardens with donkeys started rather late during the time of the research because the owner first had to find them in the *veld*.

3.3 Treatment of animal diseases

Apart from the difficult grazing conditions for cattle as opposed to donkeys and goats, the first are further exposed to a number of diseases and tick bites with which the people at Mapela are unable to cope. Dipping stations which were established under the previous government stopped operating during the 1990s. Apart from that, there is only little knowledge on stock diseases so that treatment is often of a magical nature. Some people make use of herbs which are readily available, for instance *mmale* (*Kleinia longiflora*), which is stamped and soaked in water and given to the weak and sick animal. Another herb, *Aloe zebrina*, is thrown into the *kraals* as a protective measurement against any kind of disease. Even goats are frequently treated with herbs, for instance, if they suffer from a kind of an eczema which is referred to as *lekhwekhwe*. Leaves from the *mohlukohloko* (*Cliffortia linearifolia*) plant, are chopped, mixed with water and rubbed on the skin of the sick animal. Another herdsman reported that some goats tend to catch a disease which makes them dizzy so that they behave abnormally. A conventional treatment is small incisions in the joints so that the infected blood flows away. However, many people complain about sick animals and the fact that they cannot afford a veterinarian. They say that the success of magical treatments is questionable because sometimes the conditions are not right for a positive effect.

4. Water resources

4.1 Access and control

The people of Mapela enjoy free access to water resources on the commonage and in the residential areas. For a long time, they used the rivers (*melapô*; sing.: *molapô*) as their only source of water for washing and drinking. Since the establishment of boreholes as part of the betterment planning in the 1960s, the importance of rivers for the household decreased. Usually, there is at least one borehole equipped with a handpump or a diesel engine in each ward.

However, in dry years such as 1997/1998 when boreholes dried up and supply was uncertain, many people were observed fetching water in the rivers or digging wells (*sediba*) on the banks along each side of a river (see Figure 17 below). Despite recommendations from the Department of Health and Welfare to boil this water before drinking, this was not done.



Figure 17: *Sediba* next to a river

The following gives an idea of these rivers and the wards through which they run (see Table 10 below).

Table 10
Rivers at Mapela

River	Ward
Thwathwe	GaMabuêla and GaMabusêla
Matleisane	Mošate
Kgwane	GaMotlolo
Makgeilela	GaMatlou and Mošate

Mohlosane	GaMatlou and GaMasenya
Tswaitswai	GaMasenya
Rholotši	GaPila

Theoretically, rivers are under control of the tribal authority but, in fact, access to and use of rivers is not regulated by the tribal authority. Instead, women of individual wards share “their” rivers and assume control once public boreholes dry up and water can only be obtained at central stations from the Department of Water Affairs. The women who walk to the river and dig a well or who wash their clothes on the banks were previously led by a high-ranking woman of the ward, for instance the *induna*’s wife. The leader saw to it that only those women use water from the well who also participate in communal works for the benefit of the group, e. g. the collection of firewood for a ceremony or a funeral. Today, most of the high-ranking women have their own handpumps in their yards so that the group of women who fetches water from a *sediba* is today not as organized as before. Still, strangers who pass by are only allowed to drink or to wash clothes but they are not allowed to fetch water in drums and to carry it home with a donkey cart. There is no need to inform the tribal authority about a well but it is good manners to ask the headman for permission.

Unlike rivers, public boreholes were previously controlled by the headmen and the water committees in the wards who made sure that nobody damaged the pumps or wasted water. Boreholes were maintained by the Department of Water Affairs which exercised control over all public watering places at Mapela, including the water reservoirs in the *veld*. The extension officers received reports about the state of boreholes from the committees or the traditional leaders. The usual procedure was that the headman sent a messenger to the tribal authority to forward the matter to the Department of Water Affairs for help. During this time nobody had to contribute to the maintenance of the boreholes and water could be freely used. In line with the new constitutional requirements, however, responsibility for the water provision today rests with the local

government. In the case of Mapela's boreholes, control is thus theoretically exercised by the TLC at Bakenberg. Today, people have to pay for the maintenance of public boreholes and have to organize their functioning themselves. However, many people still regard water as a free resource and do not want to pay for it. During the field research, people already faced considerable problems with the boreholes: some of them had dried up, some pumps had broken down or were damaged and there were no metres to charge money from residents. Another problem is the poor quality of the material used to repair pipes and machines. Because of this, not all residents have access to adequate and safe drinking water today.

On the initiative of the TLC, new water committees were elected to cooperate with the extension officer from the Department of Water Affairs.⁶¹ In fact, the committee represents the major organizations at Mapela: Civics, ANC and RDP. These organizations are financially independent from the tribal authority because they are supported from donor groups outside Mapela. Traditional leaders and their supporters doubt the reliability and organizational strength of the new water committees. This is ascribed to the fact that committee members are elected rather because of their rhetoric skills and their public image than because of their qualifications. Some headmen were able to convince the ward members of the questionable service of the new water committees and told the community that they should continue to raise their concerns with traditional leaders. However, without financial support, the latter are hardly in the position to help the community with regard to the supply of safe drinking water. So, if pumps do not function well in a ward, young people who may not participate in the decision-making process of the traditional authorities abuse the situation to stir up others by arguing that the traditional leaders are now old and ignorant and do not even know how to provide water.

So, according to my own observations, the collection of money was largely left with women who became active in the serious need of water whilst the men were still busy politicising the issue. One of the women's groups was observed on its way walking from

⁶¹ The extension officer stays next to the road which links Mapela with the Steilloop road.

one homestead to the next asking each person who represented the head of the household to contribute R2 for the necessary repair works to a pump. A spokesperson said that the sum of R2 is the greatest amount they can possibly ask from people who are not yet used to this procedure.

The uncertain water supply led to bitter arguments between the poor majority and the few better-off residents who could afford a water connection from the main pipeline to their homestead. Afterwards, others then accused them of stealing water from the community and of ignoring collective interests. In the ward of GaMabusêla, the *induna* asked the tribal authority for help to solve the conflict and restore harmony. During the time of the research, the dispute was, however, not yet solved. The extension officer from the Department of Water Affairs is well aware of the difficult situation in the wards. He said:

“The previous government installed community taps in 1985. They are all damaged now. And some people use private taps without permission which results in the fact that the water reservoirs are empty. These few buy taps on their own and connect their house with the main pipeline which leads to the reservoir. It happens all over the place. I have no power to fine them. And they bought the pipes themselves and if somebody now asks them for water they charge money. This is not understood by their neighbours. Because before, water was a free resource”.

Residents of a household with a private tap reported that the tap was cut off at night so that they now have to find water elsewhere. According to spokespersons this happened out of jealousy because the water in this household was also used to water flowers in the garden which was unacceptable in the light of the water scarcity faced by the majority.

4.2 Uses of water resources

A lot of water is needed in the households for drinking, cooking, washing and the watering of vegetables. In addition, animals which remain in the homestead (poultry, new-born calves and milking cows) regularly need to drink water, usually in the morning

and in the evening. Regular water supply is a precondition for the orderly rhythm of life at Mapela. In this harsh environment, however, rainfall and water supply is uncertain.

Experiences of droughts and water scarcities are thus deeply imprinted on people's memory and account for a variety of beliefs which range around climatic conditions. For a long time, a lack of rain meant hunger (*tlala*) and misfortune from which one could hardly escape. Once cattle and crops died and the natural environment became inhospitable, dry and hot (*fiša*), people assumed a punishment by the supreme being and the ancestral spirits which could only be reconciled by means of rituals. Although today, people are increasingly independent of cattle and crop farming, the fear of a drought still dominates human life to a large extent and influences their views about the natural environment.

The only remedy against starving cattle and drying crops is rainfall (*pula*). Rainwater leads to the regeneration of nature, to happiness among the people and fills rivers and the water drums. As the most vital source of life, rain is thus an indicator for normality and harmony. Many times, the people of Mapela said that it rains only outside the Mapela area because they have lost their culture. This shows that rain is not merely regarded as the basis for the physical survival of people but is also a symbol of their spiritual well-being and a manifestation of the smooth operation of the social order (see Krige in Hammond-Tooke 1981: 122). Water thus represents a number of life-carrying phenomena (*mêêtse a na le bophelô*; litt.: water has life) in the worldview of people: it symbolizes strength, power, health, youth, coolness, purity, normality and harmony.

Because of these ascribed symbolic characteristics, water plays an important role in rituals or religious ceremonies.⁶² A number of purification rites, for instance, entail the washing in rivers, more especially to conclude the initiation of boys and girls (see Schapera 1941: 260; Hammond-Tooke 1981: 52, 76, 82). Despite the fact that initiation schools are today only occasionally held at Mapela, the ritual washing after the operation remains an important feature and symbolizes the end of the old life and the

entering into adulthood. It could further be ascertained, that members of the Z.C.C. have been baptised in one of the rivers running through Mapela. The ritual to become a Zionist is extensively described by Pauw (1974: 434) and entails, apart from bathing in the river, a number of other purification rites, e. g. the vomiting by the riverside. The latter is also a well-known treatment used by traditional healers against the blood-disease. As was already indicated above (see Chapter 3, Item 2.4.4), the syncretism of beliefs forms an essential part of the religious life of the people at Mapela and can best be observed in the performance of rituals and prayers.

Another washing ritual pertains to the doctoring and cooling of widows who are especially dangerous to others because of the infectious *makgoma* disease caused by the death of their husbands (see Chapter 6, Item 2.3.4.1 above). After the treatment of the *dingaka tša go alafa bahwana* which was described above (see Chapter 6, Item 2.3.4.1), the widow would most likely go to a river to complete her purification. Only then she is allowed to take off her mourning clothes.

Water is also the basic ingredient of all concoctions which are sacrificed to the ancestor spirits and plays a central role in the *go phasa* ritual. Water in its pure form is either poured over the shrine, the *legwama* plant, or people use beer or a mixture of *mealie meal* and water which is referred to as *mphoko*. Hammond-Tooke (1981: 89) notes that water is used to cool and comfort the potential displeasure of the ancestral spirits. The strong association of water with coolness ensures that, with the correct treatment, land and people can return to a normal condition after being affected by ritual heat. Sometimes, the *go phasa* ritual is being neglected and this only becomes apparent when a member of the family falls ill, is depressed or unhappy and things continuously go wrong.

Because of this importance of water and the power which is transferred on all life-forms after being blessed with it, water resources have assumed a special place in the natural environment. They are not only valued by people, but rivers and pools also form the

⁶² A precondition for the success of a ritual is that the water is not taken from taps or boreholes but is

habitat of a mythical creature which guards the water (*modiši was mêêtse*). Most of the people perceive this creature as a snake (*nôga ya mêêtse* or *mamogašwa*) which withholds rain if disturbed. *Mamogašwa*, the snake which stays in a pool on top of the Mohlohlo mountain, is further associated with strong winds once it leaves its home to visit another snake or once it is chased away from the mountain by ignorant people. A spokesperson said that only traditional rainmakers (*barôka*) know how to approach *mamogašwa* and that they are the ones who maintain spiritual bonds with the snake. Only they would know the secret of how to approach *mamogašwa* and how to bring rain. Others only had vague ideas about the snake. Some people referred to wings of the snake which have to be taken so that it rains. Others said that the Europeans have disturbed the snake and that the people at Mapela suffer because of that.

The rainmaker is also the only person who is allowed to make use of the nest of the *mašianokê* which can be found on trees alongside or in the rivers. This is ascribed to the fact that the twigs, leaves and roots which have been collected by the bird to build the nest in the shape of a hollow dome entail magical powers and form part of the rain medicine. A spokesperson said:

"The *mašianokê* is a dangerous bird. It builds its nest right in the river. Under this nest is a fountain (*sediba*) which will never dry out. The water doesn't run in the *sediba*. If you want to steal the eggs from the bird you will drown. If you still take the eggs there will be a heavy storm. This storm will affect your family and your home. We believe in this. Even young people believe in this. The parents or the grandparents will tell them about the *mašianokê*. They tell them about the taboo they have to observe. Only the traditional healers can see the *mašianokê*. Because they know how to protect themselves. They use herbs and smear the body with them so that the bird cannot harm them".

The killing of the *mašianokê*, and also of the pangolin (*kgaga*) and the python (*hlware*; De Beer 1995: 12; also see Hammond-Tooke 1981: 134) would cause drought and people therefore have to observe the taboo not to harm these animals. Rivers are also not immune to the influences of witchcraft. A spokesperson mentioned a struggle between Bakenberg and Mapela:

“On the way to Bakenberg you cross a river, the Madibakwena. A long time ago, when Bakenberg and Mapela were fighting, the people of Mapela came and cut all the reeds and planted them at their place. Then, the people of Mapela got water and the people of Bakenberg suffered because the river dried out. The people of Mapela got the river Kgwana there. This happened because the people of Mapela bewitched the river. This happened when Bakenberg was ruling”.

4.3 Decision-making

In the perception of people, erratic rainfall and dried up boreholes reflect human imperfection and impurity as a consequence of unethical and non-conformist human behaviour. So, if people are anxious about the rain during the ploughing season, they only have a few options they can act on:

- ◆ they perform the rainmaking ritual or
- ◆ they pray in the *veld* or in the church.

The decision when to perform the rainmaking ritual is taken by the *barôka* (litt.: messengers of rain), who relay human concerns about rain to the ancestral spirits, sometimes on the initiative of the headmen and the elders in the wards. Jackson (1969: 5) describes that each ward head had his own rain doctor. However, the chief controlled the official functionary who worked in the rain *kraal* behind the *mošate*. Today, there is little communication between the chieftainess and the few rainmakers at Mapela, who still perform the ritual. A *morôka* explained that chief Hendrik became a Christian and stopped official rain ceremonies. Hendrik’s wife, the present chieftainess did not resume the ritual at the tribal authority. A spokesperson said:

“In the olden days, during August, all the men were called together to the *pitšo* (meeting of all male members of the community). We were told to prepare for the rain. Unmarried men were then sent to the boundaries of the wards where they used cattle horns to sprinkle herbs on the ground. These things don’t happen any more”.

Jackson (1969: 3-6) differentiates between the preliminary rain ritual (*mphoko wa basadi*; the women’s ritual) and the true rain ritual (*mphoko wa pula*). They first stopped

functioning around 1910 (ibid). During this ritual, each household was expected to put aside some grain and place it beside the ancestor shrines in the *lapa*. Thereafter, a group of girls marched from homestead to homestead, struck the grain with a stick, shouted “*pula!*” and collected the grain which was then taken to the rain *kraal* behind the chief’s village. A whole month could pass before all homesteads had been visited. Thereafter, the girls had to fetch water in the Thwathwe river which was used to prepare the rain medicine in the rain *kraal* (Jackson 1969: 4).

The true rain ceremony is still relevant in some wards of Mapela. The normal procedure is that pre-pubertal girls and post-menopausal women who are free from the threats of ritual heat walk early in the morning to the river and fetch water. On returning to the rainmaker, the girls sing (*re tšwa re rwele mogoge wa mêêtse a pula*) which is believed to bring rain (see Hammond-Tooke 1981: 81). Jackson (1969: 5) emphasized the central role of young girls who formerly sprinkled the rain medicine on the ground. This could not be confirmed.

Once they reached the homestead of the rainmaker they would approach the rainmaking *kraal* (*pulapulane* or *lešakana la pula*) where the clay pot (*mphoko*) with the herbs is hidden from others. They handed the buckets over to the rainmaker who would sit in the *kraal* and take the water. He filled the water in the clay pot and started a fire to boil the rain medicine (*mohlapo* or *mphoko wa pulapulane*). The fumes (*muši*) are believed to cause cloud movements which eventually cause rain. Afterwards, the medicine is put in cattle horns and teen-aged boys sprinkle it on the ground along the ward boundaries (*go thekga naga*). After pouring the concoctions on the ground, the boys lash *mololo* (*Pouzolzia mixta*) twigs on the ground and shout “*pula*”. During the rainmaking rites the *morôka* is not allowed to eat immature crops and vegetables or to have sexual intercourse. According to spokespersons, these taboos are still adhered to.

This does not mean that there are no official rituals at all. It could be ascertained, however, that more and more people pray together for the rain instead of calling a rainmaker. This could be ascribed to the growing influence of the different churches at

Mapela. The decision when to organize a prayer meeting is taken by the elders in the wards, by priests from the various churches as well as by traditional leaders. The higher the rank of participants in public prayers, the more likely is the positive outcome of the effort. In addition, it is a strongly held belief that only a group of people can be heard by the spirits. A lonely prayer would never succeed.

The following should give a picture of a rainprayer at Mapela: One morning, at about seven o'clock⁶³ in February, I met the *mokgomanamogolo*, who gathered under a maroela tree (*Sclerocarya caffra*) with two other men and eight elderly women. They met because they were highly concerned about the lack of rain. Each of them held a bible in his or her hands (see Figure 18 below). The *mokgomanamogolo* said:

“We are talking about the rain now. You’ve heard the voice of the Lord. We are happy to greet our visitors here. We are here to lodge all our complaints to the Lord. We are here to pray for the rain so that the Lord can help us. We hope that the Lord hears us. So, we raise our voices to the Lord. I thank all who attend the service”.

It was obvious that my own presence was welcomed and believed to make the service “special”. Further, modifications of such nature seemed to be easily incorporated into the ritual. The *mokgomanamogolo* said: “Maybe the Lord can hear us today because we have got a visitor from far away”. Another woman said: “We thank our visitor for her patience to stay with us because we know that Whites are usually in a hurry”.

⁶³ Such prayers usually take place early in the morning before people go to work, or have to get children ready for the *crèche* or the school.



Figure 18: Members of the Z.C.C. praying for the rain

After the chairperson and the priest have also given a speech, the women were asked to preach. Relatively motionless before, a behaviour which was only interrupted by frequent clapping of the hands as signs of approval, the women now performed enormous skills in the techniques of preaching.⁶⁴ In their preaching, the women focussed on certain issues and thereby expressed imperatives for the success of the rain-prayer, such as “going straight to succeed”, communal and cooperative efforts (“we have to come together”) and continuity (“we always prayed under a tree and to get support from heaven we have to keep on doing this”), personal commitments, senses of duty (“I greet you in the name of Jesus. Although I am late. Because I was not informed. But when I took my grandchild to the creche I saw you sitting under this tree and I knew that I have to join you”) and the need of the feeling of predictability and security (“I am grateful that we know whom we have to consult if we are in trouble”).

There was also communication with the ancestor spirits because, it was said, rain will be withheld if they are neglected. After the prayer, it took a few more days for the rain to come. Unfortunately, it was only a shower. The *mokgomanamogolo* said he “wasn’t

⁶⁴ Preaching means to take up the message of a verse, or psalm, of the bible and repeat its message in an eloquent and impressive manner which sometimes goes over into a tedious singsong. Skilled preachers know how to use their whole body to express their feelings, or to put more emphasize on certain phrases. The technique of intonation, frequent respites and closing of the eyes lend the preacher the aura of commitment and, sometimes, even of eccentricism.

concentrating enough” during the prayer and that the praying person is “not supposed to have doubts”. But he had doubts one week before, when the prayer was planned and substantially discussed by the elders. Because he could not understand the urgency of the community prayer while it was still drizzling slightly. He asked: “How can you pray if it is still raining”? Because of these doubts he felt guilty though a week after the prayer it started to drizzle again. After it had rained, people rejoiced and thanked the spirits and the supreme being. They now greeted each other with “we see the rain (*re bona pula*)” or “the rain has fallen (*pula e nele*)”.

5. Conclusions

Access to resources on the commonage is not clearly regulated. Every person who lives at Mapela holds rights to collect resources to cover basic needs. These rights are indivisible so that no one can be denied access to any resource. Resources are selected according to their availability, suitability and personal preference. Taboos which prohibit the use of some resources during certain times of the year are theoretically adhered to but are sometimes ignored by young people who feel their freedom of choice threatened. Other people disregard taboos only if they have no other choice. Taboos are generally not enforced by traditional leaders and they only give a warning if others complain about the behaviour of a person who threatens the harmony between people, nature and the spirits.

Preaching is virtually “taught” and “practised”, and Eva told me that she “never learnt how to do it properly”.

Resources on the commonage are used by groups of users as well as by individuals (see Table 11 below).

Table 11

Users of resources on the commonage

User Groups	Resource on the Commonage
women; business men	firewood
(business) men	timber
women groups	traditional spinach
traditional healers	herbs (mainly tubers and bulbuous plants)
individuals	food from the <i>veld</i>
herdsmen	grazing land

Firewood is collected throughout the year although it is less frequently cut in the summer when wood is wet and women are preoccupied with fieldwork. Fruit and traditional spinach are only available in late summer. Timber is usually cut in winter when trees have shed their leaves. Herbs are collected throughout the year. Traditional healers even store some herbs in their homesteads to ensure availability if requested by patients.

Grazing land is only used by herdsmen. Cattle can be driven anywhere at Mapela but may not damage crops or homesteads. The decision in which direction to take the cattle is taken solely by the herdsman who cannot be influenced by others because they know best where to find good grazing. The grazing resources are getting scarcer due to the expansion of agricultural and residential land. Many cattle starve in winter because additional fodder is not grown.

Water is the most vital resource for the people at Mapela and there are a variety of beliefs connected with the use of water. Unpredictable rainfall is of major concern to the people because rain determines the availability and growth of all other resources on the commonage and ensures the happiness of the people. Every year in spring time when people await the first rains, they pray to the ancestors and the supreme being to show mercy to the people and to forgive their trespasses. Apart from its importance for the regeneration of natural resources, water symbolizes coolness, purity and normality and plays an important role in a number of ceremonies and rituals.

Management of the resources on the commonage is flexible and opportunistic. If a resource gets scarce, people make use of a variety of alternatives, for instance, complement herbs with “medicines” which can be purchased in the local shops. Alternatives only have to be compatible with other resources to achieve success. The mixing and matching of resources and strategies is significant at Mapela and enables people to make the most of the things which are available. Traditional leaders support this management system to the benefit of the group. They cannot perceive the division of land into smaller units which would regulate access and impose limitations of use because this would be incompatible with the human-centred approach to life. In addition, traditional leaders say that the commonage is too small to allow, for instance, the establishment of grazing camps.

The conservation of endangered species was enforced by rangers only before the change of the government in 1994 when youth movements attained more power at Mapela and threatened rangers if they imposed restrictions on use any longer. Today, control can only be exercised at those places where abuse or exploitation from others can be easily observed, for instance, at wells which have been dug by women in the vicinity of the homesteads. Control is thus not institutionalized and functions informally with the groups holding no rights to prosecute or fine others for resource plundering. Among the user groups themselves, there is no competition over the resources who regard the latter as a divine gift to human beings. They further believe that the supreme being ensures availability of resources even if some are temporarily scarce. Most

people indicated that resources are only scarce around the homesteads but if one walks further, trees and shrubs would be available in abundance.

As long as people only made use of the surplus stock of natural resources and did not threaten the regeneration thereof, this management was sustainable despite the absence of management institutions. However, with the growing population, the weakening of authoritative structures, the absence of usage regulations and control functions, the sustainability of natural resources is threatened. Due to this uncertain situation people's behaviour becomes highly unpredictable and laws difficult to enforce. The local government is in the process of managing resources on the basis of scientific principles and knowledge about environmental management and sustainable development. However, only people who use resources know about the state of the commonage. Attitudes related to good and bad management necessarily differ between present and future decision makers. This is first of all due to opposing approaches to life and worldviews. The following chapter explores some of the major constraints to the "management from above" as envisaged by the present government.

"We want the chieftainess to be like the Queen of England" (member of the TLC).

Chapter Seven: Natural resource management and local knowledge

1. Introduction

People need to have an intimate knowledge of the natural environment to control, allocate and use resources and also have to acquire skills to adequately employ survival strategies. Local knowledge which, *inter alia*, includes these skills, enables people to make sustainable use of natural resources (Atte 1992: 3). Because of its closeness to a particular territory, the bearers of a particular culture use and apply their knowledge for survival in the area where they live (see Dupré 1991: 42). This close interrelation is dealt with in this chapter.

It focusses on knowledge of the weather conditions people are exposed to in Mapela as well as the different soil types which are found in their area. It also examines the transmission of knowledge in various contexts, i. e. homesteads, during apprenticeships and in schools where children and teenagers are exposed to the influence of peer groups. Emphasis is also given to the eclectic character of knowledge acquisition because "new" knowledge and skills usually supplement previous experiences which are relevant for local resource management.

Lastly, it deals with conflicts between local resource managers and "outsiders"⁶⁵. Emphasis is given to the important role which local knowledge plays in decisions that traditional leaders take on behalf of and for the benefit of the Mapela community. It will be revealed that the "core" of local knowledge, namely deep-rooted values, beliefs and attitudes, are reflected in the flexible and sometimes opportunistic management of resources. This raises the question as to what extent local knowledge is likely to adapt to political and socio-economic transitions, or, whether values are still relevant despite

changing relations of power. In the latter case, the citizens of Mapela are unlikely to tolerate and accept the introduction of sustainable management initiatives and projects if their worldview is not taken into account.

2. Local knowledge

People who depend on natural resources have to “read” phenomena which occur in their immediate environment to evaluate which managerial activities are most likely to bring success, in other words, secure survival and contribute to household sustenance. This section examines how people make use of empirical and spiritual knowledge to develop resource management strategies.

2.1 Knowledge about soil types and soil fertility

A precondition for the management of the land as a resource is knowledge about different soil types to appraise the usefulness and value of fields and homestead gardens. The fertility of the soil for the cultivation of crops and vegetables is assessed primarily on the basis of soil texture and the moisture content of soils.

Sometimes, people also draw causal relationships between indigenous plant covers and a certain soil type, for instance, when they interpret the distribution of the weedy plant *mmamotlalanaga* (*Xanthium spinosum*; *Boetebossie*) as an indicator of erosion. Another example is the *mollô* (litt.: fire, witch weed) plant (*Zinnia peruviana*; *Jakob regop*) which is said to appear on barren soil. A high concentration of succulents also indicates that land is not suitable for agricultural use.

Knowledge about the five major soil types at Mapela (see Table 12 below) is fairly evenly spread amongst members of all age groups and is not limited to people who are preoccupied with the cultivation of crops (see Mönnig 1983: 152pp). This can be ascribed to the fact that almost everybody deals with soil resources in one or another

⁶⁵ For an extensive discussion about the character and the role of the “outsiders” in development

way by their association with the natural environment. Consequently, the people of Mapela share a certain knowledge for the productive use of land.

This was validated in schools where pupils were asked to map the distribution of different soil types in Mapela and to associate them with human activities. The results indicate that most pupils could relate a specific soil type to crops which would do well in such soil (sandy soil – sorghum, turf – maize) and were also able to give information about the suitability of other soil types for the growing of fruit trees such as mangos and guavas. Generally, it could be ascertained that knowledge about the immediate environment was more comprehensive than knowledge about soil types in distant wards.

Table 12

Soil types and perceived cultivation potential

Soil type	Perceived cultivation potential and soil fertility
<i>selôkô</i>	very good black heavy and loamy soil, regarded in itself as manure (<i>manura</i>) itself and therefore needs no fertilizer, stores water, crops grow quickly but tend to be scorched ("burnt") by heat, unfavoured as building ground
<i>mohlaba</i> (litt.: germinated corn ground and used in making beer; see Ziervogel & Mokgokong 1975: 387)	sandy soil, "only useful for sorghum", needs fertilizer because it tends to become exhausted after a few seasons
<i>sehwiwibu</i>	red soil which is good for fruit and shade trees (orange, peach, guava, mulberry, fig)
<i>lekgethe</i>	used as plaster material for floors and walls
<i>lerotha</i>	brackish and stony soil, difficult to plough, but used for a garden to plant water melons and pumpkins

Fertility is predominantly ascribed to extraordinarily good components in the soil which are either evenly spread or unevenly distributed in a field. The latter circumstance results in the irregular growth of crops. The majority have only vague ideas about the composition and the nature of the components which "carry" fertility. Some people referred to "vitamins", others spoke about sweets which enrich the soil. The darker and

heavier the soil, the higher the concentration of such “vitamins” rendering a field strong and powerful.

The majority could also give information on the nature of soils over a time of intensive cultivation or a fallow period. Spokespersons said that fields become barren after years of repeated use which puts pressure on the soil. Eventually, the field becomes hot, dry, weak and difficult to manage. On the other hand, a field which has lain fallow over a certain period regenerates and can be ploughed again after being cleared of weeds and shrubs (see Table 13 below).

Table 13

Local knowledge about effects of human intervention on soil fertility

Change of soil quality	Local expression	Local expression	Resource management strategy
decline in soil fertility after years of intensive use	soil is hot (<i>fiša</i>)	soil is light (<i>bofefo</i>)	soil needs a rest from human intervention
regeneration of the soil after fallow periods	soil is cool (<i>tšhidi</i>)	soil is strong (<i>maatla</i>)	field may not be grazed any longer and can again be used for cultivation

For the agricultural use of land, it is thus important to “have a feeling for” the soil in order to maintain a field in a good condition and to prevent harm. Necessary information is dependant on the totality of the farming conditions (physical condition of the labourers, germination of seed and growing of crops, financial situation, relationship with owners of neighbouring fields). Many cultivators therefore interpret such conditions with regard to the instructions for keeping a field cool which are relayed by the spirits by making attempts to improve relations with them rather than improving the physical quality of the field itself.

Vorster (1981: 122-23) found among the Tswana that a particular soil type has an inherent quality, which can be influenced by a number of factors (e. g. the neglect of a

taboo; also see De Beer 1995: 2-3). At Mapela, the belief in the hot-cool dichotomy dominated any perception about the quality of a field besides practical experiences (see Chapter 5, Item 3.2 above). Inexplicable crop losses are thus often ascribed to “hotness”, in other words to ritually impure people who have entered a field and who have thereby caused pollution of the soil (see Chapter 4, Item 3.1 above). It is believed that a field which is affected by ritual impurity cannot be cured with scientific means because, as spokespersons said, this would eventually burn (*a na le mollô*; litt.: it has fire) the soil.

Thus, apart from magical treatment, there are no pest control measures employed at Mapela. A conventional magical therapy is the spreading of *mololo* (*Pouzolzia mixta*) sticks on the fields. If this treatment does not have the desired effect, a traditional healer would be consulted to identify the cause of this failure. Such treatment is required because soil can also be become hot through the abnormal and misleading behaviour of people. In order to prevent the development of such a condition of ritual impurity or heat a number of taboos or avoidance rules pertaining to the management of the soil are observed:

- ◆ ritually impure people may not enter agricultural land unless they have been treated by a *ngaka* in order not to cause barrenness of the soil;
- ◆ fields may not be ploughed and hoed if there has been a death in the ward; until the corpse is buried the soil within the ward boundaries is hot;
- ◆ no work may be done when the sun is at its zenith and the spirits take a rest; if the spirits are disturbed they would in all likelihood cause gale force winds and hail which will damage crops;
- ◆ a field may not be abandoned or lost by a kin group because it may lead to the negative intervention of the ancestor spirits;
- ◆ the *go phasa* ritual has to be performed before the beginning of the ploughing season to propitiate the ancestors to create good conditions and harmonious relations between people.

The most fertile *selókó* turf fields which occur particularly in the northern part of the ward of GaMabusela are the most valuable patches of land at Mapela. They are intensively used because, during the research, all turf fields were ploughed. For the people at Mapela this means that a good field became an extremely rare resource in the course of time. A shortage of fertile fields is also recognised by school children who argue that they will never be able to plough successfully unless they inherit some of the good patches of land. Red soil which is suitable for the growing of fruit trees and vegetables cannot store moisture and crops do not do as well as on the turf fields. If rainfall is sufficient, however, they can still yield a good crop. Fields which are not regarded suitable for the cultivation of maize, namely the sandy *mohlaba* fields, either lie fallow or are used to grow sorghum (see Box 15 below). Coarse and stony soils are also not favoured for cultivation because tilling with machines becomes more difficult and ineffective. Tractor owners are usually reluctant to offer their services to plough fields because the plough could be damaged. Sometimes, donkeys are hired for ploughing which increases the work burden considerably.

Box 15

Perceived limitations of different soil types

In the sandy soil the yields of maize will deteriorate after a few seasons. Most people cannot afford fertilizer. The only chance a farmer has to regenerate the field is to leave it to lie fallow for one or two seasons. Once the weeds grow, the soil can be tilled so that the weeds fertilize and enrich the soil again. Another way is to change the crop, or to plant beans and pumpkins. The problem of doing this is that the amount of labour necessarily changes. To cultivate beans only, means that you need a lot of women to work in your field.

If the rain comes, you find a lot of erosion (*kgogolêgô*) on our fields.

In the grey soil (*lerotha*) we can hardly grow crops. There are too many stones. We cannot hire a tractor. The tractor owner is afraid that the stones will damage the plough. So, we have to use the donkey plough. This is hard work. We really struggle to plant maize here.

Our crops grow according to the moisture which is retained in the soil. The black soil holds water. You are in trouble if you use fertilizer. It burns the soil.

If the soil tastes salty, I know that nothing will grow here. Only goats like this place.

During the ploughing season, many discussions turn around the weather. After the seed has been sown, rain has to fall as a precondition for the germination thereof and for a

timely continuation of the fieldwork. The conventional view is that, apart from prayers and rituals, there is not much that human beings can do to provide more favourable farming conditions.

2.2 Knowledge about climatical conditions

With regard to the climate, the principle prevails that nothing happens without a supernatural cause (Mönnig 1983: 79pp). The majority are certain about the existence of impersonal agents, or spirits, who behave autonomously and beyond the control of human beings. In the worldview of the people, these spirits can bring about certain climatical conditions and can cause changes such as droughts, lightning, hail and storms in the natural environment which may be harmful to human beings. It is, however, also believed that the spirits can bring about favourable conditions if the harmony between human beings, nature and the spirits is actively protected by the community.

Consequently, a human being cannot determine weather conditions but can attempt to shelter and safeguard the ancestors and to live an orderly life (*go beakanya*; litt.: to tidy, to arrange, to put right). Harmonious social relationships are so important that a person at Mapela may not refuse to help others if they need support and may not forget to inform the ancestors about important events in the family (see Chapter Three, Item 2.4.1 above). Another precondition is that nobody affronts the ancestors. The performance of a ritual is thus only effective if no member of the group objects to it.

In order to fully understand the weather conditions at Mapela and to successfully manage natural resources, empirical knowledge based on observation is also important. At Mapela, every adult person knows the minimum length of the rainy season which is necessary for fields to yield well, for animals to find sufficient grazing and to enable women to collect food in the *vel'd* and gather fruit in the mountains. In addition, most of the people are able to describe the consequences of too much or too little rain for the natural environment. Too much rain can lead to water erosion on sloping fields, to

waterlogged patches and to a waste of seed which can be washed away. In addition, some important work cannot be done if it rains heavily. Fields can, for instance, only be ploughed if the soil is not soaked with water. Too little rain threatens the timely germination of seed and makes hoeing and weeding difficult. A major concern of too little rain in the summer is, however, that the water table drops drastically so that boreholes and rivers dry up.

After a long period without rain during the normal summer rainy season, people would gather and pray to the supreme being (see Chapter 6, Item 4.3 above) but would also consult experts who know the environment well (traditional healers and rainmakers) and who can interpret natural phenomena with regard to the information they convey from the ancestors. These phenomena include the sun, moon and stars, their constellations and the time of their appearance. Rainmakers would be able to explain the message of the ancestor spirits and then decide about the appropriate means of manipulating them. It thus depends on the knowledge of rainmakers if a rainmaking ritual, which was described above (see Chapter 6, Item 4.3), is effective or if other requirements have to be met instead. This is due to the fact that things are never related to each other monocausally and lineally. Ancestral wrath which results in a drought can be ascribed to immoral or ignorant behaviour, the breaking of taboos, a deviation from tradition or the neglect of the performance of rituals to appease the ancestor spirits.

It can be assumed that the majority of old people have a basic knowledge of celestial phenomena but that they would still consult an expert if they are uncertain about rainfall. Younger people showed less interest in the climatic conditions at Mapela. School-going children repeated what they read in books and explained the cycle of water on scientific grounds. The information presented in Table 14 below was obtained from elderly women.

Table 14

Celestial phenomena indicating weather conditions at Mapela

Celestial phenomena	Northern Sotho term
star heralding cold weather around late May/June (see Jackson 1969: 2)	<i>naka (e betile)</i>
star heralding wind	<i>makgale</i>
star indicating good yields	<i>kopadilalelo</i>
star heralding an excellent rainy season in September	<i>dikgora</i>
star heralding ploughing time	<i>naledi ya selemō</i>
star indicating drought and hunger	<i>naledi ya tlala</i>
rainbow indicating that it will soon stop raining	<i>molalatladi</i>

The majority of adult people have a good knowledge about movements, outlines and formation of clouds as precursors of climatic events. Thus, many people are able to study clouds for weather forecasting. There is, however, no comprehensive taxonomic system related to clouds. Usually, people studied cloud formations and imagined living creatures. A spokesperson, for instance, said that if the sky is “dotted” and looks like a guinea fowl (*kgaka*), there would be enough rain in the ploughing season.

Great importance is also attached to the wind because this is the most certain indicator of rain. This is also substantiated in the proverb that wind is the nose of the rain (*pheto ke nko ya pula*). Many people can differentiate between winds that bring rain and dry winds according to intensity and direction. A rather comprehensive terminology thereof exists (see Table 15 below).

Table 15

Climatic phenomena

Rains and winds	Northern Sotho term
(strong) rain	<i>pula</i>
soft rain which lasts for four to six days	<i>pula ya medupe</i>
unfavourable southern rain	<i>borwa</i>
stormy rain which can blow off roofs (litt.: bad power)	<i>maatlakadibe</i>
favourable Western rain	<i>makgomara</i>
favourable eastern rain	<i>botsota</i>
hail	<i>sefako</i>
lightning	<i>legadima</i>
lightning sent by witches	<i>tladi (see Hammond-Tooke 1981: 99)</i>
thunderstorm	<i>ledimô/pula ya ditladi</i>
wind	<i>phefô</i>
whirlwind around May	<i>sesesedi</i>
wind blowing from the north around August	<i>ledimo</i>
tornado or strong rain from the southeast	<i>mamogašwa</i>

The natural repetition of growth in the rainy season and decay in the dry season have been observed and memorized over generations and have left their imprints on the worldview of people and their cyclic time perception. The people at Mapela thus subdivide a year into four seasons by assigning changes in the natural environment and dominant human activities (see Table 16 below). *Selemo* (spring), *lehlabula* (summer) *seruthwane* (autumn) are the rain months indicating times of intensive fieldwork and harvesting of natural resources. The cold and dry *marega* (winter) period gives the natural environment a rest from human intervention. Formerly, knowledge about the calendar was also memorized, repeated, shared and enforced by chiefly dictates and was promulgated by the headmen, e. g. the call for the start of the ploughing season,

the preparation by people to begin with cultivation and the performance of the rain-making rituals (Jackson 1969: 1).

Table 16

The seasonal calendar

Season	Description of conditions and vegetation
<i>selemo</i>	first rains, blossoming of <i>Dombeya rotundifolia</i> (<i>mokgoba</i>) indicating the start of the ploughing season, regeneration of the vegetation, time of feverish illnesses (<i>letadi</i>) and protection with medicated water by boiling wild tubers
<i>lehlabula</i>	collection of fruits, harvesting of spinach, performance of the first fruits ceremony (<i>go loma lerotse</i>), scarcity of firewood
<i>seruthwane</i>	harvesting of crops, time of abundance and happiness
<i>marega</i>	stubble grazing on the fields, wind dries grass and vegetation which can now be cut and collected, occasional grassfires, firewood can be collected easily even from fields which are cleared for the next season, time for ceremonies, rituals and initiation schools

Knowledge about seasonal variations in the natural environment and regular interaction with natural resources enable people to develop a routine and to regulate activities. If natural resources then appear and grow as expected, people are certain that everything is in order. If, however, the seasonal calendar deviates from its normal pattern and things do not happen as expected, people are uncertain and do not know how to react. In such a case, some of the deep-rooted beliefs come to the fore and guide behaviour.

3. Transmission of knowledge

This section explores the transmission and acquisition of knowledge in different learning environments: within the family, in apprenticeships and in schools where children are usually first exposed to political peer groups. It further examines the co-existence of

different knowledge systems and explains why teenagers re-evaluate local knowledge and skills when school days are over.

3.1 The family

Family life is the heart of the Mapela society and it is within the parental or grandparental home that most of the relevant local knowledge is acquired by children. The most important role is played by older and experienced family members (*batsebi*; litt.: the people who know) who control the activities of children at home (*maithuta go gama o gama ka gabô*). This is due to the fact that old men and women have more time to attend to children than people of a working age. Children are also sent to other places to learn important skills from seeing and working with experienced people and work groups. Knowledge on natural resource management is thus not the result of individual expertise and experience but rather of co-operation with others and the participation in social activities. Interactions with others then enable children to unconsciously learn the relevant codes of behaviour so that they are eventually able to act according to customs. This concurs with Bonvillain (1995: 1) who notes that “childhood learning teaches individuals the appropriate behaviour expected by others and moulds one’s personality to conform to cultural norms”.

An old woman said that observation is the best teacher (*phela ka go bôna*) for a child to learn the customary way of doing things. In fact, the home is viewed as an institution where children learn strategies to survive from the things nature provides for them. In addition, girls and boys learn the relevant household chores so that they are able to help themselves when they are alone at home. In the homes, children have enough time to perfect skills so that they become more self-confident (see Berger & Luckmann 1984: 87; Arce & Long 1992: 212, Atte 1993: 4; Ruddle 1993: 19).

As a result of acquiring transmitted knowledge from an early age, it could be ascertained that teenagers are already strikingly independent and able to perform the most important household tasks. Although children are not very interested in working

the fields, many of them also have to learn the relevant cultivation techniques so that they can help the women when they are strong enough. Apart from the agricultural fields, homestead gardens are regarded as an ideal place to teach children the basic skills of crop cultivation. Indeed, some old women told me that a little portion of the garden is reserved for the children where they can experiment with vegetables and crops in order to gain new knowledge. In the fields and gardens, emphasis is placed on learning by doing through repeated practice rather than observation which is more important in the homesteads where children can watch others from an early age any time of the day. A boy told me:

“We started to help our parents in the fields when we were eight years old. We went to the fields regularly and they controlled our work. We had to do this. It was our duty. We had to learn everything about the field so that we are now able to work on our own when we are sent with our friends”.

The necessity to teach children farming skills is due to the fact that despite the mechanisation of agriculture and the use of tractors and hired labourers, many tasks still have to be done manually. This requires the participation of every available person in the house, more especially during the ploughing season and at harvest time. Children told me that Christmas and Easter holidays are largely spent in the fields. Girls helped their grandmothers to hoe and weed the fields and the boys ploughed the gardens with donkeys. Older boys who could already manage a tractor were even observed to skip some lessons at school during the ploughing season to earn some extra money.

The older the children are, however, the more they seem to lose interest and regard the cultivation of crops as a waste of time if they are not rewarded. Once children start with formal education at school and get to know other professions, they are even inclined to doubt the relevance and efficiency of such customary habits. This is due to the fact that during the period when the child spends most of the time with teachers and school friends, the influence of the family diminishes. Spokespersons said that it is therefore important to give attention to children and to teach them relevant skills, social norms and obligations before they go to school. This is also substantiated in a proverb that one

can only bend young saplings (*thupa e kobja e sa le nanana*). Important values and norms are thus already inculcated in small children through the repetition of stories, idiomatic expressions and proverbs before they go to school and before they acquire scientific knowledge.

Apart from the teaching of children by the family, another important learning phase in the life of a daughter-in-law (*ngwetšhi*) is when she is instructed by her in-laws about her duties as a married woman. Customarily, she is obliged to obey her in-laws and not do things her husband forbids. This is symbolized when the girl collects a pot from her family home immediately after the conclusion of the marriage and carries it to her parents-in-law's home where a hut was assigned to her. The return with the pot to her new place of residence then means that she subscribes to the obligations which are now expected from her (*go fiwa pitša ke bafadi ge o nyetšwe ke gore o ye go apeela ba bogadi*). At the same time, she is not supposed to complain to her own family about her in-laws or her husband. An old married woman explained:

“Men always oppress women. They don't want women to go to work. Even if the family is poor. A man doesn't want the woman to do something for herself. During the time we were still grinding our crops (*go šila*), women used to sing a song which said 'I wanted to be married but now I see that the married women are oppressed and the ones who didn't marry are happy' (*ke be ke re ke a tšewa athe batšeiwa ba hlaka mola ba se ba tšewa ba phela gabotse*). So, these young girls, they don't want to get married because they see their married sisters suffering. Because if you get married you have to stay with your in-laws and you cannot go back to your parents and complain. We have a saying that the grave of a woman is at her in-laws place (*lebitla la mosadi ke bogadi*). Unmarried women say that money is better than a husband (*tšhelete e phala monna*; litt.: money defeats a husband or man). And even today, some men don't like to send their children to school. Women have to do everything. They fetch water and collect firewood with a baby on their backs. They are a man and a woman at the same time (*ke mosadi ebile ke monna*). Young women don't want this any longer. Even in the fields women do all the work. Men only come and plough and then they go back to the cities or to do other things”.

Subject to the interests of the household head and the rest of the family, the daughter-in-law is thus exposed to a new environment. During the process of adapting to the situation, she is assisted and advised by her mother-in-law. Of prime importance for the

preparation of her life as a wife and mother is the correct cooking of porridge (*bogôbê*), the tilling of fields, the cultivation of vegetables in the homestead garden, the caring for children and the housekeeping to the satisfaction of the husband.

During the period of close interaction with her in-laws, the *ngwetši* gradually reaches womanhood and is then known as a *mosadi* who is allowed to join the group of the married women (*dingwetšana*) and to leave the group of unmarried girls (*dikgarebe*; sing.: *kgarebe*). The latter are young and inexperienced while the first deserve more respect. It is not only a matter of a change in her status which is taking place. A marriage also has practical implications on communal tasks which have to be performed. So, a *ngwetši* is qualified for particular duties during festivities and ceremonies. While married women primarily cook and are referred to as the women of the pots (*basadi ba dipitša*), unmarried girls have to do more menial jobs such as collecting firewood or fetching water which demonstrates their social rank in relation to others. Old women are shown greater respect which is also substantiated in the term *basadibagolo* (litt.: important women), and are usually led by the headman's wife. Because of their age and their restricted mobility they are merely supposed to wash the dishes. The elderly women are said to be rather capricious, sometimes even cheeky as a woman told me:

"They can ask you three times to pour water in 20 litre drums. And then they ask you to carry the water. And if there is no firewood available from the Department of Agriculture or the Whites, they can send you many times to collect headloads of firewood. And they see whether you have brought enough. If the bundle is too small and the wood thin they won't accept it".

Another woman told me how she was punished by the *basadibagolo* because, coming from the city, and being new in the area she was not able to work with the same strength, speed and knowledge like the others. At first, the old women teased her "look, how late she comes to work, what did she do at home"? Then, they even charged money from her. She further told me that she had to ask forgiveness for what she had done in order not to be sent with the *dikgarebe* on another occasion. Unability of the *ngwetši* to perform tasks to the satisfaction of the group not only implies her

marginalization but she can also be held responsible for sudden difficulties of the relatives who live with her. A lazy and disobedient daughter-in-law can thus even cause ancestral wrath and misfortune. Indications of this include barrenness, unemployment or financial shocks.

3.2 The apprenticeship

Traditional healers do not have to study books to identify herbs and to perfect their skills. A spokesperson who works as a healer in Mapela said that he was chosen by the ancestors while he was asleep (*badimo ba nketetše*). He said:

“We don’t go to school to learn about herbs because this knowledge is given by the ancestors. It happens in the night when I am sleeping. Then the ancestors visit me and tell me what to do. They know everything about herbs because they used them during their lives. They come and advise me. It is very difficult to teach herbal medicine. Even if they told you at school how to apply the herbs it wouldn’t work because you have to be related to the person teaching so that the herbs can be effective”.

Others referred to a particular event which had happened, for instance a serious illness which had been cured, as a turning-point in their lives. In such a case they believe that the ancestors have cured them to mediate between human beings and the ancestor spirits. Most of the healers suddenly felt a strong sense of duty to help others and to gain experience in healing.

The acquisition of medicinal knowledge takes years of apprenticeship and practice where the person experiments with different methods, tries various herbs and concoctions, and learns how to diagnose a disease using the *ditaola*. The moment a healer feels that he is competent enough to cure people, he has to obtain a certificate from the healers association (e. g. in Hammanskraal) to be accepted by the community. Only then would a patient trust him and believe in the herbal medicine he prepares.

Once a healer gets old, he is inclined to look for a male successor whom he can teach. He would most likely choose one of the children of a kinsman and would be reluctant to teach a person who is a stranger to the family because expert knowledge is usually closely guarded. A healer would then rely on his knowledge of human nature which enables him to identify the right apprentice according to his manners, talents (*mpho*), dreams, visions and outstanding abilities which differentiate him from others. Potential candidates are sons, nephews and other male members of the extended family.

A healer said that some time must pass in order to ascertain whether a child is really blessed by the ancestors or whether he has only dreamed of them. Until the child is therefore ultimately taught the techniques and relevant skills of healing he must be guided in his ways. According to spokespersons, apprentices should have passed puberty. The elders would then say that a child whose parents have cattle know the way they live (*tlogatloga e tloga kgale modiša wa kgomo o tšwa nayo šakeng*). During the time of his apprenticeship, a young man learns to identify herbs and the places where they can be found. He accompanies the old traditional healer to the mountains, listens to him and observes everything he does. He has to learn all the secret names of herbs and is not allowed to tell others about his experiences. Theoretically, the healer is automatically responsible for the boy and obliged to care for him until the latter can support his teacher. During the time of the research, only healers still looking for an appropriate apprentice were found.

This can be due to the fact that today only a few men are left who would like to become professional healers. The majority said that traditional healers only make money in the urban areas and that their reputation has declined at Mapela because they were not able to prevent the many death cases of young people.⁶⁶ On the other hand, there were some young men who were almost fanatical about medicinal knowledge which they regarded as part of their Black identity. They were, however, not yet taken seriously by the group of traditional healers.

3.3 The school

The most characteristic feature of formal education in schools, as opposed to the informal and holistic transmission of local knowledge, is its fragmentation into different subjects. Knowledge acquired in schools is further decontextualized from the local environmental context and is ideological in nature in the sense that it deals with how things should be rather than how things are. This can even lead to a withdrawal from fieldwork and household duties because in the syllabus no subjects are included which are of relevance to farming, e. g. legislation on land, land rights and agricultural methods. During discussions held with school children, most of them indicated that they would like to learn about improved agricultural techniques, modern implements and crop varieties so that they can make a living from farming provided that they get more land from the government.⁶⁷ However, because they only know the “Black way of ploughing” which means that they only know how to cultivate maize and have no idea of commercial agriculture, they rather want to earn money by becoming medical doctors, nurses and teachers.

Despite the establishment of school committees comprising parents of school-going children, the influence of the Mapela community on school policies is low. This implies that there is nothing the people can do about the poor learning conditions and the fact that schools are still inadequately resourced with equipment and books. Another problem is that sixty pupils in a class are not uncommon. Formal education (*tsebo* or *thuto ya sekôlô*) of the required standard can thus not be provided and many subjects which appear in the syllabus can also not be taught because of a lack of teachers.

⁶⁶ Spokespersons in the clinics at Mapela and Bakenberg explained that most of the young people die from Aids.

⁶⁷ Concerning agricultural training, only two people at Mapela hold certificates from the Boskop Training Centre for the Development of Manpower approved in terms of Act 56/1981. According to the holders of the certificates, they were taught how to cultivate tobacco and were encouraged to apply their knowledge in Mapela. Due to the lack of irrigation, however, this did not materialize. One of them told me, however, that he plants oranges and spinach in his garden and that he was inspired by the training to do so. One young farmer attended the Oppenheimer Agricultural School which is about 15 kilometres away from Mapela.

Yet, the influence of teachers on school-going children is strong as was already indicated (see Chapter 3, Item 2.3 above). The moment children become familiar with the school program, they seem to break with the past by saying that they now acquire something which makes them superior to their parents and grandparents. Amongst others, this is enforced by regular morning prayers and the instruction to forget about the ancestors and to stop worshipping them. Teachers make children believe that the performance of rituals is incompatible with Christian ideas and principles.

At school, pupils are also taught political skills which are required for membership of youth movements such as, for instance, the ANC Youth League. In Northern Sotho, teenagers who engage in politics are referred to as *bafsa* (litt.: youths) and are known to have close ties with the local TLCs. It could be ascertained that some of the councillors who worked part-time for the TLC were teaching in schools in Mapela and had a great influence on school policies and syllabi.

It could not be ascertained, however, to what extent the peer group pressure of members of youth movements at school motivates a child to participate in political meetings. Yet, it was evident that those pupils who know some political slogans and who have the talent to manipulate others were automatically regarded as leading figures by children who were more nervous and shy in the presence of others. Consequently, these school “leaders” had a tremendous impact on classmates with regard to perceptions about traditional leadership and modern government.

3.4 Re-evaluation and recognition of local knowledge

The people of Mapela find everything new, exciting and stimulating. Modern techniques or medicines, for instance, usually provoke lengthy debates among people. The attitude towards innovations is thus strikingly positive. Spokespersons said that they can only profit from new knowledge and experiences. The acquisition of knowledge during one’s life-time is thus very constructive and highly dynamic. Scientific knowledge which can be gained from others who are employed by firms, from White commercial farmers, city

dwellers and teachers thus builds upon and adds to what has been learned during early childhood (see Morin-Labatut & Akhtar 1992: 24). New knowledge is therefore never built on a *tabula rasa* but rather augments previous ideas, beliefs, images, decisions and experiences of other people. However, there is seldom an integration of new knowledge with knowledge that has been inculcated during childhood.

In many cases, this results in a re-evaluation of customs and habits once the schooling has been completed and the contact with teachers and school friends weakens. This is also due to the fact that knowledge and skills which pupils learn during their school-days are easily forgotten and rarely used and applied after they have left school. Apart from English and Afrikaans which is frequently spoken with non-Northern Sotho-speakers, eventually, most of the subjects which have been learned lose their relevance.

Local knowledge, on the other hand cannot be lost because its value lies in its clear understanding of the relationship between nature and human beings, its effectiveness and practicability for survival. In addition, virtually nothing that is learned at school is related to the cultural environment and is able to encapsulate the complex worldview of people. A farmer said:

"The knowledge which our children learn in school is temporary. *Tsebo ya tlhago* is permanent. You are born with it and you are going to die with it. You will never forget it. What you learn in school cannot solve the problems we have here in this area. You see, when our children marry, they come back to us. They won't go to their teachers and ask for advice. They don't learn how to pay the school fees of their children. Because we old people know how to maintain a family. We know that you don't have to be despondent if you have a problem. We know that you should not divorce if you have an argument. You see, some children commit suicide because they don't see that a problem is never permanent. It goes away. We will say: because a shelter is never warm (*ga go na seema se borutho*). That is what life is all about. The wind can always affect you. But it will go away. But you have to stick to what you are meant for. This is the way of life (*ye ke yona tsela ya bophelô*). I am afraid that we lose our culture. But I know that when our children grow up they come back to it. Don't be under the control of anybody else. If you come back from the South, we know that you have worked hard. You should invest in farming. You should hire some labourers. *Tsebo ya tlhago* means that you have to open your eyes. It is not enough when you listen. You have to use your hands".

The return to local practices is often accompanied by a renewal of interest in skills which, during the period of schooling, had been neglected, forgotten or put aside. Local knowledge and skills have, however, been kept alive by memory and exposure to at home, and the undeniable influence of the elders. The underlying condition for the continuation and endurance of local skills and practices is the willingness to continually “add” to existing knowledge or recent experiences. Although the younger generation is at first confused because the knowledge of the older people seems to belong to the ancestor spirits, it is soon recognized that so-called “book-knowledge” does not mean anything if it cannot be applied. This can be explained by the fact that school only prepares pupils for jobs which are not available in Mapela and ignores local survival strategies where people are inclined to combine different economic strategies which are compatible with local conditions. In such an uncertain situation, local knowledge is reconsidered because it is dynamic and enables people to deal with the changing environment.

The ability to combine knowledge and skills which originate from different sources enables people to “modernize” problem-solving strategies or to adopt new modes of action. However, they can also imitate parents and grandparents and return to what was previously called “traditional” and “old-fashioned” if deemed to be necessary. A farmer told me:

“I always told my children to plough but as long as they went to school they were not interested. I told them that they can even make a living from ploughing but they wouldn’t believe me. I don’t know what eventually caused them to change their mind. In the beginning my child never asked me about ploughing. But after two years working in the city he came to me and said that he now wants to do what his parents were always doing: ploughing. We, at home, we kept quiet all the time”.

Local knowledge thus goes far beyond educating a child in abstract knowledge. It satisfies the continuous search for material and spiritual security. Local customs and the remarks and comments of parents and grandparents are then once more regarded as offering help for those who do not know what to do with their lives, more especially if

they are not yet married and if they are unemployed. Returning to the customary procedures and traditional specialists in critical times could also be observed quite frequently in the political sphere.

4. Managerial structures, values and priorities

Different managerial structures co-exist in Mapela. These are those of the traditional authorities, the TLCs and agricultural extension officers.⁶⁸ The following section deals with the different worldviews of the people involved and highlights some of the antagonisms hampering the development process.

4.1 Traditional authorities and decision makers

Traditional authorities have a vital interest in the utilization of natural resources at Mapela which they regard as the most essential asset of the chiefdom. The allocation and control of land, for instance, not only enables them to provide basic subsistence to the chiefdom, but land is also the most valuable resource traditional leaders can think of. Political power and land management revolve around in the person of the chief, the “local living deity” (*kgoši ke modimo wa lefase*). Without authority over the land resource, traditional leadership is inconceivable.

The land is, however, not only important because of its political meaning. Land means wealth (*lehumo*) and autonomy. Eventually, people at grassroots level identify themselves, and are identified by others, with the land surrounding them. The name “Mapela” thus not only designates people but also the entirety of natural resources which are under the control of the Mapela tribal authority. The more the land base can be expanded and the more farms can be added to the tribal land, the more important the people are. Land brings prestige, ensures outside recognition and helps leaders to lay claims for more financial support from the government. Water, fauna and flora is

⁶⁸ Extension work from the Department of Environmental Affairs and Tourism is not discussed. In the light of the financial situation, there were no means available to adequately train personnel to work at Mapela during the time of the field research.

usually included if traditional leaders think about land. Land therefore occupies such an important place so that it takes precedence over other resources.

Apart from the above mentioned reason, the priority given to land also has a practical reason. The traditional authority has to attend to land disputes and land applications for agricultural and residential purposes almost every day. Because of the fact that decision makers are likely to lose control over people once they can no longer meet the demands of the community, they take every chance to exploit what is available to satisfy their subordinates. They believe that a person who cannot be satisfied becomes unhappy and unpredictable and, in the long run, threatens the harmony of the chiefdom.

Of the other resources, herbs are, for instance, also highly valued but they are not dealt with at the communal level and are rather managed by groups of users such as traditional healers. Another example are women who struggle to find firewood and who rather gather and organize themselves than protesting to the tribal authority. For many, the distance from the homestead to the tribal authority is too far and not worth the effort of walking there for such a minor issue. Others said that the *ba mošate* cannot help them.

The tribal authority has therefore delegated control over land in the different wards to appointed headmen to ensure that the poorest at grassroots level can also be heard. Smaller institutions, such as the *dikgôrô*, ensure participation of people at grassroots level (see Chapter 4, Item 4.2 above). The headmen, who watch over the wards, are the eyes and ears of the chief and represent the interests of individuals and user groups. As long as headmen have the authority to render support, traditional leadership continues to empower people at grassroots level and enables them to make use of natural resources and to choose strategies according to circumstances.

The delegation of power re-enforces an important maxim at Mapela, namely the continuation of the group spirit which backs up individuals. It is a manifested viewpoint of the poor majority that only the cohesion and harmony of the group guarantees

success. This is also expressed in proverbs which say that a bangle alone cannot make a noise (*mphiri o tee ga o lle*) and that an individual is only a person by other people (*motho ke motho ka batho*). Another one declares that a single person can hardly kill a snake (*botee ga bo bolaye noga*). This value attached to the group leaves little room for open-mindedness and tolerance for the emergence of a rural elite and the concomitant deviation from customary norms.

The anthropocentric approach to life and the group-spirit are manifested in the concept of humanity (*botho*) which forms the underlying principle of local resource management. *Botho* automatically places the needs of human beings above the conservation of natural resources.⁶⁹ Traditional management is thus predominantly humane rather than materialistic and social rather than individualistic. The *botho* concept forms the ethical frame of reference for the allocation of resources by traditional authorities.

This does, however, not imply that traditional authorities automatically manage natural resources impartially and equitably. This can be ascribed to the fact that approval and support given to the application or request of a person depends on the good relations which have been established with traditional leaders over a period of time. Basically this entails that the better a person is known to the tribal authority and traditional leaders, the better are the prospects for support and assistance. Prerequisites for such good relations are the paying of tributes to the chieftainess, attendance at meetings, regular visits to the tribal authority and the participation in communal events. People who are unknown, on the other hand, first have to win the confidence of the traditional authorities and establish rapport with them before they can announce their requests.

The establishment of such good relations with traditional leaders can be difficult and complicated. Unmarried men and women, for instance, are still excluded from traditional councils and meetings, and women are only accepted as representatives of their

⁶⁹ Humanity also occurs in the dealing with foreigners and migrants. Somebody who comes from outside can transmit new knowledge so that others can also gain from his or her experiences. This is also substantiated in a proverb which says if someone wants to leave the place we are sad, but we are happy if someone moves to our place (*nthole ga a ganwe re gana nthweše*). The

husbands. They are therefore often not well-known to traditional leaders. While women have developed a strikingly independent way of managing the environment and are able to cope without male support through women's organizations and mutual support (see Meer 1997: 4), young people reject *ex-officio* memberships of political councils and exclusion from traditional meetings with overt opposition. The situation has only changed slightly after the installation of the present chieftainess Atalia in 1993 because only women who stay close to the *mošate* or who are well-known to her benefit from the first female rule at Mapela (see Chapter 5, Item 2.1 above).

Apart from the *botho* concept and the importance of good relations between people and the ancestor spirits, local resource management reflects the holistic worldview of traditional authorities. It could be ascertained that traditional leaders believe that the tribal area can only be managed in its totality and that individual natural resources or species cannot be singled out. As a result, the visible (material) and the invisible (immaterial) beings are not separated but are perceived to be interrelated. Situations are thus not assessed by means of linear and scientific analysis but rather by a multiplication of causal relationships. From the people's perspective, resource management is thus an inclusive concept which encompasses a complexity of perceptions and beliefs.

This holistic approach is also reflected in the perception of development (*tswelopele*) and improvement (*tthabologo*) which are used interchangeably. Development is understood as encompassing a number of outside sponsored projects which improve the infrastructure at Mapela. Development is not related to the natural environment. It is rather inconceivable that nature which persists automatically in the view of people, can be improved qualitatively by means of human intervention or, for instance, rain and benevolent spirits. Western reductionist developmental concepts which split up a "development area" into different "development domains", are therefore in sharp contrast to the attitudes of local people who intuitively link and interconnect different aspects of life in time and space.

councillors further said that the more people who live in Mapela, the more they are recognized by local and provincial politicians.

Another important issue which has a bearing on local resource management is the cyclic perception of time (see Chapter 7, Item 2.2 above) which is based on repetitive, regular and predictable changes in the natural environment (see Thorpe 1996: 123). Things which happen are perceived to be almost identical with incidents which took place in the past. Consequently, problems are solved by relying on previous experiences. Allocation and control issues are thus never assessed by contemplating about future consequences. Traditional authorities rather rely on established customs which have been applied successfully over generations. However, traditional leaders are also realistic and take into account the many unpredictabilities of life, first of all the unstable human nature itself, when they confer rights over resources to others. This accounts for the striking flexibility of resource management strategies despite the adherence to traditions.

The last but most critical and extensively discussed feature of local management is its processional character. It was observed that a number of prerequisites have to be met before plans can actually materialize, more especially if a person is uncertain how to proceed. In such a case, he or she would subdivide his or her time into rather elaborate phases placing great emphasis on details to make the unmanageable manageable. Such a process entails not only a series of actions or operations in order to achieve consensus with others but also to have time to correct ideas, bring order out of disorder and re-organize the disorganized. Central to these processes are guidelines and directives which have to be obtained from the ancestral spirits. Guidelines, in this respect, refer to the evaluation of natural and supernatural phenomena in order to explain the will of the spirits. Directives are the instructions and advice which are obtained from local experts, for instance, traditional healers who know how to effect plans successfully in times of a crisis. A person thus hardly ever acts independently from others and nobody dares to take the full responsibility over matters which also concern others.

4.2 Agricultural extension officers

For a long time, agricultural extension work has been regarded as a strategy to overcome Africa's environmental problems. Theoretically, extension work is service-oriented, politically neutral and acts as a link between local people at grassroots level and outside (developmental) organizations or governmental departments. The backbone of extension work is a wide network of agricultural experts and trained scientists who specialize in the transfer of expertise and modern technology to local people. In practice, they regularly visit rural areas, meet farmers and conduct on-farm experiments to test new varieties of crops or more sustainable methods under natural conditions. Examples from West and Central Africa reveal that great emphasis is also laid on the participatory nature of extension work to give recognition to grassroots perceptions on land management (see Millar 1994: 164; Pottier 1994: 85).

In the course of time, however, the positive image of extension work has changed dramatically and many extension experts are today accused of focussing on the transfer of technology which is inappropriate, paying attention to wealthier farmers only or concentrating on eye-catching projects (e. g. irrigation schemes) and rapid success stories to forward their personal careers (see Chambers 1983: 22). Some of these problems were also found at Mapela.

As indicated above (see Chapter 4, Item 4.2), extension work has nearly come to an end in Mapela at the beginning of the 1990s when strong rural leaders and their followers began to reject the whole apparatus of the previous government. Today, extension work is still viewed with suspicion because the majority resent the way they were patronized in the past (see Zulu 1996: 243). It can also be assumed that the replacement of extension officers after a period of work at Mapela nullified the success of agricultural projects. Such disturbances, for instance, had a negative effect on the sustainable use of the irrigation scheme at GaMasenya. According to spokespersons, good and long-lasting relationships were only established with traditional leaders who

acted as gate-keepers for development programmes which could not be introduced without their permission.

Because of the fact that extension work was not resumed effectively after the change of government due to a multitude of financial and structural difficulties faced by the Department of Agriculture, there was only one agricultural extension worker left at Mapela during the time of my research. Theoretically, he is available on Mondays at his office at GaMasenya, manages the irrigation scheme and consults small-scale subsistence farmers on soil management. He is also obliged to mediate the agricultural development project of the PPL mine which aims to increase crop production at Mapela. Due to a lack of departmental support and knowledge about local values and farming strategies, the extension officer is, however, critically overworked and unable to fulfil his duties effectively. It could be ascertained that in some wards his name was unknown let alone the activities he is supposed to do at Mapela. Even the tribal councillors had only vague ideas about extension work at Mapela and said that only farmers at the irrigation scheme gain from development aid. Another aggravating factor is the fact that the extension officer was not born at Mapela and that his family lives in Lebowakgomo. Indeed, his continuous absence hampers the development of good relations with the majority of the people at Mapela.

Discussions with Mapela farmers revealed that they wish to gain advantages and quick profits from agricultural extension work. The perception prevailed that people need to be compensated materially for the wrongs which have been done in the past. Long-term project designs and training are regarded as a waste of time because of the unpredictable weather conditions at Mapela and other factors which can easily ruin any plan. This concurs with the finding that only a few people are aware of the fact that they can shape and influence their own future. This concurs with a lack of planning for coming seasons and a concentration on the here and now. Hence, spokespersons said that they rather need immediate financial and technical support to solve urgent problems than plans which are probably unlikely to materialize. Obviously, this strong focus on material support separates technically superior farmers at the irrigation

scheme (*molemi wa makgonte*) from the poor majority who have no access to the harrow and the planter which are parked at the agricultural office in GaMasenya.

The focus on material aid also results in the fact that farmers at the irrigation scheme are likely to plough easier and timeously but that they did not acquire the expert knowledge which could enable them to do this. Despite the fact that they have easier access to scientific advice it could be ascertained that the farmers at the irrigation scheme do not differ much from others in the area concerning attitudes towards farming. Even here, many farmers perceive magical means as the only appropriate protection from insects and plant diseases. Extension work did therefore not alter the belief that modern technology is inappropriate for the propitiation of harmful spirits who can destroy crops.

For the people at Mapela, subsistence farming only contributes to survival but has for long ceased to function as the most important rural activity besides the keeping of cattle. The strong focus on agricultural land and the attempts to manage fields more productively is hardly understood by the community. People believe that human beings share the cosmos with other invisible forces who have a great influence on the natural environment and yields. The majority would thus feel insecure if they relied on the production of crops only. Other arguments are related to the small size of fields, insecure tenure rights and the unpredictable weather conditions.

The basic policy of agricultural extension work differs strikingly with this holistic worldview as could be elicited from the agricultural headquarters in Potgietersrus. Here, a senior official said that extension work is specifically focussed on the long-term restoration of the soil resource at Mapela which has been critically exhausted by a rapidly increasing number of people who make intensive use of the land. The policies build on the premise that the black turf fields at Mapela are among some of the most fertile patches of land in the Northern Province but are exploited by people who do not know how to manage the soil effectively. Consequently, it is believed, that improved methods and technology as well as the application of more productive seed varieties

would eventually develop “traditional” agriculture and adjust it to Western standards in the long term. A negative result of this promotion of certified seed and machines is that some farmers have now started to buy implements on credit and are likely to get into debt soon.⁷⁰

Table 17
Clashing of principles

Principles of agricultural extension officers	Principles of Mapela farmers
long-term increase in productivity	short-term availability of seed and machines
agriculture underlies universal principles	agriculture is inseparable from the people's worldview
success depends on personal initiative	a single farmer alone cannot be successful
traditional agriculture has to adjust to Western standards	agriculture contributes to subsistence and only crops which can be processed into a porridge are cultivated
only scientific knowledge enhances productivity	local knowledge cannot be replaced and continues to be the guiding principle for the cultivation of crops

A precondition for success, as perceived by the agricultural experts, is that managerial activities must be carried out in time to be effective (see Table 17 above; Table 18 below). Long waiting periods for machines which are common at Mapela are regarded as counterproductive and a waste of valuable resources. The broadcasting strategy which is regarded to be the most simple and fast by Mapela farmers is perceived as inefficient and disastrous for the productivity of fields.

Tractor owners are not perceived as the cause of jealousy and conflict but rather as progressive farmers who successfully implement improved strategies. It is, however, forgotten that a number of tractor owners exploit others and that is to the disadvantage of those they do not know well (see Chapter 5, Item 3.2 above). This is due to the fact that outsiders believe that the group-oriented approach to life at Mapela automatically

⁷⁰ Such credits are, for instance, granted by the PPL.

results in an equitable sharing of resources. This, however, clashes directly with the position in Mapela where people differentiate sharply between well-known, known and unknown persons when they transfer user rights and allocate or distribute resources.

Table 18

Problems of agricultural extension work

Focus of agricultural extension work	Problem
focus on field cultivation	support is needed for both homestead gardening and field cultivation
focus on modern technologies	appropriate and cheap technologies used by many farmers are ignored
focus on male farmers	many fields are cultivated by women ¹

Finally, the underlying philosophy which guides agricultural extension work is that prosperity depends on individual efforts, personal achievements and the willingness to change behaviour. Communal land tenure and the group spirit are regarded as obstacles to the new initiatives, ambition and motivation. Problems are analysed by means of monocausal analyses and solutions are determined which have been proven worthwhile in other areas. The employment of universal principles necessarily clashes with local knowledge and skills which have gained managerial importance at Mapela. Socio-cultural factors such as living standards, family sizes, eating habits, literacy, values and perceptions of people play a minor role in the planning of agricultural guidelines for extension workers. In fact, by concentrating on agriculture as an aspect of development, the complexity of human interaction is ignored. This results in a lack of sensitivity towards the local rationale behind economic activities.

4.3 Modern structures

The term “modern structures” refers to the TLCs as well as to youth movements (e. g. ANC Youth League and Civic organization) and committees (e. g. RDP). The latter are

linked with the TLC. Modern structures form the political opposition to the traditional leadership structure. This opposition is predominantly controlled and supported by young lay men between the ages of twenty and thirty who are literate and who have radical political views about the land reform process in South Africa. Most of them want to get hold of the tribal land as a means to usurp traditional leadership. Basically this is due to the fact that those who possess tribal land also have the power to rule the chieftdom.

The question about the future management of tribal land thus polarizes attitudes and clearly separates the “traditionalists” from the “modernists” more than any other resource at Mapela. The leaders of the opposition at Mapela are a few teachers and others who, for some or other reason, have broken with traditional leaders sometime in the past. Their views do not necessarily reflect those of the TLCs in Bakenberg who have easier access to outside information, conferences, crash courses and workshops.

At Mapela, the issue of resource management is thus limited to land management in the arguments of the opposition whereby the close association between people, land and ancestor spirits is largely ignored. Land management is rather reduced to the allocation of, and access to land, in short, power to control scarce resources. The way the land should eventually be used by individuals plays a comparably minor role and proposals are only half-heartedly suggested and are not logically thought through. Some people who support the opposition, for instance, wish to build more soccer fields for the youth. Future plans of sustainable management of natural resources are left in the hands of outside scientists and other experts. Financial help is expected from the government. In other words, supporters of the opposition claim access to more land which could then be allocated to those who have been denied access to land by the traditional leaders. They do, however, not feel responsible for the sustainable use and development of the land.

⁷¹ This concurs with Cross' (1998: 8) findings who notes that women “are often described as the country's farmers, but that their potential is not being realized”.

The opposition makes use of a number of radical strategies to gradually undermine the position of the councillors and the headmen. During the time of the research, the tribal hall at the *mošate* was claimed by the opposition to assemble people for political meetings. This application was not approved and obviously increased feelings of discontent with the traditional authorities. Eventually, a number of conspiratorial and secret gatherings took place in the wards. Spokespersons also reported that the opposition is strongly represented in development organizations and committees. As far as could be ascertained, discussions usually centre around the disadvantages of traditional leadership and not around more effective farming methods.

Arguments against traditional leadership are manifold (see Box 16 below) and are supported by those who feel disadvantaged by the tribal authority, mostly landless and unemployed people or strangers.

Box 16

Arguments raised by modern structures against traditional leadership

- ◆ ex-officio membership in tribal councils
- ◆ non-democratic principles
- ◆ preferential treatment of members of the same kin (nepotism)
- ◆ no clear attitude against minority government
- ◆ exclusion of marginalized groups (strangers, women) from tribal meetings
- ◆ accumulation of wealth
- ◆ collection of tribal levies by the chief
- ◆ conservative, backward principles and resistance to adaptation to changing conditions
- ◆ inability to perform services under the new dispensation
- ◆ lack of knowledge about changed administrative procedures

Support for the opposition is attractive because of the number of promises which have been made by the opposition, e. g. majority rule and equal rights. Most of these promises presuppose democracy (*mmušo wa batho ka batho*) and the abandonment of traditional institutions. For the young, formally educated people who regard life at Mapela as an unpromising compromise, solidarity with opposition leaders who have the

same views and ambitions is highly attractive. Although the opposition at Mapela is not strong as yet and financially not powerful enough to really change something, its members have perfected skills at school which can easily compete with those of traditional leaders, e. g. the rhetorical use of language to instil ideological jargon into the people's heads. In addition, members of the opposition constantly try to convince people to neglect the payment of tribal levies.

Due to the lack of a speaking platform, members of the opposition tend to behave like politicians who canvas for support: they establish themselves in front of shops, make use of placatory slogans and focus their arguments around a simplified worldview. Debates over land resources are reduced to issues of possession, ownership and expropriation. This behaviour is not yet taken too seriously by the elders who still maintain the upper hand in the wards. Only a few regard young politicians as a serious threat to the old order because they have "bad manners" and are "disorganized" and "do not yet have much to offer".

During the research the effects of political change could, however, already be felt. Mention has to be made of the increasing bureaucracy connected to administrative processes, e. g. the compulsory notification of the TLC in Bakenberg about any land application, and the corruption of some transitional councillors with regard to approvals. In addition, the lack of knowledge about new procedures and laws affects the control system to such an extent that villagers lose confidence in the ability of the traditional leaders to rule the chiefdom. A positive effect of this "wind of change" is, however, that almost everybody at Mapela struggles with the question of the future of the land. This leads to a re-evaluation of present resource management and makes people more open to alternative ideas and solutions. Seen in this light, a political change accompanied by a temporary legal vacuum also empowers people to experiment with new strategies.

Lastly, it was ascertained that group membership continues to play a dominant role even among opposition groups. If, for instance, a member of the TLC works in his home ward he cannot escape certain social obligations without losing respect at his home. If

he would, for instance, refuse to participate in a ritual his reputation would decline and the members of the ward would be less likely to listen to him. Some of the deep-rooted values are thus unlikely to change and continue to embed people in a network of social relations on which they can rely in times of crisis.

5. Conclusions

Local knowledge is deeply embedded in the belief and value system of Mapela. Despite the fact that, for instance, the dichotomy between hot and cool beings and things (humans, fields) can also be found among other groups in the Northern Province, other beliefs influencing resource management have only little meaning beyond the boundaries of Mapela. This is due to the fact that local knowledge is not only interrelated with the immediate natural environment but also with the political situation and the religious life which give the cultural group a lasting and idiosyncratic character (see Hammond-Tooke 1981: 83; De Beer 1995: 11). So, local knowledge is less rigid and less able to be generalized than the formally acquired book knowledge taught in schools or the scientific knowledge which governs developmental projects (see Tillmann 1991: 102pp).

Despite the fact that local knowledge is largely unarticulated and unconsciously applied, it can be elicited from people's interaction with the environment and their underlying principles. It could be ascertained that the majority raised serious concerns and revealed some of their maxims when they felt threatened and insecure, for instance, when water got scarce and they feared a drought. In such a situation, ancestral beliefs, a group-oriented spirit and communal prayers disclose values which are less obvious and discernible when life runs normally and the supply of essential resources, such as rainwater, is found in abundance.

In times of crisis, local knowledge applies and limits the range of possibilities and options to a few acceptable actions and decisions by means of laws, taboos, sanctions and rituals (see Arce & Long 1992: 211; Morin-Labatut & Akhtar 1992: 24; Marsden

1994: 49; Antweiler 1995: 43). Local knowledge then determines the applicable use of resources at the appropriate time and forms the basis for people to develop effective management strategies. Managerial knowledge is thus available and shared but not always applicable. Another striking feature of local resource management is its focus on short-term availability of resources and the indifference to long-term planning and initiatives to ensure sustainable use of natural resources.

The section on the transmission of knowledge revealed that basically, all the people at Mapela have the same potential and noticeably share perceptions on natural resources despite unequal access to information (such as the different length of school days, exclusion from healing knowledge etc.). This opposes the conventional view that resource management is shaped by local expert groups who have a monopoly on all kinds of knowledge to which others have no access.

The last section described the ideological character of knowledge which dominates the strategies of different managerial structures at Mapela. This finding concurs with Marsden (1994: 47) who notes that knowledge is never neutral. The traditional authority focusses on the administration of tribal land and delegates the management of other resources to lesser institutions. Initiatives thus often come from grassroots level and are translated into action by traditional leaders. Good relations with traditional leaders are important to ensure access to resources. This can be ascribed to the holistic character of resource management which encompasses the complexity of social relations, beliefs and experiences. In the perception of the people, the natural environment (*tikologo*; litt.: roundness, sphere) is more than a conglomerate of material entities but also includes information and beliefs about the supernatural world.

This holistic approach of necessity clashes with the simplified worldview of the political opposition at Mapela. In the political discourse of young people, natural resources are reduced to instruments which can be used to demonstrate power and superiority. To undermine the authority of traditional leaders, for instance, natural resources are stolen and damaged. Another factor is the illegal occupation of land. Although some of the

political aims are not approved of by people at grassroots level, the opposition becomes more attractive when traditional leaders are not able to satisfy the needs of the people. This applies, for instance, to many young people who are formally educated but unemployed and who are unhappy with their lives at Mapela.

Such perceptions are again in sharp contrast to those principles which guide agricultural extension work. In agricultural offices the attitude “us planning for them” dominates behaviour and results in top-down policies which make no attempts to empower people at grassroots level. This approach has the advantage of economising on scarce financial resources and accommodating the limited personnel situation. Bottom-up approaches like environmental education would require considerably more well planned efforts and time inputs.

The fact remains, however, that environmental problems cannot be solved without the participation of those who depend on natural resources. The last chapter therefore examines the potential of holistic local resource management not only to sustain the natural environment but also to take cognizance of the value-orientation of the people. It suggests the involvement of local communities in the development of more sustainable use of natural resources. This is due to the fact that, in the long run, the experts on local resource management are not in offices but somewhere in remote wards where they have virtually no influence on the people.

“When Africans themselves take the lead, when leaders demonstrate serious commitment to environmentally sustainable development, then the process will take root and accelerate”
(Grève 1995: 18).

Chapter Eight: Findings and Conclusions

1. Grassroots people and the international arena

When talking about environmental problems, such as the degrading of the natural resource base, international initiatives and operations increasingly recognize the importance of local knowledge, for instance, in Agenda 21 which was formulated during the Rio Summit in 1992. However, while today there is agreement that there has to be a stronger focus on cultural values in order to understand the local knowledge of people, there are no general policy guidelines or manuals on how to effectively co-operate with rural communities or on how to implement bottom-up approaches in development projects. This is due to the cultural diversity of peoples at grassroots level and the costly and time-consuming study thereof. African governments in particular can hardly invest in “worldview-studies” in order to better understand their people and to implement more participatory approaches.

This means that top-down policies are still widespread in many “Third-World” countries. Here, “grassroots” refers to the bottom level of decision-making and control, in other words, to ordinary people who can largely decide for themselves which resources to use at which time but who have hardly any opportunity to influence decisions on a “higher” level, i. e. to affect compatibility of environmental management policies with their own perceptions on natural resource management. In South Africa, a shift of thinking among regional and national decision makers can, however, only be achieved if the ANC government is willing to support relevant departments (e. g. the Department of Agriculture and the Department of Environmental Affairs) and social scientists financially to empower small-scale cattle or crop farmers as well as grassroots decision makers and traditional authorities. In short, although decisions are taken and guidelines are

formulated during international conferences and in conventions to try and control implementation at national level, the communication with the people in the former homelands remains the task of the state itself. The more fieldwork can be conducted and the more studies on the values of people can be publicized the more “outsiders”, e. g. extension officers, can understand local people so that, eventually, they are no longer the recipients of development plans they have to accept but rather the local experts whom policy makers consult. This study illustrates that the grassroots level of resource management is not a passive sphere, but rather has the potential to shape and model the future of the natural environment in South Africa.

2. The anthropological perspective of resource management and local knowledge

2.1 Non-economic aspects of resource management

The place of values (beliefs and perceptions) and norms (laws and taboos) in local resource management of the Mapela people who live in the former Lebowa homeland (Northern Province) constituted the focus of this study. The starting-point was the question as to whether “culture” not only has a bearing on certain customs and social institutions but also on the way people manage natural resources and, if so, whether the underlying knowledge-in-use (local knowledge) can be of interest in the planning of sustainable management projects.

This study contends that resource management at Mapela cannot be limited to economic aspects, namely the exploitation of natural resources for the physical survival of humans. The findings reveal that a group-oriented approach to life provides the ethical frame of reference for managerial aspects such as access, control, decision-making procedures and the use of natural resources. Moreover, for the sake of harmony and compatibility within the group, individual ambitions have to be curtailed. This is enforced by numerous interest groups (e. g. a women’s group lead by the headman’s wife) in the constituent wards who especially watch over people who come from the cities because these are renown for their materialistic behaviour and could thus try to exploit the resource base for their own benefit. Such user-group control is unlikely to

change in the near future, more especially in the light of the scarcity of vital natural resources such as, for instance, land and water.

Apart from this group-oriented approach to life which is wide-spread among many African communities, the view that nature forms part of a wider cosmos which has been created by the supreme being and which is permeated by invisible spirits also has a bearing on local perceptions. Some natural resources are thus assigned a supernatural status which explains, for instance, the use of water in purification rituals or the taboo which prohibits the cutting of certain trees. Information about those natural resources which bear supernatural qualities, and which, therefore, have to be treated with the utmost respect, forms part of the local knowledge which has to be acquired in order to manage them accordingly.

Customarily, due to the great emphasis laid on the well-being of the Mapela chiefdom and the observation of taboos and laws, the potential for conflict over, and the exploitation of, natural resources is low. This reduces friction and competition over indigenous trees or access to grazing land. In addition, the necessary consensus which has to be reached in many decision-making institutions, for instance in the *kgôrô*, reduces the possibility of inappropriate solutions. In the perceptions of people, such shared principles with regard to resource management prevent chaos and misfortune and ensure the maintenance of relatively harmonious relations.

Poverty has, however, forced people to disregard some taboos and laws. An example is the decrease of trees which are theoretically protected from felling because only branches may be cut for firewood. Today, valuable indigenous trees (e. g. *Combretum imberbe*) are cut by men who sometimes also supply those women who cannot collect enough in the vicinity to cook food for their families with wood. Due to the collapse of outside law enforcement and the tolerance of traditional leaders regarding the breaking of laws and taboos, resource use is today far from being sustainable. This tolerance has to be seen against the background of the anthropocentric approach to life which places the needs of human beings above the conservation of natural resources.

Customary norms of behaviour are, however, still known by members of the chiefdom despite the fact that some of them have lost their relevance. Münkner (1998: 2) notes that “rules must be known, understood and accepted as legitimate by those expected to apply them”. Because of this, guiding principles of behaviour are handed down from one generation to the next so that the essential management procedures and strategies are eventually well-known by people across generations. In discussions about environmental problems, spokespersons thus continued to refer to local ethics of resource use. It was only after continuous cross-checking that they admitted that today many people are inclined to deviate from these principles.

Despite the fact that laws and taboos are increasingly ignored and some procedures are stigmatized as being old-fashioned by teenagers, numerous coping strategies, for instance the consultation of a traditional healer, are re-evaluated when things do not develop as expected. This implies that the core of local knowledge is never “replaced” but rather that new experiences supplement deeply-embedded values and norms which can be re-activated any time. In fact, the more unpredictable life becomes, the more people rely on super-empirical experiences to restore equilibrium between them, the supernatural and the natural environment as a precondition for implementing their survival strategies in the environment. Even if the desired effect is not brought about, the gathering and consultation with others in rituals or ceremonies equips an individual with the necessary self-confidence and strength when encountering difficulties. This concurs with Schmidt (1998: 41) who notes that “people increasingly emphasize the ‘local’” despite the tendency of the world to become a global village.

Mention was also made of the way in which natural resource management adapts to changes in the political arena, i. e. decentralization through the establishment of local governments all over South Africa. It could be ascertained that, as a result of growing uncertainty about the future administration of tribal land and the questionable availability of some key resources, economic activities are increasingly flexible and opportunistic which results in a manifestation of utility values in the worldview of people. This explains, for instance, the apparent splitting of economic commitments, the risk-

minimizing agricultural strategies (e. g. low investments) and the use of alternatives which are more readily available than natural resources. In short, while people easily learn how to generate additional income, how to use agricultural machines and how to apply other than the conventional techniques, they are less likely to substantially change the deep structure of their managerial skills. As a result, adapted survival strategies neither affect what people believe nor do they really influence decision-making procedures (see Atte 1992: 17). Yet, the growing number of economic alternatives can reduce incentives for some group activities (see Lawry 1990: 409).

A distinction between profane and sacred activities is not made by the local communities. In their view, the supernatural world forms part and parcel of life in Mapela and cannot be separated from economic activities. The importance of grasping the complexity of social interactions and beliefs to understand grassroots perceptions about issues such as environmental change or causality has already been highlighted.

2.2 Impersonal causality: implications for sustainable development

Climatic intricacies in the semi-arid northern part of South Africa have left their imprints on people's perceptions about the cause and effect of environmental changes. Hunger as a result of crop failures after droughts or hail storms as well as the realization of human imperfection to enhance good ploughing or grazing seasons have stimulated the development of fatalistic beliefs in impersonal agents who can activate forces to punish people. Deep-rooted values reflect this perceived interrelation between natural resources, human beings and the supernatural world. This concurs with Rees (1990: 18) who notes that "a society's understanding of 'reality' is profoundly affected by an elaborate set of unconscious 'facts', unquestioned assumptions, and entrenched beliefs".

In addition to the harsh climate, population pressure, unsustainable cultivation methods and overgrazing of the common areas, the unsustainable "living off ecological capital" (as opposed to sustainable "living off the interests") as Rees (1990: 29) paraphrased,

have created some “new” problems which people had to learn to accept and cope with. Findings of the field research elicit that impersonal causality has been extrapolated to these “new” problems which, in the perception of people, are all interconnected, e. g. poverty, unemployment, crime and general insecurity.

This means that soil erosion and resource degradation are tackled with customary and group-oriented problem-solving strategies which have been transmitted over generations: avoidance of conflict over scarce resources through consensual decision-making, sharing of key resources (e. g. maroela trees, water), processual behaviour and the establishment of self-help groups and support systems.

Due to the fact that the ultimate locus of power is somewhere outside the local community and cannot be clearly determined by members of the chiefdom, activities or initiatives to try and restore natural resources which are excessively utilized are totally lacking. Yet, this does not apply to the bad infrastructure at Mapela which is definitely regarded as a legacy of the apartheid period and which the new government now has to improve for credibility reasons. This explains why people expect financial aid, public facilities, tarred roads and electricity from development projects rather than woodlots or grazing camps.

Projects which try to implement sustainable management strategies are thus likely to be a drop in the ocean if the local causality-theory is not taken into consideration. This implies that local knowledge cannot be reduced to mere “ethnoscience” which can easily be tested, documented and computerized. The importance of the supernatural world for the finding of solutions to local problems has to be taken more seriously in the development discourse than before because its relevance to resource management is decisive for the understanding of human activities at grassroots level. As Bin-Karubi (1989:93) notes “we found out that, despite change in the environment, traditional values stay the same. Change will occur at the structural level but in order for the new institutions to be legitimate, they must reflect the traditional values of people”.

Despite the fact that people are likely to participate in meetings and workshops provided they are outside sponsored so that members do not run the risk of losing money, the moment private initiative and investment become indispensable, the belief in human incapacity continues to “paralyze” the local community. This is due to the fact that, apart from minor “defects” which can be explained and solved empirically (e. g. uneven germination of seed because of careless broadcasting), broad ecological interrelations are not fully grasped by people and are thus ascribed to the supernatural world or to non-equilibrium in the cosmos.

As a result, environmental education for members of the chiefdom is regarded as a necessary instrument to enhance environmental awareness which Boersema (1994: 22) traces to a “shift in thinking which has been mainly brought about by our modern perception of a relationship between all the different environmental problems, which are no longer categorized as avoidable by-products of our social development”.

If it is well-understood that impersonal causation cannot be applied to problems which have been created by the community, people would perhaps also be able to assign “new” solutions to “new” problems. Environmental awareness is, however, only likely to influence behaviour if free access to land and natural resources on the commonage is not restricted to members of the chiefdom without offering plausible alternatives.

If people at grassroots level are willing to develop plans and to make decisions on the basis of a scientific understanding of “their” natural environment as a supplement to local knowledge, the need to adjust to a scientific worldview in order to manage resources sustainably which is a major prerequisite in the conventional top-down development approach, is no longer relevant. This implies that environmental education may not dissect “nature” into separable “management entities” which would contradict the holistic worldview of people but would rather offer scientific explanations for the adverse effects of some widespread management strategies on natural resources.

The potential for such a synthesis is supported by the fact that the analysis of local knowledge revealed that people are able to add “new” knowledge without replacing the “old” (worldview). This is, for instance, apparent in the eclectic belief system of people or in the mixing of medicinal herbs and pharmaceutical products to cure illnesses. It presupposes, however, that “new” knowledge and skills may not contradict past experiences and have to be compatible with the values of the people. In fact, the importance of making “sustainable development” meaningful to people is the crux of the problem.

3. Local knowledge: potential and limitations

3.1 Continuity of a meaning-giving philosophy

The continuous relevance of the causality theory and the fact that no knowledge gap with regard to certain values and norms exists between old and young people, or between men and women, implies the active and general transmission thereof so that, eventually, the people at Mapela share a common “knowledge pool”. This stock of knowledge is, however, less relevant when a person is exposed to the pressure of peer groups, for instance, at school or during political meetings.

Notwithstanding this, the question remains as to why customs and traditions are recalled the moment a person assumes responsibility for his or her own life (see Chapter 7, Item 3.4 above). The importance of values for young people who struggle to realize their hopes for secure employment and who, sooner or later have to solve existential problems, implies that local knowledge enhances a philosophical understanding of the world and offers more salient solutions than school-books to such questions as:

- ◆ what is the meaning of existence?
- ◆ what is the order of things?
- ◆ what is the place of nature and that of human beings?
- ◆ what are the implications of humanity (*botho*)?
- ◆ who has to care for the chiefdom?

This concurs with Thorpe (1996: 11) who refers to the “human need for holistic unity” if something threatens the orderly life of people. Mbiti (1982b: 31) further notes that “no person in the world can exist without contemplating about life and the world”. Local knowledge thus explains the interrelation of human beings, nature and the ancestor spirits and the perceived power constellation which determines their relationship. In the view of people, the royal chief (chieftainess) mediates between the supernatural world and human beings. Such a special status in the cosmos capacitates the chief (chieftainess) to rule over the tribal area on behalf of the royal ancestors. This implies that other members of the chiefdom (or outsiders) can, regardless of their potential qualification, never attain power to control others because they are unable to maintain order and be a symbol of unification in the chiefdom.

The assumed role of the chief (chieftainess) is clearly defined as being increasingly difficult to perform: he/she has to ensure the well-being of the members of the chiefdom which implies that he/she provides families with the essential resources to secure household sustenance. Natural resources are regarded as a gift from the supreme being to the chief for allotment to others for utilization which results in the land use ethic of free access to land and free access to natural resources on the commonage.

The task of the people (*batho*) is to obey the chief’s word because reigning qualities to which others have no access are automatically (*ex officio*) assigned to him/her. There is a mutual relationship between the chief and the community because neither of them could exist without the other (*kgoši ke kgoši ka batho*; litt.: a chief is a chief through people). Young people who want to become independent from their parents and consequently need land for housing and agriculture from the traditional leaders, increasingly consider traditional values and norms, which are observed by the local community, as also important in their lives. This is necessary so as not to be marginalized from the group which is the greatest fear of a person. This concurs with Thorpe (1996: 110) who stresses that “without the group, the individual would not exist, but likewise, the group would be null and void without its individual members”.

In addition, once a person who ploughs agricultural land, and whose physical survival depends to a large extent on rainfall and soil fertility, faces a drought, he or she is inclined to search for the supernatural cause of misfortune in order to find the appropriate remedies to restore equilibrium in the cosmos. The same applies to the decreasing availability of plants (e. g. *veldkos*). Accordingly, the continuous belief in human impurity (*fiša*), i. e. the fear of ritually impure people who can effect crop losses on one's own agricultural land discloses the belief that the individual cannot survive without taking cognizance of others who can be potentially harmful to the community if not adequately cured. Vitality of natural resources is then assumed to be rather a question of order and normality than one of application of appropriate techniques or practices. This also explains the cross-generational application of super-empirical knowledge to interpret or "read" phenomena.

The customary prohibition of the use of certain trees, the maintenance of the "ideal" for a happy life and the worshipping of ancestors during the ploughing season thus have to be seen against the background of the embedded belief in the teleological maintenance of equilibrium in the cosmos. The perception that nature, human beings and the ancestor spirits are imperishable and can only change their form but never their function results in the fact that natural resources are regarded as infinite despite the present scarcity of some resources. A spokesperson once told me "even if I have to walk a little bit further today to find what I need, I know that it will continue to exist".

3.2. Transition: limits of local resource management

Transition, the change from a well-known to a less-known state or condition, challenges the relevance of local knowledge. At Mapela, what people learn from their parents and what they themselves have later experienced is likely to diminish when traditional leaders and elders lose control over the tribal land. This implies that the relevance of local knowledge is inseparable from the social order and environmental conditions. The current incompatibility of the meagre resource base with the needs and aims of the

local community as well as the direct response of people reveals the weakness and limits of local knowledge.

The fact that growing environmental problems can no longer be nullified or ignored by the decision makers in the tribal authority and the wards while, simultaneously, outside support and law enforcement is lacking, raises uncertainty among people about the capacity of leaders to care for the members of the chiefdom. In fact, the ability to deliver services for the benefit of the community is used as a yardstick to assess their quality. Once the land resource is exhausted, the power of traditional leaders necessarily declines because marginalized, poor and depressed people begin to lose confidence in their leadership. At Mapela, an increasing number of young landless people are beginning to support oppositional factions at grassroots level and polarize views about land tenure issues within the community.

Growing dissatisfaction among people also has to be seen against the background of low living standards, stock theft, unemployment and unpromising future perspectives for the youth. Yet, while the local environmental context is in a constant state of flux, local decision makers try to eradicate misfortune which affects the community by means of lengthy discussions to find out the cause of the crisis. This implies that people are inclined to establish causal relationships rather than to target symptoms.

While this happens, the poorest meanwhile try to find alternative means to secure household sustenance and exploit the remaining resources. This implies that the scarcity of supply does not automatically trigger more sustainable methods but rather results in opportunistic behaviour. In addition, the delegation of control over resources on the commonage from the tribal authority to smaller user units (e. g. women's groups and cattle herders) in the constituent wards further limits the development of coherent sustainable management schemes.

Eventually, the growing number of people who mix and match strategies and tools to cultivate at least small portions of land or to find minimum grazing for their animals, the

development of “new” household compositions and life-styles which emerge (e. g. *matita*-households) and the increasing economic dependence on pension payments lead to a disintegration of some ward communities which the tribal authority is not yet prepared to deal with because these are unknown experiences. The question is whether such “new” survival strategies will soon gain normative weight so that local authorities can tackle problems or whether the situation will develop its own dynamic so that traditional leaders further lose control while the TLC is not yet ready to satisfy the interests of different user groups at Mapela. This concurs with De Beer (1999: 24) who points out that “the TLC members have neither the credibility nor even the legitimacy accorded to the traditional authorities despite being elected and despite having control of funds, allocated by the central government”.

At present, expert intervention seems to have become indispensable to objectively assess long-term effects of local resource management strategies on the natural environment by means of scientific methods together with the traditional ones so that there is continuity between the “old” and the “new”, i. e. between conservative local authority systems and managerial structures which can offer alternatives to people to enhance the sustainable use of natural resources on the long run. Eventually, “outsiders” as well as decision makers at grassroots level will have to co-operate and develop more sustainable strategies which are acceptable to other members of the chiefdom so that they can be employed in future.

4. Practical implications and recommendations

4.1 The contribution of anthropologists

It has been stated above that local perceptions make no use of the concept of “sustainability” which is described by Boersema (1994: 23) as “the maintenance of environmental quality” (see Rees 1990: 19). Yet, interpretations of sustainable development have to be “socially sensitive” (ibid.) which implies that, in the process of development, “culture” is not a static parameter but is likely to change (Schmidt 1998: 42) which can, at worst, lead to disharmony between people, political factionalism and

the loss of relevant knowledge and skills which provide a practical link between the rural area, its natural resources and the people at grassroots level.

Because of the growing conflict between “outsiders” and local communities, many policy guidelines today mention the importance of the “cultural setting” or the “worldview” of the intended beneficiaries to bring about more successful co-operation (see Kakonge 1995: 19). Yet, as Schmidt (1998: 42) notes “culture very rarely appears in the great narratives and practices of development agencies”. This means that anthropological studies about the impact of culture on resource management and especially about the relevant deep-seated value-orientation are either not yet comprehensive enough which would imply that a great deal of work still lies ahead, or, that interdisciplinary work which presupposes the permanent dialogue between social and natural scientists, extension workers and politicians has not yet successfully materialized.

At present, “outsiders” who interfere in local life-styles sometimes still ignore the relevance of local knowledge and its significance for society as well as the danger of the fragmentation of local user groups the moment they offer alternative strategies to people at grassroots level. This is due to the fact that, in most of the cases, such alternatives (e. g. agricultural machines which are made available) cannot be used by all people due to, for instance, a lack of money.

Yet, more especially in periods of transition and confusion, the positive aspects of local knowledge have to be stressed rather than ignored. At Mapela, for instance, shared values and norms have for long kept the local community together and reconciled interests and demands of individuals. The great importance ascribed to group harmony further led to the development of self-help groups and neighbourhood support. In the interest of the people, this should be stimulated and empowered rather than counteracted. Kalyalya and others (1988: 27) note that “if project goals or processes contradict the community’s values and attitudes, project members will probably not behave in appropriate ways to achieve the goals, unless through participation in an evolution process they consciously decide to adopt different values and attitudes”.

Local knowledge and the worldview of people have to be compatible with project aims. Anthropological studies can enhance the identification of potentially progressive approaches. De Beer (1996: 18), for instance, highlights the potential of the synthesis of people's perceptions and sustainable development. He notes that "the close connection between human beings and the soil and the fact that without either of them there is no life could be used to motivate people to conserve the soil, because its destruction will also mean annihilation of human beings" (ibid.). Other cultural aspects which could perhaps play a role in sustainable management planning are the re-enforcement of taboos (e. g. the teaching of taboos at school) or the re-consideration of customary information networks through messengers so that important information always reaches the tribal authority.

Outside intervention thus presupposes an assessment of local resource management strategies with regard to their socio-cultural relevance. Local people usually co-operate and explain the holistic "context" of a resource, i. e. where and how the resource is going to be used and whether it will be consumed with others, e. g. during a ceremony or ritual. In addition, people know practical constraints best so that they can predict what is possible in remote villages which enhances the viability of projects. At Mapela, the analysis further revealed the meaning-giving importance of local knowledge which gives certainty in people's lives as well as their willingness to settle conflicts over resources by a compromising approach. In addition, the discussions revealed that the complex worldview of people cannot be replaced by more simplistic outlooks on life.

Local knowledge is thus not only important to understand what people know about species and soil types but, more decisively, its use reflects and reveals the values of people at grassroots level, i. e. local knowledge gives meaning to people's behaviour. Knowledge about motives and priorities, once documented and recorded, then allows outsiders to interpret problems "from below". This is probably the most important information anthropologists can make available to scientists and practitioners.

4.2 The role of people at grassroots level in development projects

Today, development projects comprise five essential and separate stages or project phases: planning, monitoring, implementation, evaluating and replanning (see Soura et al 1998: 79). These stages enable the practical translation of the most essential key issues in bottom-up approaches which are participation, empowerment and capacity building (ibid.). As was described above, the multiplying problems at Mapela make outside intervention indispensable. With regard to the need for more people-oriented projects in the former homelands of South Africa, Mapela could play a key role in the development of the Northern Province given that, in the planning phase of projects, plans produced are as understandable, complete and comprehensive as possible. Preceding workshops with due consideration of the group-oriented approach of the people to create environmental awareness among local communities should make use of local facilities and knowledge transmitting institutions where as many people as possible can be reached: schools, churches, clinics, shops and tribal meetings.

Development agencies, whether governmental or non-governmental must therefore recognize the legitimacy of traditional claims, so that lineage representatives and traditional leaders are not ignored in the process and their status is not affected. African leaders should be restrained from looking down on "traditional" life-styles and knowledge which has to be modernized. This applies, more especially to TLCs who regard local political institutions as a legacy of apartheid, which, in order to indicate the beginning of a new "era" in South Africa, have to be abandoned and replaced without considering their on-going recognition.

Women farmers should be able to get better access to relevant information on tenure issues, to extension officers from the Department of Agriculture and the Department of Environmental Affairs and Tourism because they contribute significantly to the skilled management of natural resources. Moreover, women are most likely to assess which "new" strategies are regarded as appropriate by others. They would also be able to evaluate their experiences with new strategies with regard to the need to reduce their

time and labour constraints which result from the need to combine household chores with fieldwork and other activities.

Co-operation and communication between individual user groups (e. g. cattle herders) should be enforced. Cattle herders who know best where to find suitable grazing land could, for instance, make use of cell phones to arrange their routes with others. The need to coordinate rural activities forms an essential feature of holistic landuse approaches as envisaged, for instance, by the German Agency for Technical Co-operation (GTZ; see Soura et al 1998: 74).

Women who run small street shops and sell sweets, fruit and others things could cooperate with the farmers at the irrigation scheme who could resume the growing of vegetables if women were prepared to sell their produce. This enhances the harmonizing and combination of the service and organizational infrastructure which has already been established in the constituent wards. The tribal authority could provide one of their rooms which could be used as a library to house relevant books, journals and government gazettes which concern the Mapela area.

This participatory approach challenges outside intervention on the basis of eurocentristic principles which are likely to result in an artificial levelling of socio-cultural diversities. Attempts to enhance sustainable resource management in the former homelands can, however, no longer ignore the wealth of knowledge, established practices and experiences of natural resource managers at grassroots level who do not oppose the restoration and conservation of natural resources *per se* but arrive at decisions and operate from a holistic and anthropocentric worldview which clashes with scientists and development experts who build on different premises.

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APPENDIX A: GLOSSARY

1. AFRIKAANS

<i>bantustans</i>	homeland areas
<i>crèche</i>	kindergarten, pre-school
<i>donga</i> ⁷² :	gully, gulch
<i>koppie</i> :	small hill
<i>kraal</i> ⁷³ :	corral, enclosure for cattle, donkeys or small ruminants on a homestead
<i>mealies</i> :	maize
<i>mealie meal</i>	maize meal
<i>shebeen</i> :	informal drinking hall
<i>veld</i> :	savanna, extensive grassland with a scattering of trees, found in the east of the interior of South Africa
<i>veldkos</i> :	food from the <i>veld</i>

2. NORTHERN SOTHO

MANAGERIAL STRUCTURES

<i>bakgômana</i> (sing. <i>mokgômana</i>):	royal relatives, councillors
<i>balemi</i> :	extension officers
<i>ba mošate</i> :	people of the <i>mošate</i>
<i>bafsa</i> (<i>batho ba bafsa</i>):	youth (ANC youth league)
<i>batho</i> :	people
<i>induna/ntona</i> (pl.: <i>ma-</i>):	headman
<i>kgoši</i> (pl. <i>magoši</i>):	chief
<i>kgošigadi</i> :	chieftainess
<i>kgôrô</i> (pl. <i>dikgôrô</i>):	council, meeting (place)
<i>komiti</i> :	committee
<i>lekgotla</i> :	statutory council
<i>lekgotla la bakgômana</i> :	royal council
<i>lekgotla la bakgômana le mantona</i>	headmen-in-council
<i>lekgotla la go seka molato</i> :	tribal authority
<i>melaô</i> (sing. <i>melaô</i>):	laws, rules, regulations
<i>mošate</i> :	chief's capital, tribal authority
<i>motseta</i> :	messenger, intermediary
<i>pitšo</i> :	meeting of the adult men
<i>setšhaba</i> :	political unit under the authority of a chief/chieftainess

⁷² Originally a Zulu term, *donga* is today part of the Afrikaans vocabulary.

⁷³ In the South African history, the word "*kraal*" was used to refer to rural villages, e. g. of the Khoikhoi (Elphick 1977).

BELIEFS/RITUALS/HEALING

<i>badimo:</i>	ancestors
<i>bolwetši (ma-):</i>	illness
<i>bophelô:</i>	life
<i>botho:</i>	humanity
<i>digwere:</i>	herbs
<i>dihlare:</i>	herbs
<i>dihlare tša gaê:</i>	home medicine
<i>diila (sing. seila):</i>	taboos
<i>dingaka (sing. ngaka):</i>	traditional healers
<i>dingaka tša ditaola:</i>	healers of the divination bones
<i>dingaka tša go alafa bahwana:</i>	healers who cure widows
<i>dingaka tše tšhupša:</i>	healers who prescribe medicine
<i>fiša (noun):</i>	ritual heat
<i>fiša⁷⁴ (verb):</i>	to burn and become hot (ritually impure)
<i>maatla:</i>	power, strength, ability
<i>makgoma:</i>	contagious disease
<i>magwere (pl.: di-):</i>	rain medication, herbs (mainly tubers and bulbous plants)
<i>makhura:</i>	animal fat, used as an unguent
<i>malôpô (sing. lelôpô):</i>	spirits sent by the ancestors
<i>medi:</i>	roots
<i>mêêtse:</i>	water
<i>mmele:</i>	body
<i>modimo:</i>	creator
<i>morôka (pl.: ba-):</i>	rain doctor
<i>mona:</i>	jealousy
<i>muši:</i>	fume
<i>moya:</i>	soul, wind, breath
<i>pheko:</i>	remedy
<i>phasa (badimo):</i>	to make libations to the ancestor spirits
<i>phefo:</i>	wind
<i>pônô (pl.: di-):</i>	vision
<i>pula:</i>	rain
<i>seriti:</i>	shadow, personality, spirit
<i>hlompega:</i>	to (show) respect
<i>tšhidi:</i>	coolness

RESIDENTIAL LAND/HOMESTEAD

<i>baagišani:</i>	neighbours
<i>bega:</i>	to introduce
<i>boloi:</i>	witchcraft
<i>fiwa:</i>	to give or bestow

⁷⁴ The infinitive "go" is not used in the glossary.

<i>lapa:</i>	yard, household
<i>lotšha:</i>	to salute the chief (and/or pay tribute)
<i>jarata:</i>	garden
<i>legwama:</i>	<i>Boophane disticha</i> , ancestor shrine
<i>lešaka:</i>	<i>kraal</i>
<i>mohlaba:</i>	sandy soil
<i>monyemabu:</i>	owner of the ground
<i>morala:</i>	cooking hut
<i>mošalalapeng:</i>	he who remains in the <i>lapa</i>
<i>motse</i> (pl.: <i>metse</i>):	collection of huts under one head, village
<i>ntlo:</i>	dwelling unit
<i>sehlahla:</i>	drying platform for maize
<i>selôkô:</i>	black turf
<i>sehwibidu:</i>	red soil
<i>thekga motse:</i>	to protect the boundaries of a village
<i>thetamotse/thetemotse:</i>	fence surrounding a village in form of a circle
<i>tšhomišano:</i>	teamwork
<i>tirišano:</i>	co-operation

AGRICULTURAL LAND

<i>adima:</i>	to lend, to borrow
<i>bathuši:</i>	helpers (usually children and teenagers)
<i>bjala:</i>	hoe cultivation (accurate placement of seed)
<i>bogobe:</i>	(maize) porridge
<i>buna:</i>	to harvest
<i>gaša:</i>	to broadcast seed
<i>hlagola:</i>	to weed
<i>kgatha:</i>	soil preparation
<i>kobokela:</i>	to re-sow
<i>kopêla:</i>	to plant-in-between (after thinning)
<i>letšema:</i>	work party, weeding party
<i>loya:</i>	to bewitch
<i>mabele:</i>	crops
<i>mabelethorô:</i>	sorghum
<i>mabu ke a mošate:</i>	tribal land
<i>mafela:</i>	(hybrid) maize
<i>maselamotse:</i>	magic, trick
<i>mašemo</i> (sing. <i>tšhemo</i>):	fields
<i>mašemo a mošate:</i>	royal tribute fields
<i>peu</i> (di-):	seed
<i>rothiša:</i>	sowing with a planter
<i>sekime:</i>	irrigation scheme
<i>sekobana:</i>	hoe
<i>selemo:</i>	ploughing season
<i>setlamô:</i>	contract
<i>thekga naga:</i>	to protect the ward boundaries

tsikila: to thin (maize plants)

OTHER NATURAL RESOURCES ON THE COMMONAGE

<i>bjang:</i>	grass
<i>digwere:</i>	tubers and bulbuous plants (see: healing)
<i>dihlare:</i>	trees (also: herbs, medicines)
<i>dihlare tša dikenwya:</i>	fruit trees
<i>dihlare tša naga:</i>	indigenous trees
<i>dijo tša naga:</i>	<i>veldkos</i>
<i>dikgong tša go gotša mollô:</i>	firewood
<i>tikologô:</i>	roundness, sphere (also: environment)
<i>dimela tša mollô:</i>	firewood
<i>lekgethe:</i>	grey stony soil
<i>lešoka:</i>	wilderness, forest
<i>melapô (sing. molapô):</i>	rivers
<i>merôgô (sing. mo-):</i>	traditional spinach (greens)
<i>modiši:</i>	guard, herdsman
<i>mohlahla:</i>	reeds
<i>naga:</i>	country, <i>veld</i>
<i>phulo:</i>	grazing
<i>tlhago:</i>	origin, source, nature
<i>sediba (di-):</i>	fountain, digging well
<i>sekgwa:</i>	thicket
<i>sehlare (di-):</i>	tree
<i>serotha:</i>	brackish and stony soil

HOUSEHOLD/KIN GROUP

<i>bagadi:</i>	in-laws
<i>kgôrô:</i>	homestead, meeting place
<i>lapa:</i>	homestead, main unit of settlement
<i>lehumo:</i>	wealth
<i>magadi:</i>	marriage goods, bridewealth
<i>malomê:</i>	maternal uncle
<i>mokgalabje:</i>	old man
<i>mosadi:</i>	woman, mature girl
<i>mosadimogolo:</i>	old woman
<i>mošemane:</i>	boy
<i>mosetsana:</i>	girl
<i>ngwetši (di-):</i>	daughter-in-law
<i>rakgadi:</i>	husband's sister

SEASONS

<i>lehlabula:</i>	summer
<i>marega:</i>	cold season
<i>selemo:</i>	spring, ploughing season
<i>seruthwane:</i>	autumn

ANIMALS

<i>dikgômo:</i>	cattle
<i>dipudi:</i>	goats
<i>diruiwa:</i>	livestock
<i>dïtonki:</i>	donkeys
<i>kgaga:</i>	pangolin
<i>kgaka:</i>	guinea fowl
<i>leruô:</i>	livestock
<i>mašïanoke:</i>	<i>Scopus umbretta</i> , hammerhead
<i>hlware:</i>	python

APPENDIX B: POPULATION AND LAND USE IN THE NORTHERN PROVINCE

In the Northern Province, the population is estimated to be 5, 398 mio. people which is about 13,08% of the population of South Africa (see Table 1 below).⁷⁵ As De Beer (1997: 232) points out, this does not include the more than 2-3 million foreigners from neighbouring states who still stream into the country.

Table 1
Population (1000)

	Total	Blacks
South Africa	41 244 (86,92%)	31 461 (76,28%)
Northern Province	5 398 (13,08%)	5 238 (97,03%)

The Northern Province comprises an area of about 11,96 mio. hectares of the total surface of South Africa. Of this area 88,2% is utilized as farmland (see Table 2 below). The Northern Province contributes, however, comparably little to the national maize production (see Table 3 below).

Table 2
Land utilization in South Africa

	Total area	Farm land	Pot. Arable land
South Africa	122 320 100	100 655 792 (82,3%)	16 737 672 (13,7%)
Northern Province	11 960 600 (9,7%)	10 548 290 (88,2%)	1 700 442 (14,2%)

	Arable land utilized	Grazing land	Nature Conservation	Forestry	Other
South Africa	n.a.	83 928 120 (68,6%)	11 785 999 (9,6%)	1 433 964 (1,2%)	8 434 345 (6,9%)
Northern Province	n.a.	8 847 848 (74%)	1 161 600 (9,7%)	65 410 (0,5%)	185 300 (1,5%)

Table 3
Maize production, 1 000 t (1993-1996)

	1993/94	1994/95	1995/96
South Africa	13 242	4 836	9 694
Northern Province	168 (1,2%)	68 (1,41%)	64 (0,66%)

⁷⁵ Data in the tables is taken from the Abstract of Agricultural Statistics 1998.

APPENDIX C: OVERVIEW OF THE SOUTH AFRICAN LAND POLICY

Enactments	Strategy
1884-1896	21 locations were set up for black occupancy in the former Northern Transvaal, creation of "reserves"
1903	foundation of the South African Native Affairs Commission to transcend British and Boer policies ⁷⁶ and division of Blacks into farmers and landless full-time mine labourers, this intended to force cultivators to invest more in agriculture
1910	<i>Vereeniging</i> , beginning of the United Party government
Natives Land Act, 1913	sought to prevent Africans in Natal and the Transvaal from acquiring or hiring land or interests in land
1910-1948	entrenchment of segregation
Native Trust and Land Act, 1936	"released" areas were added to "scheduled" areas, black areas thus amounted to 13% of the total area of South Africa
Proclamations Nos. 31 of 1939 and 116 of 1949	establishment of betterment areas to rehabilitate the reserves
1950s	widespread resistance to betterment implementation because, among others, it was externally imposed, Tomlinson commission was founded to develop a policy of "separate development"
1948-1958	beginning of the implementation of the policy of separate development
Group Areas Act, 1950	complete segregation in urban residential and trading areas
Bantu Authorities Act, 1951	formed the basis of the three tiers authority structure
Black Self-Government Act, 1959	reserves were regarded as separate geopolitical entities

⁷⁶

In the aftermath of the Anglo-Boer war, the two Boer republics Transvaal and Free State were brought under British rule. Two opposing interests in land had to be reconciled which were claimed by mine owners and Boer farmers (Cross & Haines 1988: 78).

1959-1976	unfolding of grand apartheid, reserves were officially re-defined as "homelands" in the late 1950s and forced blacks to "move back" from the towns ("forced removals") ⁷⁷
Act on the Citizenship of Bantu Homelands, 1970	made provision for the allocation of citizenship to people of a particular homeland
Constitution of the Bantu Homelands, 1971	made provision for the constitutional development of every homeland to reach independence
1979-1988	"Neo-apartheid", increasing dissatisfaction and acute rural poverty, world pressure and sanctions
1981	"Good Hope Plan" divided South Africa in eight development regions which cut across homeland borders
1991: Abolition of the Racially Based Land Measures Act, Upgrading of Land Tenure Act	communal land tenure is no longer a legal system
1994	Abolition of "reserves", first democratic elections and presidency of Nelson Mandela, initiation of the land reform process

sources: Cross & Haines 1988: 73-92; Cross & Friedman 1997: 16-34; Horn 1998; Yawitch 1988: 101-11.

⁷⁷ The percentage of blacks legally living in "homelands" then increased drastically from 39% in 1960 to 53% in 1980 (Cross & Haines 1988: 86).

APPENDIX D: NORTHERN SOTHO NAMES OF BOTANICAL RESOURCES

1. Northern Sotho/Botanical term

Northern Sotho	Botanical term
<i>kgatlakgatla</i>	<i>Ledebouria sp.</i>
<i>kgopha</i>	<i>Agave americana</i>
<i>kgophana</i>	<i>Aloe zebrina</i>
<i>legwama</i>	<i>Boophane disticha</i>
<i>leroto</i>	<i>Cleome gynandra</i>
<i>letseta la naga</i>	<i>Gossypium herbaceum</i>
<i>mahlommutla</i>	<i>Rhoicissus sp.</i>
<i>maroberobe</i>	<i>Ehretia rigida</i>
<i>mmale</i>	<i>Kleinia longiflora</i>
<i>mmamotlalanaga</i>	<i>Xanthium spinosum</i>
<i>mmilo</i>	<i>Vangueria infausta</i>
<i>mmoï</i>	<i>Adansonia digitata</i>
<i>mmupudu</i>	<i>Mimusops zeyheri</i>
<i>modubu</i>	<i>Combretum erythrophyllum</i>
<i>mogaba</i>	<i>Kirkia wilmsii</i>
<i>moge</i>	<i>Ficus sur</i>
<i>mohlakauma</i>	<i>Dovyalis zeyheri</i>
<i>mohlantlhatšane</i>	<i>Diospyros lycioides</i>
<i>mohlatswa</i>	<i>Englerophytum magalismontanum</i>
<i>mohlokohloko</i>	<i>Cliffortia linearifolia</i>
<i>mohlopi</i>	<i>Boscia albitrunca</i>
<i>mohlware</i>	<i>Olea europaea spp. africana</i>
<i>mohwelere</i>	<i>Combretum molle</i>
<i>mokano</i>	<i>Sclerocarya caffra</i>
<i>mokata</i>	<i>Combretum hereroense</i>
<i>mokgalo</i>	<i>Ziziphus mucronata</i>
<i>mokgekgerwane</i>	<i>Grewia flavescens</i>
<i>mokgoba</i>	<i>Dombeya rotundifolia</i>
<i>mokgwaripa</i>	<i>Acacia mellifera</i>
<i>mokobokobo</i>	<i>Ficus abutilifolia</i>
<i>mologa</i>	<i>Croton gratissimus</i>
<i>mololo</i>	<i>Pouzolzia mixta</i>
<i>molope</i>	<i>Schotia brachypetala</i>
<i>monakanekane</i>	<i>Terminalia sericea</i>
<i>monamane</i>	<i>Cassine transvaalensis</i>
<i>monna ga apare</i>	<i>Adenia glauca</i>
<i>mooka</i>	<i>Acacia gerardii</i>
<i>mooku</i>	<i>Acacia robusta</i>
<i>mootša</i>	<i>Sterculia rogersii</i>
<i>mopilikomo</i>	<i>Eucalyptus sp.</i>
<i>morakgwedi</i>	<i>Steganotaenia araliacea</i>
<i>morampopo</i>	<i>Melia azedarach</i>
<i>moretlwa</i>	<i>Grewia monticola</i>
<i>morotodi</i>	<i>Pappea capensis</i>
<i>morupeila</i>	<i>Morus sp.</i>
<i>mosehla</i>	<i>Peltophorum africanum</i>
<i>mošitšane</i>	<i>Elephantorrhiza burkei</i>

<i>mošu</i>	<i>Acacia tortilis</i>
<i>mošunkwane</i>	<i>Lantana rugosa</i>
<i>motetepe</i>	<i>Dichrostachys cinerea</i>
<i>motse</i>	<i>Acacia nilotica</i>
<i>motšhidi</i>	<i>Ximenia caffra</i>
<i>motsupe</i>	<i>Erythrina lysistemon</i>
<i>motswiri</i>	<i>Combretum imberbe</i>
<i>moumo</i>	<i>Ficus thonningii</i>
<i>mphai</i>	<i>Ficus glumosa</i>
<i>mphamphepa</i>	<i>Commiphora marlothii</i>
<i>mphuphuntswane</i>	<i>Bridelia mollis</i>
<i>mpipi</i>	<i>Boscia foetida</i>
<i>patše ya tšhwene</i>	<i>Myrothamnus flabellifolius</i>
<i>sebokana</i>	<i>Clerodendrum sp.</i>
<i>sekekolwana</i>	<i>Hypoxis sp.</i>
<i>sepatho</i>	<i>Gymnosporia buxifolia</i>
<i>telele/rampipedi</i>	<i>Corchorus schimperi</i>
<i>tetele</i>	<i>Ornithogalum sp.</i>
<i>tetswane</i>	<i>Tapinanthus oleifolus</i>
<i>thepe</i>	<i>Amaranthus hybridus</i>
<i>thoba</i>	<i>Schinus molle</i>
<i>thola</i>	<i>Citrullus lanatus</i>

2. Botanical term/Northern Sotho

Botanical term	Northern Sotho
<i>Acacia gerardii</i>	<i>mooka</i>
<i>Acacia mellifera</i>	<i>mokgwaripa</i>
<i>Acacia nilotica</i>	<i>motse</i>
<i>Acacia robusta</i>	<i>mooku</i>
<i>Acacia tortilis</i>	<i>mošu</i>
<i>Adansonia digitata</i>	<i>mmoi</i>
<i>Adenia glauca</i>	<i>monna ga apare</i>
<i>Agave americana</i>	<i>kgopha</i>
<i>Aloe zebrina</i>	<i>kgopana</i>
<i>Amaranthus hybridus</i>	<i>thepe</i>
<i>Boscia albitrunca</i>	<i>mohlopi</i>
<i>Boscia foetida</i>	<i>mpipi</i>
<i>Boophane disticha</i>	<i>legwama</i>
<i>Bridelia mollis</i>	<i>mphuphuntswane</i>
<i>Cassine transvaalensis</i>	<i>monamane</i>
<i>Citrullus lanatus</i>	<i>thola</i>
<i>Cleome gynandra</i>	<i>leroto</i>
<i>Clerodendrum sp.</i>	<i>sebokana</i>
<i>Cliffortia linearifolia</i>	<i>mohlokohloko</i>
<i>Combretum erythrophyllum</i>	<i>modubu</i>
<i>Combretum hereroense</i>	<i>mokata</i>
<i>Combretum imberbe</i>	<i>motswiri</i>
<i>Combretum molle</i>	<i>mohwelere</i>
<i>Commiphora marlothii</i>	<i>mphamphepa</i>
<i>Corchorus schimperi</i>	<i>telele/rampipedi</i>
<i>Croton gratissimus</i>	<i>mologa</i>

<i>Dichrostachys cinerea</i>	motetepe
<i>Diospyros lycioides</i>	mohlantlhatšane
<i>Dombeya rotundifolia</i>	mokgoba
<i>Dovyalis zeyheri</i>	mohlakauma
<i>Ehretia rigida</i>	maroberobe
<i>Elephantorrhiza burkei</i>	mošitšane
<i>Englerophytum magalismontanum</i>	mohlatswa
<i>Erythrina lysistemon</i>	motsupe
<i>Eucalyptus sp.</i>	mopilikomo
<i>Ficus abutilifolia</i>	mokobokobo
<i>Ficus glumosa</i>	mphai
<i>Ficus sur</i>	mogo
<i>Ficus thonningii</i>	moumo
<i>Gossypium herbaceum</i>	letseta la naga, "wild cotton"
<i>Grewia flavescens</i>	mokgekgerwane
<i>Grewia monticola</i>	moretlwa
<i>Gymnosporia buxifolia</i>	sepatho
<i>Hypoxis sp.</i>	sekekolwana
<i>Kirkia wilmsii</i>	mogaba
<i>Lantana rugosa</i>	mošunkwane
<i>Ledebouria sp.</i>	kgatlakgatla
<i>Melia azedarach</i>	morampopo
<i>Mimusops zeyheri</i>	mmupudu
<i>Morus sp.</i>	morupeila
<i>Myrothamnus flabellifolius</i>	patše ya tšhwene
<i>Olea europaea spp. africana</i>	mohlware
<i>Ornithogalum sp.</i>	tetele
<i>Pappea capensis</i>	morotodi
<i>Peltophorum africanum</i>	mosehla
<i>Pouzolzia mixta</i>	mololo
<i>Rhoicissus sp.</i>	mahlommutla
<i>Schinus molle</i>	thoba
<i>Schotia brachypetala</i>	molope
<i>Sclerocarya caffra</i>	mokano
<i>Steganotaenia araliacea</i>	morakgwedi
<i>Sterculia rogersii</i>	mootša
<i>Tapinanthus oleifolus</i>	tetswane
<i>Terminalia sericea</i>	monakanekane
<i>Vangueria infausta</i>	mmilo
<i>Xanthium spinosum</i>	mmamotlalanaga
<i>Ximenia caffra</i>	motšhidi
<i>Ziziphus mucronata</i>	mokgalo