RURAL RESOURCES RURAL LIVELIHOODS WORKING PAPER SERIES

Research funded by
the Economic and Social Research Council
Global Environmental Change Programme
Phase III Project:
'Dryland Degradation in Africa: Land, Water and Local Governance'

Paper No 7

LAND, WATER AND LOCAL GOVERNANCE IN SOUTH AFRICA: A Case Study of the Mutale River Valley

by

EDWARD LAHIFF

January 1997

Acknowledgments

This case study forms part of a project entitled *Dryland Degradation in Africa: Land, Water and Local Governance,* being undertaken by the Institute for Development Policy and Management, University of Manchester. It is funded by the Economic and Social Research Council (U.K.), under Phase III of its Global Environmental Change Programme.

I wish to thank Professor Henry Bernstein, of the School of Oriental and African Studies, University of London, for his constant help and encouragement in the preparation of this report.

Thanks are also due to the farmers, local representatives and government officials of Tshiombo and the Lower Mutale for their willingness to share their knowledge and experience with a stranger; to Marc Wegerif, Chris Wood and Carola Addingdon for their generous hospitality and friendship during my time in South Africa; to Catherine Lawrence of SOAS for preparing the maps; and to Dr Philip Woodhouse, of IDPM, for his patience and help. Full responsibility for any errors, of course, rests with myself.

This study is dedicated to the memory of my friend and co-worker, Lawrence Phala.

TABLE OF CONTENTS

LIST OF ABBREVIATIONS

ACB	-	Agricultural Credit Board
ANC	-	African National Congress
CONTRALESA	-	Congress of Traditional Leaders of South Africa
DB	-	Division Box
DBSA	-	Development Bank of Southern Africa
DWAF	-	Department of Water Affairs and Forestry
GDP	-	Gross Domestic Product
GGP	-	Gross Geographic Product
GNI	-	Gross National Income
IDT	-	Independent Development Trust
ISCW	-	Institute of Soil, Climate and Water
LAPC	-	Land and Agricultural Policy Centre
MBB	-	Murray Biesenbach & Badenhorst Inc.
MEC	-	Member of the Executive Committee
NTK	-	Northern Transvaal Co-operative
PTO	-	Permission To Occupy
RAU	-	Rand Afrikaans University
RDP	-	Reconstruction and Development Programme
RSA	-	Republic of South Africa
SANCO	-	South African National Civics Organization
SALDRU	-	South African Labour and Development Research Unit
TURP	-	Trade Union Research Project
UDF	-	United Democratic Front
ZAR	-	South African Republic (Transvaal)

List of Figures and Tables

1. INTRODUCTION

This study examines the use and management of natural resources in an area of South Africa at a time of profound political and social change. It takes as its focus the Mutale River valley, which lies almost entirely within Venda, a former black 'homeland' under the South African system of *apartheid*, and now part of the Northern Province. Venda is situated in the north-eastern corner of the country, adjacent to the Kruger National Park and the border with Zimbabwe.

Despite the formal ending of apartheid, and the election of the country's first democratic government, South Africa remains a deeply divided society. Extreme inequalities exist in virtually every area, from incomes and education to housing and life expectancy, particularly between the 'white' (European) and 'black' (African) sections of the population (TURP 1994: 52).

Much of the worst poverty is concentrated in the former 'homelands', or bantustans, the thirteen per cent of the country reserved for occupation by black people , and an enduring legacy of apartheid's policy of 'divide and rule'. The homelands have their origins in the small areas of land left in the hands of African peoples following the colonial and settler conquests of the nineteenth century, but took on greater significance during the period of industrialization following the discovery of diamonds and gold. In the early decades of the twentieth century, these 'native reserves' were preserved and even expanded by the state, as reservoirs of cheap labour for the mines, factories and farms of 'white' South Africa. Denied political and other rights in the white areas, black workers and their families were left to supplement their meagre wage earnings with whatever they could produce for themselves in the poorly-developed and over-crowded rural reserves. Under the apartheid regime, from 1948 to 1994, millions of black people were forcibly removed from cities and farms and dumped in the ten 'homelands' designated for the country's various linguistic groups. These territories all acquired the trappings of self-rule and their own authoritarian regimes, and four - Transkei, Ciskei , Bophuthatswana and Venda - were granted the unlikely status of 'independent' republics.

Social and economic conditions within the black homelands were (and continue to be) extremely harsh, by any standards. Demographic structures were heavily biased towards women, children, and pensioners, due to the prevalence of male migrant labour. Welfare services and infrastructure were poorly developed, and general standards of living were far below those in the rest of South Africa. Industrial development, other than mining, was virtually non-existent, and there were few formal employment opportunities outside the government service. Agriculture, too, with the exception of a number of large government projects and a small elite of private farmers, was poorly developed compared to the rest of the country, and was oriented mainly towards household consumption. Land in the homelands was almost entirely held under the system of so-called communal tenure, controlled by the tribal chiefs and village headmen. These 'traditional' leaders were promoted by the apartheid regime as the principal form of local government in the reserves, and played an important part in the operation of the homeland system.

In April 1994, all ten homeland areas were reincorporated into South Africa, and their administrations were absorbed into the new provincial structures. In the Northern Province, which is composed of three former homelands, and one former 'white' area, the task of integrating the multiplicity of institutions, and tackling the enormous social and economic

problems inherited from the apartheid era, is proving particularly difficult. A system of democratic local government has been created within the former homelands only since November 1995, but, at least in Venda, this was not yet operational by mid-1996. This has left the 'traditional' leaders, who have survived the transition to democracy with their powers virtually intact, as the most important institution of local governance within the black rural areas.

The political isolation of the homelands under apartheid meant that many institutions, including those associated with environmental management, were very different to those found in the rest of South Africa, or simply did not exist at all. Very little is known about environmental issues within the former homelands, especially those of the northern Transvaal, and although problems associated with over-crowding and over-grazing are widely referred to, little empirical information is available on such questions. The general lack of information on environmental matters obviously poses considerable problems for the new government's wide-ranging programme of reforms, which has included land redistribution and environmental protection amongst its priorities for the development of the rural areas.

Of particular importance in this regard is the system of 'communal' land tenure, which is unique to the former homelands. While much debate has focused on the need for tenure reform, little or no attention has been paid to the potential for new, community-based, approaches to resource management in the communal areas.

This study is based on documentary research and on fieldwork conducted in the Mutale River valley, in north-eastern Venda, during 1995 and 1996, over a period of five months in all. Research included interviews with government officials, tribal leaders, local councillors and a wide range of other informants. It also involved a survey of farming households at Tshiombo, and more loosely structured research amongst farmers and other resource users in the lower Mutale area. It aims to provide an understanding of the following issues:

- the main forms of natural resource use in the Mutale River valley;
- the institutional basis for the allocation, use and protection of natural resources;
- the availability of other factors (capital, labour, markets, services etc.) which influence how people can make use of resources to secure livelihoods;
- the processes of conflict or cooperation between social groups around resource use; particularly the exclusion or displacement of one group of users by another;
- actual or potential threats to the local resource base arising from current practices;
- the potential for the involvement of statutory or non-statutory bodies, at local or higher levels, in the promotion of social and economic development based on sustainable use of natural resources.

The main body of the report is laid out as follows:

Chapter Two looks at the institutional background to environmental policy and local government in South Africa. On the policy side, it looks particularly at the current proposals of the national government for reform in the areas of land and water, and addresses the specific needs of the former homeland areas. On the local government side, this Chapter

provides an introduction to the system of 'tribal' government, made up of chiefs and Tribal Authorities, and the newly constituted system of elected rural Councils.

Chapter Three provides a brief introduction to the history of Venda, with particular reference to the process of dispossession, and a survey of current social and economic conditions within the area.

Chapter Four provides an overview of physical conditions in the Mutale River valley, including climate, rainfall, topography, vegetation and flow rates in the Mutale River itself. It also situates the two study sites, Tshiombo and the Lower Mutale, within the context of Venda and the Mutale River valley.

Chapters Five and **Six** present the findings of the field work in the two case study areas, Tshiombo and the Lower Mutale. The analysis focuses mainly at the household level, looking at issues such as demography, migration, landholding, and especially farming, both pastoral and arable. Of particular interest is the question of rural livelihoods, and the processes by which users gain access to key resources of land and water. It also looks briefly at the main, non-farming forms of resource use, and the impact of these on the people and environment of the area.

Chapter Seven draws on the material presented in the two case studies to address the question of local governance in the Mutale valley area. It looks at the main local institutions - the tribal leaders, elected councils, and non-government organizations such as 'civics' and farmers associations - and assesses their current and potential role in the management of natural resources.

Chapter Eight summarizes the main arguments presented in this paper, and draws some tentative conclusions regarding the current state of natural resource use and local governance in the study area.

A number of **Maps**, showing the location of Venda within southern Africa, and details of the case study area, may be found in the Appendix.

2. ENVIRONMENTAL POLICY AND LOCAL GOVERNMENT IN SOUTH AFRICA: THE INSTITUTIONAL CONTEXT

2.1 INTRODUCTION

This chapter outlines the institutional framework within which environmental policy and local government in South Africa operate. On the environmental side, it looks at the evolution, current position, and proposed reform of official policy, before considering two issues of specific importance to the country's less developed rural areas, and themselves the subject of major reform initiatives: namely, water and land policy. The two main forms of local government in the country - elected councils and Tribal Authorities - are then considered, with particular reference to the Northern Province and the former Venda.

2.2 ENVIRONMENTAL POLICY

Environmental policy in South Africa has, until very recently, been characterized by a highly centralized, 'top-down' approach, and a pre-occupation with conservation of particular wild species and habitats, rather than an integrated approach to all aspects of the human and natural environment. Racist government policies promoted the economic and recreational use of resources by the white minority, while denying them to the majority black population. As Jacklyn Cock (1991:13) puts it: "Successive governments have done much to protect wilderness areas and rare species of plants and animals, but often at the expense of human rights and dignity". Environmental policies (although they were not always called that at the time) were experienced by the black population in a largely negative manner. Prime examples of apartheid-style environmental policy were the forced removals of black communities from areas designated as nature reserves (Harries 1987:104), and the compulsory replanning of black rural areas, from the 1950s, under the policy of 'betterment' (de Wet 1995; Yawitch 1981).

Official concern with the environment in South Africa can be traced back to the legal protection of various species of wild flora and fauna in the eighteenth and nineteenth centuries (Schwella and Muller 1992:73). This conservationist approach was institutionalized with the establishment of forestry departments in the various provinces in the late nineteenth century, starting with the Cape in 1875, and game reserves in Natal and the Transvaal from the 1890s. Rabie and Fuggle (1992:18) argue that environmental policy for much of the twentieth century has centered on physical planning issues (i.e. land use), but statutory controls have gradually been extended to areas such as sea fisheries (1940), soil conservation (1946) and atmospheric pollution (1965). Only in the 1970s did the concept of an integrated environmental policy began to take shape, with legislation such as the Mountain Catchment Areas Act of 1970, and the creation of a Department of Physical Planning and the Environment in 1973, tasked with coordinating legislation relating to the control of pollution and the conservation of natural resources (Rabie and Fuggle1992: 20).

An important step towards a more comprehensive national environmental policy was taken with the passing of the first Environment Conservation Act (Act 100 of 1982), which was in turn replaced by the 1989 Environment Conservation Act (Act 73 of 1989). The 1989 Act set out broad environmental goals which national policy must address, and, for the first time, provided a legal definition of the environment, as "the aggregate of surrounding objects, conditions and influences that influence the life and habits of man or any other organism or collection of organisms" (1989 Act, Section 1 (x), quoted in Schwella and Muller 1992:85). In practice, however, the Act has been seen as ineffective, as it depends on the exercise of powers granted to the Minister of Environment Affairs, which have not been widely used (Glazewski, Dodson and Smith 1991:139).

With the transition to democracy in South Africa, public policy on the environment, like many other areas, is undergoing extensive review, and there is evidence of new thinking emerging from both official and non-governmental organizations. Dladla (1995:209), for example, identifies growing support among conservationists for the idea that the participation of local communities is critical in legitimizing and ensuring the success of conservation efforts. “The basic assumption underlying this philosophy is that communities' perceptions, needs and aspirations are the root cause of environmental problems; therefore their requirements must be taken into account and their involvement in and benefit from the management of natural resources ensured, if conservation efforts are to be successful".

There are also signs of increased interest in environmental affairs across most, if not all, of the political spectrum (Ramphele 1991:9). The African National Congress (ANC) signaled its approach to the environment in the 1994 *Reconstruction and Development Programme* (RDP), stressing the principles of equity, sustainability and participation:

> "The democratic government must ensure that all South African citizens, present and future, have the right to a decent quality of life through sustainable use of resources. To achieve this, the government must work towards: equitable access to natural resources; a safe and healthy living and working environment and a participatory decision making process around environmental issues, empowering communities to manage their natural environment" (ANC 1994: 2.10.2).

The failure of past policies to address either the environmental or the broader social needs of the country are recognised in a recent *Discussion Document* from the Department of Environmental Affairs and Tourism:

> "Past policies have severely damaged South Africa's social environment. A large proportion of the population was disenfranchised, disempowered and dispossessed. They were forced to move from commercial farming land to live in overcrowded homeland areas. Here they could only survive through unsustainable patterns of resource use. Consultation, transparency and public accountability played little part in the arbitrary administrative decision making that sometimes had a tragic impact on people's lives" (Department of Environmental Affairs and Tourism 1996: 26).

In an attempt to remedy this situation, the Department proposes a wide-ranging set of reforms, centered around three 'primary goals':

1. A "win-win alliance" of development and environment, which recognises that socio-economic development and protection of the environment must be mutually supportive, and seeks to find ways of reducing conflict around environmental decision making;

2. Sustainable use of the natural environment and renewable natural resources, in such a way that their benefits will last indefinitely;

3. Effective and integrated environmental protection institutions, based on the principles of coordination, competence, care for the environment, effective law enforcement and transparency in environmental matters across all areas of government.

Other proposals which could form part of national environmental policy include waste minimization, protection against environmental risks, conservation of cultural objects and resources, community involvement in environmental decision making, promoting public awareness and understanding of environmental issues, improving the quality of human living environments, and continuous improvement of environmental management (Department of Environmental Affairs and Tourism 1996: 14).

Meeting the new government's objectives of sustainable growth, environmental protection and participatory planning, clearly requires the existence of effective institutions at both local and national level. In the former homelands, where many feel the environmental problems are most acute, there is little popular organization around environmental issues, or effective regulatory systems, and these institutions will have to be established virtually from scratch. New ways will also have to be found to translate the aspirations of the new government into effective programmes that enjoy the support of rural communities long alienated from the processes of policy making and public action.

2.3 WATER POLICY

In what is largely a semi-arid country, water in South Africa is subject to heavy demand from competing user groups. Average annual rainfall across the entire country is only 497mm, and 65% of the territory receives less than 500mm per annum (Rabie and Day, 1992:647). The problem of low rainfall is exacerbated by the high average annual potential evaporation throughout the country, which ranges from 1,100mm to more than 3,000 mm, and the very low conversion of rainfall to runoff. It is estimated that only 10% of rainfall reaches the rivers, and that only 60% of this can be effectively exploited for human use.

Under colonialism and apartheid, the control and use of water resources in South Africa, which was closely allied to the control of land, reflected the interests of the white minority. Not surprisingly, reform of policy in this area is today a matter of intense debate and speculation, and presents an enormous challenge for the new government.

Many different types of water rights exist in South Africa, including riparian rights, private water rights, communal and common law rights, purchased or granted rights, and afforestation rights (Forster 1994: 11). Historically, water rights in South Africa have been based on the concept of riparian rights, which accords the owners of property

adjoining a river the exclusive right to use the water of that river. Riparian rights are conditioned by two further legal concepts: the distinction between 'public' and 'private' water, and between 'normal' and 'surplus' flow'. 'Private' water includes rainfall, soil water and ground water occurring on or underneath private land, together with streams which rise and flow over a single piece of private land, and only the owner of that land has rights to use such water. 'Public' water is water in a river or stream having a known and defined channel, and capable of being used for irrigation on two or more pieces of riparian land. This water may be used by all those owning land adjacent to that stream and, under certain conditions, by the state (O'Keeffe, Uys and Bruton 1992:277). 'Normal flow' is defined as "flow that occurs with such a degree of dependability that it can be used beneficially for irrigation without storage", while 'surplus flow' is water that occurs sporadically in the stream, or "any flow other than normal flow". Owners of riparian land are entitled to only a 'fair share' of the normal flow, but they are allowed to abstract or store as much of the 'surplus flow' as they can use productively (Department of Water Affairs and Forestry 1986). In practice, Woodhouse (1995: 534) argues, property owners use as much water, whether public or private, as they can, and only in cases of disputes are more precise definitions applied.

These private property rights form the basis of the Water Act (Act No. 54 of 1956), which, despite numerous amendments, continues to define public policy in this area. Under the Act, the State has limited powers to restrict riparian rights, through the declaration of Government Water Control Areas, under which it can exercise control over the abstraction and use of public water (O'Keeffe, Uys and Bruton 1992). Outside of these areas, riparian rights still predominate.

There is a widespread feeling, both inside and outside government, that legislation in this area is in urgent need of reform (Department of Water Affairs and Forestry 1986; O'Keeffe, Uys, Bruton 1992; Forster 1994; Woodhouse 1995). Among the reforms most commonly called for are the ending of private water rights, the extension of control by the Department of Water Affairs to all sources of water, including ground water and wetlands, the management of water on a catchment-wide basis, and the recognition of 'the environment' (i.e. wetlands, estuaries, streambeds, wildlife etc.) as an important water 'user'. In its *Reconstruction and Development Programme,* the ANC commits itself to comprehensive reforms in this area: "The fundamental principle of our water resource policy is the right to access clean water - water security for all! The RDP recognises the economic value of water and the environment, and advocates an economically, environmentally and politically sustainable approach to the management of our water resources and the collection, treatment and disposal of water" (ANC 1994:2.6.3).

Many of these issues are addressed in a recent discussion document from the Department of Water Affairs and Forestry (*Water Law Principles*, DWAF 1996), which puts forward a set of principles upon which future policy may be based. A number of fundamental changes to water law are suggested, foremost amongst them being the recognition of the principle of equitable access to water by all, regardless of land rights. While the government commits itself to protecting existing water rights "subject to the public interest", it also signals an end to the automatic rights of riparian owners: "The location of the water resource in land should not in itself confer preferential rights to usage" (Principle B.3). Riparian owners "will in future not automatically be entitled to priority use of the water flowing past their land simply because of their ownership of the land".

A second important proposal is the extension of government control to all water "wherever it occurs in the water cycle" (Principle B.1), which implies an end to many existing rights:

> "One of the most important results of adopting this Principle will be to enhance Government's ability to control the abuse of ground water, where resources are over-exploited on the basis of the water being "private". A further consequence of the principle is to place in context the distinction between the concepts of normal and surplus water as it exists in the present Water Act. Whilst the distinction between "public" and "private" water, and "normal" and "surplus" flow may retain some use when it becomes necessary to calculate and define the quantity of water that can be allocated in practice to a water user, terminology and definitions will have to change to avoid outdated and misleading connotations" (DWAF 1996: 4).

Under these proposals, priority in allocation of water would be given to meeting peoples' basic domestic needs, sufficient to ensure a minimum level of health and quality of life: "The right of all citizens to have access to basic water services (the provision of potable water supply and the removal and disposal of human excreta and waste water) necessary to afford them a healthy environment on an equitable and economically and environmentally sustainable basis should be supported" (Principle G.1). The human use of water would not, however, be allowed to compromise the long term sustainability of aquatic and associated ecosystems (Principle C.3). In another departure from past policy, the Department proposes a broadening of popular participation in water management and administration, and the delegation of powers to appropriate levels: "Responsibility for the development, apportionment and management of available water resources should, where possible, be delegated to a catchment or regional level in such a manner as to enable interested parties to participate and reach consensus" (Principle E.2).

Within the former homeland areas, the balance of water rights is, at present, quite different to that in the former ‘white’ areas of South Africa. In the absence of secure private rights to land (see below), existing water law has little applicability, and both the South African government and the homeland authorities have been able, in practice, to determine the allocation and use of water resources without public consultation or regard to the rights of existing users. Customary law as it exists in the homelands entitles people to a share in available natural resources, but provides little protection in the face of determined action by the state or local elites.

Although private water rights are likely to be legally curtailed in the near future, any improvement in water rights for people in the homelands will, to a large extent, depend on the achievement of secure rights to land, both within the homelands and in former white areas, where much of the country's water resources and related infrastructure (dams, irrigation systems etc.) are concentrated. With regard to rivers and other water sources within or adjacent to the homelands, effective reform will require legislative change that shifts the balance of rights towards the satisfaction of basic needs (primarily domestic, but also for small-scale irrigation and stock farming), coupled with the commitment of sufficient other resources to allow people in these areas to adequately exploit available water resources in a sustainable manner.

2. 4 LAND POLICY

Government land policy was a central instrument in the creation and preservation of white minority rule and privilege in South Africa. With the coming to power of the first democratic government, land policy now forms an important part of the efforts to redress the imbalances of the past.

The European military conquest and attendant dispossession of the eighteenth and nineteenth centuries established the broad pattern of land holding in South Africa, whereby whites settlers - Boers, British and others - claimed exclusive ownership of the vast majority of the land, and native people were corralled into 'reserves', or tolerated as "squatters" on white-owned farms. In the decades after Union (1910), this highly unequal pattern of land holding was given additional legal sanction by means of the Land Acts of 1913 and 1936, under which the majority black population was allocated just 13% of the total land area of the country (Lacey 1981:84).

This geographical division of land and people along racial lines was bolstered through coercive government policies before and during the apartheid era, which denied political and economic rights to black people outside the designated 'reserves'. Foremost amongst these measures were the Group Areas laws, which forcibly restricted black, coloured and Indian people in urban areas to racially segregated townships; restrictions on movement between rural and urban areas, generally referred to as influx control, or pass laws; and attacks on the position of black people who remained in areas officially designed as 'white', either as farm tenants ("squatters") or as owners of pockets of free-hold land ("blackspots") (Robertson 1990: 122). The physical removal of black people from areas classified as “white” gained momentum as the black reserves, or homelands, moved towards self-rule and 'independence', and it is estimated that more than 3.5 million people were forcibly removed from white areas in the period 1960 to 1983 alone (Platzky and Walker 1985: 9).

Within those areas reserved for black occupation, the great majority of land was (and still is) nominally owned by the state, either directly or through the statutory South Africa Development Trust (Budlender and Latsky 1991: 121). For all practical purposes, however, land is under the control of the tribal chiefs and Tribal Authorities, and is occupied under a system generally referred to as communal (or tribal, or customary) tenure. The precise nature and purpose of communal tenure remains an area of considerable debate, but it has profound implications both for the development and management of the resource-based economy, and for the new Government's land reform programme.

Communal tenure is seen by its advocates as based on 'traditional' (i.e. pre-colonial) models of African society, in which land was the property of the tribe, and was allocated amongst the people by the tribal chief, according to their needs (Letsoalo 1987:19). For its many critics, however, it is at best a neo-traditional form, perpetuated by the forces of colonialism and apartheid as a means of controlling the rural black population, which bolstered the power and patronage of reactionary 'traditional' leaders, and hindered the development of black agriculture (Haines and Cross 1988:89; Levin and Mkhabela 1994:224).

Under the communal land tenure system, every household within a village has, in principle, a right to a residential site, an arable plot for subsistence purposes, and access to common property resources, such as grazing. The system is 'communal' in the sense that an individual's entitlement to land flows from membership of a political community, rather than from private ownership (Bennett 1995: 168). Once allocated, however, residential and arable plots are reserved for the exclusive use of the occupying household. Unallocated lands are available to village members as a common pool resource (commonage), providing pasture for livestock, wood for building and fuel, grass and reeds for thatching and weaving, clay and mud for pottery and bricks, edible fruits and plants, and materials for use in traditional medicine (Cousins 1996:168).

Land for arable and residential purposes is obtained through the tribal chief or, more commonly, the village headman acting on behalf of the chief, who may allocate plots from whatever land is currently available. Under customary law, the right to land usually extends only to male 'household heads', but in practice it is sometimes extended to woman also, although this varies considerably from area to area (Bennett 1995: 137). Those who obtain land receive a right to the permanent use and benefits of that land, subject to certain conditions. Tribal authorities have, in principle, the power to repossess land if it is needed for other purposes, such as public buildings, if it is deemed surplus to the needs of the holders, or in order to punish a landholder for some offence, but examples of such repossession are rare (Bennett 1995: 141). In practice, land is usually transferred to children or widows on the death of a household head, although this right is not considered to be well established in customary law (Budlender and Latsky 1991:122). Until recently, landholders were expected to register their residential and arable plots with the Tribal Authority and the local magistrate's office, where they were granted 'Permission to Occupy' (P.T.O.), either in writing or verbally.

In practice, land tenure and distribution in the former homelands is far from this 'model', and fails to meet the needs of much of the rural population. A substantial proportion of rural households (up to 50% by some estimates) have no access to agricultural or grazing land, particularly those forcibly removed from 'white' areas during the apartheid period and now concentrated in 'closer settlements', a process aptly described by Murray (1987) as 'displaced urbanization'. Furthermore, even in those villages formally classified as agricultural settlements, the limited availability of land, coupled with rapid population growth, has meant that a sizable proportion of households has not actually obtained land, particularly arable land, to which they are notionally entitled (de Wet 1995:186). By contrast, the communal system has allowed chiefs and their close associates, as well as many homeland officials, to obtain large areas of land for their own use. The situation was further complicated by the collapse of homeland administrations in the period from 1990, and the abolition of the 1913 and 1936 Land Acts and other racially-based laws. Cross and Rutsch (1995:23) report cases from throughout the country "where areas of communal land have been handed over by tribal authorities to developers and private interests in deals which seem to have no legal basis and which do no always take the interests of or rights of local people into account". Under such conditions, the concept of 'communal' tenure needs to be treated with a considerable degree of caution.

Land reform has been a central demand of the ANC and the broad liberation movement in South Africa for most of this century, and featured prominently in the Freedom Charter adopted by the 1955 Congress of the People: "the land shall be divided among those who work it!". The importance of the land question, especially in terms of

economic and social development in rural areas, is reflected in the ANC's *Reconstruction and Development Programme*:

> "A national land reform programme is the central and driving force of a programme of rural development. Such a programme aims to redress effectively the injustices of forced removals and the historical denial of access to land. It aims to ensure security of tenure for rural dwellers. And in implementing the national land reform programme, and through the provision of support services, the democratic government will build the economy by generating large-scale employment, increasing rural incomes and eliminating overcrowding" (ANC1994:2.4.2).

The RDP committed the ANC to having a land reform programme in place within one year of the (1994) elections, with the aim of redistributing 30% of ('white') agricultural land within the first five years of the programme.

The centrality of land reform to the creation of a more equitable and democratic society is also recognised in the recent *Green Paper on South African Land Policy* (Department of Land Affairs, 1996):

> "Land is an important and sensitive issue to all South Africans. It is a finite resource which binds us all together in a common destiny. As a cornerstone for reconstruction and development, a land policy for the country needs to deal effectively with: the injustices of racially based land dispossession of the past; the need for a more equitable distribution of land ownership; the need for land reform to reduce poverty and contribute to economic growth; security of tenure for all; and a system of land management which will support sustainable land use patterns and rapid land release for development." (Department of Land Affairs 1996:1).

The Government's approach to land reform is made up of three distinct components:

> **"Redistribution** is a broad based programme which aims to provide the disadvantaged and the poor with land for residential and productive purposes. Its scope includes the urban and rural very poor, labour tenants, farm workers as well as new entrants to agriculture.
>
> **"Land Restitution** covers cases of forced removals which originate since 1913. They are being dealt with by a Land Claims Court and Commission, established under the *Restitution of Land Rights Act,* 1994.
>
> **"Land tenure reform** is being addressed through a review of present land policy, administration and legislation to improve the tenure security of all South Africans and to accommodate more diverse forms of land tenure, including types of communal tenure" (Department of Land Affairs 1996:3):

In addition to the reform of land holding, the Green Paper also proposes reform of land development policy, with the aim of coordinating land development planning and regulation at all levels of government (Department of Land Affairs 1996: 66).

Very little land has, so far, actually been redistributed. Some progress has, however, been made with the establishment of the *Land Reform Pilot Programme*, now operating in all nine provinces, which aims to develop "equitable and sustainable mechanisms of land redistribution" in rural areas, as a prelude to a larger national programme (Department of Land Affairs 1996: 4, 51). In addition, legislation is being introduced to provide both land and financial assistance for new settlements, to improve the security of tenure for farm tenants and informal urban dwellers, and to facilitate people wishing to hold land on a collective basis.

As yet, it is not clear what the land programme has to offer the millions of people living on communal lands in former homeland areas such as Venda, and both the ANC and the Department of Land Affairs have displayed considerable ambivalence towards the system of communal land and tribal administration. The Green Paper on land policy, for example, acknowledges the failures of the communal system in many areas, but points to its advantages over other forms of tenure on the grounds of welfare, equity and ecological protection: "common grazing systems afford smallholder livestock producers access to grazing opportunities that they would not otherwise enjoy, and common forests are an essential source of wood for fuel, particularly for the poorest of households. In many settings, the individualization of common property resources would further marginalize the poor. It may be more appropriate in such cases to help repair or construct local-level systems of rules that govern access to communal resources and regulate levels of use, so as to ensure social stability and sustainable management" (Department of Land Affairs 1996:50). As virtually no land within the communal areas is in a position to be sold, it cannot form part of the 'market-based' solutions being advocated by many within government, and it has yet to be seen what land in former 'white' areas will be made available for occupation by homeland dwellers, or what means will be provided for its acquisition. However, reform of tenure conditions within the communal areas, and the redistribution of lands currently occupied by the various parastatal Development Corporations, are possible options.

Overall, land reform is likely to continue to be one of the most controversial and difficult challenges facing the new government and, on the evidence of the past two years, progress is likely to be very slow. Within the former homelands, where the demand for reform is undoubtedly high (Levin and Weiner 1994: 315; Land Research Group 1995), the most pressing questions are which institutions should control existing communal land - the old tribal authorities, or the newly elected local councils - and who should benefit most from land redistribution - the ‘poorest of the poor’, or experienced farmers with proven ability?

2.5 STRUCTURES OF LOCAL GOVERNMENT

Preceding sections outlined the national policy framework in the key areas of environmental affairs, water, and land. This section examines the institutions which have an existing or potential role in the management of environmental resources at the local level, and through which national policies may be implemented.

Venda, along with much of the rest of South Africa, is currently undergoing a profound transformation, indeed a crisis, of government, at all levels. Having effectively collapsed during the last years of 'independence', administrative structures in Venda are slowly being reestablished under the new provincial government, but still lag far behind the

levels of organization, resources and effectiveness found outside the homelands. At the local level, newly elected councils are struggling to establish themselves in the face of stiff opposition from well-entrenched tribal leaders, and paltry support from higher tiers of government.

During the period of its nominal statehood (1979-94), Venda was not so much 'independent' of South Africa as isolated from it, especially in terms of political institutions, standards of public administration, and legal system. As well as reinforcing its geographic and economic marginalization, political isolation meant that Venda was not subjected to the same regulatory framework, and enforcement system, as the rest of the country in areas such as environmental protection and natural resource management. As an under-developed and (by South African standards) relatively impoverished area, with a highly unpopular and authoritarian government, there existed within Venda, up to very recently, neither the resources, the capacity nor the political will, to implement more than a rudimentary service in many fields, not least amongst them local government and environmental protection. To make matters worse, from 1989 to 1994 Venda was subject to severe civil unrest and state repression, and many areas of government came to a virtual standstill. Thus, to speak of 'government policy', or 'the state', or even 'the law' in the context of Venda's recent history is, as often as not, to speak of the absence, or the ineffectualness, of those institutions at a local level. By any standards, Venda today remains extremely under-governed, and any discussion of the role of government - national, provincial or local - must be conducted in that light.

In the period since the transition to democracy began (April 1994), Venda and its administration have been incorporated into the provincial structures of the Northern Province. This is a new province, having had no statutory or administrative existence prior to April 1994, and is composed of the former 'homelands' of Venda, Gazankulu and Lebowa, and part of the former Transvaal Province. By virtually every socio-economic indicator - from infant mortality, to literacy, to unemployment - the Northern Province stands out as the least developed of the nine South African provinces (Land and Agricultural Policy Centre 1995: 3). The provincial government is heavily dominated by the ANC, a body which had little organization within the province prior to 1990, and, two years after the general elections, was still struggling to establish a permanent presence outside the main urban centres. The provincial government is composed of elements of all four former administrations in the province, along with many new political appointments, and much attention to date has focused on the difficult task of integrating these disparate structures. The provincial government has divided the province into six administrative regions. Venda is part of the northern region (of Northern Province), with regional offices based at the former Venda capital of Thohoyandou. Much of the old Venda government administration remains in place, minus its very top ranks, although as of June 1996 there were signs that some reorganization and changes of personnel were under way.

Executive government of the Northern Province is composed of a Provincial Premier and ten Members of the province's Executive Council (MECs, or ministers). The two provincial departments most relevant to this study are Environmental Affairs and Tourism, and Land, Housing and Local Government.[1] However, provincial government,

[1] Provincial government departments were being reorganised at the time of field work (June 1996). New departments are to be: Local Government and Traditional Affairs; Land, Agriculture and Environmental Affairs; and Trade, Industry and Tourism. Water is, under the new constitution, a national rather than a provincial competency, but it is envisaged that

especially in the Northern Province, has not, as yet, emerged as a source of independent policy formation, especially in areas related to the environment. For that reason, this study will not look at provincial government in any detail, but will focus on sub-provincial structures which may have a role in environmental management at the local level, namely elected local government, and the so-called tribal authorities.

2.6 CHIEFS AND TRIBAL AUTHORITIES

Until 1995, 'tribal' institutions, including chiefs, village headmen, appointed councillors and officials, were the principal form of local government in the former homeland areas of South Africa. Venda is divided into twenty-eight tribal districts, each under a chief and a Tribal Authority (also known as Territorial Councils).

The modern tribal institutions found in Venda and elsewhere in the former homelands are derived, in part, from the incorporation of pre-colonial forms of African government into first the colonial, and later the apartheid system of administration. Prior to the arrival of European settlers, the most important socio-political unit of southern African society was the tribe, composed of people loyal to a single chief and believed to share a common ancestry. The chief was the leader and most powerful member of the tribe, combing important political and religious functions. As Letsoalo (1987: 18) puts its, "the chief is the central figure in the tribe and is the link between the tribe, its ancestors and God". The powers of the chiefs, although never precisely defined, were diffuse and all-inclusive, but tempered by a high degree of social responsibility and collective decision making: "African rulers had to care for their people, judge disputes fairly, govern the nation wisely, and provide for the needy" (Bennett 1995: 67),. Chiefs were obliged to consult with their councillors or tribal elders in all matters of importance, and could govern only with the consent of their people, a concept expressed in the common saying "a chief is a chief through his people" (Letsoalo 1987:18).

The power of the chiefs was, at first, greatly weakened or even destroyed by the colonial conquest, as African societies were militarily defeated and dispossessed of their lands, and subjected to a range of unfamiliar financial and administrative requirements. Following the initial wave of conquest in the nineteenth century, however, the British colonial administrators, notably Shepstone in Zululand, began co-opting indigenous leaders to the colonial administration, under what came to be known as the system of indirect rule (Thompson 1990:98). This was extended to all the African 'reserves' under the 1927 Native Administration Act (No. 38 of 1927), in what Lacey (1981:95) describes as a process of "enforced tribalization". The state granted itself the power to create and divide tribes as it wished, and to appoint or depose chiefs and headmen. Rather than being the highest political power in their territory, chiefs became subordinate to the colonial authorities, which fundamentally changed their relationship with their subjects: "Once African rulers became functionaries of the new system of government they had no need to look to their subjects for acceptance or approval: their authority was supported by the full weight of the colonial state" (Bennett 1995:68). With the coming to power of the National Party in 1948, the system of tribal government in the reserves became a central feature of the policy of 'separate development', or apartheid. Through legislation such as the 1951 Black (Bantu)

---

certain powers within this area may be delegated to the provinces, which will fall to the new Department of Housing and Water Affairs.

Authorities Act (No. 68 of 1951), and the 1959 Native Affairs Act (No. 55 of 1959) chiefs and newly constituted Tribal Authorities were made responsible for the peaceful and orderly administration of their areas of jurisdiction. Bennett (1995: 69) argues that "those who were not amenable to government directives, no matter what traditional legitimacy they might have enjoyed, were ousted from office or passed over in matters of succession. The outcome was a compliant cadre of 'traditional' leaders that provided an infrastructure for the homelands when they eventually gained independence from South Africa".

Chiefs today enjoy wide ranging powers, based on a poorly-defined mix of customary practice and apartheid-era legislation. According to Bennett (1995:74) a chief is entitled to command labour, tribute and taxes from his subjects, to decide the use and allocation of all land within his areas, and to allocate himself the best lands for his homestead and fields. Together with the Tribal Authority, he has a say in all public affairs within his area, including agricultural projects, licensing of businesses, construction of roads, schools, and the supply of water and electricity, although such services are not usually provided by the Tribal Authorities themselves. Chiefs and headmen also exercise a range of judicial powers relating to matters of African law and custom concerning people living under their jurisdiction, and are entitled to hear cases in tribal courts (Bennett 1995:76).

While symbolic power rests with the chief, routine administration of the tribal district is largely in the hands of the Tribal Authority. This is composed of all the headmen under a chief, plus various 'elders' or prominent individuals selected by him. The chief himself (all Venda chiefs are male) does not usually participate directly in the proceedings of the Tribal Authority, but is kept informed of its deliberations and will communicate his opinions to it from time to time. As well as being a forum for the discussion of matters pertaining to the district, collecting local taxes, dealing with planning applications and resolving disputes, Tribal Authorities are responsible for the operation of the Tribal Court, an important component of the judicial system in the former 'homeland' areas. Territorial councils are funded from local sources, including a levy on all households and migrant workers, and the fines collected by the tribal court, and also received funding from the former Venda government.

In each village, there is a headman (or occasionally a headwoman) appointed by the chief, although the position is usually hereditary. Headmen are responsible for all ‘tribal’ matters within their village, including the allocation of land, and are the principal means of communication between the chief and his people. Village headmen may carry out their functions with the assistance of an unelected village council, comprising older men of the village, but this varies from area to area. Under the former Venda administration, headmen, like the chiefs, received a government salary, and since 1994 they have been paid by the government of the Northern Province.

In the transition from apartheid to democracy, the 'traditional' leaders in the former homelands have managed to hold on to most, if not all, of their powers, and the main challenge to their authority is coming not from the new government, which seems eager to preserve the tribal system, but from grass-roots organizations such as 'civics'[2], which are impatient with the pace of transformation (Levin and Mkhabela 1994:230; Westaway

[2] Civics are informal village councils which emerged during the transition to democracy (1990-94).

1995: 12; Maloka 1996:189). In the final days of apartheid, the ANC co-operated with the Congress of Traditional Leaders of South Africa (Contralesa) and 'progressive' elements within the homeland administrations, in order to secure a smooth transfer of power, and, since coming to power, has shown a willingness to preserve the 'traditional' aspects of the chieftaincy, and to accommodate chiefs within new structures of local government.

Chapter Eleven of the Interim Constitution recognises the position of tribal leaders, and their right to exercise their powers under indigenous law: "A traditional authority which observes a system of indigenous law and is recognised by law immediately before the commencement of this Constitution, shall continue as such an authority and continue to exercise and perform the powers and functions vested in it in accordance with the applicable laws and customs, subject to any amendment or repeal of such laws and customs by a competent authority" (Act 100 of 1993:116). Furthermore, the Constitution makes provision for the establishment of Provincial Houses of Traditional Leaders, and a national Council of Traditional Leaders, which are entitled to advise and make proposals to government on any matters concerning traditional authorities and customary law (Bennett 1995:72). These provisions effectively insulate the (undemocratic) institution of the chieftaincy from the changes that are sweeping virtually every other aspect of South African society.

These provisions do not, however, reflect the position of many local-level political activists, especially those with a background in the United Democratic Front (UDF), and now organized in civics and youth movements, who see the chiefs as undemocratic, corrupt and tainted by their dealings with the apartheid regime. Of particular concern here is the fact that neither the Constitution nor the Local Government Transition Act make any specific reference to the power of chiefs in the area of land allocation, nor how their wide-ranging powers may be reconciled with the powers now being granted to elected organs of local government (McIntosh 1995:419).

Overall, the chiefs and tribal structures look set to remain important and powerful institutions within the former homeland areas, despite the expectation of many of their opponents that they would not survive the transition to democracy (Levin and Mkhabela 1994:222; McIntosh 1995:419). As elected local government becomes established (see below), it can be expected that the chiefs will find themselves faced with more strenuous opposition, particularly around the control of land.

2.7 ELECTED LOCAL GOVERNMENT

Prior to 1994, 'local government' in the former 'homelands' meant some form of tribally-based authority, or the various homeland regimes imposed by the South African government. Both of these types of structures incorporated elements of election from time to time, but their claims to democracy were widely seen as lacking in credibility (Surplus People Project 1983:17; Southall 1982:257). What public services existed at the local level were provided by the line departments of the homeland government, working through the Tribal Authorities but accountable only to the homeland leadership. These service agencies have now largely been incorporated into the line departments of the new provincial governments.

Up to 1995, elected local government in Venda consisted of five rural District Councils (or Regional Authorities), covering the magisterial districts of Thohoyandou, Vuwani, Tshitale, Mutale and Dzanani, plus an urban council in Thohoyandou. The District Councils were composed of all the chiefs within their area, plus one councillor elected from each Tribal area. The dominance of the chiefs over the electoral process, and the effective ban on party political activity, meant that these institutions were far from democratic. District Councils had no revenue raising powers, and their main function seems to have been to make representations to government on the provision of services in their areas (Eales 1993: 150). Attached to each council was a District Office (under the control of a District Director), which handled planning applications and other aspects of local administration. Judgments of the Tribal courts were reported to the District office, and thence to the office of the Chief Minister, and now are reported to the office of the provincial premier. The last elections to the District Councils in Venda were held in 1989, and the Councils were due to expire in 1994. They were, however, allowed to remain in office in a caretaker capacity until the local government elections of November 1995.

While enormous debate took place during the transition from apartheid (1990-1994) around the form and functions of national and provincial government, relatively little attention has been paid to local government, and especially to rural local government. McIntosh (1995:415) goes so far as to suggest that established higher level authorities (such as national line ministries) have been reluctant to devolve powers to poorly-resourced and untested local bodies, and have not thrown their weight behind the creation of the new organs of local government.

Under the terms of the 1993 Local Government Transition Act (Act 209 of 1993) transitional local forums were established in many parts of the country to negotiate new forms of non-racial local government. While these bodies played an important role in managing the transition in urban areas, with well developed local administrative and civic structures, they had little impact in rural areas, especially in the former homelands, where both governmental and non-governmental structures were often non-existent (Swilling and Boya 1995:173; McIntosh 1995:415). As a result, provincial governments were left to hastily devise their own model of local government in the run-up to the November 1995 local elections.
The model of local government adopted for the rural areas of the Northern Province is a two-tiered system, comprising a primary level of directly elected Transitional Local Councils, with poorly defined powers, and a secondary level of indirectly elected District Councils, with all the statutory powers and responsibilities of local government. There are 35 Transitional Local Councils for rural areas in the Northern Province, and just two

District Councils. With a few exceptions, these new demarcations do little to challenge the old apartheid-era divisions, effectively maintaining the distinctions between formally white and black areas, and between the former homelands of Venda, Gazankulu and Lebowa.

The Transitional Local Councils established in the province appear to correspond, in terms of responsibilities, to the Transitional Representative Councils as defined in the fifth amendment to the Local Government Transition Act (30 June 1995). These, according to Westaway (1995: 10), "are not local authorities in the full sense of the term, in that they have limited powers and functions (they will not actually deliver services, for example)". Their main functions would appear to be to ensure that their areas are represented in discussions with higher-level authorities, and to help coordinate service delivery and RDP activities at the local level. They have not, as yet, any administrative capacity of their own.

Transitional Local Council areas are sub-divided into wards, with each ward electing a single councillor. In addition to ward representatives, each local Council has approximately 40% of its members elected by proportional representation from across all the wards. Local Councils in the Northern Province vary in size from 5 seats (3 ward and 2 proportional) in areas such as Dendron, Vaalwater and Warmbad-Pienaarsrivier (all former 'white' areas), to 13 or 14 seats in some of the former homeland areas: Giyani council, in the former Gazankulu, for example, has 14 members (8 ward and 6 proportional) (Northern Province, 1995). It was widely reported that tribal chiefs are also to sit as *ex officio* members of the Local Councils, but the statutory provision for this is not clear.

In terms of powers and personnel, District Councils are the direct descendants of the apartheid-era District Services Councils, with the addition of the former homeland areas. Membership of the two District Councils in the Northern Province - Northern and Bosveld - is made up of one councillor nominated by "each local government body" within the Council area (Northern Province 1995); it is not clear whether this refers to rural councils only, or includes urban councils as well. In addition, a chairperson for each District Council is appointed by the Provincial government, which is also empowered to appoint a number of representatives from various 'interest groups', viz. farmers, landowners or levy-payers; farm labourers; women; and Traditional leaders, up to a total equal to 20% of the number of elected representatives. According to Proclamation No. 51, 1995 of the Northern Province Government, District Councils have responsibility for the establishment and maintenance of infrastructural services and facilities, they are the planning authority and licensing authority for their area, and they are responsible for the implementation of the RDP. The chief executive officer of the District Council is also responsible for the functions of the chief executive officer or town clerk in all the Transitional Local Councils under its jurisdiction.
The very limited form of local democracy contained within the new two-tier system of local government has given rise to considerable concerns among elected councillors and the small minority of voters who are aware of how it works. In particular, the District Councils, with a virtual monopoly of local government powers in rural areas, are not seen to be accessible or fully accountable to the electorate. This perception is reinforced by the powers of the Provincial government to appoint the chairperson and representatives of 'interest groups', to augment the (indirectly) elected councilors. Finally, the size of the District Council areas is a cause for concern, as they are perceived to be remote from the needs of local communities. The Northern Province is

divided into just two District Council areas, and one of these, the Northern District, accounts for close to three-quarters of the area of the province (and over 90% of the former homeland territories), making this tier of local government only marginally more 'local' than the Provincial Administration itself (Land and Agricultural Policy Centre 1995:10). The large scale of the District Council areas is explained by McIntosh (1995:416) in terms of the need to raise and redistribute revenue over widely divergent territories, and to achieve economies of scale in the delivery of service in resource-poor rural areas.

In those councils which fall entirely or largely within the former Venda, all seats (both ward and proportional) were won by the ANC in the elections of November 1995. However, despite the dominance of the ANC at local, provincial and national level, local government in Venda and other former homelands in the Northern Province has yet (as of June 1996) to become a reality. There are two main reasons for this, one administrative and one political. On the administrative side, it appears that little effective preparation was made by the provincial authorities for the establishment of the new local councils, especially in the rural and former 'homeland' areas. No provision seems to have been made for offices or staff for many councils, or training in basic procedures. As of June 1996, some councils had yet to have any funds released to establish themselves, and District Councils had not yet held their first meetings (although they were reported to have done so in August 1996). On the political side, rural local councils find themselves caught up in a national debate over the powers of so-called traditional leaders, of particular significance for the Northern Province with its plethora of well-entrenched chiefs and Tribal Authorities. By introducing a new form of local government, without first disbanding or at least curtailing the powers of the existing structures, the national government has effectively created two parallel systems of local government, which are now in direct competition with each other. In the opinions of many councilors, and their supporters, the new councils are set to take over all local government functions from the chiefs, leaving them with only “ceremonial” duties. Not surprisingly, this is being vigorously contested by the chiefs, and the absence of any clear definition of powers on either side means that this battle is likely to continue. Since the November 1995 elections, there is at least a cadre of elected local representatives, the first of their kind in these areas, who are leading the demands for the establishment of effective structures at the local level, and pressuring the provincial authorities to provide the funding, training and other resources required for them to become operational.

3. VENDA: THE RISE AND FALL OF AN 'INDEPENDENT' HOMELAND

3.1 INTRODUCTION

The former 'homeland' of Venda is situated in the north-eastern corner of the Transvaal, in the Republic of South Africa (RSA), between latitudes 22.15 and 25.24 south, and longitudes 29.50 and 20.31 east (see Map 1). During the period of its nominal 'independence', it consisted of two separate territories, completely surrounded by South Africa. A strategic strip of land, 5 to 8 km wide, separated the main block of Venda territory from the Limpopo river, and the border with Zimbabwe, in the north. To the north-east, the Kruger National Park separated Venda from the border with Mozambique. To the south and south-east it bordered the former homeland of Gazankulu, and to the west and south-west, the Soutpansberg and Messina districts of the RSA. The main town, and capital of the former 'homeland', is Thohoyandou, which embraces the older administrative centre of Sibasa, but Venda depends for much of its services on the towns of Louis Trichardt and Messina, and, to a lesser extent, the provincial capital of Pietersburg.

During the apartheid period (1948-94) Venda was declared to be the 'homeland' of all speakers of the Venda language (*Luvenda*), and was an 'independent' republic from 1979 to 1994. As with the other three such territories within South Africa (Transkei, Ciskei and Bophuthatswana), Venda's 'independent' status was not recognised by the international community. On 27 April 1994, Venda was reincorporated into the RSA, forming part of the new Northern Province, and today has no administrative significance. Compared to the adjoining 'white' areas of South Africa, Venda can be described as extremely underdeveloped, in terms of infrastructure, economic activity, health, welfare and education services, and general standards of living.

At the time of its political 'independence' in 1979, Venda covered approximately 520,500 hectares, but this was later increased by purchase or incorporation of various 'white' farms and other pockets of territory to 680,700 hectares, or 6,807 square kilometres (Development Bank of Southern Africa 1991:1). For administrative purposes, this territory was divided into four magisterial districts, namely Dzanani (in the north-west), Mutale (in the north-east), Thohoyandou (in the centre and south-east) and Vuwani (in the south-west) (see Map 2). The western part of Vuwani (Vuwani II) became the district of Tshitale in the late 1980s, but does not feature in most official reports as a separate district. According to the 1991 Census, the population of Venda was 558,797.

3.2 HISTORY

The Venda people (*VhaVenda*, or *BaVenda* in the Venda language), in common with other southern African tribes, are primarily a linguistic grouping, albeit with a distinct cultural heritage and common history. The Venda language (*Luvenda*), part of the Bantu group of African languages, has close affinity with Shona (Karanga), and shows the influence of Sotho (Lestrade 1932:487). Oral tradition - recorded in the early twentieth century by Wessmann (1908), Van Warmelo (1940), Lestrade (1932), Stayt

(1931/1968) and others - tells of the ancestors of the Venda migrating from an area to the north, identified by some sources as the Great Lakes area of East Africa. After sojourning for a period amongst the Karanga of Zimbabwe, they are believed to have crossed the Limpopo and subjugated the inhabitants of the Soutpansberg, overcoming them by the beating of a magical drum (Van Warmelo 1940:23). Lestrade puts the arrival of the main body of Venda rulers towards the end of the seventeenth century, although Wilson (1969:175), drawing on archaeological evidence, suggests much earlier contacts. At some time in their history, the Venda incorporated the Lemba people (*VhaLemba*) , a caste of traders and craft-workers, whose origins are unknown, but who are referred to in the early literature as displaying Shona or coastal Islamic ("Semitic") influences (Lestrade 1932; Stayt 1931/1968:18).

Consideration of both the linguistic and the broader cultural evidence leads Kuper (1982:91) to conclude that the present-day Venda were formed by one or more off-shoots of the Karanga imposing themselves as ruling sections upon Northern Sotho communities, and thus suggests affinity between the Venda and broader Sotho-Tswana culture (1982: 91). Like the Sotho, Wilson (1969:175) argues, the Venda are a patrilineal and virilocal people, with a preference for endogamous marriage. The institutions of Venda chieftaincy are also similar to those of the Sotho, but show traces of their Karanga inheritance.

The early Venda settled in the fertile and well-watered areas of the Soutpansberg mountains, building their *Dzata*, or chief's place, at Nzhelele, with the nearby Fundudzi as their sacred lake (Van Warmelo 1932: 6). Venda villages tended, historically, to be small, and built in inaccessible mountainous areas, while the great places of their chiefs were built in stone. The pre-colonial economy, according to Wilson (1969:172), was based on "cultivation, hunting and metal-working", and depended on Lemba craftsmen for woven cloth and pottery. The Venda forged iron hoes, and traded with the Tsonga who dominated the copper trade from Messina and had access to Portuguese traders on the east African coast. They grew grain, originally eleusine (finger millet) and sorghum, and later maize, which was stored in underground pits or on raised platforms. They are believed to have kept few cattle, due largely to the prevalence of the tsetse fly (Stayt 1931/1968:37). Beer, made from eleusine or sorghum, played an important part in Venda diet and ceremonial life (Wessmann 1908:49).

The first trekkers from the European settlement at the Cape to reach Venda territory were the followers of Coenraad de Buys, a mixed-race captain who settled at the western end of a mountain range he called the Zoutpansberg (literally, salt pan mountain, later Soutpansberg), around 1820 (Wagner 1980:318). Advance parties of the Afrikaner 'Great Trek' led by Louis Trichardt, Hendrik Potgeiter and Johannes Van Rensburg, reached the area in 1836, searching for a land route to Lourenço Marques (Maputo), but most of these met an early death from malaria or at the hands of the local inhabitants. The first substantial white settlement was the town of Zoutpansberg (later Schoemansdal), nine miles west of the present town of Louis Trichardt, founded in 1848 by Potgeiter and his followers moving from Ohrigstad (Wilson and Thompson 1969:413).

This isolated settlement represented the northern limit of European expansion, as further progress was blocked by the tsetse fly country of the Limpopo basin, deadly to both cattle and horses. While the Zoutpansberg settlement was too small and too far from ports or markets to develop as a centre of agriculture or livestock, Wagner (1980:336)

argues that it did emerge in the 1850s and 1860s as an important hunting and trading centre - a *'n jagtersgemeenskap*, or hunters' community - based mainly on ivory. While a few Africans found employment as hunters, or participated in the ivory trade, the Zoutpansberg settlement was experienced by the native people of the area chiefly as "a raiding state, exercising hegemony over them through annual tribute levies and meeting obduracy with destructive forays, funded out of the attendant plunder" (Wagner 1980:322). To the east of Zoutpansberg, the ivory trade was dominated by a handful of Portuguese traders, with close ties to the various Tsonga-Shangaan communities in the area, and to the powerful Gaza kingdom of southern Mozambique. Rivalry over control of a diminishing ivory trade contributed to the outbreak of war in 1867, when Venda forces, led by their chief Makhado, destroyed the town of Schoemansdal (Wilson and Thompson 1969:442). For the next thirty years, the only European presence in the area was a handful of traders, and Swiss and German missionaries (Harries 1989:92).

With the discovery of gold on the Witwatersrand in the early 1880s, and the rapid expansion of both the economy and the white population of the Transvaal, those African chieftaincies which had managed to preserve a degree of independence came under renewed pressure from the European settlers. The defeat of Sekhukhune's Pedi by the British in 1879 cleared the way for the South African Republic (ZAR) to enforce its claim over the whole of the Transvaal territory (Delius 1984:246). Between 1882 and 1894, the settler forces defeated the Sotho-speaking Lowveld tribes (1882-94), leaving the Venda as the only independent African people within the Transvaal (Thompson 1969:281). Pressure on the Venda came initially from white settlers expanding northwards from Pietersburg and eastward along the Letaba river, who began to intrude on the outer reaches of Venda settlement. The most powerful of the Venda chiefs, Makhado, who had defeated the Boers over twenty years before, resisted the demands by the Transvaal authorities to disarm and remove to locations, but, in 1898, a ZAR commando, with Swazi and Tsonga allies, defeated his successor, Mphephu, and drove him and many of his followers across the Limpopo (Wessmann 1908:120). The town of Louis Trichardt was established the following year by the victorious Boers, as the centre of an increasing white presence in the far northern Transvaal (Bulpin 1965: 446).

Following the second Anglo-Boer war (1899-1902), the Venda were disarmed by the new British administration. Much of their territory, particularly to the south and west, was thrown open to white settlers, and a greatly reduced area was delimited as "native locations" for the leading chiefs - Mphephu, Tshivhase, Mphaphuli, Khakhu, Rambuda and Thengwe (Stayt 1931/1968:19). These locations were subsequently ‘scheduled’ under the terms of the 1913 Natives Land Act (i.e. reserved for Black occupation only). Following the 1936 Native Trust and Land Act, portions of Crown (i.e. unsurveyed) Land and a number of white-owned farms in southern and western districts were added to the area reserved for Venda occupation (i.e. 'released' in terms of the 1936 Act). As most of this area was already heavily populated, however, this did little to alleviate the general land shortage in the 'tribal' areas (Harries 1989:98).

By the 1920s, white farms had been established north of Louis Trichardt as far as Messina and to the south-east towards Bandelierkop and the Letaba River, and by the 1930s the government was settling poor white farmers on irrigable land along the Upper Levubu. However, the relatively small numbers of white settlers, and the acquisition of large tracts of land by absentee owners - both individuals and companies - meant that much of the native population in the northern Transvaal was not immediately dispossessed, but it was, none the less, drawn into the colonial economy in a variety of

ways. White settlers required cheap labour, and sizeable numbers of the original inhabitants remained on farms, generally as unpaid labour tenants, but also as rent-paying tenants. Restrictions on the land available to tenants for their own cultivation, and on the numbers of livestock which they could keep, and demands for unpaid labour, led to a steady flow of labour tenant households off white farms and into the increasingly crowded tribal locations. The sustained attack on 'squatters' by the state and white farmers, which began in other parts of the country with the 1913 Natives Land Act and accelerated following the passage of the 1936 Native Trust and Land Act, was not fully executed in the northern Transvaal until the 1960s, when large numbers of labour tenants were forcibly removed to the newly declared 'homelands' (Horrell 1973:137).

From 1948 the National Party government, in pursuit of its *apartheid* ideology, set about establishing a system of 'tribal' administration in the African reserve areas, while continuing to deny political and economic rights to black people in 'white' South Africa. Tribal Authorities were first established in Venda in 1954, starting with Mphephu, Tshivhase, Mphaphuli and Rambuda. By 1962, the foundations had been laid for division of the African population of the northern Transvaal along ethnic lines, with the establishment of three Territorial Authorities - Thohoyandou, under the chairmanship of Chief Mphephu for the Venda-speaking population, Matshangana (later Gazankulu) under Chief Mhinga, for Tsonga-Shangaan speakers, and Lebowa for Northern Sotho speakers (Hill 1964:15).

Forced removals from white areas accelerated dramatically following the establishment of these 'homelands', and the legal abolition of labour tenancy in the region in the early 1960s. Tens of thousands of black families were evicted from white farms throughout the northern Transvaal and dumped in the reserves, a process vividly described by Cosmas Desmond (1971), and Muriel Horrell (1973). The relocation of Venda-speakers was concentrated in the western parts of Venda, particularly in those areas acquired by the Native Trust after 1936, and within commuting distance of the white farming districts (Surplus People Project 1983:165). Farm workers, now officially resident in the reserves, were now obliged to spend lengthy periods on white farms without their families, and without access to whatever ploughing and grazing land they had formerly used as tenants. Within the crowded reserves, removed families were rarely given access to arable plots, or entitled to keep livestock, and found themselves in competition with previous residents for the limited resources and services available.

Forced removals were not confined to the white farms. Mission stations, where black communities enjoyed a degree of autonomy and in some cases freehold title to their lands, as well as urban townships, were targeted by apartheid's social engineers using the powers of the Group Areas Acts of 1950 and 1966 (Desmond 1971:160). As late as 1979, 12,769 people were cleared from 'black spots' in the northern Transvaal in a single year (Surplus People Project 1983:161). In the black township of Tshikota, adjacent to the town of Louis Trichardt, the authorities set about removing each of the so-called 'national' groups to their respective 'homelands', and the destruction of the township. Between 1982 and 1984, over twelve hundred Venda-speaking families were moved to the new township of Vleifontein, twenty kilometres away, and a similar number of Shangaan-speakers were moved to the township of Waterval, adjacent to Elim Hospital.3 The relatively small Indian population of Louis Trichardt was also removed to a separate township, Eltivillas, on the outskirts of the town.

3 Tshikota is today being rebuilt and reoccupied, mainly by the original inhabitants.

From the 1960s to the late 1970s, other, related, processes of coercion and dispossession were underway, as most of Venda was subjected to 'betterment' planning, starting with Trust land in the west of the territory, and moving gradually eastward (Surplus People Project 1983:161). While ostensibly concerned with the conservation of grazing and the improvement of the rural economy, betterment was a crucial aspect of the apartheid policy of containing the maximum possible black population within the homelands (Yawitch 1981). Dispersed settlements were regrouped into tighter, grid-like villages, standard-sized arable plots were allocated to approved households, grazing lands ('camps') were demarcated and fenced, and attempts were made to impose a rotational grazing system (De Wet 1995). Households of long-standing within the older 'reserve' areas, such as Mphephu, Tshivhase and Mphaphuli, were generally able to secure grazing and ploughing rights, although not necessarily in proportion to their original holdings. For those households without land rights at the time of betterment planning, however, and especially the tens of thousands of households moving into Venda from surrounding areas, there was little chance of obtaining an arable plot or access to communal grazing. Investigating the process of forced villagization in the north-west of Venda, Schutte (1984) found that the pre-existing social structure, based on extended patrilineal kin-networks, was not accommodated in the new settlements, and that prospects for obtaining agriculture-based livelihoods were much reduced following 'betterment'.

Forced removals also took place between homelands as people were separated along ethnic lines, often with the active support of local chiefs (Harries 1989:106). With the creation of separate Regional Authorities for Venda and Tsonga speakers, many people found themselves on the 'wrong' side, which led to friction over the allocation of land, the assignment of positions of responsibility on tribal authorities and school boards, and the language medium to be used in schools (Horrell 1973:8). Desmond (1971: 148) reports that many thousands of Vendas were forcibly removed from areas such as Mavambe, south of the Levubu River, in 1968, while large numbers of Tsonga were removed from Tshakhuma Lutheran Mission farm and other villages in Sibasa district.

Following the lead set by the Transkei, the Thohoyandou Territorial Authority was replaced by a Venda legislative assembly in 1971, and two years later was granted the status of a self-governing territory within the Republic of South Africa, with Chief Mphephu as Chief Councillor (Horrell 1973:42). Elections to the legislative assembly were held in 1973 and 1978. On both occasions, the majority of contested seats were won by the Venda Independence People's Party (VIPP), led by Baldwin Mudau, but Mphephu's Venda National Party (VNP) managed to hold on to power through the support of nominated chiefs (Surplus People Project 1983:19). This manipulation of any democratic process set the tone for the next decade, as the Mphephu regime engaged in systematic intimidation of the opposition and the accumulation of considerable personal wealth. In September 1979, Venda declared its 'independence', a status recognised by no democratic country in the world, and Chief Mphephu had himself declared *khosikhulu* (paramount chief). In the elections of 1984, Mphephu's VNP won an unlikely 41 out of 45 elected seats, amongst strong protests of vote-tampering from the opposition VIPP, but found it difficult to shake off a growing reputation for corruption and violence, including the death in detention of many political opponents (Indicator SA 1986).

Mphephu ruled until his death in 1988, and was succeeded as State President by Frank Ravele, amidst growing popular opposition to the regime. By 1990, following the

release of Nelson Mandela and the unbanning of the ANC, marches, demonstrations, strikes and stay-aways by government workers and students brought the homeland to a virtual standstill, with demands for the dismissal of Ravele and his ministers, an end to marital law, and immediate re-incorporation of the territory into South Africa. Within a matter of months, Ravele was ousted by the chief of staff of the Venda Defence Forces, Colonel Gabriel Ramushwana (with support from the South African Defence Forces), who backed the popular calls for reform and for re-incorporation (National Land Committee 1990:12). Along with the nine other homelands, Venda was reincorporated into a unified South African on 27 April 1994.

3.3 Demography and Settlements

Population estimates for Venda, as for many other former 'homeland' areas, must be treated with a considerable degree of caution. Poor survey methods, the prevalence of migrant labour, and a history of forced removals, have tended to result in under-estimates of the black population, especially in rural areas (DBSA 1993b:29). Frequent changes in 'homeland' borders also introduce an element of uncertainty, especially when attempting comparisons between censuses. Bearing these points in mind, the following table shows the available population statistics for Venda since 1970, broken down by magisterial districts.

Table 1. Population of Venda, by Magisterial District

	19701	*19782*	*19853*	*19914*	*1970-91 % Increase*
Dzanani	63,611	74,536	108,400	123,035	93.4%
Mutale	27,726	32,099	47,400	55,141	98.9%
Thohoyandou	123,114	175,371	203,000	244,532	98.6%
Vuwani	70,799	78,247	118,600	136,089	92.2%
TOTAL	285,251	360,253	477,400	558,797	95.9%

Notes: 1. Total 'Black' population from 1970 census (RAU 1979:30), including an upward adjustment of 4.7% for under-enumeration. 2. From RAU (1979:30). 3: 1985 census (DBSA 1989). These figures have been rounded to the nearest hundred. 4. 1991 Census (Republic of Venda 1993a).

The population of Venda in 1991, according to the census of that year, was 558,797, which represents an increase of 95.9% over the figure for 1970. It is not possible to say how much of this increase is due to natural factors, and how much to forced movement of people into the area. These figures represent an average growth rate over the period of approximately 3.4% per annum, compared to 3.0% for the black population of South Africa as a whole, and 2.7% for the entire population (DBSA 1993b:29). As with other former 'homeland' areas, population structure in Venda is strongly skewed in favour of women and the young, which is usually explained in terms of the out-migration of adult male workers. Males made up 43.5% of the total population in 1991 (Government of Venda 1993a). The population density of Venda in 1991 was estimated at 82.5 persons per square km, less than that of the neighbouring homelands of Lebowa and Gazankulu, but thirteen times the density of the non-homeland (i.e. 'white') section of the northern Transvaal (DBSA 1993b).

The manner in which the Venda territories have been demarcated during the twentieth century, and the successive waves of population movement within the region, have resulted in a high degree of cultural and linguistic homogeneity amongst the population. The 1991 Census found that 95.24% of the population spoke Venda (Luvenda) as their first language, with the only significant linguistic minorities being Shangaan/Tsonga (2.04%) and Northern Sotho (1.88%). Afrikaans is understood by many people, particularly older people with experience of working on white farms, and was the principal language of administration up to the 1970s. English is now the preferred medium of communication with non Venda-speakers, especially amongst the younger generation and within the administration, although it is not spoken by much of the adult rural population. Understanding of English or Afrikaans is generally higher amongst men than amongst women.

While Venda is generally considered as being rural, a growing proportion of the population is becoming functionally urbanized, within either the five 'proclaimed' towns or the many rapidly growing peri-urban areas (DBSA 1993a: 5). Of the urban areas, the most important is the new town of Thohoyandou, which was developed during the

1970s and 1980s as the capital of the 'independent' Venda, and now embraces the older administrative centre, Sibasa, and the townships of Shayandima and Makwarela. The population of Thohoyandou urban area (including informal settlements) was 21,998 in 1991 (Republic of Venda 1993a), while the much larger Thohoyandou magisterial district accounted for 43.8% of the population of Venda. Further concentrations of population are found between Thohoyandou and Louis Trichardt, in the magisterial districts of Vuwani and Dzanani. The largest magisterial district, Mutale, in the north-east, accounts for less than 10% of the total population.

Apart from Thohoyandou, the only areas with any substantial commercial or industrial development are the town of Makhado (Dzanani district), Tshikondeni mine (Makuya district), and parts of Sinthumule and Kutama districts, adjacent to the former 'white' town of Louis Trichardt. The township of Vleifontein, in western Vuwani, with an official population of 2,891 in 1991, is effectively a displaced suburb of Louis Trichardt, with few social or economic facilities of its own, while the remaining 'proclaimed' town, Vuwani, is little more than a rural trading post with a police station and magistrate's office.

Venda has an estimated 420 so-called rural settlements, ranging from remote villages to informal towns (DBSA 1993a:69). The majority of these were subjected to 'betterment' planning in the 1960s and 1970s, either as 'agricultural villages', whose inhabitants had access to some arable and grazing lands, or 'closer settlement', for households without land. Most houses in the rural areas are of traditional build, with round, mud-brick wall, and thatched roofs, but there is a strong trend towards concrete block walls and tin roofs.

3.4 Social and Economic Conditions

The general lack of economic investment and development in Venda, and the ways in which its people have been incorporated into the South African economy, have left them heavily dependent on the major industrial and commercial centres for employment and the provision of goods and services. While attempts were made during the 'independence' period to produce 'national' economic indicators (GDP, GNI, per capital income, etc.), these must be treated with a considerable degree of caution, due to the open nature of the economy, the prevalence of 'informal' (i.e. unrecorded) activities, and the sometimes questionable survey methods. DBSA (1993a: 4) estimated the Gross Geographic Product (GGP) for Venda in 1998 at R535.2 million, and per capita GGP at R1,060. This latter figure is substantially higher than the comparable figures for neighbouring (former) 'homelands' of Gazankulu and Lebowa, but only 15% of the figure for the former 'white' portion of the northern Transvaal. During the era of 'independence' (1979-94), the great part of budgeted government expenditure (70-80%) was provided by the South African government (Moody and Golino 1986).

The formal economy is heavily biased towards the tertiary (i.e. service) sector, which largely addresses welfare concerns - health, education, pensions - and is dominated by the public sector. Government services accounted for 54% of GGP in 1990, followed by construction (10.1%), trade and tourism (9.9%), agriculture (8.3%), manufacturing 6.4%, and financial and business services (5.3%) (DBSA 1993a: 4). The area remains heavily dependent on wage income remitted from outside Venda, which Schutte (1984) estimated probably outweighed the entire value of goods and services produced within

Venda. SALDRU4 (1996:7.2) estimates that 47% of all rural African households in the Northern Province are in receipt of migrant remittances, and DBSA (1993b:41) estimated the number of migrant workers absent from Venda in 1991 (male and female) at close to 80,000. Labour migration from Venda is mainly to the Witwatersrand (Gauteng Province), with smaller numbers going to the industrial centres of the northern Transvaal, such as Pietersburg, Messina and Phalaborwa.

Formal employment opportunities exist within Venda for less than a quarter of the available work-force (excluding migrants). Over half (53.5%) of the labour force is estimated to be engaged in the subsistence sector; formal employment accounts for 23%, informal activities a further 7.3%, and 16.2% are classified as unemployed (DBSA 1993b: 96). While no statistics are available on the level of poverty, there can be no doubt that a considerable stratum of households have neither pensions, wage employment nor access to agricultural or grazing land, and lead a precarious hand-to-mouth existence. Average monthly household income for black people in the Northern Province was estimated at R723 in 1994, or R135 per capita (SALDRU 1994:13.1).

In 1979, Venda had only two tarred roads, totalling 131 km - one running from Louis Trichardt to Punda Maria, with a 5km spur to Thohoyandou; the other, dating only from the late 1970s, running from the Messina-Louis Trichardt road to Pafuri on the Mozambique border, via Tshipise (RAU 1979:127). In addition there were approximately 1058km of gravel roads, of varying qualities. The main rail line from Messina to Gauteng passes through the western part of Venda, but there is no stop, and the rest of the territory is without rail links.

Recent years, especially the period since 1990, have seen rapid improvements to the road network, and considerable progress has been made in the electrification of private dwellings, although many areas have yet to be served. The telephone system still extends little beyond the main urban areas, and a small number of 'farm lines' to outlying government offices and local notables. Running water is now supplied to most homes in urban areas, and is slowly being extended to the rural areas. This tends to be in the form of communal standpipes, and in many rural areas even these are frequently dry, leaving people dependent on streams and springs for their household water supplies.

Education in Venda, both primary and secondary, has seen an enormous expansion over the last thirty years. Prior to 'independence', the numbers of children per classroom in primary and secondary schools were extremely high, and the length of education per pupil short (RAU 1979:39). Since 1979, school attendances have risen dramatically, especially at the secondary level, aided by an extensive school building programme. By 1991, the number of primary pupils was up 57% on 1978 figures, roughly in line with population growth, while the number of secondary students jumped by 336% (DBSA 1993b:165). As with other public services, quality of delivery is marked by enormous differences, with many rural children still receiving their education under make-shift shelters and suffering severe shortages of basic educational materials.

Hospital beds, nurses, clinics and doctors per capita are also far behind the levels for 'white' South Africa. At 'independence', Venda had three hospitals - Donald Fraser, Siloam and Tshilidzini - all founded by missionary societies, with a total of 1,263 beds. In addition, 39 clinics functioned as satellites of the hospitals, and the entire territory

[4] See Standing, Sender and Weeks (1996:255) for a critique of SALDRU's methodology.

was served by ten doctors (RAU 1979:56). Since then, health care provision has been considerably improved through the extension of the village clinic system, under the supervision of the three main hospitals. Women's self-help groups ('Care Groups') have also been mobilized in many areas to raise awareness of health and nutritional issues.

Detailed statistics are not available for welfare indicators such as life expectancy, literacy etc. for Venda alone, but a general indication may be obtained from the figures for the African population of the old 'Development Region G' (which roughly approximates the new Northern Province). By virtually every indicator, the African population of this region represents the extreme (i.e. least favourable) case for all races and all regions in South Africa (DBSA 1993b: Table 1). For example, life expectancy at birth and adult literacy, are the lowest in the country, while rates for infant mortality, births to teenage mothers and total (lifetime) fertility for women are the highest.

4. OVERVIEW OF THE MUTALE RIVER VALLEY

4.1 INTRODUCTION

The Mutale River valley lies almost entirely within the former 'homeland' of Venda. The river rises in the Soutpansberg range, close to Lake Fundudzi, at an altitude of approximately 870m, and flows in a north-easterly direction for a distance of approximately 120km, until it joins with the Luvuvhu River just inside the Kruger National Park (see Map 2). From here, the Luvuvhu flows eastward for another 20km before it empties into the Limpopo, at Crook's Corner, on the international frontier of South Africa and Mozambique. In addition to the Mutale, the Soutpansberg is the source of most of Venda's other perennial rivers and streams. To the north, rivers such as the Nzhelele and the Nwanedi flow into the Limpopo, while those to the south, such as the Dzindi and the Mutshindudi, flow into the Luvuvhu.

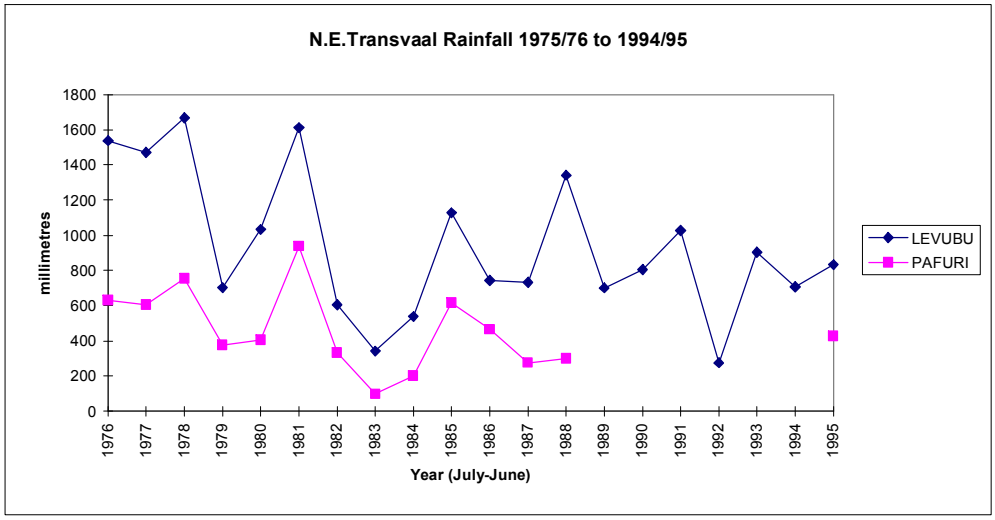
Sources for geographical information on the Mutale River area are extremely scarce. The principal source remains RAU's (1979) *Planning Proposals for Venda*, which draws on earlier work by Taylor and Niemand, and Loxton, Hunting and Associates. In addition, as part of this study, a special printing of the land type map for the area (1:250,000 Land Type Series, *2230 Messina*) was commissioned from the Institute of Soil, Climate and Water in Pretoria, based on previously unpublished data. This map, together with the accompanying *Memoir* (ISCW 1996), provided valuable information on terrain and soil types in the study area. Climatic data for weather stations in the region was supplied by the South African Weather Bureau, Pretoria, and stream-flow data for the Mutale River was supplied by the Department of Water Affairs and Forestry, Tzaneen.

4.2 RAINFALL AND CLIMATE

Climatic conditions in Venda are generally sub-tropical, but show considerable local variation. Rainfall declines dramatically as one moves northwards and towards lower-lying areas, while air temperatures increase, giving rise to relatively cool, wet highlands, and warmer, dryer lowlands.

The following chart shows annual rainfall figures for two meteorological stations just outside of Venda, which provide a good indication of the range of conditions found in the region. Levubu station is located just south of the Soutpansberg, on the southern fringe of Venda, and Pafuri station lies in the extreme north-eastern corner of the Kruger Park. Data are also available for stations within Venda (see below), but these do not cover such a long period.

Figure 1.

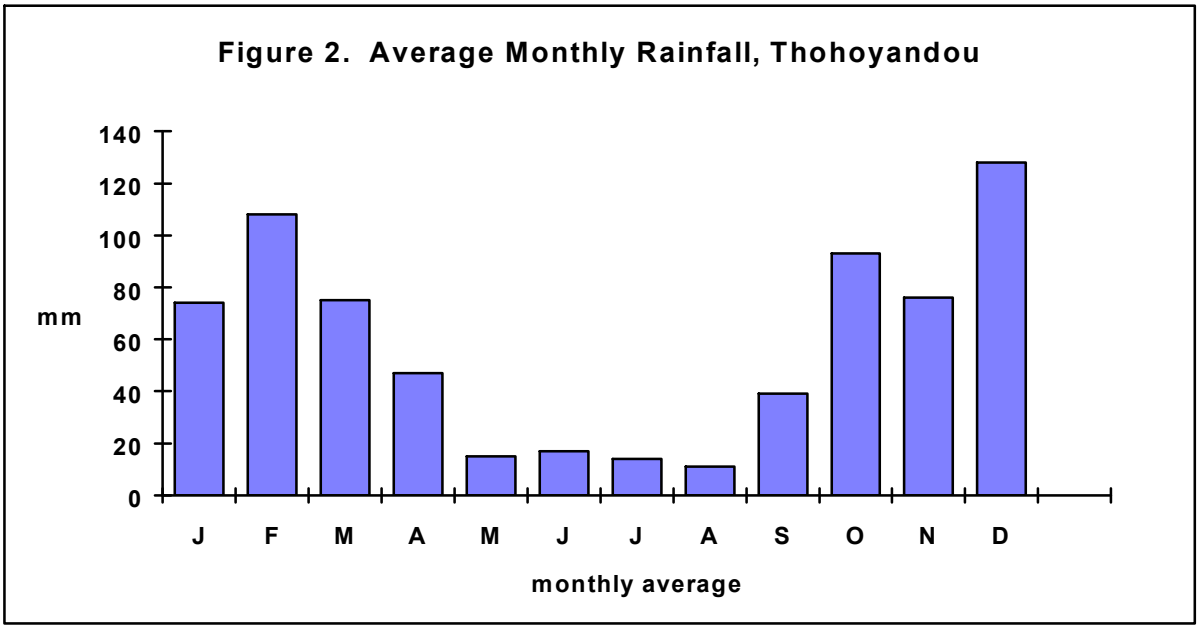


0

Source: South African Weather Bureau, Station Reports.

The area lies within the summer rainfall region of Southern Africa, with more than 90% of annual precipitation occurring during the six months between September and March, mainly in the form of thunderstorms. Frost, snow and hail are all rare in the region.

The distribution of rainfall over the year can be seen from the following table, which shows monthly averages for the period 1982 to 1990, recorded at Thohoyandou station, in central Venda.



Source: South African Weather Bureau, Station Report

0December is the wettest month, with an average rainfall of 128mm, and August is the driest, with an average of 11mm.
The Mutale River, the focus of this study, rises in an area of relatively high rainfall, and passes through progressively dryer areas as it leaves the Soutpansberg and enters the low-lying country to the north-east. Drawing on data from the 1960s and 1970s, RAU (1979: Map 6) shows the upper reaches of the Mutale - approximately the first 40km

from source, including the Tshiombo valley - in a relatively high rainfall area (between 1000mm and 1600mm annually). The middle reaches - roughly from Tshandama to Masisi - receive between 500mm and 1000mm, and only the very lowest reaches of the river (that part lying within the Kruger Park) receive less than 500mm annually. More up-to-date data from the South African Weather Bureau suggest that these estimates are somewhat high. Following a period of relatively high rainfall in the mid- to late 1970s, the graph has turned downwards, especially during the early 1980s and most dramatically during the early 1990s, with the result that a considerable part of the Mutale valley may now lie below the 500mm isohyet.

The region is prone to periodic droughts, which recur on a roughly ten-yearly cycle. Pafuri, for which the longest time-series data are available, shows severe drops in rainfall in 1963/64[5] and 1972/73, while all the stations in the area (Levubu, Siloam, Thohoyandou, Tshandama, Punda Maria and Pafuri) show severe declines in 1982/83 and again in 1991/92. Indeed, the latter year is easily the driest on record for all the stations. Water reserves in the area remained dangerously low during the first period of field work, in mid-1995, but by early 1996 the situation had improved dramatically, with high rainfall throughout the southern African region.

Temperatures in Venda, like rainfall, show considerable variation across the territory. In general, temperatures increase as one moves from the higher ground of the central Soutpansberg to the low-lying areas to the north-east. This pattern may be seen from the following table, which shows average maximum and minimum daily temperatures for January and July, the hottest and coldest months of the year, for three stations in the region: Siloam, Tshandama and Pafuri. These may be taken as roughly indicative of conditions in the upper, middle and lower reaches of the Mutale River, respectively.

Table 2. Average Daily Temperatures, Mutale Valley

	Summer		*Winter*	
	Max.	Min.	Max.	Min.
Soutpansberg (Siloam Station)	29.5	18.4	22.7	7.2
Tshiombo Valley (Tshandama)	31.5	19.3	24.0	6.2
Limpopo Valley (Pafuri)	33.3	22.7	26.3	7.1

Source: Weather Bureau Table WB42

Average temperatures are moderate to high throughout the year, and day-night inversions are not particularly severe.

[5] Desmond (1971) provides a vivid description of the impact of drought in the region at this time.

4.3 GEOLOGY AND VEGETATION

Central Venda is dominated by the Soutpansberg Range, formed by a succession of volcanic and sedimentary rocks overlying the Archaic bedrock. The mountains run for approximately 140 km in an east-west direction, reaching an altitude of more than 1500m at the western end and above 1300m in central sections. The topography of the area results from dissection by the north- and north-eastward flowing steams which form the tributaries of the Limpopo River, which provide considerable cultivable areas (RAU 1979: 6). In the higher, wetter parts of the Soutpansberg the climax vegetation is forest but has been largely replaced by grassveld on the mountain tops, and by scrubby thornveld, classified as North-Eastern Mountain Sourveld, on escarpments and slopes (Acocks 1988).

To the north of the Soutpansberg, towards the Limpopo River and the Malonga Flats, the geology is predominantly composed of sediments and basalt lavas of the Karoo Super Group. Soils are mainly shallow and stony, with areas of red apedal sandy soils of both colluvial and aeolian origin. Vegetation is largely mopane veld, with some mixed bushveld and sourveld in western portions (RAU 1979: 5).

North of the Soutpansberg, the vegetation is predominantly open tree savannah (sourish mixed bushveld) with *Acacia caffra* the dominant tree, and a denser tree savannah (mixed bushveld) in the northern foothills (RAU 1979:5). In the dryer, low-lying areas to the north, the vegetation is largely short shrubby mopane trees (*Colophospermum mopane*), with scattered Baobab trees (*Adansonia digitata*) (Acocks 1988:43).

4.4 STUDY SITES

The study focuses on two parts of the Mutale River valley, the Tshiombo valley, and the Lower Mutale area (see Map 2) .

i. The Tshiombo Valley

For the first 15 km from its source, the Mutale River descends rapidly through mountainous forested terrain of the Soutpansberg, whose peaks rise to more than 1300m and valley floors lie at over 700m above sea level. The terrain contains a few patches of deep red clay soils (ISCW Land Type Ib441) offering little scope for cultivation. The area is sparsely populated. Ten kilometres north-east of Lake Fundudzi, the river emerges into the Tshiombo valley, a broad, almost flat area approximately 33 km long, and 4 to 7 kilometres wide, at an altitude of about 600m above sea level. The valley covers some 18,800 hectares, 80% of which is estimated to be cultivable (ISCW Land Type Ba60). About half of this area consists of red, well-drained sandy loam soils, with the remainder made up of grey, poorly drained soils of a higher clay content.

Annual (calendar year) rainfall in the Tshiombo valley (Tshandama Station) for the period 1982-93 averaged 688mm, 82% of this falling in the period October to March (Weather Bureau Table WB42). However, the totals for the agricultural year (July to June) show a wider variation - from 240mm in 1991/92 to 1120 mm in 1987/88. RAU estimated the total mean annual runoff for the Tshiombo valley at 19.3 million cubic meters, or 120,600 cubic meters per square kilometre, all of which goes to the Mutale River.

At the lower end of the Tshiombo valley the river flows into a narrow gorge and then for approximately 20km through the foothills of the north-eastern Soutpansberg, which rise to about 800m and effectively separate the Tshiombo valley from the drylands to the north.

ii. The Lower Mutale

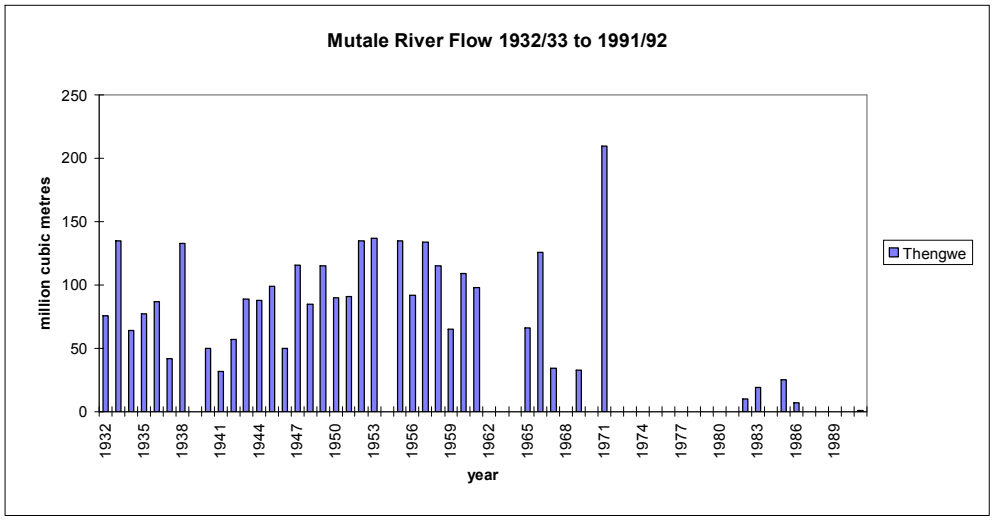
On emerging from the foothills of the Soutpansberg, the Mutale River flow north-eastwards for approximately 15km through hilly terrain dominated by rocky slopes with shallow soils. The area is sparsely populated, and cultivable soils are estimated to cover only 8% of the land area (ISCW Land Type Fb498). Moving northwards, the landscape through which the river flows becomes progressively flatter and the hills more dispersed. North of Mutale Bridge, the river turns to the east to skirt the southern edge of a rocky quartzite and sandstone ridge around Ha-Mutele, before turning north-eastwards once again. At this point extensive areas of alluvial and deep clay soils make up 70-80% of the gently sloping riverine land on both banks (ISCW Land Type Fb499). For its last 15km, the Mutale turns to the east once more, flowing through terraced valleys to its confluence with the Luvuvhu. Away from the immediate floodplain, soils are sandy and shallow, giving way in the north to extensive areas of deep sandy soils bordering the Malonga Flats, an extensive area of clay soils derived from the underlying basalt rock.

Annual rainfall in the Lower Mutele area falls below 500mm in parts. The area is thus marginal for rainfed cultivation, and is suitable mainly for extensive grazing. Vegetation in the south-western parts consists of mainly mixed Bushveld of the Tropical Bushveld Savannah Types, merging with Acocks' Mopane-veld of the Tropical Bush and Savannah Types towards the north-east (RAU 1979:14)

4.5 RIVER FLOW

Figures for the monthly volume of water flowing in the Mutale River, measured at Thengwe (Streamflow Gauge A9M04), are available, with some gaps, for the period August 1932 to July 1995. For the 38 years for which complete data are available, the average flow has been 82.68 million cubic meters per annum, and in 29 of those years flow has exceeded 50 million cubic meters, as may be seen from the following table. Data were unavailable for the years 1939, 1954, 1962-64, 1968, 1972-81, 1984, and 1987-90.

Figure 3.



0Source: DWAF Streamflow Station, Thengwe

While these figures show some cyclical pattern, the most obvious feature is the dramatic decline in water volumes in recent years, especially in the period since 1980. With the exception of only two seasons (1937/38 and 1941/42), the entire period from 1932/33 to 1962/63 shows volumes of above 50 million cubic meters per annum. After 1962 the annual flow shows a substantial decline, and it would appear that from 1982/83 to 1994/95 (with the possible exception of 1984/85), no season has experienced more than 50 million cubic meters - i.e. well below the previous norm The lowest confirmed figure is 1.28 million for 1991/92, with less than 50,000 cubic metres (i.e. virtually no flow) for each month from February to October 1992. Informants in the Lower Mutale area reported that the Mutale dried up completely in the 1992/93 season, the only time that they could recall this happening

The significance of this decline can be illustrated by comparing total flow in the river against the requirements of the single largest water user along the Mutale, the Tshiombo irrigation scheme, estimated at 8.14 million cubic meters per annum (at 80% land utilisation). Over the long term, the volume measured downstream of the scheme, at Thengwe, has exceed Tshiombo's requirement by a factor of ten, but, in recent years, the amount required at Tshiombo actually exceeds the total water volume remaining in the river.

There is no single explanation available for the severe decline in water volumes in the Mutale River, but a number of possibilities present themselves. Most obvious is the changing rainfall pattern in the region, which seems to be in long term decline. To this must be added, however, the increasing extraction of river water for irrigation schemes, and, as will be seen, by private irrigators all along the valley. In addition to the 8.14 million cubic metres required every year by the Tshiombo scheme, M.B.B. (1989: 32) estimate that a further four million is extracted for the Makonde irrigation scheme, and 1.8 million between Tshiombo and Thengwe for animal and human consumption. Another likely cause of decline is the damming of the Tshirovha River, a tributary of the upper Mutale, in order to provide irrigation water for the tea plantations at Makumbane, on the south side of the mountains.

Whatever the reason, or combination of reasons, the general pattern of decline fits that described by O'Keeffe, Uys and Bruton (1992:288) for the rivers draining through the Kruger National Park:

> *"Reductions in the flow of South African rivers, due to river abstractions as well as impoundment, have compounded the effects of catchment degradation, and have converted a number of southern Africa's perennial rivers to seasonal rivers. Some of the most striking examples are the rivers that flow through the Kruger National Park. These rivers all rise to the west of the park boundary, and many have been heavily exploited before they flow into the park. Although there are no formal hydrological records, very reliable observations since the first half of the century are available from park rangers' notebooks. These indicate that all the main rivers (Luvuvhu, Great Letaba, Olifants, Sabie and Crocodile) were formerly perennial. In recent years the flow in the Letaba River has been so reduced that it flows for only a few months each year. The Luvuvhu River first stopped flowing in 1948, and again in 1964-65, but it now stops flowing in most years".*

As yet, the Mutale itself has not been dammed, but the danger facing all of the rivers in the region would appear to be same.

5. TSHIOMBO CASE STUDY

5.1 Introduction and Methodology

The Tshiombo irrigation scheme lies in the Tshiombo valley, a fertile and relatively well-populated area of central Venda (see Map 3). The area has been the scene of various attempts by the authorities, since 1960, to develop its agricultural potential and stimulate the local economy. As one of the few well-watered areas occupied by black people in South Africa's Northern Province, it could be expected to reveal important information about how key natural resources are currently being used, and what potential or problems there may be for the further development of such resources.

Field-work for the Tshiombo study was conducted in two phases: a preliminary survey of the area, followed by a detailed household survey, during April-June 1995; and a follow-up study in March-April 1996. Preparatory work began with an exploration of published source material related to the area. The general literature and statistical sources on Venda (outlined above) contain very little specific to the Tshiombo valley. The exceptions are two reports by the engineering consultants Murray Biesenbach & Badenhorst (MBB) from 1987 and 1989, which deal mainly with the hydrology of the Tshiombo and Rambuda irrigation schemes, and proposals for their improvement. MBB also provided a blue-print of the Tshiombo scheme, from 1960. Very limited records are kept on the scheme itself, amongst them monthly estimates of crop production by block, a register of plot-holdings and rental payments, and bookings for government tractor services.

Meetings with officials of the provincial administration in Pietersburg and Thohoyandou revealed little further information or documentary material relating to Tshiombo. It also became apparent that the provincial Department of Agriculture did not, at this stage, have any specific policies regarding projects such as Tshiombo, and were still working on a plan for the reform of agricultural services in the province generally. Preliminary interviews and discussions were also held with farmers, officials, local leaders and others during this preparatory phase, in order to gain an understanding of the background, purpose and overall workings of the scheme, how it was administered, and the main activities and problems associated with it. Other research methods employed at this time, and throughout the period of the study, included participation in various community events, both formal and informal, and on-going observations of both social and economic activities in the area.

The preparatory phase was followed by a questionnaire-based household survey, involving a sample of plot-holders on the scheme. The survey sample was generated by means of a one-in-ten interval selection from the 930 plots on the official land register at Tshiombo, starting with a randomly chosen number between one and ten. This yielded a sample of 93 plot-holders, evenly distributed across the scheme, but on examination it was found that two of the plots selected were held by the same household, so the confirmed sample size (i.e. total number of possible interviews) was reduced to 92. By the end of the research period, interviews had been completed with eighty-three households. Of the remaining nine plot-holders, one had recently deceased, and the other eight were either unwilling to participate in the survey or were uncontactable after many

attempts. Therefore, the effective sample size, as used throughout the analysis that follows, was 83 (n=83).6

Interviews took place in respondents' homes, at their fields, or at the scheme office, as they preferred. Attempts were made to speak with as many members of a household as possible, but in most cases a household was effectively represented by a single person. All of the interviews were conducted by the author and an interpreter, Mr Lawrence Phala. Most interviews were in the Venda language (Luvenda), with immediate translation into English, but in a few cases the participants preferred the interviews to be conducted in English.

The objective of the household survey was to obtain information on the composition of each household, along with its history, holding of land and livestock, farming practices, and sources of livelihood. In addition to empirical issues, the questionnaire also aimed to elicit more subjective information, by asking respondents to evaluate the irrigation scheme and related services, as well as their personal situation.

The second phase of field-work at Tshiombo was carried out during the period March-April 1996, and had two main objectives: to review conditions on the scheme one year on, and to follow-up on particular issues arising from the household survey of the previous year, especially where the recorded information was unclear or incomplete. All of the Agricultural Officers on the scheme were re-interviewed at this stage, along with village headmen, councillors, members of civics and a variety of other informants. In addition, group interviews were conducted with farmers on four of the twelve blocks on the scheme. These interviews were largely unstructured, and the Agricultural Officers were given discretion to select the participants. Out of 32 plot-holders who participated, ten had been included in the original household survey, and twelve were new to the study. Initial survey results were presented for discussion at these meetings, allowing for considerable debate and clarification of issues.

5.2 DISTRICT OVERVIEW

The Tshiombo irrigation scheme is situated at the extreme south-westerly end of the Tshiombo valley, on the south bank of the Mutale River (see Map 3). Administratively, the valley is divided between four tribal authorities, Tshivhase, Thengwe, Rambuda and Tshikundamalema. Tshivhase, by far the most populous of the Venda tribal districts, stretches from west of Lake Fundudzi along the south bank of the Mutale River as far as Tswere, and south as far as Thohoyandou. Rambuda, on the north bank of the River, stretches from the western end of the valley as far east as Pile, and north of the Soutpansberg. Thengwe lies to the east of Rambuda (starting at Tshandama) on the northern bank of the river, with a small portion of territory on the south bank, the villages of Mukondeni and Tshanzhe. A small area at the extreme north-east of the valley falls under Tshikundamalema tribal authority, which also extends north over the Soutpansberg as far as Masisi.

[6] The survey found that a minority of households held more than one plot on the scheme, and that the average number of plots per household amongst the sample group was 1.52. Extrapolating this data to the entire scheme suggests a total of approximately 608 household on the scheme, and that the number of completed interviews probably represents around fourteen per cent of all households with land on the scheme.

Under the pre-1994 system of local government, the southern part of the Tshiombo valley (i.e. all the territory south of the Mutale River), fell under Thohoyandou District Council (Regional Authority), and the northern part fell under Mutale District Council. Under the new (post-1995) dispensation, the southern part of the valley, from Lake Fundudzi to the Makonde Bridge, falls under Thohoyandou Urban Council, while the northern part of the valley, along with the entire lower reaches of the Mutale, falls under the rural council of Mutale, Masisi and Vutshwema. As discussed above (Chapter 2) local government structures in Venda were not fully functioning at the time of fieldwork. Civics, loosely aligned to SANCO (South African National Civics Organisation) have been formed in many of the villages in the area, since 1994, and are strongly opposed by the existing village (i.e. 'tribal') councils. The civics have recently begun petitioning the authorities on a range of local issues, mainly to do with electrification of homes and the provision of drinking water, but they have also begun making representations to agricultural officers regarding the supply of irrigation water and tractors.

As the Tshiombo valley falls within a number of administrative district, it is difficult to determine the exact population. However, a figure of 25-30,000 people, spread over about 20 settlements is probably close to the mark. More precise figures, drawn from the 1991 census, are presented below for the area of the Tshiombo irrigation scheme. While not amongst the most densely populated parts of Venda, the valley as a whole probably has an above average density for the region, and is well in excess of the territory to the north of the Soutpansberg and along the lower reaches of the Mutale.

Given its location, only 20km from the Venda capital, the Tshiombo valley is relatively well provided with services and communications. A good quality tarred road runs from Thohoyandou to Mutale township, via a bridge at Makonde, and then eastward to the end of the valley. Gravel roads connect the villages of Maraxwe and Ha-Rambuda, at the western end of the valley, to the tarred road, and a bridge over the Mutale River at the western end of the valley connects Tshiombo to Rambuda district. Public transport - in the form of buses and mini-bus taxies - is generally good, at least as far north as Mutale township. A large number of people commute to work in the Thohoyandou area, and many more travel there for shopping and to sell their produce. Taxis are usually available in the western villages at intervals throughout the day, but transport to the eastern end, and to the districts north of the valley, is much less frequent. An assortment of shops, services and filling stations can be found along the main tarred road, at places such as Khubvi and Makonde. However, the main concentration of services in the area is at Mutale township, with magistrates' and other government offices, police station, post-office, a variety of shops, a fresh produce market, and a collection of small craft workshops built by the Venda Development Corporation.

Mains electricity has been installed along the main tarred road since 1991, and is being gradually extended to villages in the western part of the valley. Telephone services are restricted to a few farm-lines (manual exchange). Most villages in the valley have been equipped with communal stand-pipes for drinking water, but the service is highly unreliable, obliging people to rely on rivers and natural springs for their household needs. Ha-Rambuda, Mutale township and Tshiombo all have primary health clinics, with full-time nursing staff, and are visited periodically by doctors from Donald Fraser Hospital, some 25km to the south-west.

Economic activity within the Tshiombo valley is mainly concentrated on agriculture. Land adjacent to the Mutale River is well suited to the production of crops under

irrigation, but the climatic conditions are also capable of supporting dryland agriculture and livestock farming.

Tshiombo and Rambuda irrigation schemes, at the head of the valley, were developed by the South African authorities (Department of Native Affairs) in the early 1960s, They share a similar design, based on gravity-fed furrow irrigation, and draw water from the Mutale and Tshala rivers respectively. Tshiombo is the larger of the two, with 1150 hectares under irrigation (divided into 930 plots), and is amongst the largest of its kind in South Africa. By contrast, Rambuda has only 120 hectares, divided into 102 plots. Research conducted on the Tshiombo scheme constitutes the central part of this case study, but brief visits to the Rambuda scheme suggested that conditions are broadly similar on both.

Adjacent to the Tshiombo scheme, at Makonde, an area of approximately 540 hectares has been developed by the Venda authorities for sprinkler irrigation. This project is managed by the parastatal Venda Agricultural Corporation (Agriven), which leases plots ranging from eight to twenty-five hectares to individual farmers. Production on these plots is heavily market orientated, and farmers receive substantial support from Agriven, ranging from advice on production and marketing to credit, ploughing and transport services. While a number of farmers at Makonde were reported to be in financial difficulties in recent years, leading some to abandon their plots, the majority of plots are currently being used. Unlike the situation on Tshiombo and Rambuda schemes, a high proportion of plot-holders on the Makonde scheme have additional employment or business interests elsewhere. Small areas of informal (i.e. private) irrigation are also found on both banks of the Mutale River, especially around Tshandama, on the north bank, and along tributaries such as the Tshiombedi and the Sambandou.

Dryland (rainfed) agriculture is carried out in many parts of the valley, particularly in the eastern end. The exception is Tshiombo, where virtually all arable land between the river and the mountains is given over to the irrigation project. Substantial stretches of dryland cropping are found along the northern bank of the Mutale, from Tshapasha, in Rambuda district, as far as Mangaya, and on the south bank, in the area between the villages of Tswera and Mukondeni. Individual plots throughout this area tend to be between 0.5 and three hectares. The dominant dryland crop is maize, usually intercropped with various varieties of pumpkins and squash. Smaller areas of groundnuts and some sorghum are also found. Generally speaking, dryland cropping tends to be less sophisticated than irrigated production, in terms of purchased inputs and methods of cultivation. Ploughing in these areas is largely done using privately-hired tractors, although a minority of farmers use donkey draught, and some smaller plots are cultivated by hand. Use of purchased agricultural inputs - improved seed, fertilizer, pesticide - are well below the levels found on the irrigation schemes, and in many cases are not used at all. The proportion of produce sold is also very low, with most dryland crops being consumed entirely within the household. With very few exceptions, dryland cropping does no more that supplement household incomes, and rarely if ever constitutes people's principal source of livelihood.

Stock farming, of both cattle and goats, is widespread in the area, but not on the scale found in more northerly districts. The grazing south of the mountains is largely classified as sourveld, meaning that the grass loses its nutrients in winter. Local officials of the Department of Agriculture estimated that no more than one-quarter of households in the area kept livestock, with cattle slightly outnumbering goats. Most cattle herds were

found to be in the range of 5 to 20 head, with similar sizes for goats. There are no established sales points for livestock in the area, and informal sales - to butcheries and local households - were reported to be very low. Overall, livestock farming is considerably less important as a source of livelihoods than crop farming, and less important than in areas north of the Soutpansberg.

All land within the Tshiombo valley is officially classified as communal land, and is under the control of the tribal authorities. On the government-run irrigation schemes, however, a degree of control has been acquired by Agriven and the Department of Agriculture, although this has not altered the underlying tenurial form. On the older, small-holder schemes, at Tshiombo and Rambuda, plots for cultivation are allocated jointly by the village headman and the agricultural extension officer, and plot-holders pay an annual fee of R127 per plot to the government. Despite the role of officials in the allocation of plots, and the payment of annual fees, the basis of land-holding on these schemes does not differ from other land allocated under the 'tribal' system: occupants are given permission to use the land, but no title deed; occupants are free to pass their plots to other family members on their death or retirement; and there are no effective means of repossessing lands, even where they are unused, unless the occupant surrenders it. On the Makonde scheme, the system of land-holding is quite different, as plots are allocated by Agriven managers, with little reference to the tribal authorities. Plot-holders are granted their land for a fixed period under a renewable, written contract, and are liable to forfeiture of their tenancy if they do not meet their rental and other financial obligations. Away from the schemes, however, the 'communal' or 'tribal' tenure system prevails. Arable and housing plots are allocated by the village headman, and grazing is used collectively by the inhabitants of each village (see below).

Agriculture and related services in the Tshiombo area generate considerable economic activity for non-farmers also. At least eight private tractors were available for hire on the Tshiombo scheme, for example, and many more people, both farmers and non-farmers, were providing transport services using one-tonne trucks. Large numbers of dealers, with their own transport, and hawkers, many using public transport, also operate in the Tshiombo area, supplying Thohoyandou and other towns with fresh produce. Other enterprises serving the agricultural sector are the Tshiombo co-operative, which offers a wide range of agricultural and household requisites, and a new, electrically-powered maize mill, which offers a local alternative to the roller-mills at Shayandima, and appears to be extremely successful. A large number of people are also employed by the government on the agricultural schemes. Tshiombo itself has over fifty full-time employees, ranging from agricultural extension officers to water bailiffs, tractor drivers, mechanics, cleaners and labourers, with lesser numbers at Rambuda and Makonde. Direct wage employment on agricultural plots is not very great, with the exception of the larger plots at Makonde, where farmers employ between five and ten workers at a time. On the small-scale schemes at Tshiombo and Rambuda, the majority of farmers do not employ labour, and the remainder rarely employ more than two or three workers on a casual basis.

The only industrial activity in the Tshiombo valley is brick making; brickyards have sprung up in many of the villages in recent years. Some are privately owned, but others are collectively run schemes, started with assistance from various non-governmental

[7] The South African unit of currency is the Rand (R). In 1995, the exchange rate was approximately R5.5 to UK£1.

organisations, most notably the Independent Development Trust (IDT). This development is very much a response to the rise in brick-built houses, which have begun to replace the traditional mud and thatch huts in many areas. Finally, there is a considerable degree of self-employment in service and hand-crafts in the area - motor mechanics, dressmaking, shoe-repairs, hairdressing and the like.

The majority of people from the Tshiombo area who are in full-time wage employment work in Thohoyandou, and commute there daily. Daily or weekly commuting to other parts of Venda, or adjoining white areas, is uncommon. Long-distance labour migration, to Johannesburg and other industrial centres remains an important source of livelihood for many households, but would appear to be declining in importance, and many young men no longer consider it as an option. Possible reasons for this change are the decline in industrial employment in the country generally, and the rapid expansion of employment opportunities within Venda, particularly in the government service, during the 'independence' period.

5.3 Tshiombo irrigation scheme

Tshiombo irrigation scheme lies at the western end of the Tshiombo valley, on the upper reaches of the Mutale River. The irrigated lands cover an area of 1,196 hectares, divided into 930 plots, each of approximately 1.2 hectares (1.5 *morgen*) in size. The plot-holders reside in six villages situated alongside the scheme. The irrigation scheme was developed by the South African authorities (Department of Native Affairs) between 1959 and 1964 on land provided by the local chief, Tshivhase. Until 1994 it was under the management of the Venda Department of Agriculture, but it has since been integrated into the administration of the new Northern Province.
Although little precise information is available, Tshiombo would appear to be an early, and relatively elaborate, example of the policy of 'betterment' implemented in the black 'homelands' during the apartheid era. De Wet (1995:48) argues that after 1954 the South African government abandoned its earlier policy (and the recommendations of its own Tomlinson Commission) of trying to develop smallholder agriculture in the reserves through the creation of 'economic' holdings, which included the culling of cattle and the removal of the 'surplus' (i.e. landless) population to separate 'locations'. Instead, the regime concentrated on establishing more effective control over the rural population, which meant bolstering the position of the tribal leaders, and 'stabilising' the rural economy by promoting new developments such as irrigated agriculture, sugar cane, forestry and fibre production. Culling of cattle, and any changes to the 'tribal' land system, such as the introduction of private land tenure or mass dispossession, would, it was thought, undermine the position of the chiefs, and were therefore rejected.
"Locations were still divided into residential, arable and grazing areas, but plans were modified to cater for all the inhabitants of a location ... This meant that only a few, and in some cases, no families, received economic units, as it was policy in the application of the revised planning strategy that no one should lose rights to occupy land as a result of the implementation of Betterment" (de Wet 1995:51).

The creation of the Tshiombo scheme involved relocating the surrounding population, which then lived in dispersed settlements, into six new, compact villages, namely

Matangari, Tshiombo8, Mianzwi, Maraxwe, Muhotoni and Mutshenzheni, each under its own headman or woman. The villages are all located south-west of the main road that runs the length of the scheme, and to the south of the arable lands.

Older people in the villages remember this initial period as a time of plentiful employment, with the construction of the irrigation infrastructure and the clearing of ploughing land, but also as a time of considerable disruption as households were forced to relocate to the residential areas. A number of households, not wishing to join the scheme, or not understanding what was happening, are said to have left the area at this time ("they ran away", said one old man). However, it appears that most, if not all, households in the vicinity of the scheme were able to obtain an irrigated plot if they so desired, as were a considerable number of people from other parts of Venda and from 'white' farming areas to the south and west.

Of the households interviewed, 49 (59%) had obtained plots at the beginning of the scheme (i.e. prior to 1966). Of these, 21 originated in Tshiombo, 16 came from other parts of Tshivhase chieftaincy, eight came from other parts of Venda, and four moved from white farms. In later years, the great majority of people obtaining plots originated outside the area, with the result that less than a third (31.3%) of the plot-holders now on the scheme originated in Tshiombo.

The degree of movement into Tshiombo suggested by these figures could be seen as a mark of the success of the scheme, but must also be understood in terms of the widespread uprooting of black people throughout the region (see Chapter 3). The move from white farms is in line with what is known about the ending of labour tenancy and the forced removal of black 'squatters' from white farms, a process which entered its decisive phase in the northern Transvaal in the mid-1960s (Desmond 1971; Horrell 1973). Many of the people coming from white farms were experienced farmers in their own right, and were able to re-establish themselves in areas such as Tshiombo and, as will be seen (below), the Lower Mutale area as well. One respondent at Tshiombo reported that her late husband had moved there from a white farm in the Luvuvhu Valley around 1960, bringing with him cattle, ploughs and 'his own wealth'. People who moved into the area said they were attracted by the prospects of irrigated land and government support, and many came with the intention of becoming full-time farmers.

5.4 Government Services

The state provides a wide range of services at Tshiombo, relating to the maintenance and operation of the irrigation system, and support to individual plot-holders. The main agencies involved up to 1994 were the Venda Department of Works and Water Affairs, which maintained the irrigation infrastructure and provided tractor services, and the Department of Agriculture, which provided the agricultural extension service. Both departments have now been incorporated into the new provincial government service.

The key officials in the day to day management of the scheme, and in the co-ordination of government services on the ground, are the Agricultural (extension) Officers, each of whom is responsible for one of the twelve ‘blocks’ into which the project is divided. The

[8] Throughout this paper, the name 'Tshiombo' is used to mean the irrigation scheme as a whole, including all six villages, unless otherwise indicated.

Agricultural Officers advise farmers on all aspects of crop production, particularly the selection and use of seed and fertilizer, the optimal times for planting and harvesting, and the control of pests. They also organises the booking of tractors and other services for farmers on their Blocks, and deals with all applications for new plots or transfers of plots between members of a household. All twelve Officers report to the Scheme Superintendent, who has an office on the scheme.

While many of those interviewed were critical of the extension service, the great majority made use of it, and people generally viewed the official support services as an important component of the scheme. The most common grounds for complaint was that officers did not visit the plots on a regular basis, or at all, but as with other criticisms, this varied considerably from block to block (i.e. from officer to officer).

Working closely with the agricultural officers are fifteen water bailiffs, who supervise the daily allocation of water to the various blocks, and are expected to prevent unauthorised use of irrigation water (see below). Other staff involved in the general operation and maintenance of the scheme include fence repairers, office cleaners, a team of (approximately 20) labourers to maintain the irrigation canals, and a clerk who receives revenue for tractor hire and annual plot rental.
An important component of the Tshiombo project since its inception has been the government tractor fleet, which provides ploughing and cultivation services to plot-holders, for a fee. According to Department officials, there are six tractors stationed at Tshiombo, but no more than two appeared to be working. Farmers on the scheme reported that the service has deteriorated severely in recent years, particularly since 1990, and that they were experiencing long delays in obtaining tractors for ploughing. Officials on the scheme confirmed that the tractor service suffers from delays in routine maintenance and repairs, despite the presence of full-time mechanics on site. Mechanical problems were compounded by recurring shortages of diesel fuel, caused by budgetary problems in the former homeland administration, which had not been resolved more than a year after the transfer of responsibility to the new provincial government.

The most important non-government service on the irrigation scheme is undoubtedly the Tshiombo Co-operative. This was founded in 1973 as a collective purchasing organisation for farmers on the scheme, and provides a rare example of a (relatively) successful independent farmers' co-operative in a 'black' area of South Africa. The co-op has 630 members, and is run by a management committee, elected annually by the membership, and a full-time staff of six. It is essentially a retail operation, its main activities being the sale of agricultural inputs, such as fertilizer, seed and pesticides, petrol (it has the only filling station in the area), and household supplies, such as cooking pots, candles, paraffin, soap, mealie (maize) meal and waterproof clothing. The management of the co-operative reported that it was having problems competing with Agriven (the parastatal Venda Agricultural Corporation) and the 'white' co-operatives in the region (Northern Transvaal and Levubu Co-operatives) in the supply of agricultural inputs, mainly because of the poor terms offered by suppliers, and the fact that Tshiombo is not in a position to offer credit facilities to its members.

5.5 SOCIAL ASPECTS

Each of the six villages at Tshiombo is laid out to the grid pattern typical of 'betterment' planning, and is provided with rudimentary services. Each has a small general store, and

between them they share eight primary schools, three secondary schools, and one clinic, with a full-time nurse and three assistants; a doctor from Donald Fraser Hospital attends the clinic once every fortnight. The only other store within the area of the scheme is the Tshiombo co-operative. Every village has been fitted with communal standpipes, connected to a mains system, for drinking water, but supply is infrequent and households rely mostly on the irrigation canal and natural springs for their domestic water requirements.

Most homesteads consist of traditional-style round huts, made of mud bricks and thatched with grass. However, a sizeable number of modern houses, made from concrete bricks and tiled roofs, have been built in the area in recent years, and many homesteads display a mix of traditional and modern styles. During the first period of fieldwork (April-June 1995) houses throughout the area were being provided with mains electricity. Domestic toilets are of the pit-latrine type.

The population of the Tshiombo villages, according to the 1991 census, was as follows:

Table 3. Population Of Tshiombo

Village	Population
Matangari	2992
Tshiombo	1127
Mianzwi	1338
Maraxwe	1069
Muhotoni	988
Mutshenzheni	478
Total	**7992**

The total population of the eighty-three households included in this study was 636, an average of 7.66 persons per household. The household survey attempted to obtain a complete picture of each household as a social and economic unit, and therefore, unlike the census, included all those who lived within the household for some or all of the year (e.g. migrant workers), or who considered it their principal home. Off-spring who had married and established their own homes away from the parental homestead were excluded from this definition, but those who remained within the parental homestead for some or all of the year were included, along with their spouses and children. Children who lived with their grandparents in the village while both parents stayed in the city were included in the grandparents' household, although generally the parents were not.

The actual number of persons per households ranged from one to twenty-one persons, but two-thirds of households contained between five and ten members, typically spread over three generation of the one family. Adults constituted 42.6% of the sample population, and children 57.4%. Of the adults (i.e. those over 15 years), 41.3% were male, and 58.7% were female.

All households within the survey sample contained at least one adult, and the highest number of adults reported in a household (one case) was ten. The average for the sample was 3.23 adults per household, and over four-fifths of households (80.8%) contained between two and four adults. The number of children per household ranged from nil to sixteen, and averaged 4.43.

Table 4. Number Of Persons Per Household, Tshiombo

NUMBER OF PERSONS	NUMBER OF HOUSEHOLDS	PERCENTAGE OF HOUSEHOLDS
1	2	2.4
2-4	13	15.7
5-7	28	33.7
8-10	28	33.7
11+	12	14.4

n = 83, mean = 7.66 persons/household

Households at Tshiombo take a wide variety of forms. Most contained three generations of the same family, and a minority were based around polygynous relationships. The most common manner in which households reproduce themselves (or 'extend') is where one off-spring (usually a son, but occasionally a daughter) marries and remains, along with their spouse and children, within the parental homestead, gradually assuming responsibility for the homestead and for the parents. Other adult off-spring may share the homestead until such time as they marry and set up their own homes.

There are, however, considerable exceptions to this model. More than one off-spring may continue to live within the parental homestead with their spouse and children after marriage - the leading example of this pattern was a household comprising an elderly couple with four married sons, their wives and a total of eleven grand-children, all inhabiting the one, much-enlarged homestead. It is also possible that this pattern may be continued into a fourth, contemporary generation, as one or more grand-child marries and/or has children while remaining within the homestead. It is not unusual for relatively young women (15-17 years) to bear children while unmarried and resident within the parental homestead, although this may be a temporary arrangement prior to setting up their own home. Natal households also have a tendency to partially reconstitute themselves over time, as widowed or abandoned women return to live with their parents.

Polygynous marriage is a long-standing feature of Venda life, popularly associated with the chiefs. The practice has been strongly opposed by the missionary churches in the region, but it still survives, particularly amongst non-Christians and the followers of independent 'Africanist' churches. In the course of the survey, nineteen examples of polygynous marriages were encountered, all involving men with two wives, although examples of men with up to six wives were encountered outside the survey sample. Polygynous households fall into two broad types: the more common type (14 cases in the sample) is where the wives live within the same household, and the less common (five cases) where wives live in separate households (usually in different villages), with the husband alternating between the two. In some of these latter cases, it would appear that the first wives have effectively been abandoned by their husbands (i.e. divorced). While most of the men concerned were relatively elderly (i.e. in their 60s and 70s), cases of men in their 40s and 50s supporting multiple households were also encountered.

The preponderance of adult women over men suggests that a significant number of women are living without male partners, which is indeed the case. One consequence of

the extended family structure, however, is that relatively few households are entirely without an adult male (or female) member. In all, only five households out of the eighty-three in the sample did not contain an adult male, and only one example was found of a household without an adult female member. Although women are undoubtedly the principal bread-winners in many households, the fluid nature of the extended family makes it difficult to use a category such as 'female-headed households' with any accuracy.

In terms of occupations, the adults in the sample (271 persons) can be divided into three broad categories. The largest proportion, 127 persons, or 46.8%, were primarily engaged within the household economy; this included people involved in domestic and agricultural work, various forms of non-farm petty commodity production, and those who described themselves as unemployed. The other broad categories were pensioners (29.9%), and wage-workers, who made up the remaining 23.2%. These categories clearly mask a large degree of internal differentiation, the most important of which is the radically different occupational structures for men and women.

Looking first at adult women, 59.8% were primarily engaged within the household economy (domestic and/or agricultural work), 34% were pensioners, and only 6.3% were in paid employment. Of the ten women in paid employment, one was a nurse, one worked in a clothing factor in Thohoyandou, one working in a brickyard, one was a cleaner in the agricultural office at Tshiombo, one was a government labourer employed on the irrigation scheme, one was a tribal official and worked at the agricultural research station, and four were primary school teachers. All worked within 15km of Tshiombo. Overall, we can say that the adult female population is heavily concentrated within the household economy, has a relatively high proportion of pensioners, a very low incidence of extra-household employment, and does not engage in migrant labour.

The occupational structure for males is heavily weighted towards non-household employment, with a relatively low proportion of pensioners. The proportion of adult men in paid employment, 47.3%, was nearly seven-times the female rate, and nearly five times the absolute number. Of a total of 53 men in paid employment, two worked part-time within the Tshiombo area (one as a priest, one in voter education), 21 were migrant workers (meaning that they were in permanent employment at some distance from their home, returning home no more than once per month, but as infrequently as once a year in many cases), and 30 were employed within Venda. With four exceptions (two who worked in shops, one in a mine, one in a filling station), all of the men in full-time, local employment were employed in some branch of the government service - tractor drivers, hospital porters, security guards, soldiers and teachers. Migrants worked in a wider range of jobs in the public and private sectors, mostly in skilled and semi-skilled manual trades, such as drivers, machine operators, and construction workers.

The proportion of adult men receiving pensions was 24.1%, well below the figure for women; in absolute term, female pensioners outnumber male pensioners by exactly two to one. The difference, in part, can be explained by the fact that women qualify for old age pensions at 60 years of age, whereas men must wait until they reach 65. Of the men without pensions or wage-employment (32 in all), 19 described themselves as full-time farmers, meaning that working their own plots was their principal occupation and their principal source of income, and 13 (mainly in their 20s) described themselves as unemployed. Some of this last group were engaged in agriculture on household plots, but their aim was to find a full-time job outside of farming.

In addition to wages and pensions, seven households (8.4%) reported that they received some financial support from family members who were not resident in the household. Six of these seven involved support provided to parents by sons in regular employment, all of them in Gauteng, and in three of these cases, children of the urban-based parents were living with their rural grandparents. Thus, it could be argued that caring for grandchildren is a source of livelihood for some older people, or that the extended family retains much of its importance as a social and economic unit despite the spatial separation of its members.

Although precise income data was not collected for all the households, the average cash income from non-farm sources is estimated to be in the order of R1200 per month. In cash terms, this makes non-farm income far more important that farm income for the great majority of households in the survey (see below). Wage rates reported in the survey were between R400 and R1500 per month, and old-age pensions, for men and women, were R430 per month. The division of non-farm income amongst households is, not surprisingly, highly uneven. Forth households (48.2%) received both wage and pension income, 11 households (13.2%) wages but no pensions, 22 households (26.5%) received pension payments but no wages, and 10 households (12%) neither wages nor pensions.

5.6 LAND HOLDINGS

Land at Tshiombo can be divided into four categories, viz. house stands, arable plots on the irrigation scheme, arable plots off the irrigation scheme, and grazing. When the area was reorganized under 'betterment' in 1959/60, only the first two categories were catered for. Unlike other villages in the region, no lands were officially demarcated at Tshiombo for dryland agriculture or for grazing, although limited amounts of both are today carried out on the margins of the irrigation scheme (see below).

With the exception of about fifty houses in Matangari village located on a small island of land within the irrigated lands, all houses in the six villages at Tshiombo are situated in the narrow (100-500m) strip of land between the main road and the hills on the southern fringe of the scheme. House-stands are each roughly forty metres square, and are arranged in a regular grid pattern. Sizeable parts of many house-stands are given over to fruit trees, vegetable plots, and animal 'kraals' (enclosures). Stands are, in principle, allocated by the village headman, within the area officially demarcated for residential purposes. Once approved by the headman, stands could, up to about 1990, be registered at the magistrate's office (in Thohoyandou), where the demarcation of the land and details of the householder were recorded and householders granted "Permission to Occupy" (PTO), sometimes in writing, but more usually verbally. Registration and PTO did not confer any legal title to the land, but was seen as securing the position of the householder in the event of any dispute with the headman or with neighbours.

In practice, not every house-stand had been registered, and a number of incidents were reported of "young men" building houses for themselves on the edges of the villages without consultation with the headman or other officials. The perceived threat to the system of allocating house-stands was the leading cause of complaint amongst headmen in all the villages, and the main source of friction between them and the emergent civics. Civic leaders and local councillors blame the dispute on the length of time the headmen

took to allocate plots, especially to political opponents, and the collapse, since 1990, of the registration system for communal land.

Plots on the irrigation scheme average 1.2 hectares each, but there is considerable variation between them, both in shape and size. They are split, for administrative purposes, into four main Blocks (1 to 4), but in recent years, these Blocks have been further subdivided, and today there are twelve Blocks, each under the supervision of its own Agricultural Officer. Blocks range in size from 48 plots (Block 1) to 143 plots (Block 3A). Each plot is divided into between 10 and 14 crop beds, the position and number of which are dictated by the outlets from the secondary irrigation canals.

Plots on the irrigation scheme are allocated jointly by the village headmen and the Agricultural Officer for the Block. Plot-holders pay an annual charge of R12 per plot to the government, a sum that has remained fixed since the beginning of the scheme. It appears that a policy of 'one man one plot' was applied for approximately the first ten years of the irrigation scheme, but from about the mid-1970s this began to change, and a minority of plot-holders were able to obtain additional irrigated plots, as well as areas of 'waste land' surrounding the scheme (see below). However, a majority of plot-holders (63.9%) still conform to the original design, having only a single plot each. The largest number of plots held by any household within the sample was six, and the average number of plots per household was 1.53 (1.84 hectares).

Table 5. Number of Irrigated Plots per Household at Tshiombo

NUMBER OF TS	NUMBER OF HOUSEHOLDS	PERCENTAGE OF HOUSEHOLDS
1	53	63.9
2	21	25.3
3	7	8.4
4	0	0
5	1	1.2
6	1	1.2

According to local residents, it was originally intended that every household in the six villages would have a plot on the scheme, and, conversely, that only those households with plots on the scheme would be allowed to live in these villages. This rule has now broken down, if indeed it was ever enforced, as people moved into the area without gaining access to arable land, and as, it was reported, a number of residents gave up their plots over the years. More significant, however, has been the natural expansion of the local population, with the number of new households formed by the off-spring of existing plot-holders rapidly outstripping the availability of plots. No precise figures were available for the number of households at Tshiombo without land on the scheme, but it was estimated, on the basis of the census data and field investigations, to be in the order of 400 households, or 40% of total households in the six villages.

All of the agricultural officers on the scheme reported a demand for plots, both from within and outside the immediate area, and eight of them kept waiting lists of applicants.

Turn-over of plot holdings is extremely low, however, with most plots remaining within households even between generations. All of the Agricultural Officers agreed that it would be unusual to transfer more than a single plot on a block to a new owner in any one year.

Subdivision of plots was not a common response to this situation, which can possibly be explained by the ability of the extended household to absorb additional members without the need for actually subdividing land between them. However, one man was found who had allocated half of his plot to his brother, and another man was sharing with his married son. In both cases, these people maintained separate households, and cultivated their shares separately.

As noted above, no land at Tshiombo, other than the irrigation scheme itself, is formally designated as arable land. Nonetheless, land on the margins of the scheme, particularly marshy areas between the scheme and the Mutale River, referred to by local officials as "waste land", is being cultivated. It is not known how long this has been happening, but interviews with users suggest that the formal allocation of plots on this "waste land" has been occurring since the late 1980s. Plots are allocated by the village headmen, who consult informally with the local agricultural officers.

Of the 83 households interviewed on the irrigation scheme, 21 held additional arable land off the scheme. Nine of these households held less than one hectare of additional land, and the greatest amount held off the scheme by any one household was ten hectares. The smaller plots (i.e. under 1ha) were mainly used for vegetable production, some with improvised methods of irrigation. Of the 11 households with one hectare or more of additional land, three were growing rain-fed crops, and three had planted orchards. Two more had constructed their own irrigation furrows, drawing water from nearby springs and streams (possibly fed by run-off from the irrigation scheme), and three of the largest plot-holders (each with at least six hectares of 'waste' land), were irrigating their land using diesel-powered pumps, drawing water directly from the Mutale.

Table 5 (above) suggests considerable accumulation of irrigated land by a minority of households. Such differentiation appears even more pronounced when land off the scheme is included. Table 6 (below) shows the distribution of so-called waste land per household, according to the number of irrigated plots held on the irrigation scheme.9

Table 6. Combined land holding at Tshiombo, per household

No. Plots Per Household	1 Plot	2 Plots	3-6 Plots
No. of Households	53	21	9
Total Waste land (ha)	7.0	22.75	21.0
Average Waste/Household (ha)	0.1	1.1	2.3
Average Land/Household (ha)	1.3	3.5	6.6

[9] Irrigated and non-irrigated land should not, strictly speaking, be aggregated in this way. The distinction between them breaks down in the case of Tshiombo, however, because some lands off the scheme appear to be better irrigated that the dryer plots on the formal scheme.

It may be seen from the above data that there is a direct correlation between the number of plots held on the scheme and the amount of waste land held by a household. The process of land accumulation appears to have gained pace only during the 1980s, and has continued into the 1990s. In 1980, only 14 households in the sample had multiple plots on the scheme, and the highest number of plots held by any household was three. By 1995 there were 30 households with multiple plots, and the highest number of plots had risen to six. Indeed, since 1990 only households which already had more than one plot managed to obtain additional plots.

The acquisition of non-scheme (i.e. 'waste') land by scheme members has also gathered pace in recent years. Thirteen households in the sample (15.7%) stated that they held additional (off-scheme) land prior to 1990, but the largest holding was 1.5 hectares, and most were less than one hectare. Since 1990, however, eight households have acquired additional lands, all between one and ten hectares. Thus, we can say that following a relatively egalitarian period in the first decade of the scheme, considerable inequalities in land-holding have developed, to the point where just six households (7.2% of sample) now control a third (33.76%) of all land held by the sample. While we cannot say with any certainty what has stimulated this concentration of land-holding, it is notable that it has accelerated during a period of enormous political upheaval and the virtual collapse of the state apparatus in Venda (i.e. 1990-95).

Despite the inequalities in land holding, the majority of survey respondents at Tshiombo were satisfied with the amount of land they possessed, and only a quarter (26.5%) stated that they did not have enough land for their needs. Of those who wanted more land, most declared that they would be satisfied with a total area of two to three hectares under irrigation, which was widely felt to be about as much as a single household could manage. However, a number of men in their 40s and 50s stated that they required between 10 and 25 hectares, and believed that the new government should make state land, and land in formerly white areas available to 'progressive' black farmers on favourable (i.e. assisted) financial terms, allowing them to become "real farmers, like the Boers".

Amongst the households not looking for more land, a number stated that they would like to have more land, but that with the mix of other resources currently available to them - labour, cash, water etc. - they would not be in a position to make use of it. That is, they did not have 'enough' land to satisfy their needs, but neither did they see more land in itself as the solution to their problems.

From the little information available, it appears that no land has ever been formally demarcated for grazing purposes at Tshiombo. To a large extent, this can be explained by the geographical setting, with virtually the entire valley bottom (on one side of the river) given over to the irrigation project, and the residential areas squeezed into a narrow strip between the plots and the steep hillsides to the south. Both cattle and donkeys were reported to have been used for ploughing and other purposes before the scheme began, and in the first years of its operation, but this was said to have been strongly discouraged by the (white) officials of the time. Goats were actually banned from the area for many years, as they were seen as a nuisance to arable farmers, but this rule appears to have lapsed. Today, goats are grazed mainly on the hillsides behind the residential areas, whereas cattle and donkeys are grazed on the margins of the irrigation scheme and the residential areas, along the river bank, and on irrigation plots after harvest. Livestock may not be grazed on cultivated lands, or on other people's house-

stands, and anyone infringing this rule is liable to reported to the agricultural officer, and/or fined by the village headman. Otherwise, there are no restrictions on the number of livestock that may be kept by villagers, or on the use of unallocated (i.e. common) lands for grazing. It would appear that the recent allocation of riverside land ('waste land') for cultivation (see above) has meant a reduction in the grazing area available to livestock owners, but this was not a problem raised by respondents in the survey. Increased cultivation along the river banks is also likely to reduce access to river water for livestock, but this, again, does not appear to be a problem, as most owners water their stock from the irrigation canals and ground dams on the scheme.

5.7 Water and the irrigation system

The method of irrigation used at Tshiombo is a gravity-fed canal and furrow system, supplied with water from the Mutale River by means of a purpose-built barrage and piece pipeline up-stream from the irrigated lands. The main concrete-lined canal follows the contour along the southern edge of the scheme for 15.2km, roughly parallel to the road. The canal decreases in size from a top width of 2.0m and a depth of 0.85m at the beginning, to a width of 0.66m and a depth of 0.31m at the end (MBB 1987: 30). There is no main reservoir, but a limited water storage capacity is provided by nine small buffer dams situated at points along the scheme, which are designed to boost the flow in the main and secondary canals. Typical flow rates in the canal were estimated in 1987 as 510 litres/second in the upper reaches, dropping to 120 l/s after the first 4.7km (MBB 1987: 30).

From the main canal and the buffer storage dams water is supplied to the arable plots by a series of concrete-lined secondary canals. The flow of water into the secondary canals is controlled by means of division boxes ('DBs'), fed by small-diameter pipes, which are opened and closed using improvised stoppers - usually a mix of grass, twigs, plastic bags or other available debris. Unused water is allowed to drain back into the Mutale River.

Every plot on the scheme adjoins one of the secondary canals. Plot-holders direct water into their plots by temporarily damming the canal using an object such as a large stone or fertilizer sack, causing the water to overflow via one of the indentations placed at regular intervals (approximately every 10 metres) in the canal side. Each indentation corresponds to a single cultivation strip, or crop-bed within the plots. Once water is diverted into the plot, it is channelled in earthen furrows between the crop ridges as required, an extremely laborious process that involves constant blocking and opening of furrows using hand tools.

Officially, every Block on the scheme receives water once per week, usually for about six hours, on a rota basis. When water is particularly scarce, as was the case during much of 1993 and 1994, supply is reduced to one period every two weeks, and limits are imposed on the number of beds that may be irrigated on each plot. Unauthorised use of water was reported to be widespread, especially at night and during the weekends when the water bailiffs are not on duty. Excessive water extraction in the upper parts of the canal inhibits the rate at which the lower ground dams are replenished, and reduces the supply available to users on lower Blocks. A similar problem occurs along the course of each of the secondary canals, in that users closer to the junction with the main canal have first claim on the water during the official irrigation period, and supply diminishes considerably further down.

The availability of water for irrigation was the leading problem raised by plot-holders in the survey, being mentioned by 82% of respondents. While plot-holders on blocks One and Two, those closest to the head of the canal, usually receive enough water to produce two crops in the year, the supply deteriorates steadily further downstream. On parts of block Four, farmers reported that they can grow crops only during the rainy season, and more than one plot-holder stated that "this is not really an irrigation scheme", due to the ongoing scarcity of water.

The most obvious explanation for the overall deterioration in water availability is the prolonged drought which has affected the region since the early 1980s, and the dramatic decline in the flow of the Mutale River. However, a number of informants attributed the decline not to the weather but to the extraction of water from the Tshirovha River, which flows into the Mutale upstream from Tshiombo, to supply the tea estate at Makumbani (see Chapter Four). Other reasons for the water shortage given by informants were the greater number of people using their plots in recent years, and a greater intensity of production on individual plots, leading to a much-increased demand for water.

On-site observations suggest that plot-holders on the upper parts of the scheme, especially on Block 1, received much more irrigation water than those further down, and some certainly appeared to be irrigating their plots on a daily basis. While the water bailiffs make some efforts to regulate water usage, it was clear that they did not have the full co-operation or the respect of all the plot-holders, and were not capable of imposing effective sanctions on known abusers. The bailiffs are not helped in their task by the design of the mechanical controls on the schemes (the DBs), which can be operated by anyone, whether to divert water to an arable plot or to obtain a bucket-full for domestic use, and are frequently left open after use.

Whatever the precise causes, there can be little doubt that the combination of a reduced supply of water into the main canal, and losses associated with the design, use and maintenance of the system, amounts to a critical, and possibly deteriorating, situation for those attempting to practice irrigated cropping, and fuels widespread dissatisfaction amongst users. Plot-holders and officials were virtually unanimous in their demands that the scheme be upgraded, something they believed had been under consideration by various official bodies, including the Development Bank of Southern Africa (DBSA) for many years. The principal demand of those associated with the scheme is for the construction of a substantial dam on the Mutale, which would retain more of the river flow than at present and improve the volume and continuity of water supply to the arable plots. Among the other suggestions from plot-holders were that the canals and control mechanisms (DBs, sluice gates, etc.) be covered-in and made secure, both in order to reduce water loss by evaporation and to prevent unauthorised use, and that sprinklers be introduced on all the plots. For inspiration in this regard, the plot-holders of Tshiombo have the adjacent Agriven scheme at Makonde, where large-scale sprinkler systems operate virtually around the clock.

The 1987 study by Murray Biesenbach & Badenhorst found that the supply capacity of the main canal at Tshiombo was inadequate, and in a poor state of repair, and the buffer (ground) dams within the scheme had only half the required capacity: "The hydraulic calculations showed that, in its present form, the canal does not fulfil the water requirements for 1,150 ha of irrigation, since the flow rate at the beginning of the canal

is only 510 *l/s* and approximately 780 *l/s* is needed. The latter figure ... will be sufficient [only] if the buffer storage dams are repaired and enlarged" (MBB 1987: 30). The same report also determined that there was sufficient water available in the Mutale for the Tshiombo scheme, as long as it could be stored in sufficient quantities. MBB recommended construction of a dam on the upper Mutale with a capacity of 1.9 million cubic meters, plus the replacement of the open canal by a pipeline from a point upstream of the confluence of the Tshirovha and Mutale Rivers, which would have sufficient water pressure to feed sprinklers on the plots without the need for supplementary pumping.

In summary, the technology employed at Tshiombo can be said to be highly 'appropriate', as it is relatively robust and reliable, and can largely be controlled and maintained by the users themselves. Being entirely gravity-fed, there are few 'moving parts' (pumps, engines etc.) to break-down, and plot-holders (or the appropriate authority) are spared the recurring costs of fuel, spare-parts, and specialised maintenance staff, associated with more 'high-tech' approaches.

The down-side for such a 'low-tech' furrow irrigation system, however, is that it is likely to be relatively inefficient in its use of water, compared to sprinklers, for example, and extremely labour intensive at the point of application (Booher 1974: 111). An unknown quantity of water is lost from leaks in the canals and the DBs, through evaporation from the open canals and excessive seepage in the earth furrows, and the distribution of water within the plot tends to be uneven, leading to water-logging in places. The amount of labour required to open and close the earthen furrows at the time of irrigation, and to ensure an even flow of water between the ridges, means that even when irrigation water is plentiful, few plot-holders attempt to irrigate more than two or three beds (approximately 0.25-0.35 hectares) at any one time. If more beds are in use, different parts of the plot may be irrigated on alternate weeks, depending on the type of crops.

5.8 Agricultural production

The availability of irrigation, along with the range of agricultural services at Tshiombo, has allowed farmers on the scheme to greatly expand the range of crops grown, extend the growing season, and generally intensify production compared to rainfed lands in the region. It has not, however, totally transformed the choice of crops or methods of cultivation. While sizeable quantities of tomatoes, mangoes and maize are sold to processing industries, and a small number of farmers send produce to specialist markets as far away as Johannesburg and Durban, overall activity on the scheme remains shaped by local food requirements, using informal market channels. With few exceptions, agriculture on the scheme represents an extension of household self-provisioning (i.e. 'subsistence-plus'), rather than new forms of commodity production aimed specifically at a market (i.e. ‘cash-cropping’).

Without doubt, the single most important crop, in terms of area planted, is maize, the staple food of the area, which probably accounts for 40-50% of total cultivated area. Following this, a group of six crops between them comprise around 40% of the area under production, viz. groundnuts, spinach, *muxe* (a local variety of spinach), tomatoes, sweet potatoes and cabbage. Other crops, such as chilli peppers, beans and onions account for a small area (each in the range 1-3% of total area under cultivation), while

pumpkins, jugo beans, tobacco, sugar cane and okra are grown in even smaller quantities.

Plot-holders on the irrigation scheme showed considerable variation in intensity of land use. The vast majority - 94% - grew at least one summer crop in the 1994/95 season, 73.5% planted at least one crop in winter; and only three households grew nothing at all. Respondents cultivated an average of 68.7% of available land in summer, and an average of 43.7% in winter.

Accurate details of crop production and disposal - areas planted, yields, income from sales etc. - were extremely difficult to ascertain. Complete, up-to-date records were kept by none of the officials on the scheme, and the quality of the records that were available varied considerably from Block to Block. Most showed considerably less production than that reported by plot-holders themselves, and prices for crops sold were 'official' (i.e. standardised) prices supplied by the Department of Agriculture, rather than actual prices obtained by producers. Prices, and even volumes, of purchased inputs - seed and fertilizer in particular - were also 'standardised' in this way, being calculated on the basis of the area planted, rather than what was actually used by the particular farmer. Aggregate estimates of areas planted and volumes harvested of each crop are filed monthly with the Department by each Officer, but the poor methods of estimation mean that these are of very limited use.

None of the farmers in the survey kept their own written records, and many were unable (or unwilling) to provide precise estimates of past harvest volumes. At best, most farmers could recall the approximate area planted to various crops, usually in terms of the number of beds, which themselves vary considerably in size. Harvests estimates were usually given in non-standard units, such as the number of bags, crates or trucks filled, or in terms of the price obtained, neither of which were very useful in terms of estimating precise yields. Furthermore, the fact that many perishable crops are harvested and sold piecemeal, with an unknown quantity being consumed within the home, makes such an estimate even more difficult. The exceptions are those crops which are stored after harvest, and thus can more easily be estimated, such as groundnuts and dry maize, or those which are sold through formal channels, such as mangoes or tomatoes, for which written receipts were sometimes available. As a result, estimates of crop output, yields per hectare and crop income used throughout this study are rough approximations only.

Maize was grown by every household in the survey sample that planted a crop, and a minority of households (15.7%) planted two maize crops in the year. Early (or winter) maize is usually sold (or consumed within the household) as fresh cobs (green mealies, or *zwikoli*), rather than being dried and milled for meal. Farmers on irrigated land have a comparative advantage over those in dryland areas in the production of early maize, for which there is a strong demand throughout Venda. Later in the season (i.e. from February onward), the demand for fresh maize is much diminished as the dryland crop is harvested, and summer maize (*mavhele*) is, therefore, largely retained for home consumption as maize meal. Larger and better-off producers at Tshiombo generally take their summer maize to the NTK roller mills at Shayandima where it is deposited, milled and redeemed as required, under a voucher system known as 'stoormielies'. Smaller producers, and those without their own transport, rely on the new electric mill at Tshiombo, which does not have storage facilities, or stamp their maize by hand. In good harvest years summer maize can be sold outright to the NTK mills (part of South

Africa's official maize marketing system until the 1994-1995 season), but no survey respondent reported selling any maize to the mills in the last three years.

Agricultural Officers' records at Tshiombo showed annual yields for summer maize over the period 1990/91 to 1994/95 ranging between 1.12 tonnes (14 bags) per hectare to 2.80 tonnes (35 bags), with the average for the period 1.79 tonnes per hectare. The local price for a bag of maize grain (80kg) in 1995 was R70-80, considerably more than could be obtained through formal channels. The same quantity of maize could fetch two or three times this amount if sold as fresh cobs.

Due to the considerable fluctuations in yields, it was difficult to say whether or not households were in surplus for what is their staple food. Where possible, producers retain more a single year's requirement, and it is not uncommon for households to have up to three years supply of mealie meal (e.g. 50 bags) in storage at the NTK mills. Poor harvests in recent years, however, have greatly eroded household reserves, and three-quarters of respondents reported buying some maize meal over the past year.

Extensive cultivation of tomatoes is a relatively recent phenomenon in Venda. Over the last twenty years, however, it has become a significant source of income for farmers with irrigated land, and a widespread addition to the popular diet. This development has been boosted by the establishment of a tomato canning factory at Makhado, but a large informal market for tomatoes also exists in the area. Tomatoes can be grown at Tshiombo throughout the year, but most planting occurs between February and May, with harvesting concentrated in the period June to September. Agricultural Officers' records suggest that tomato yields fluctuate enormously, both between seasons and between growers. In 1991, growers produced the equivalent of between one and five tonnes per hectare; in 1992 virtually the entire crop was wiped out by drought; and in 1993 and 1994 exceptionally high harvests were recorded, with many producers exceeding 10 tonnes per hectare. Tomatoes are sold either to the factory at Makhado, to hawkers and dealers who come to the fields, or directly to consumers in Thohoyandou and neighbouring villages. In past years, Agricultural Officers at Tshiombo have been instrumental in arranging shared transport to the Makhado factory, and in handling payments from the factory on behalf of the producers, but this arrangement has broken down of late, seemingly due to the low prices obtained from the factory relative to the cost of transportation, and the better prices obtainable on the consumer market. In 1994, the factory was reported to be paying producers R230 per tonne, when as much as R600 per tonne could be obtained by selling smaller quantities directly to the public.

Groundnuts are strictly a summer crop, and are commonly grown with little application of fertilizer and only rudimentary ploughing. Considerable labour is required, however, for both weeding and harvesting. Planting occurs during the months September to December, and groundnuts are harvested during the period January to April. Agricultural Officers' records show yields ranging from the equivalent of 0.7 to 1.9 tonnes per hectare over the period 1991 to 1994. Yields for 1994-5 were generally higher, with producers reporting yields equivalent to between one and three tonnes per hectare. Prices for groundnuts have been rising steadily in recent years - an 80kg bag sold for R80 in 1993, R100 in 1994, and some growers reported obtaining as much as R120 per bag in 1995.

Sweet potatoes are grown over a prolonged season, with planting continuing from November to April, and harvesting from March to September. Producer prices have

improved rapidly in recent years, from R10 per crate (approximately 25kg) in 1992, to R15 in 1995, with occasional reports of R20 per create. Agricultural Officers estimated typical yields at around three tonnes per hectare.

Cabbage is widely grown as a winter crop, planted between the months of February and June, and producing a harvest between June and October. A small number of plot-holders also grow cabbage over the summer season, planting in November and December, and harvesting in February. Survey respondents reported yields ranging from 8,000 to 20,000 head of cabbage per hectare, at a market value of R4,000 to R10,000.

China spinach and *muxe* (a local variety of spinach) are widely grown on the scheme, and constitute an important element of the local diet. They are grown under similar conditions and fetch similar prices, although *muxe* is more likely to be reserved for home consumption. These crops are grown all the year round: various respondents reported planting in every month from February to October, and harvesting from May to January. Prices for spinach and *muxe* were reported to be R10 per bag (80kg mealie meal bag) in 1993, and R15 in 1994. Agricultural officers estimated a typical income of R1,500 to R2,000 per hectare over the course of a season, with continuous harvesting.

Fruit trees are an integral part of the landscape at Tshiombo, both on home stands and around the edges of arable plots, but are more likely to be grown for shade and domestic consumption rather than for commercial purposes. While 41 households reported having fruit trees on their arable land, only 18 of these (21.7% of the sample) had ten trees or more, and only one had more than 50 trees. Many of the smaller orchards were located on the irrigated plots, but the larger ones were all on non-irrigated 'waste' land. The most common type of fruit grown was mango, followed by banana, guava, lemon, avocado and paw-paw. Some mango growers sold to achar (pickle) factories at Levubu and Shayandima, but most reported that their fruit was either consumed within the household or sold within the local villages. Mango trees were reported to have been badly affected by blight in recent years, resulting in extremely poor yields.

On the basis of the information provided by farmers in the survey, rough estimates were made of total household agricultural output for the year 1994-95. All crops were given a value, based on current prices in local markets, and the results are summarised in the following table.

Table 7. Estimated Crop Value per Household at Tshiombo, All Lands

Crop Value	Households	Average Plots (Ha)	Average Waste (Ha)	% of Sample
R0-1,999	31	1.2	0.1	37.4
R2,000-4,999	32	1.5	0.3	38.5
R5,000-10,999	15	1.7	0.6	18.1
R11,000-40,000	5	3.4	5.6	6.0

The total valued of crops produced by households in the year 1994-95 clearly differs enormously, from zero to over forty thousand rands, but what is probably of most significance about these figures is that three-quarters of households in the sample (63, or 75.9%) produced crops worth less than R5,000 for the year in question.

5.9 CROP MARKETING

The majority of plot-holders at Tshiombo sell some portion of their agricultural produce every year, although for many, volumes are extremely small. Sales are overwhelmingly through what might be called informal (or unrecorded) channels, in the form of direct (cash) sales to the public at Tshiombo and in surrounding areas (up to 20km radius), or to traders who call at the plots. Non-monetised transactions are rare, although payment of labourers with a share of the harvest was said to have occurred occasionally in past years, and two plot-holders reported bartering part of their sweet-potato crop for maize in the dryland areas north of Tshiombo. The main outlet for produce from Tshiombo, and indeed from much of Venda, is the Sibasa-Thohoyandou complex, whether it is brought there to be sold directly by the producers or by hawkers. Smaller market places also operate in villages and at taxi halts within a few kilometres of Tshiombo, such as Makonde and Mutale, while individual stalls are to be found on the road-side at Tshiombo, and at various points along the tar road towards Donald Fraser Hospital.

A minority of households in the survey (15, or 18.1%) reported that they had sold nothing at all over the previous twelve months, but this included three households who had not actually produced anything. Only ten households (12%) had sold any produce via 'formal' channels, either tomatoes to the canning factory at Makhado, mangoes to achar (pickle) factories at Shayandima and Levubu, and, in just two cases, chilli peppers on the Johannesburg morning market, but the volumes sold represented a relatively small part of total marketed produce for the households concerned. The remaining 58 households (69.9%) sold their produce through informal channels only.

'Informal' marketing of produce takes a number of forms: carrying small volumes on the head, or in wheel-barrows for sale at the roadside at Tshiombo; transporting goods by private or rented trucks to neighbouring villages or to larger markets in Thohoyandou and Sibasa for sale to dealers or directly to the public; and probably the most important form, selling to dealers or 'hawkers' in the fields. Hawkers, usually women, buy as much produce as they can carry, and take it to a roadside stall, to their home village, or to Thohoyandou market for sale to the public. Larger dealers, usually with one-tonne or four-tonne trucks, buy larger volumes, and may sell the produce from their own shop, or from the back of their truck at Thohoyandou or elsewhere, or may supply hawkers in various locations. The biggest dealers may buy an entire crop from one or more plot-holders at a time. Overall, producers attempt to combine these marketing methods as best they can, and those with their own means of transport are obviously in a stronger position to take advantage of the full range of opportunities. Surprisingly few plot-holders were themselves involved in the buying and selling of produce - just three survey respondents described themselves or members of their households as hawkers, or reported regularly buying produce from other plot-holders.

The most widely marketed crops are tomatoes, sweet-potatoes, groundnuts, cabbage and china spinach. The most commonly grown crop, maize is largely intended for household consumption, in the form of mealie meal (see above), although most of the

winter maize harvest, and a smaller amount of the summer harvest, are sold as fresh cobs ('green mealies') for immediate consumption. Less common crops grown largely for sale include onions, chilli peppers and dry beans.

5.10 TRANSPORT

Various forms of transport are used to move goods to and from people's plots. There is reasonable vehicle access to most plots, via dirt tracks, but a number of plots close to the Mutale become virtually inaccessible to vehicles during the wet season. The maximum distance of any plot from the main gravel road at Tshiombo is about two kilometres, and distances from plots to the nearest tar road, at Makonde. vary between two and ten kilometres.

Private hire of vehicles - typically a one-tonne 'bakkie' (pick-up truck), and less often a four-tonne 'half-truck' - was the most common means of transporting goods between fields, homes, markets and mills. Over one-third of households (36.1%) reported that they had hired a vehicle at some time during the previous twelve months. Rates reported for hiring a one-tonne vehicle ranged between R20 and R40 for a single journey within Tshiombo, and from R60 to R100 per load to Sibasa or Thohoyandou. Less than one-third (31.6%) of households surveyed had access to a vehicle within the household, and in many cases these were used by family members in other lines of work, or belonged to their employers, and were only available to plot-holders at weekends.

A similar proportion of plot-holders (31.6%) did not use any vehicle during the year. Most of these relied on hawkers (with their own transport) to come and collect produce directly from the plots. A smaller number transported produce on their head, or by wheel-barrow, to the gravel road for sale to the passing trade, or to their own homes for consumption. Only a single respondent reported using public transport (bus and taxi) to take produce to Thohoyandou for sale, although a steady stream of women hawkers come from Thohoyandou by mini-bus taxi every day in order to purchase produce.

Overall, the type of transport used was strongly correlated with size of land holding: larger land-holders tended to own their own vehicle, and those who did not hired one as required. As size of landholding decreases, households tended to rely increasingly on hired vehicles, if they could afford them. Of those with the smallest holdings (i.e. just one plot), less than a quarter own their own vehicles, slightly more hire on occasions, but half do not use any form of vehicle throughout the course of the year.

5.11 FARM LABOUR

Agriculture in the former 'homelands' of South Africa is generally portrayed as a 'household' activity, and this study would support this impression. A majority of plot-holders surveyed (45, or 59%) did not hire any labour in the past year, depending entirely on household members to work their plots. Of the remainder, 27 (32.5%) used some combination of household and non-household (hired) labour, four depended entirely on hired labour, and three households did not work their land at all in the past year.

The majority of households that hired labour reported employing just one worker at a time, but a sizeable minority employed two or more, and the highest number employed by a single household was seven. Respondents used various ways to describe the form of hired labour - full-time, seasonal, part-time, occasional, piece-work, etc. - and the distinctions between these categories were not always clear. However, the main difference appeared to be between those plot-holders who hired only for specific tasks, such as harvesting or planting, and paid a piece-rate, and those who employed labour for more routine work - weeding, spraying, irrigating etc. - and tended to retain their workers for longer periods on a steady wage. Overall, the survey revealed that those households hiring labour tended to have more land, higher off-farm income, and higher levels of crop production than those who depended entirely on household labour.

Agricultural labourers reported that they earned between R120 and R250 per month, which is comparable to wage rates on white farms in the Province (Standing, Sender and Week 1996:255), but well below rates in the 'formal' economy, which start at about R400 per month (e.g. for a government labourer). Of the six workers interviewed - four women and two men - none had land on the irrigation scheme, although four lived at Tshiombo. One elderly woman said her late husband had his own plot many years ago, but had given it up because it was 'useless'. (i.e. dry and unproductive). One younger man reported that his parents had moved to Tshiombo after the scheme had started, and had not received a plot because the village headman considered them ‘outsiders’. The young man himself, however, was on the waiting list for the irrigation scheme, and hoped to obtain a plot in the near future.

The majority of people working in the fields, whether paid or unpaid, were women. Men also worked in the fields, but tended to be more involved than women in ancillary activities, such as buying inputs, transporting produce to market or to the mill, and arranging ploughing services. Many plot-holders insisted that their children should not work in the fields while they are still at school, but it was clear from observations that children do make a considerable contribution to household labour, especially at planting and harvest time.

5.12 PLOUGHING METHODS

The intensive use of farm machinery is one of the principal factors that distinguishes the state-sponsored agricultural schemes such as Tshiombo from other rural areas in Venda. Since the beginning of the scheme, tractor services have been provided by the government, latterly by the Department of Public Works, using tractors and drivers based permanently on the scheme. In recent years, however, there has been a severe decline in the government service, and farmers have been obliged to turn increasingly to private tractor owners. The household survey found that over 90% of plot-holders had used hired tractors for ploughing in the previous season (i.e. summer 1994/95), and of these, less that one quarter had used government machines.

Various explanations were offered for the decline in the government service, but most point to a general collapse in the homeland administration in the period after 1990. For the tractor service at Tshiombo, this meant acute shortages of spare parts, lengthy delays in effecting repairs, and, most definitively of all, periodic absences of diesel, which kept the entire fleet out of operation for lengthy periods. Difficulties in obtaining tractors for ploughing was amongst the top problems faced by farmers in the survey, second only to

the shortage of irrigation water. Complaints centred on the general unreliability of the government ploughing service, and the higher prices charged by private operators.

The failings of the government tractor service have created opportunities for some local entrepreneurs, but added greatly to the problems of the plot-holders. Over the last four years, at least eight individuals in the area (but none in the survey sample) have acquired tractors and begun offering them for hire on the scheme. In addition, the parastatal agricultural corporation, Agriven, which maintains its own fleet of tractors, has been offering these for hire at Tshiombo in recent years. Despite the problems with the Departmental tractor service, farmers at Tshiombo greatly preferred the government tractors (including Agriven) over the private operators, due to the higher skills of their drivers and the lower (i.e. subsidised) prices they charged.

Ploughing with draught animals, until recent decades the back-bone of African agriculture, appears to be reaching the final stages of extinction at Tshiombo. Ploughing with oxen or donkeys is not a skill shared by the younger generation of plot-holders, and even those households with livestock generally do not possess the specially-trained teams, nor the equipment, required for effective ploughing. Just two households in the survey used animal traction on a regular basis - a team of two oxen in one case, and six donkeys in the other. The team of oxen required six months of training before they could be used in the field, and had to be replaced every seven years. Both plot-holders using animal traction reported themselves well-satisfied with the results, which they suggested were just as good as what could be achieved with a tractor, especially in the light sandy soils of the Tshiombo scheme.

The various ploughing methods used by plot-holders in the survey are shown in the table below.

Table 8. Principal Method Of Ploughing at Tshiombo

Method of Ploughing	No. of Households	Percentage
Nil	3	3.6
Animal Traction	2	2.4
Hand-hoe	1	1.2
Government tractor	18	21.7
Private hire tractor	59	71.1

Note: 'Government tractor' includes Departmental and Agriven services.

5.13 Purchased inputs and credit

Information on the volumes and types of purchased inputs provides insight to two areas of interest: the commercialisation (or market integration) of agriculture (in terms of backward linkages), and its technical sophistication. The household survey dealt with three categories of inputs - fertilizer, seeds (including seedlings), and pesticides - and respondents were asked how much of each they used, of what types, and where they purchased them. It was found that every plot-holder who had planted a crop in the last year (i.e. 80 out of 83) had purchased and used at least one of these inputs during the past year.

Chemical fertilizer was used by the vast majority of plot-holders (91.6%) on some or all of their crops in the past year, and 69.9% indicated that they had used close to the quantities (and types) recommended by the Agricultural Officers10. Various formulas of mixed fertilizer (N-P-K) were applied at planting time, ranging from 250kg to 1000kg per hectare. Approximately three-quarters of plotholders applied a second application as topdressing, usually 'KAN' (calcium ammonium nitrate) or, in a handful of cases, urea, using approximately half the previous quantities. Organic fertilizer (animal manure) was used only by a minority of plot-holders in the survey (26, or 31.3%), and was not used by all those keeping livestock. Kraal manure, either from donkeys or cattle, was used by 23 households, and three reported using chicken manure. More than half of those using manure (14 out of 26) obtained it from their own kraals, four respondents bought it from neighbours, and eight obtained if from neighbours or relatives free of charge.

Plot-holders at Tshiombo used both purchased (certified) seeds and their own seeds (retained from the previous harvest), depending on the crops grown. Maize, the dominant crop, is grown almost entirely from certified seed, purchased annually. Tomatoes and cabbage are also grown mainly from purchased seed, but a number of the larger tomato growers reported buying seedlings from nurseries in the Tzaneen area (100 km to the south). Groundnuts, china spinach, and *muxe* spinach are all grown exclusively from retained seed. Sweet potatoes are generally grown from 'runners', either produced on the plot or purchased from (white) farmers in the Levubu area.

The use of chemical sprays (insecticides and fungicides), was less widespread than other types of purchased inputs. Many plot-holders did not appear to have a good understanding of these products, or could not afford them. Indeed, the price of inputs generally was the subject of frequent complaint throughout the survey, but plot-holders tended to treat fertilizer as a higher priority than pesticides. Overall, 71.1% of plot-holders surveyed reported using pesticides on at least one crop over the previous twelve months, although in many cases the amount used was well below the levels recommended by the suppliers or the Agricultural Officers.

Tshiombo is one of the few places in Venda where farmers have access to their own co-operative stores, and three-quarters (75.9%) of plot-holders surveyed used it as their main source of agricultural inputs. The next most common sources was the NTK store at Shayandima, used by 18.1% of respondents, and the Agriven stores at Makonde, favoured by just two plot-holders (2.4%). Price was the most common reason given for purchasing from outside Tshiombo, but a comparison of prices in all three outlets revealed little overall difference. The wider range of goods, agricultural and household, available at NTK, and its proximity to Thohoyandou and the Shayandima roller mills, however, may make it a more attractive proposition, especially for those with their own transport.

The vast majority of farmers at Tshiombo, as elsewhere in the former homelands, do not have access to formal credit facilities, either through government or commercial sources, and this is undoubtedly a disincentive to the use of purchased inputs for many farmers. Agriven offered credit facilities through the Tshiombo co-operative for a number of

[10] Recommended types and quantities of inputs clearly varied from plot to plot, depending on soil conditions, and from crop to crop. With the assistance of the Agricultural Officers, the levels of inputs used by each plot-holder in the survey were classified as either close to, well below or well above recommended levels.

years, granting a total of 1,353 loans in 1988/89, averaging R256 each (MBB 1989: 7). This facility was withdrawn in 1992 in the face of widespread default following the severe drought of that year, and reports of financial problems within the government service. No evidence could be found of informal credit systems - money-lenders, communal savings schemes or credit unions, advances on crops etc. - playing any significant role within agriculture at Tshiombo, or elsewhere in Venda.

During the 1994-95 season, a limited volume of funds was made available by the South African Agricultural Credit Board (ACB) for the provision of seasonal loans to small farmers in the former homelands. In Venda, this was available only through NTK, and was, according to NTK management, taken up by approximately one hundred farmers in Venda. Of the 83 survey respondents at Tshiombo, four (4.8%) received credit from the NTK/ACB scheme, for amounts ranging from R5,000 to R14,000. All expressed themselves satisfied with the amounts received and the terms of repayment. Many plot-holders expressed wariness about credit in general (possibly based on bad experience in the past), while others felt that the R5,000 minimum loan on offer from the ACB was beyond their requirements or their ability to repay. For reasons that are not clear, this credit programme was not continued beyond the first year.

5.14 LIVESTOCK

The keeping of livestock, especially cattle and donkeys, is in decline amongst households farming at Tshiombo. Virtually all households interviewed reported having kept cattle at some time, but a number of plot-holders stated that they had sold off their cattle when they first came to the scheme, and others lost their herds over the years. At the time of the survey, just under a quarter of households (24.1%) kept cattle. Amongst these, the number of cattle per household ranged between 2 and 45 head, with an average of 12.75 per cattle-owning household (or 3.07 per household across the entire sample).

Table 9. Distribution of Cattle Amongst Households at Tshiombo

No. of Cattle	No. of Households	% of Households
Nil	53	63.9
1-10	10	12.0
11-20	7	8.4
21+	3	3.6

Various reasons were given for the decline in cattle owning. The recurring drought of the 1980s and early 1990s took a heavy toll of cattle throughout the region, and small-holders depend on natural replacement to rebuild their herds. A number of households reported selling cattle to pay debts at various times in the past, while other said they had sold off their cattle due to a loss of household labour, especially as children grew up. Once lost, herds tend not to be replaced. While official disapproval of keeping livestock on the scheme would appear to have abated in recent years, there is still opposition

from some non cattle-owning plot-holders, a number of whom expressed strong feelings about cattle damaging their crops, while others suggested that the area is simply unsuitable for cattle farming.

Underlying all of these contingent factors, there is evidence of a shift in attitudes towards cattle. As a form of *lobola* (bride-wealth), as an indicator of wealth or social status, as a source of income, or even as a form of savings, cattle have been effectively replaced by other more accessible, more flexible and more productive form of property obtained through involvement with the market economy. Rural-dwellers are now more likely to invest in capital and cultural goods, such as vehicles, agricultural inputs, clothing or education, which are more highly regarded, or capable of generating a higher return, than cattle, while *lobola*, if it is paid at all, is now most likely to be paid in cash. With the growing importance of the cash economy over many decades, and the multiple, daily demands on households for cash, tying up household wealth in cattle no longer appears to be seen by many people as an appropriate use of available resources.

Ownership of cattle was only weakly correlated with land-holding, and not at all with off-farm income, but did seem to be related to the presence of a full-time male farmer. Nine out of the ten households with the largest cattle herds had a full-time male farmer (many of them pensioners) who took day-to-day responsibility for the herd. Of all farm related activities at Tshiombo, cattle ownership is probably the most 'gendered'. Although a few widows owned cattle, both male and female respondents tended to speak of cattle as male property, in a way that was not applied to other forms of household property (homesteads, arable plots etc.). A number of widows stated that their late husbands had owned cattle, but that after their deaths, these had passed to other male relatives. In two other cases, women reported that their husbands had abandoned them, and taken their cattle with them. Whether for cultural or economic reasons, men appeared to be more successful than women at accumulating cattle, and keeping them as personal, rather than household, property.
Cattle farming at Tshiombo remains very uncommercialized. Only half the cattle owners in the survey (i.e. ten) reported selling stock in the past year, each selling between one and six head, or an average of 1.45 per cattle owner. Sales were all confined to the Tshiombo area, usually to private individuals and occasionally to local butcheries. Eight households reported slaughtering cattle in the past year, two of them slaughtering two animals each, and the remaining six households a single animal each. Although cattle are dipped regularly, none of the owners have access to veterinary or other technical services. None of them buy-in stock on a regular basis (none had bought any stock in over five years), and while most have bulls, none of the owners attempted to influence stock quality through selective breeding.

Ownership of goats at Tshiombo is even less widespread than cattle: just six respondents in the household survey (7.2%) reported keeping any. As with cattle, the land available for goats at Tshiombo is severely limited, being almost entirely restricted to the rocky outcrops to the south of the scheme, and they appears to be even more unpopular than cattle with scheme officials and plot-holders. Numerous reports were given of goats damaging crops on people's home-stands and irrigated plots. Of the six households within the survey sample that keep goats, five owned between 2 and 17 each, while one other kept an estimated 100 goats. This latter household was also the only one that reported selling goats during the past year, disposing of approximately 50 to consumers in the local villages. A number of other owners reported that they had sold goats in

previous years when they were in need of cash, and all owners reported consuming at least one goat within their own household during the past year.

Donkeys, like cattle, would appear to be declining in numbers at Tshiombo. Donkeys were widely kept in the area up to the 1970s, being used for tillage and transport purposes, but only three households in the survey had donkeys - four, six and six animals, respectively. All three donkey owners also kept cattle. Only one household with donkeys relied on them for all its ploughing requirements, but the other two used donkey power for the final preparation of the soil prior to planting (harrowing). Two of these households also earned occasional income by hiring out their donkey teams and equipment to other plot-holders. None of these owners had bought or sold donkeys in the past year, or indeed in recent memory.

The decline in donkey numbers can be put down largely to the wide availability of tractors and motor transport, and, like cattle, it appears to have been accompanied by a considerable shift in attitudes. All three donkey-owners believed that their neighbours looked down on them for using animal traction, and reported that the younger members of the household refused be seen behind either a donkey cart or plough. The ongoing crisis in ploughing services at Tshiombo (see above) has done little to reverse this trend, as the great majority of households at Tshiombo do not have the resources to revert to former ploughing methods. However, at least one donkey ploughing team, operated by a couple of young men, has recently been coming to Tshiombo from another village, ploughing and harrowing plots on the scheme for less than the rates charged by private tractor owners.

Chickens were kept by less than half the households in the survey (45.8%) with numbers ranging between two and 25 per household, with the exception of a single owner who kept 50 birds. These surprisingly low figure are, in part, attributable to the effects of Newcastle disease, which was endemic in the area for the three years prior to the survey, but observations at respondents' homesteads suggested that there may have been considerable under-reporting of chicken numbers. Chickens are generally kept for domestic consumption of meat. Only two poultry-keepers reported selling any birds during the past year: one who sold an average of one bird per week, and an other who sold 50 birds every two weeks. Not surprisingly, this latter owner was also the only respondent who regularly purchased young stock, buying 50 chickens at a time from a hatchery at Levubu, and selling them within the locality after two weeks.

Hens' eggs are not widely exploited by the farmers of Tshiombo, either for food or for sale, and the most common variety of chickens ('Venda chickens') are not considered reliable layers. Efforts have been made, however, to promote small-scale commercial egg production in the district. A female Home Economics officer, attached to the Department of Agriculture, is based at Tshiombo, and works with local women to promote various income-generating schemes, mainly sewing and egg production. Participants in the schemes are provided with a dozen laying hens (3-4 weeks old) and initial feed supplies, for an investment of about R300. Three households within the survey were participating in this scheme - two had a dozen hens each, producing on average 10 eggs a day, and one had two dozen hens, producing an average of 20 eggs per day. As with most other small-scale income-generating schemes encountered in the area, however, little thought had been given to the marketing aspects, and all the producers expressed difficulties with disposing of even these small volumes.

6. LOWER MUTALE CASE STUDY

6.1 Introduction and methodology

This chapter looks at the second substantial area of settlement along the Mutale River, approximately 60km downstream (north-east) of Tshiombo (see Map 4). Relative to Tshiombo, the Lower Mutale area is hotter, dryer and considerably less developed, and supports a much smaller human population. Between them, the two case study areas demonstrate the range of social, economic and environmental conditions found within the Mutale River valley, and provide the basis for the discussion of natural resource management issues that follows.

Given the very different conditions found on the lower Mutale it was decided to select a more extensive study area, and to employ a less structured research methodology, than was used at Tshiombo. The study covers an area falling within a 10 km radius of Mutale Bridge, embracing a stretch of river stretching from Mushithe village in the south-west to Thondoni, or Ha-Mutele, in the north-east. This area includes the Senari irrigation scheme, Mukumawabane village, and parts of Tshikondeni Mine and Makuya Park on the south bank of the river, and the villages of Masisi and Tshikuyu, and the Mutele irrigation scheme, on the north bank. The study area also takes in parts of three different tribal districts. While there is an element of arbitrariness in the choice of study area, it can be broadly defined as the hinterland of Masisi, and was generally recognised as such by people in the locality.

The methodology used for this part of the study was based on a mainly qualitative approach using a range of techniques associated with the Rapid Rural Appraisal (RRA) method. These included observations, group interviews and meetings with various stake-holders in the local community, and interviews with 'key informants' or local office holders. The principal objectives were to gain a good understanding of the social, economic and political activities, and institutions, of the area, the principal forms of natural resource exploitation, and the ways, if any, in which natural resources are managed or protected. The main difference between the Lower Mutele study and that conducted at Tshiombo was that no formal household survey was attempted in this case. There was, therefore, a greater reliance on individual and group interviews and direct observations. People who participated in the study included members of the local council, the tribal authorities, the Department of Agriculture, the Department of Environmental Affairs and Tourism, Makuya Park Forum and various irrigation projects, along with 'informal' irrigators, dryland farmers, livestock farmers and representatives of Tshikondeni Mine. The field-work for this study was conducted over a single six-week period, May-June 1996, and involved the researcher and translator living in the area.

Documentary sources for the Lower Mutale area were even fewer than those available for Tshiombo. The only materials that could be found that related specifically to this area were a brief study of Tshikundamalema district by van Nieuwenhuizen (1984), and another of the neighbouring Manenzhe district by the Land Research Group (1995). General knowledge of the area amongst senior government officials at provincial and sub-provincial level was very poor.

6.2 DISTRICT OVERVIEW

The Lower Mutale study area falls within the territory of three Tribal Authorities (Territorial Councils): Makuya in the area south of the Mutale River, Tshikundamalema north of the river as far east as Masisi, and Mutele, also north of the river, running east from Duluthulu village as far as the Kruger National Park. All three districts have population densities well below average for Venda. Tshikundamalema is a sprawling, sparsely populated and poorly developed district, straddling the north-eastern foothills of the Soutpansberg, with Masisi, Tshipise (Sagole) and Tshivhongweni as its only substantial villages. Mutele is one of the smallest and least developed tribal areas in Venda, tucked into the extreme north-east corner of the country, and, despite the Pafuri road which cuts across it, is probably the poorest and most isolated part of Venda. Makuya is the largest (in terms of population and area) and probably the best developed of the three tribal areas, with substantial settlements in central parts, around Ha-Makuya. The southern portion of Makuya district enjoys good access to Thohoyandou and the more developed areas of central Venda, but the area north of the Soutpansberg, from Guyuni to Tshikondeni, forms part of quite a different zone, both geographically and socio-economically.

During Venda's 'independence' period, the districts north of the Mutale River (i.e. Tshikundamalema and Mutele) formed part of the Mutale District Council (Regional Authority), while the area south of the river (i.e. Makuya tribal district) formed part of the Thohoyandou District Council. Under the new political dispensation, the local government districts have been considerably reorganised, and these two former District Council areas (with the exception of the area around Thohoyandou) now form the single rural council district of Mutale, Masisi and Vhutswema. This rural council is composed of six wards, roughly based on existing tribal boundaries. Ward One, which covers the northern part of the study area, combines the tribal districts of Mutele, Tshikundamalema and Manenzhe, while Ward Two, which covers the southern part, corresponds to the tribal district of Makuya. All six wards, plus the three 'proportional' seats on the council, were won by the ANC in the elections of November 1995. Interviews with the newly elected councillors for the area (in June 1996) revealed that they were still unsure of their precise powers and functions, and were unhappy with the slow rate of progress towards establishing the council. Councillors had expected to inherit the offices and other resources of the former Mutale District Council, but this had not yet happened. Furthermore, the councillors and other ANC activists had expected that the new council would also take over the administrative powers of the chiefs and Tribal Authorities, especially with regard to the allocation of land, leaving the chiefs with purely ceremonial functions, but this has not happened either. As was also found at Tshiombo, councillors in the Lower Mutale area were highly critical of the provincial authorities for what they saw as a lack of support for the establishment of democratic institutions at the local level.

As at Tshiombo, 'civics' have been established in some of the larger villages - such as Senari and Masisi - since before the general elections of 1994, but in many of the smaller villages they exist in name only, or not at all. The main spur to their creation seems to have been the general political mobilisation in the run-up to the 1994 general elections, and the absence of any democratic local government prior to the local elections of November 1995. This institutional and political vacuum was filled, in part, by the civics, which emerged as catch-all political organisations, combining aspects of an unofficial village council and a branch of the ANC. The civics were seen as virtually the only organisation in the rural areas which represented the spirit of liberation and

transformation, and they attracted support mainly from the youth, but also from older people who were opposed to tribal leaders, for political or personal reasons.

6.3 Social and economic aspects

The Lower Mutale area is, in socio-economic terms, poor, sparsely populated and under-developed relative to the rest of Venda. The population is scattered in small villages, living largely in mud and thatch huts, generally without electricity, telephones, tarred roads, health services or public transport, and with only the most rudimentary water supply, schools and shops. The physical conditions are harsh and unforgiving, with much marginal land suitable only for extensive grazing of livestock or hardy grains such as sorghum and millet. Small areas along the banks of the Mutale are suitable for cultivation of crops under irrigation.

Some of the problems with demographic information for Venda were mentioned in the previous chapter. The following list - drawn from unpublished 1991 census data - shows the best available estimates of the population of the villages which fall within the Lower Mutale study area.

Table 10. Population of the Lower Mutale Area

Village	Population
Tshikundamalema District	
Mushithe, Mutele A	567
Maramanzhi	492
Mukununde, Tshamutavha	523
Masisi, Tshilamusi	691
Mutele District Council	
Mutele B, Bileni	571
Tshikuyu, Duluthulu, Doyho	531
Makuya District	
Mukumawabane, Senari, Nkotzwi	565
Tshikondeni	633
Makuya Park	123
Total:	**4696**

Source: 1991 Census (Republic of Venda 1993b)

Settlements are, on average, less than half the size of those at Tshiombo, with no village having over seven hundred inhabitants. No further breakdown of the population - by age, sex, occupation etc. - was available for this area. It should be noted that the figures listed for the three tribal districts represent, in each case, less than half the total population of these districts, the rest lying outside the study area.

No village-level population figures were available for previous years, but there was a widespread impression in the area that the population had increased considerably over the past thirty years or so, and available information for Venda as a whole would tend to support this. The figures in Chapter Three (above) suggest that the population of Venda more or less doubled in the thirty years to 1991, and that the increase has been broadly similar across all magisterial districts. For remoter areas such as the Lower Mutale, any rise in numbers is probably due mainly to natural increase, but population movement may also be a contributory factor. A number of people have moved into the area from white farming districts to the west over the last thirty years (see below), but there is no evidence of large concentrations of displaced persons such as those found in western and southern parts of Venda. It is also impossible to estimate the movement out of the area over that period, although given the restrictions on black movement and settlement up to recent years, it is unlikely to have been very great. People who migrate to urban centres in search of work still tend to leave their families behind in the rural villages, and return once their employment ceases. There is, nonetheless, a sizeable Venda population in Soweto and other large urban areas, many of whom have certainly become permanently urbanised.

Possibly as important as any overall change in the size of the population over the past thirty years has been the reorganisation of settlements, which has put considerable pressure on resources in areas of relatively high population densities. All of the villages in the study area were reorganised during the 1960s and 1970s under the government's 'betterment' programme (see above), whereby homesteads that were previously

dispersed over a wide area, typically on hill-sides and higher ground, were concentrated in a tight grid pattern in low-lying areas (Schutte 1984: 6). Interviews conducted in the Lower Mutale area suggest that there is, in addition, a limited spontaneous movement (possibly only of the past five years or so) of people from remoter areas, closer to the Kruger National Park, to areas with better services adjacent to the main roads. Although nothing definitive can be said at this point, it appears likely that the combined effects of natural population increase, inward migration, and reorganisation of settlement patterns will give rise (if they have not already done so) to considerably increased pressure on resources such as grazing, firewood and drinking water in the vicinity of those settlements.

The 1991 census (Republic of Venda 1993b) recognised 9 population centres partially or entirely within the study area, as listed above. Of these, the most important is Masisi, which is strategically located at the junction of the two main roads in the area - one from Messina to Pafuri, tarred all the way, and the other from Masisi to Thohoyandou, recently tarred from Masisi as far as Mutale Bridge. Masisi possesses the only concentration of services within the Lower Mutale area, including a grocery store, bottle store and butchery, a small market for fresh produce, a health clinic, a police station, agricultural and veterinary offices, and a post office. It is also the terminus for the few bus and taxi services that operate in the district. Despite these facilities, the area around Masisi is still very underdeveloped, and many key services, such as a bank, a farm supply store, a mill, etc. do not exist. The nearest commercial centres of any importance are Thohoyandou (80km away) and Messina (100km). There is no public transport to Messina, and the only links to Thohoyandou are a bus which leaves for Thohoyandou early in the morning, returning late in the evening, and three mini-bus taxis which run intermittently throughout the day.

To the east of Masisi, villages such as Tshikuyu and Thondoni have only the most basic of shops, carrying a limited range of tinned and dried goods, and few have as much as a butchery, a bottle stores or any other services. There is no public transport to these areas. Villages to the south and west of Masisi have access to the main road, making communications somewhat easier, but shops and other services are little different to those in the rest of the area. Water for domestic purposes is available from communal stand pumps - either diesel or hand-powered - in all the villages, but it was reported that many sources dried up temporarily during the drought of 1992-93. Mains electricity and automatic telephone services serve Tshikondeni mine, but do not yet serve any of the communities in the Lower Mutale area.

The great majority of all households in the area are engaged in some form of farming, either dryland cropping, irrigated cropping, or extensive livestock production. Few, however, depend on it entirely for their livelihood. As in other parts of rural Venda, and the other former homelands, farm incomes are supplemented by various combinations of migrant remittances, local wage employment, state pensions, and small-scale trading in fresh produce, beer and other goods.

Opportunities for paid employment are extremely rare in the area, with the exception of Tshikondeni Mine and the government service. The Mine employs over five hundred workers, and although these are drawn from within an 80 km radius, employment on the mine is undoubtedly the most important source of wage income in the Lower Mutale area. Skilled government posts - police, agricultural officers, nurses, teachers, clerks - are very limited, and do not necessarily go to local people, although a small number of

such officials settle in the area because of their work. A limited amount of unskilled government work is available for cleaners, watchmen and labourers of various sorts. Beyond the mine and the government service, however, there are virtually no formal employment opportunities within the area, Some casual employment is available on irrigated plots, but the majority of farmers, and the few small shops and businesses that exist in the locality, are not in a position to hire workers, and depend on unpaid family labour.

Migrant labour to the urban and industrial centres of South Africa makes some contribution to livelihoods in the Lower Mutale area, but there does not appear to be a well established pattern of migration - for example, a tradition of local people going to work in particular centres, or particular industries, as is found in some other parts of the country. The remoteness of the area from major centres, and the fact that there have been, historically, no large-scale expropriations of land, and no history of farm tenancy, have also contributed to keeping the level of migration below that found in southern and western parts of Venda. There is some daily and weekly commuting to Thohoyandou, and to work on the farms (black and white owned) in the vicinity of Nwanedi and Messina, but these appear to account for relatively small numbers. However, in the absence of a systematic household survey, these assumptions may not be taken further.

The overall potential for farming in the Lower Mutale areas is generally considered very low, given the rocky terrain, shallow soils, poor rainfall, and distance from markets. The area is suited, however, to extensive livestock rearing, of both large and small stock, and small stretches of alluvial soil along the Mutale River are suitable for cultivation of crops under irrigation.

Local sources suggest that, up to the 1960s, cattle and goats were the mainstays of the local subsistence economy, with virtually every household keeping a small number of each, and a few people, especially the chiefs, maintaining herds in excess of 100 cattle. Over the last 30 years that economic base has undergone considerable changes, with the opening of the area to outside influences, and the rise of alternative sources of income, with the result that today a sizeable proportion of households are without cattle, although the great majority still maintain at least a few goats. Sheep are reported to have been introduced only since the 1960s, and numbers remain small.

From what little information is available, it appears that agriculture in the first half of this century was mainly centred on the production of millet and sorghum for domestic consumption, along with smaller areas of water melons, groundnuts and pumpkins, all of them using rainfed methods of cultivation. Vegetables such as spinach, sweet potatoes, and possibly tomatoes were grown in garden plots next to people's homes, and watered mainly by hand. As at Tshiombo, there appears to be no tradition of irrigated agriculture in the Lower Mutale area. In contrast to western and southern parts of Venda, where the presence of white settlers introduced new methods and stimulated a degree of market-oriented agriculture (Harries 1989:36), the relative isolation of the Lower Mutale area meant that it retained more of its subsistence character until relatively recently.

Government support services to farming in the Lower Mutale area are extremely poor compared to Tshiombo. Agricultural extension officers are based on the Senari and Mutele irrigation schemes, but also serve the surrounding areas. Another extension

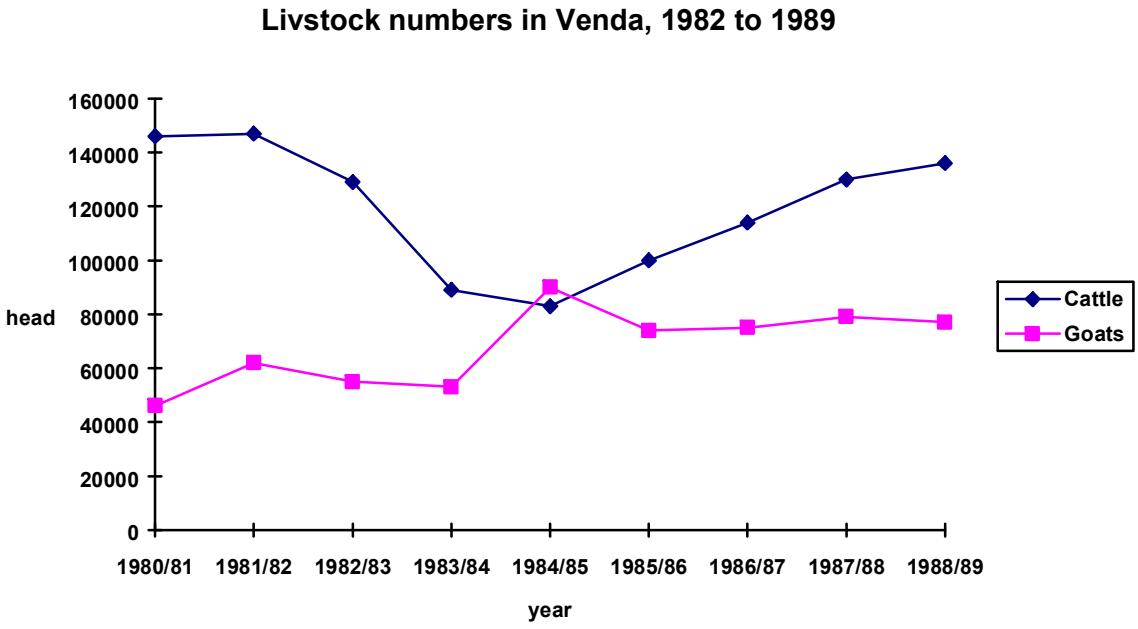
officer is based at Masisi, along with a veterinary technician. All of these officials have extensive territories to cover, but only those at Masisi had transport at their disposal. Government tractors are based on the Nwanedi Block, some 20km to the west, and are occasionally available to the few farmers on government-run schemes, but not to the more numerous 'private' farmers in the area. Government-run cattle dips operate in all three tribal districts, and a government-run cattle auction is held every two months at Sigonde, 8km west of Masisi. Other government services, such as provision of credit, transport, marketing assistance or supply of agricultural inputs are not available to farmers in the study area.

6.4 LIVESTOCK FARMING

The exact number of cattle in the study area was not possible to determine. However, official dipping records, and the statements of veterinary officers in the area, suggest that total cattle numbers in the area increased considerably during the 1960s and 1970s, reaching a level in the late 1970s which the officers estimated at double the carrying capacity11 This expansion was reversed by the drought of the early 1980s, and numbers continued to fall into the 1990s, reaching an estimated 30% of 1979 levels by 1993. According to the veterinary officer at Masisi, local stocking levels now "are about right, with capacity for a moderate increase". Such shifts in livestock numbers are broadly in line with what is known about livestock in Venda generally. Data from the DBSA (1991: Table 6.3) for the 1980s show a severe decline in cattle numbers in the 1983/84 and 1984/85 seasons (following the droughts of 1982 and 1983), but this is accompanied by a dramatic upturn in the numbers of goats, as may be seen from the following table.

11 See Cousins (1996:184), and Clayton (1995: 19) for discussions of the use (and mis-use) of the concept of 'carrying capacity'.

Figure 4.



Source: DBSA (1991: Table 6.30)

The carrying capacity of the area has been estimated at various times by the Department of Agriculture, based on the quality and quantity of grazing available. Efforts were made by the authorities in the 1960s and 1970s to limit the numbers of cattle kept by each household, ostensibly in order to conserve soil and vegetation, but these measures were extremely unpopular and were widely evaded. Today, veterinary officers make their own estimates of carrying capacity, based on past experience, seasonal changes and the extent of over-grazing or erosion, but, apart from encouraging farmers to adopt good practices, they have no means of enforcing any limits on cattle number.

Veterinary officials estimated that roughly 50% of household in the area owned cattle, and that most cattle farmers had between 10 and 40 animals. In the very remote area north-east of Masisi, two farmers were found with exceptionally large herds - one with 215 cattle, and another who reported a herd size of 600 head. While herd sizes in Venda generally show a wide variation, the size of these herds is greater than anything reported from other areas, where a herd or more than 100 cattle is a rarity. A recent study from the neighbouring district of Manenzhe, for example, found an average herd size of 11.9 cattle, and no single herd of over 70 (Land Research Group 1995: 8).

Rainfall is the key limiting factor in livestock production in the Lower Mutale area. The volume of rainfall effectively determines the rate at which rivers, streams and ground-water reserves can be replenished, and at which grazing can be restored. At times of severe drought - as occurred in 1982/83 and again in 1991/92 - the quality of grazing on the veld deteriorates rapidly, rivers and springs are in danger of drying up, and even boreholes are liable to fail.

Farmers interviewed for this study reported sizeable losses of livestock throughout the 1980s and early 1990s, but the ability to withstand unfavourable conditions varied widely. A number of smaller cattle owners - typically those with less than 20 head -

reported all of their animals wiped out during the 1980s, while others were forced into distress sales when faced with the prospect of losing their herds. One larger herd owner at Mukumawabane reported a reduction in herd size from 100 to 68 between 1991 and 1993, as calves and some mature cattle died from a combination of starvation and thirst. Grazing, which had deteriorated badly during the 1980s, was virtually eliminated in the 1991-92 season, and the river and many local bore-holes dried up, causing severe shortages of drinking water for both animal and human populations. However, those larger farmers who had invested in their own water supply, or had the means to buy in supplementary feed, were in a much better position to withstand the drought. During the 1980s, the two biggest cattle farmers in the area drew drinking water for their cattle from the Mutale river, using tractors and bulk tanks. In 1991, one of these farmers invested in a bore-hole, pump and reservoir next to his kraal, a timely decision as it allowed him to survive the period of extreme drought that followed without the loss of any cattle. The other large cattle-owner (Mr K. below) used his tractor and tanker to travel to other villages that still had bore-hole water to collect supplies for his cattle, and was, with the help of his bank in Messina, able to access R20,000 of (South African) government drought relief credit to purchase supplementary feed from white farmers. As a result, he was able to see out the drought of 1991-92 with losses of only six cattle out of more than 200. For the great majority of farmers, however, none of these options was available, and their herds suffered as a result.

No official records are kept regarding small stock - goats and sheep - in this area, but field estimates suggest that the total numbers are greater than that of cattle, and ownership is certainly more widely spread. An informal survey of households in the study area suggested that at least 75% kept goats. Herd sizes were generally in the range of five to 20 goats, and 45 was the largest herd encountered. Sheep are comparatively rare in the area, and flock sizes tend to be small, in the range of 10 to 20 head.

Horses and mules are virtually unknown in this part of the country, but donkeys are well-suited to the conditions and are plentiful, although their numbers appear to be declining along with their economic importance. While many poorer households continue to plough with donkeys, tractors are now the norm, a development only of the past ten years. Donkey-drawn carts are also used for transport, but they are unsuited to the stony roads in much of this district, and transportation by motor vehicle, bicycle and foot is more common.

Grazing in the Lower Mutale area is entirely on open (i.e. unfenced), communal rangeland. Since the reorganisation of the 'betterment' period, each village has had an approved residential area and demarcated crop lands, with all other land under the village headman generally available for grazing. Every household in a village is entitled to keep livestock, and there are no limits on the numbers that can be held. Attempts were made in some areas in the 1970s to introduce a system of rotational grazing, whereby village lands were divided into three fenced areas, or 'camps', and cattle were moved between them on a periodic basis, in order to allow the veld to recover. As with other forms of official controls on livestock, this system was resisted by cattle owners, and collapsed entirely within a few years due to a combination of non-compliance by farmers, the theft of fencing materials, and an inadequate supply of water in many of the camps.

Despite the recurring drought of the 1980s and early 1990s, the veld was showing good signs of recovery after the rains of 1994-95 and 1995-96. This improvement in natural

conditions, coupled with the severe reduction in cattle numbers resulting from the drought, led most farmers interviewed to express satisfaction with the quality of grazing, and optimism about a rapid recovery in herd sizes. As with the ability to withstand drought, some farmers were better positioned that others to take advantage of the improved circumstances, and those with sizeable numbers of breeding stock were using the available grazing to expand their herds to pre-drought levels or above.

Supplementary feeding of cattle was reported only by the two largest cattle farmers, and this was limited only to the most severe drought periods of the early 1980s and 1991-92. Just one farmer could be found who produced his own fodder crop, namely one hectare of lucerne (alfalfa) under irrigation, for feeding to his flock of twenty sheep. Cattle are, however, grazed on post-harvest crop residues, mainly maize and sorghum, and foliage from river-banks and around arable lands is commonly gathered and fed to she-goats with young in the kraal.

In the area adjacent to the Mutale River (e.g. within about 3km of its banks) farmers rely on the river for watering their livestock. When the river dried up in 1992, the majority of these farmers were forced to fall back on the village pumps intended for domestic supply, but many of these also ran dry during the height of the drought. For some stock owners with close family ties in other villages, moving their herds was an option, and examples were found of farmers moving their cattle up to 50km in search of alternative water supplies during this period. For the minority with their own vehicles, transporting water was a possibility, albeit extremely labour intensive.

The biggest change in the way that livestock are watered over the last thirty years has been the switch from surface water - rivers, streams and springs - to ground-water, pumped up from bore-holes. While this shift is largely a result of the concentration of human settlements, and the introduction of the necessary technology, it has been exacerbated by the loss of access to the two biggest rivers in the district over the last twenty years, the Limpopo and the Luvuvhu. The Limpopo has been sealed off by the South African army since the late 1970s, and the Luvuvhu has been made inaccessible by the creation of the Makuya Park, which is closed to farm stock (see below). While the limited evidence available suggests that the areas immediately adjacent to both rivers were extremely sparsely populated prior to these developments, interviews with local farmers revealed that some of them did, in past years, graze their cattle as far as the Limpopo in particular. Otherwise, there are few restrictions on the use of water for livestock purposes. All inhabitants of those villages adjoining the Mutale River are entitled to unlimited access to the river and use of river water. In other areas, those with the necessary resources are permitted to drill bore-holes on their own plots, and pump as much ground-water as they desire. Although there are formal restrictions on the use of government-owned village pumps - limiting them to domestic use only - it is clear that during the height of the drought farmers were accessing this water for livestock purposes, and thus competing directly with domestic users for what was a rapidly diminishing resource.

Overall, livestock farmers in the Lower Mutale area appeared to be content with the system of communal resources, and those interviewed expressed no interest in changing the form of tenure or introducing new forms of regulation. Unrestricted access to grazing and water was highly valued by respondents, and the disparities in resource use between large and small herd owners was not seen as a cause for concern. With a couple of exceptions, there was general acceptance that stock numbers would fluctuate from

year to year, and a belief that quantity of stock was, in the long term, more important than quality.

An important feature of livestock farming in the Lower Mutale area is the disease control barrier, or 'red line'. This line consists of a secure fence with supervised gates, running the entire length of South Africa's northern and eastern borders, and is intended to prevent the spread of infectious diseases, especially foot-and-mouth disease, to South African livestock from wild animals in the Kruger National Park (KNP) or from livestock in neighbouring countries. For reasons that are not clear, the line runs approximately 10km south of the Limpopo, and between 10km and 20km outside the perimeter of the KNP, passing along the northern fringe of the study area, before turning south close to Masisi and running parallel to the Thohoyandou road. This means that a sizeable population, human and livestock, including all of Mutele tribal district, is isolated behind this barrier. The red-line does not appear to cause any major inconvenience for the inhabitants of the area, as gates are operated around the clock. Likewise, as it does not cut across any villages, it does not impose any additional restriction on grazing. Only when it comes to selling cattle across the red line do difficulties arise, as cattle coming from the restricted zone must be inspected and quarantined for two weeks prior to being moved out of the region. While this is seen as no more than a minor irritant by the farmers behind the line, the perceived risk of disease was reported by veterinary officers and others to deter potential buyers. However, given the relatively low volumes of cattle sales in the areas immediately outside the line, this in itself could not be said to be a major problem, although it could present an obstacle to the future development of the livestock trade in the region as a whole.

Partly as a result of the red-line, cattle diseases seem to be kept well under control, according to farmers and veterinary officers. Foot-and-mouth disease, which was reported to have been common in the area in the 1970s, is now rare, while anthrax is reported to be effectively controlled by the state vaccination programme. Tick-borne diseases are controlled by means of compulsory fortnightly dipping of all cattle, for which farmers are required to pay an annual dipping fee of R2 per animal. It was not possible to evaluate the effectiveness of this system, or of the degree of compliance with the dipping programme, but the veterinary officer at Masisi did not report any problems in this regard. An outbreak of red-water disease, a tick-borne infection, in early 1996, which accounted for a number of cattle losses in the area, was attributed by veterinary officials to the persistent heavy rains, which rendered dipping ineffective, and the tardiness of farmers in notifying officials or obtaining medication. Overall, the farmers interviewed expressed themselves satisfied with the general level of animal health in the area.

While it is not accurate to speak of livestock production in the study area as 'subsistence' orientated, or 'non-commercial', it can certainly be argued that - for the majority of farmers - the production of livestock is not primarily driven by market considerations. With one notable exception, cattle farmers interviewed for this study reported that their aim was to maximise the size of their herds, and that while some cattle were sold out of necessity, this was usually regretted, and the numbers sold were kept to a minimum. A small number of farmers reported having sold cattle because their herds were becoming 'too big', but these were once-in-a-lifetime events for the individuals concerned, occasioned by shortages of grazing during periods of drought, or the lack of a herd-boy, typically when the last child in a family went to school or left home. While the majority

of households with cattle reported some sales within the past five years, only two farmers in the study stated that they routinely sell cattle every year. The usual reasons giving for the sale of cattle were to meet pressing household needs, such as food, school fees or uniforms, or the purchase or repair of a motor vehicle.

Of the two largest cattle owners, only one, Mr K. (see below), appeared to have a well-developed marketing strategy. All bull calves, and the majority of heifers, amounting to 80 or 90 head per year, are systematically sold at between 9 and 14 months,. The other large cattle owner in the study reported that he only sold intermittently, but given the size of his herd (600 head) and the number of people involved in handling it, the off-take, either in terms of sales or direct consumption, is likely to be substantially higher than the figure of 10-15 head per year.

The main site for formal sales of cattle is Sigonde agricultural station (8km west of Masisi), where an auction is held every two months, and an average of 30 cattle are reported to change hands. Some of the buyers are local butchers, but most are dealers for slaughter-houses in Johannesburg and Pretoria. There were no reports of local farmers buying cattle at these auctions. The general impression gained from farmers in the study area was that they did not like the auctions. The most common complaints concerned the low prices on offer, and the fact that there was often only a single buyer present, who could, therefore, dictate the prices. Typical prices reported at the time of field work were in the range of R2,000-2,500. The one farmer in the study who reported selling a substantial number of cattle (i.e. Mr K, see below) was highly critical of the conduct of the auctions at Sigonde, claiming that they were disorderly and that the veterinary officers and auctioneers colluded with the buyers to keep prices down. He preferred to take his cattle to a more distant auction, at Tshipise, which is used mainly by white farmers and attracts a wider range of buyers.

It was not possible to estimate the number of cattle sold outside of the formal channel, but veterinary officers in the area reported that considerable numbers of cattle are sold to local butchers, and for slaughter by local households, especially for festive occasions such as weddings and births. A number of cattle are also consumed within the producing households, but many farmers, especially those with smaller herds, stated that they had not slaughtered an animal for their own use in many years.

There are no formal market-places for goats or sheep. Some are consumed within the producing households, or sold within the local village, but, as with cattle, the off-take appears to be low. Sheep meat is highly prized, and while overall numbers are small, there is a strong demand from throughout Venda, especially at Christmas and Easter time.

The sale of milk from cows or goats does not make much contribution to household livelihoods in the Lower Mutale area, although some milk is consumed within cattle-owning households. In most of the villages visited, one or two households had milk for sale. Mr K. was the leading producer of milk, which he sold from a roadside stall or separated and sold for butter-making (see Profile below).

Most cattle farmers in the study area did not make use of stud bulls or selective breeding to improve the quality of their herds. A number of stock-owners reported purchasing pure- or cross-bred bulls at some time in their lives, but most stated that they relied on their own bulls, or let their cows breed "at the dip", where they mixed with other herds.

Cattle farmers tended to have a relatively high proportion of bulls, typically 20-30% of their herd. The exception to this, as with so much else, was Mr K, who sold all of his bull calves, along with a sizeable proportion of the heifers.

6.5 Profile of a large cattle farmer

Mr K. was born in 1933, at Sinthumule, outside Louis Trichardt. His father originated in Mutele district, where his brother (K's uncle) was the chief, but moved to Sinthumule to open a shop. Mr K. himself worked for twelve years as an overseer with South African Breweries in Johannesburg, and, together with his brothers, used the money he earned to extend the family business. At its height, it included five shops, a fleet of five tractors which they rented out to other black farmers, a hammer mill, a 50 hectare farm, and a large herd of cattle.

In 1966, K. left Sinthumule, as the area was getting crowded with former tenants evicted from white farms, and he believed that his own family would soon be removed by the government. He came with forty cattle and a tractor to Mutele and obtained ploughing land next to the Mutale River from his uncle. Here he installed an irrigation pump, the first of its kind in the area, and started producing a range of vegetables for sale in the locality. At that time, he says, the people in the area grew only sorghum, and a little maize, and were ploughing with donkeys. Mr K. says he encouraged people to grow a wider range of crops, and he rented out his tractor to them for clearing the bush and ploughing. In 1979 he was chased away from Mutele by the new chief, his cousin, "because of jealousy", and decided to concentrate on raising cattle deep in the bush, near the Limpopo. While K. denied he had any aspirations to the chieftaincy, this may explain his falling out with his cousin.

At this time, K. had a herd of 280 cattle. He used to sell 99 every year, using his own and two other people's quotas under a marketing system then operated by the government. In 1982 he was removed by the army from his bush station, where he stayed alone with his cattle, and was granted alternative land on the farm "Hetty" which had been acquired by the Venda government. The grazing on this farm was inferior to that adjacent to the Limpopo, and he lost 100 cattle over the course of three years. Since then, he has drilled a bore-hole at Gumbu, where one of his wives lives, and his herd now stands at 120 breeding cows, five bulls, and 90 calves. Half of his herd are kept at Gumbu, and the other half at a new station he is building in the bush, having returned there without permission in November 1995. The army know he is there, he says, but he doesn't believe they will move him "now that Mr Mandela is the government". He has no access to the Limpopo, however, and is obliged to transport water every day from a government pump at Masisi, 10km away, using his own tractor and bulk tank.

Mr K. has a well developed cattle breeding and marketing programme, unlike other farmers in the area. He keeps five Sussex and Simmental bulls at any one time, worth up to R10,000 each, for breeding purposes, and replaces them as necessary at the Messina agricultural show. All bull calves are sold by K. at between nine and fourteen months old. Most of his heifers are also sold at this stage, except for those required to maintain the size of his breeding herd. Older cows are also sold off when they show signs of weakness or fail to breed. In the past, K. sold his cattle to big dealers who came from Pretoria and Johannesburg, but these no longer operate in the area. He has tried selling

his cattle at the auction at Sigonde, but says that the sales are disrupted by farmers arguing about the price, and that the prices on offer are too low. He prefers to sell at the auction used by the white farmers at Tshipise, despite the extra distance, as it is better organised and there are more buyers.

In addition to selling at auction, Mr K. slaughters some of his own cattle, and sells the meat to local shops. He has a gas-powered refrigeration unit deep in the bush, and plans to open his own abattoir at Masisi, if he can find a reliable source of water. He hopes to build a cold-room big enough for 200 carcasses, which will serve his own herd and whatever cattle he can purchase in the locality, and plans to ship the meat to Johannesburg.

Mr K. is also one of the few farmers in the area involved in commercial production of milk. At the time of fieldwork he was obtaining only fifty litres per day, but said that this will rise to 300 litres once the calves are weaned. He has his own separator, for extracting the cream, which he keeps in his refrigerator and sends to Johannesburg once a month for butter making. He also sells fresh milk from a roadside stall at Nwanedi.

Financially, K. says he is doing quite well, and is looking for new ways to invest his money. At present it is mainly deposited in his bank account in Messina where, he says, the bank manager takes an active interest in his welfare. In 1992, for example, he was able to access R20,000 of government drought relief funds through the bank, which he spent on buying supplementary feed for his cattle from white farmers. With the income he obtains from his cattle, he feels well able to support himself, his six wives and his twenty three children, and has recently paid for an extension to the local primary school. His only problems, he says, are the army, who prevent him drawing water from the Limpopo, and the occasional attacks on his cattle by lions in the vicinity of the Kruger National Park.

6.6 IRRIGATED AGRICULTURE

Extensive cultivation of crops under irrigation appears to be a relatively new phenomenon in the Lower Mutale area, probably dating only from the 1960s, but it is rapidly expanding and holds out a high potential for development. Irrigated agriculture in this area takes two forms - organised schemes, both government and non-government, where irrigation is controlled centrally on behalf of all users, and independent irrigation, where each user is responsible for his or her own supply of water. Despite the concentration of government assistance on the organised schemes, the independent irrigators show signs of being considerably more dynamic and successful.

Interviews with older inhabitants of the area suggest that there is little tradition of irrigated agriculture along the lower reaches of the Mutale. Among the reasons given for not cultivating the more fertile riverine lands, and not making use of irrigation, were that the river banks tended to be covered in dense bush, which required considerable effort to clear, and that they were prone to flooding. In addition, the low level of the rivers relative to the surrounding lands during periods of normal flow required a considerable pumping effort, the technology for which was not available to the local people. Traditional Venda settlements also tended to be located away from river banks, for reasons of security and to avoid the risk of disease and flooding, as were roads and

tracks, leaving them generally inaccessible. River banks also feature prominently in Venda folk-lore as places of mystery and magic, but it is impossible to say to what extent this may have deterred potential farmers.

Irrigated agriculture seems to have been introduced to the Lower Mutale area in the 1960s and 1970s by a handful of pioneer farmers, most of them forcibly removed from white farms, who migrated here with their own capital - including livestock, tractors and implements - and a considerable level of expertise. These independent irrigators have increased in number in recent years, and there are now close to fifty of them in the study area alone. Formal irrigation schemes only began in the late 1970s, when the government constructed two small irrigation schemes within a short distance of each other, one on the south bank of the river at Senari, and one on the north bank at Ha-Mutele (Thondoni). Since then, the independent irrigators (known locally as 'private farmers', to distinguish them from participants on government schemes), have prospered and grown rapidly in numbers, while the government projects have tended to stagnate or decline.

Three irrigation schemes were identified within the Lower Mutale study area. Two of these - at Senari and Mutele - are run by the government service, while the third, located at Masisi, was started by a committee of local unemployed people, and funded by the South African government .

The Senari and Mutele schemes, within 5km of each other on opposite banks of the Mutale River, are similar in design, and suffer from similar problems. The were started in 1977 by the Venda administration, chiefly the Departments of Agriculture and Public Works, and are located on pockets of rich, alluvial soil within bends of the Mutale River (see Map No. 4). For the first two years of their existence, these projects were run as state farms, with farm managers and hired labourers, but in 1979 they were sub-divided into plots and allocated to individual farmers. Senari scheme has a total of 39 hectares, divided between 5 farmers, while Mutele has a total of 33 hectares, divided into five plots of 6 hectares each, and one plot of 3 hectares. These plot sizes are six times the size of those at Tshiombo, and were clearly intended to foster a new class of ‘commercial’ farmers. On each of these schemes irrigation is supplied by means of a large diesel engine, which pumps water directly from the Mutale to movable sprinklers on the plots, without any capacity for storage. Plot-holders pay an annual rent of R60 each per plot, which entitles them to fuel for the pump and maintenance of the irrigation equipment. An agricultural extension officer is based on each scheme, although these are also responsible for the surrounding areas. Senari and Mutele projects are constructed on communal (i.e. tribal) land, and it appears that the original allocation of plots was made by the respective chiefs, Makuya (at Senari), and Mutele. No plots have been reallocated since the inception of these schemes.

Both of these government schemes have deteriorated in recent years, for a variety of reasons, and now operate well below their potential. At Senari, only two farmers are actually using their land: one is cultivating less than half his plot, while the other is cultivating both his own plot and another which he is sub-leasing, unofficially, from its official occupant. Both of these farmers had full-time employment in the government service when they acquired the plots, although one is now retired. The larger of these two farmers operates a highly commercialised operation, employing ten people full time. His main crop is tomatoes, which are grown throughout the year, but maize, cabbage and spinach are also produced. This farmer owns his own tractor and ploughing

implements, as well as a van, with which he transports produce for sale at Thohoyandou, and to the tomato canning factory at Makhado. The other active farmer on the scheme was producing only maize and sorghum, for his personal use. The remaining, inactive, plot-holders were reported to have abandoned their lands at various times over the last ten years, due to a combination of poor harvests and severe debts.

What is perceived as the under-utilisation of the scheme, and the fact that the two active plot-holders are from villages outside the immediate area and have close ties to the chief, is a source of considerable resentment amongst sections of the local community. The Senari civic, with the backing of the ward councillor, is now campaigning to have the unused plots reallocated to people from Senari village, and appears to have the support of the Department of Agriculture. If such a development were to occur, it would signal a significant shift in power over land in favour of local democratic structures and away from the tribal authorities.

The Mutele irrigation scheme was found to be in an even poorer state than Senari, as the main pump had been out of order for five months, due to flood damage. Repeated requests by the farmers and the local extension officer to the Departments of Agriculture and Public Works to have it repaired had met with no success. As at Senari, the majority of plot-holders had ceased using their lands in recent years, and the two farmers that remained were struggling to produce crops of maize and sorghum, under what were effectively dryland conditions. At the time of fieldwork (June 1996) both were pessimistic about obtaining even their own domestic requirements of maize for the year from a very poor summer harvest, and had abandoned any hope of planting for the winter. These plot-holders differed from those on the Senari scheme in that they were both from the local village, and described themselves as full-time farmers, without alternative sources of income. This may explain why there was no evidence of pressure from the community to have the land on the Mutele scheme redistributed, but this could also be related to the apparent weakness of the local civic compared to other areas. Alternatively, it is quite possible that within this small community there may not be the individuals with the necessary capital to work a six hectare plot, especially where others have been seen to fail. Equally important, however, is the absence of any mechanism for the repossession and redistribution of unused land on these schemes, and it may well be that if smaller, well-serviced irrigation plots were made available they would create their own demand.

The Mutele and Senari irrigation schemes offer many points of contrast with the Tshiombo scheme. Most obvious of these is the scale of the different schemes, both overall and in the size of the individual plots. Average holdings per household on the Lower Mutale schemes are more than four times the size of those at Tshiombo, and yet have proved unviable for all but one or two farmers on each. Even at full occupancy, the small numbers of farmers on the Lower Mutale schemes, their distance from major markets, and the limited support services available to them, could also be seen as major problems. Tshiombo, on the other hand, is at the heart of an active agricultural community, with a well-developed extension service, ploughing service, co-operative suppliers and marketing networks, which are unlikely to be equalled by eleven farmers on the Lower Mutale, no matter how large their plots. The irrigation methods employed on the different schemes are also of importance. Tshiombo, for all its problems with water, has a gravity fed infrastructure which is not liable to catastrophic failure, unlike the diesel pumps on the Lower Mutale schemes. The risk of mechanical failure at Senari and Mutele is compounded by the relative aridity of the area, which, in contrast to

conditions at Tshiombo, does not permit a temporary recourse to dryland methods. Overall, the poor record of the Lower Mutale schemes suggests that considerable changes would be required if they are to make a significant contribution to the development of the area.

The third irrigation scheme in the Lower Mutale area, at Masisi, is referred to locally as a community scheme, and is quite different from the government schemes described above. It was started in 1992 by a group of unemployed, landless people, organised by a local social worker, with a grant of R120,000 from the South African government's National Nutrition and Social Development Programme (NNSDP). It is situated on a gently-sloping 10ha site, allocated by the local headman. Part of the initial grant was spent on food for the project members during the construction phase and the first growing season, and the remainder on fencing and the irrigation infrastructure. The project draws water from a purpose-built bore-hole, which feeds a reservoir at the top of the scheme by means of a diesel-powered pump. Irrigation is applied using a single, flexible pipeline and sprinkler system. The project has 20 members, and is run by an elected committee which plans the year's production, manages the finances, and directs day-to-day activities. The land is worked on a collective basis (i.e. it is not divided into individual plots), with all members contributing cash and labour as required, and sharing equally in the returns. The project is actively supported by the Agricultural Officer based at Masisi, who advises the members on all aspects of crop production.

The scheme got off to a poor start when the first crop of maize failed entirely, and has been beset by problems ever since. Central to its difficulties is a lack of working capital. The initial capital grant supplied by the NNSDP was spent entirely on establishing the project, with nothing kept over to meet recurring costs such as diesel, seed, fertilizer, ploughing and transport. Such costs have, therefore, to be met through a levy on the members, and, insofar as possible, through produce sales. But, as project members were selected on the basis of their poverty, they are not in a good position to contribute to expenses. Furthermore, as members' labour is unpaid, and most of them do not have alternative sources of income within their households, they depend heavily on the scheme for household food requirements, thus leaving relatively little over for sale. To make matters worse, any funds that remain in the project's account at the end of the year are distributed amongst the members, with the result that the project starts each new year without funds. Not surprisingly, the project finds itself in permanent financial difficulties. At the time of field work, for example, the water pump was not operating as there was no diesel, and more than half the land on the scheme was unploughed because the members could not afford to pay for the hire of a tractor. Some produce had been sold in the locality in 1994 and 1995, but the demand was said to be very poor, and the members could not afford to hire transport to other districts. Despite this, they were continuing to experiment with new crops - including chillies, tomatoes and butternuts - on a small scale, with a view to attracting buyers with their own transport.

With little sales income, a relatively impoverished membership, and no sustained source of external funding, it is questionable to what extent such a scheme is going to benefit the community. Clearly, the input of a large volume of free labour is not enough to ensure agricultural success in the absence of capital to meet recurring expenses. Rather than providing people with a resource that they can easily exploit, it would appear that the NNSDP has saddled them with a range of new expenses which they can ill afford. Without a sizeable injection of working capital over a number of years, and careful

financial management, it appears unlikely that this project will ever reach the point where it generates a regular profit and can become financially self-sustaining.

6.7 PRIVATE IRRIGATORS

The most significant change in agricultural practices in the Lower Mutale area in recent years has undoubtedly been the development of 'private' (i.e. individual, or non-government) irrigation plots along the banks of the Mutale River. By walking both banks of the river in the company of a local extension officer, it was estimated that within a 3km stretch, west of Mutale Bridge (adjacent to Mushithe village), there were 12 such farmers, on plots ranging from 0.5 to 25 hectares. Another concentration was found on the south bank of the river, near Mukumawabane village, and along the 20km of river within the study area, there were, according to various estimates, between 50 and 60 such farmers in all.

Interviews with private irrigation farmers encountered on various parts of the riverbank revealed that the rise of irrigation on private plots had been spearheaded by people from outside the area, but now includes many local people as well. Of the ten farmers interviewed, four originated in white farming districts to the west of Venda, and migrated to the Lower Mutale area in the 1970s because they had heard there was fertile, irrigable land available. Of the six farmers originating in the immediate vicinity, one had begun irrigating in 1981, but the others had all obtained their lands only since 1990.

These private irrigators, especially the larger ones, stood out from the rest of the local population in a number of ways. Those originating in 'white' farming districts - all men, and all of whom had at least three hectares under irrigation - came to the Lower Mutale area with tractors or draught animals and considerable agricultural expertise, as well as cash earned through employment in the urban areas, and all came with the specific intention of taking up irrigated agriculture. Three more reported having a household member in full-time employment, two of them at Tshikondeni mine, which allowed them to invest in the pumps, pipes and other materials necessary to begin irrigating. Of the three remaining, two were women farming on a very small scale (i.e. cultivating less than 1ha at a time), but the third was a relatively successful farmer, on five hectares, who had started on a smaller plot and funded his expansion solely through the revenues he obtained from selling his produce.

All but two of the farmers in this group of private irrigators were using diesel pumps and sprinklers to irrigate their land, drawing water directly from the Mutale. The two woman farmers were irrigating by hand, using buckets, but one, who had obtained her land only in the last year, was in the process of buying a pump on an instalment plan. Just one farmer was found to have any water storage capacity on his land, in the form of a large concrete tank. Unlike any of the others, he was using a form of flood irrigation, on a network of two metre squares, rather than sprinklers or furrows, as he found this more suitable for the very sandy soil in his plot. Nonetheless, all of these farmers complained that they lacked the resources - in terms of pumps, piping, diesel etc. - to irrigate as much land as they would have wished, and many of these with pumps were obliged to move them around regularly in order to irrigate different parts of their land.

All of the farmers interviewed reported that they had obtained their plots by the 'traditional' route, that is, by applying to the chief or headman, and were satisfied with this procedure. As with other farmers in the area, they pronounced themselves content with the communal land tenure system, and none saw it as implying a lack of security or a barrier to their progress. In Makuya district in particular, respondents said that they had received strong support from the chief, who told them to clear as much land as they thought they could work. Judging by the statements of the farmers themselves, and the levels of investment involved in these irrigated plots, it is evident that they consider these plots a long-term undertaking. Seven out of the ten interviewed had registered their plots with the Tribal Authority and the District Magistrate's office, which involved having their plots surveyed by the Department of Agriculture, and being issued with a verbal 'Permission to Occupy'. Although this procedure does not confer any rights of private ownership, it is seen as a safeguard in the event of any other party claiming the land, or in a dispute over plot boundaries.

Observations in the field suggest that most of the cultivable land along both sides of the river in the study area has now been claimed. Indeed, it is not just land immediately adjoining the river that is being cleared and irrigated: in a number of places where all the riverine land has already been occupied, farmers are using land further away from the river, with lengthy irrigation pipes being run across other people's plots. Despite this, it was generally reported that competition for land was not particularly intense, as the overall demand was limited by people's ability to raise the capital necessary for clearing plots and purchasing irrigation equipment.

A wide variety of crops are produced on these irrigated plots, but the main emphasis is on tomatoes. Two farmers said that they sold tomatoes to the factories at Messina and Makhado from time to time, while another (Mr M. below) had a fixed-price contract to grow 5ha of tomatoes for the Makhado factory. The other main crops produced by these farmers were maize, cabbage, spinach, beans, butternut squash, gem squash, pumpkins and water melons. The bulk of these crops are sold directly by the farmers, or members of their households, in neighbouring villages, or to hawkers who come to their plots. Only one farmer regularly sends produce to markets outside the region - mainly Johannesburg - using a commercial transport company (see profile below). The same farmer is also the only one known to have planted an orchard, in this case 200 orange trees, which have yet to reach production.

Maize was grown by all the farmers, but this was mainly intended for domestic consumption. Some fresh cobs (green mealies) are sold within the local area, but the bulk of the harvest is brought for milling either to the NTK roller mills at Shayandima, or to one of the small tractor-powered mills operating in nearby villages. The stamping of maize by hand within the homestead seems to have died out almost entirely amongst this group of farmers, although it is still practised among other households in the area with relatively small quantities of grain.

Despite their pioneering spirit, and considerable agricultural success, private irrigation farmers in the Lower Mutale area receive virtually no recognition at official level, either in government reports or in conversations with regional officials of the Department of Agriculture. Of greater importance, however, is the fact that they receive little or no direct assistance from the state in terms of credit, irrigation works, ploughing services etc., unlike farmers on the 'official' irrigation schemes at Mutele and Senari, and those on larger schemes in adjoining areas such as Nwanedi and Folovhodwe. The most pressing

concern amongst all of these farmers was the lack of any direct financial assistance or credit facilities. Only one of the farmers interviewed had obtained government credit (from Agriven) in the past, but none of them were in receipt of any form of direct state assistance at the time of fieldwork. All stated that they felt severely hampered by a lack of working capital, and would, if given the opportunity, be willing to borrow in order to invest in agricultural inputs, diesel, additional irrigation piping, ploughing and, in one case, additional hired labour.

Apart from direct state assistance, farmers in the Lower Mutale area are hampered by their remoteness from the entire range of agricultural services. Modern agricultural inputs, such as approved seed, fertilizer and pesticides, are widely used, and are purchased either from the Agriven depot at Nwanedi (25 km away), or from NTK branches at Shayandima (90km) or Messina (100km). The distances involved are clearly a problem for all farmers, but especially for those who do not have their own transport and have to hire or borrow a truck as required. Ploughing services are also in short supply, and every farmer interviewed, even those with their own tractors, stated that a lack of capacity was preventing them from ploughing as much land as they wanted to. There are government tractors based on the Nwanedi block, which occasionally come to plough on the Senari and Mutele schemes, but these are rarely available to private farmers. Of the ten individual irrigation farmers interviewed, two had their own tractors, two ploughed with donkeys, and one cultivated by hand. The remaining five relied on hiring tractors from other farmers in the area, which they found expensive and unreliable.

Other problems cited by the private irrigators were the very limited demand for farm produce in the area, the high cost of hiring transport to take goods to the larger centres, and vehicular access to the riverside plots. There were generally no roads to these lands, and farmers had to make their own tracks over rough terrain. The one area where these private irrigators did express satisfaction was with the agricultural extension service. The extension officers on the official schemes in the area appeared to be committed to serving these often hard-to-reach individual farmers, and were, in turn, generally appreciated by them. However, as one cash-strapped farmer put it, "what is the good of the officer telling us how much fertilizer to use, and how to apply the spray, if we can't afford to go to the co-op and buy them?".

While these farmers varied considerably in approach and scale of operation, they all had, by Venda standards, a strong commercial orientation. Eight out of ten described themselves as full-time farmers, meaning that farming is their only occupation and principal source of household income. The cash required to clear land, acquire irrigation equipment, and purchase agricultural inputs requires such an approach, and it is reflected in the choice of crops and the production and marketing strategies employed.

6.8 Profile of an irrigation farmer

Mr M. was born on a white farm at Jouberstroom (west of Venda) in 1936. He worked on the farm as a boy, and from 1960 to 1971, he worked as a driver for the South African Department of Agriculture, based in Louis Trichardt. When he had saved some money, he resigned from his job, and went to study poultry farming in Natal. In 1974 he moved to Sibasa, and established himself as ”Venda’s first commercial poultry farmer”. This business was highly successful, he says, until his flocks were wiped out by disease

in 1983. Following this setback, he decided to try something completely different. After looking at the prospects for farming in different parts of Venda, he was attracted to Makuya district by the availability of good grazing land, and went into cattle farming. In 1988, his cattle were stolen, by Zimbabweans, he believes, and although he tracked them as far as the Limpopo, he was unable to retrieve them. This second set-back made him want to quit the area, but Chief Makuya persuaded him to change his mind, saying that the area needed such people. The Chief invited him to choose any land he wanted to try another branch of farming. After some searching, he identified a 25ha site along the south bank of the Mutale, which he felt was suitable for irrigation. He "de-bushed" the area using his own tractor and hired labour, had the land registered in his name, and went into production. He pumps water from the river using one Lister pump, and a second pump operated from his ageing tractor, both of which are moved around to supply different parts of the plot. He also uses his tractor for all his ploughing, but says it is not adequate for the amount of land.

His main crops are tomatoes, maize, spinach, pumpkins, butternut squash, oranges and paw-paws. For the last five years he has been growing tomatoes under contract for Gants canning factory at Makhado, and in a good year he expects to harvest up to 100 tonnes. He was satisfied with the current price of R300 per tonne, but was not happy about having to pay R70 per tonne to a private truck owner to have his produce delivered. Tomato plants are ploughed under after a single harvest, to be replaced first by butternut squash, and later by beans, giving him three crops in a year. Most of his produce, apart from tomatoes, is sent to market in Johannesburg, using private transport companies based at Levubu and Tshipise, and the remainder is sold around the local villages by his sons. He has recently planted 200 orange trees, which have yet to bear fruit.

M. works full-time on the plot, along with his wife and two adult sons. He also hires up to 16 day labourers at a time, and says he could use twice that number if he had the cash to pay them and the means to transport them to and from the villages. Transporting people and goods to and from the fields is also a major problem, as there is no road and everything must be carried either a long distance through the bush, or across the river to the nearest road. Also, his old truck is on the point of collapse, and he doesn't have sufficient cash to purchase a new one. Overall, however, M. feels that he is making an adequate living for himself and his family, which he puts down to spending all day in the fields, and keeping written accounts, which allows him keep a careful check on his business and to learn from his mistakes.

6.9 DRYLAND AGRICULTURE

Dryland - or rainfed - cropping, once an essential part of livelihoods in the Lower Mutale, is now probably the least important type of farming in the area, and would appear to be set for even further decline. The extent of this change in farming practices, and the reasons behind it, require further study, but it would appear that the availability of income from other sources - mainly wages and pensions - has led many households to abandon this highly marginal form of production, while a small elite have managed to switch to more marketable crops such as tomatoes under irrigation.

Land for dryland cropping is allocated in the same manner as other types of land, through the village headman. Under former Venda government regulations, the

allocation of ploughing lands had to be approved by the local agricultural officer, and such approval was essential if the land was to be registered. In practice, however, it appears that considerable areas were allocated by headmen without consulting officials, and registration did not appear to be a priority amongst dryland farmers in this area. This was probably due to the general availability of arable land, albeit of relatively poor quality, and the low level of fixed investment involved, usually amounting to no more than a rough fence of wire or bush wood to deter livestock. The total area allocated for dryland cropping in the study area could not be determined exactly, but was estimated at between 200 and 300 hectares for each village. Every family interviewed stated that they had arable land available to them, although less than half were using it. Nobody in the study spoke of a shortage of ploughing land, and new plots appeared to be available to those who need them. Thus, while it is not possible to speak about a general shortage of arable land in the Lower Mutale area, good quality arable land is certainly in short supply.

Sorghum is the most common dryland crop, but the area planted to maize is not far behind. Maize is less resistant than sorghum to the dry conditions of the Lower Mutale area and, according to local farmers and agricultural officers, has completely failed roughly one year in three over the past two decades. Despite this, it appears to be growing in popularity, and is probably set to replace sorghum as the main dryland crop in the area in the near future. The area of millet is small relative to both of these crops, and is usually grown in just a few rows along with sorghum. Sorghum and millet are grown entirely for domestic consumption, and no evidence could be found of a market anywhere in Venda for either crop. Furthermore, it was widely reported that the one-time staple food of the far northern districts, sorghum porridge, has been almost entirely replaced by maize meal porridge in the course of little more than a generation, indicating a shift not just in taste, but from a largely self-provisioning to a more market-dependent local economy. The bulk of both sorghum and millet is now used for domestic production of beer, and sorghum porridge tends to be eaten only by invalids and the very elderly.

The other dryland crops suited to the area are watermelons and pumpkins, both of which are widely grown, usually intercropped with either maize or sorghum. From what information could be obtained, it appears that these crops are also intended mainly for domestic consumption, although a proportion is sold within the local area. Ploughing for dryland crops is most likely to be carried out with donkeys rather than tractors, seed is usually retained from one year to the next rather than purchased, and little or no fertilizer or pesticides are used.

Given the risky nature of dryland cropping in the Lower Mutale area, and the lack of market demand for dryland produce, it is at best a supplementary economic activity, and no household could be found that relied upon it as its principal source of livelihood. It is, however, of particular importance to women farmers in the area who tend to have little access to either cattle or irrigated land.

6.10 NON-FARMING RESOURCE USERS

There are three major non-agricultural users (or at least occupiers) of land in the Lower Mutale area - the South African army in the Madimbo (or Mashakatini) corridor, the Makuya wild-life park, and Tshikondeni Mine. It should also be noted that the Kruger National Park, the largest wild-life reserve in the country, and a major tourist attraction,

is only 15km from the study area, but has little direct impact on the adjoining communities. The last inhabitants of the Park, over 3000 of the Maluleke people who lived around Pafuri, were forcibly removed to Gazankulu in 1969 (Harries 1987: 107).

i. Madimbo Corridor

The Madimbo corridor is a 5-10 km wide military zone running eastward from Messina along the south bank of the Limpopo River. It was cleared as a security measure in the late 1970s and is still occupied by he South African defence forces. A number of communities were removed from the corridor, and relocated to villages in Venda. South of the corridor, cattle owners from villages such as Masisi and Gumbu, who were accustomed to grazing their cattle as far north as the Limpopo, were denied access to the river, and cattle that strayed into the strip were impounded. In recent months, various white farmers owning lands adjacent to the corridor, to the west of the study area, were reported to be suing the defence forces for damage to their lands caused by use of herbicides within the corridor, although this did not emerge as an issue in the Lower Mutale area (*Sowetean*, Johannesburg, "SANDF Sued", 22 March 1996).

With the transition to democracy in South Africa, it appears likely that the Madimbo corridor will shortly be vacated by the military, and it is now being eyed by various interested parties. Amongst these are mining companies, which wish to begin exploration for diamonds in the corridor, and wild-life interests, which have plans to make it the centre-piece of an international wild-life reserve stretching from Mozambique to Botswana. The future of the corridor has given rise to considerable debate at the national level, and has led to tensions between national government, which has responsibility for mineral affairs, and appears to be backing the diamond prospectors, and the government of the Northern Province, with responsibility for tourism and environmental issues, which favours the wild-life option (*Star*, Johannesburg, "World's largest wilderness on our doorstep", 3 June 1996). Neither party, it should be pointed out, has expressed much interest in the needs or wishes of the local community, or of the people who were forcibly removed from the corridor. The mining interests have, however, been keen to mobilise local support to counter what is being portrayed in the national media as a threat to a pristine wilderness area, and have persuaded local leaders, such as Chief Mutele, to speak out on their behalf (*Sowetean*, Johannesburg, "Diamond search in corridor goes on", 26 April 1996). Interviews with inhabitants of the area suggested that popular feeling strongly favours mining over the wild-life option, largely because of the perceived benefits in terms of employment, and past experience of both forms of land use within the immediate area.

ii. Makuya Park

Makuya Park was created as a 'national' wild-life park during Venda's independence period, but has never become fully operational. The park area consists of approximately 16,000 hectares of land, which is leased from the tribal authorities of Makuya, Mutele and Mphaphuli. The Park was laid out in the mid-1980s, long after villagization (betterment) had been implemented in the area, and no communities appear to have been removed especially for the Park. Makuya Park was originally run by Venda Tourism (part of the parastatal Venda Development Corporation), but has now been taken over by the provincial Department of Environmental Affairs. It has a full-time staff of fifty, including a park manager, game wardens, fence patrollers, gate-keepers and others. The Park is situated on high ground, overlooking the Luvuvhu River, and, for all practical

purposes, is effectively an extension of the Kruger National Park, with which it shares a long, unfenced boundary. Wildlife such as lion, leopard, various forms of buck, and, occasionally, elephant. move freely between the two Parks. For reasons that are not entirely clear, the Makuya Park has never been properly promoted, or been able to attract more than a trickle of visitors, and as things stand it is unlikely to do so. Apart from a bush-camp, which can cater only for one party of 12 people at a time, there are no facilities for visitors. The camp was originally intended as a hunting site, but hunting has been banned in the Park since 1992. Roads within the park are virtually impassable without a four-wheel drive vehicle, and do not form the kind of circular route that might be attractive o tourists.

The authorities in Thohoyandou and Pietersburg seem to be in two minds about the Park, for while they keep it fully staffed, and it receives small parties of visitors at the weekends (in winter, at least), it is not advertised or promoted in any way and is virtually unknown outside of the Province. In short, the physical territory for some sort of park has been demarcated, but no progress has yet been made towards creating a useful amenity, or even defining what its purpose might be.

With the formation of a new provincial administration, there has been a fresh approach to the management of wildlife reserves, and attempts have been made by the government to promote debate on the future of Makuya Park. The newly-created provincial Department of Environmental Affairs has embraced the principle of community participation in the management of nature reserves and other amenities under its control, and is attempting to create structures which will give local communities a direct involvement in the management of such amenities. Thus, in late 1995, the Department initiated the Makuya Park Forum, consisting of representatives of the Department and of civics and Tribal Authorities in the vicinity of the Park, as a first step towards planning its future. From the outset, however, it was clear that the objectives and motivations of the Department and the community representatives were quite different. For the three tribal authorities, who dominated the Forum, the main objective was to obtain payment of rents owed to them by the Department - an amount of R1 per hectare per annum - which had not been paid for over two years, and, if possible, to negotiate a rise in the rental. In addition, the members of the Forum were looking to the government to take a lead in developing the Park, in the expectation that this would attract tourists and boost the local economy. The aim of the provincial government, however, was quite the opposite: to hand over responsibility for the Park to local people, and end the government's responsibility for rent, wages and other costs associated with running it. In this, the provincial government was clearly influenced by the substantial investment that would be required to make the Park fully operational, and the fact that it is currently receiving negligible amounts of revenue in return for substantial outlays. The aim of the Department, according to senior officials, is to encourage "the community" to form a Trust for the management of the Park, and for that Trust to enter into a joint venture with private-sector investors, such as a hotel chain, to develop the Park. As this strategy was being promoted by the Department under the banner of "community participation", it is not surprising that it led to considerable confusion amongst local representatives. To them, 'participation' clearly meant some form of partnership between local people and the government, with the expectation that the government would provide substantial resources and leadership. To the Department, however, "participation", at least in this case, seems to mean that the community must shoulder the main responsibility for the development of local resources, and cannot expect the same level of official support as it did in the past. Such off-loading of failed, or

undeveloped, assets onto an unprepared and under-resourced community clearly does little for the concept of 'development' or 'participation', and has been met by incomprehension and frustration by local representatives.

During the course of this study, the Makuya Park Forum emerged as a site for the growing political conflict between 'traditional' and 'democratic' leaders from the local area. As the Forum was created before the November 1995 local elections, it did not include the elected councillors for the area, and in the months following their election, the Forum, probably quite deliberately given the dominance of tribal leaders, made little or no effort to include representatives of the council in its deliberations. What is more surprising is that Department officials, who are also members of the Forum, did not do more to include the elected representatives. Such lack of interest would seem to support the point made by Westaway (1995:37) that provincial and national administrations have shown a marked reluctance to engage with elected local representatives, preferring to operate through parallel "community-based" forums. The evidence of the Makuya Park Forum would suggest that Department officials, mainly survivors from the old homeland regimes, feel politically threatened by newly elected representatives who emerged from the anti-homeland and anti-apartheid struggle, and may be happier dealing with the tribal representatives with whom they are more familiar.

By late May 1996, when the leader of the council finally appeared at a meeting of the Forum, it was clear that the council members had little intention of co-operating with the tribal leaders, and were questioning the composition and legitimacy of the Forum. Councillors argued that there was no need for such a forum now that there were legitimate elected representatives who could speak and act on behalf of the community. By the end of the field-work period (June 1996) it was clear that the Forum was not going to proceed as planned, and the Department, which seems to have been caught unprepared by the local political conflict, was looking for a new strategy.

The future of the Makuya Park, given its location, is most likely to lie in some relationship with the Kruger National Park, but this is something that has not been given any consideration within the Park Forum itself or, it would appear, within the Department of Environmental Affairs and Tourism. As things stand, the extreme north of the Kruger Park is the least visited area, largely due to its remoteness and the risk of malaria in the summer months, and it is not at all clear that an expansion of wild-life based business in this area is economically feasible. It is also worth noting that no attempt was being made to capitalise on the handful of tourists who pass through the Lower Mutale area every day en route to the Kruger National Park's Pafuri gate.

iii. Tshikondeni Mine

Tshikondeni Mine, located just east of the study area, adjacent to the Kruger National Park, is the only industrial enterprise of any note within an 80km radius, and is the only working mine in Venda. It is owned by ISCOR, the South African government-owned iron and steel corporation, and produces high-grade coking coal for use in ISCOR's steel plants. The mine began production in 1983, in an area previously mined on a smaller scale for graphite and coal. The mine concession area totals 22,000 hectares, much of which overlaps with the Makuya Park but, under terms negotiated with the then Venda government, the total surface area allowed for development is limited to 600 hectares at any one time. The mine currently employs 670 people, of whom 520 are from Venda, but this is expected to increase to a total of 900 in the near future. Extensive

underground workings are now operational (the main shaft descends to a depth of 420m), and deposits are estimated to be sufficient to keep the mine operating at current levels for another 40 years.

The mine management is proud of its environmental record, and the overall impact of the mine on the visible natural environment does appear to have been very little. The policy of the mine has been to minimise environmental disturbance, and to promote conservation and restoration as part of all above-ground activities. The entire mine workings, including mine dump, offices and work-shops, are contained on a single 150ha site. Where possible, strips of original vegetation have been left undisturbed between the various installations, and the area immediately outside the perimeter fence has not been cleared. Ongoing efforts are under way to 'green' the main mine dump, by compacting it, surrounding the lower portions with soil, and planting indigenous trees and shrubs, which is already showing some signs of success. Away from the main compound, exploratory diggings are covered-up and replanted as they are finished with, and trees and bushes along road-sides are trimmed rather than felled. Indeed, the mine's environmental officer stressed that the mine had even filled-in some of the open-cast workings left behind by previous ventures.

In addition to its main mining-related activities, Tshikondeni mine was involved in a number of environmental and development projects in the locality. These included funding on-going research into the flora and fauna of the area, providing facilities for local schools, and funding a number of micro-enterprises in the local villages. On the mine itself, there is an extensive technical training programme aimed at upgrading the skills of black workers, although there are as yet no black managers. The mine also runs literacy training for its employees outside of working hours.

Overall, the mine does not appear to compete for resources with other users. Through its provision of employment opportunities, and the building of a high-quality tar road to Masisi, it could be said to have considerably improved the quality of life for the people of the area, and is generally viewed with approval by the local population. Indeed, the only complaint heard during the course of field-work was that the mine did not provide employment for all those in the locality who required it. In terms of surface area, the only land closed off by the mine is the 150ha of the mine compound, which is located in a remote and unpopulated area. The remainder of the concession area, including the village of Mukumawabane and a large part of Mutele tribal district, remains under the control of the tribal authorities, and can be used for grazing or cultivation without special restrictions. In terms of water usage, the mine does not extract any water directly from the Mutale or the Luvuvhu Rivers. Water for industrial process is obtained from the deep shaft, and for domestic purposes is obtained from a number of bore-holes on site.

7. LOCAL MANAGEMENT OF NATURAL RESOURCES IN THE MUTALE RIVER VALLEY

This chapter summarizes the main changes in natural resource usage in the Mutale valley over the last 30 years, and evaluates the role of the main institutions of local governance - 'traditional', 'democratic' and non-governmental - in the management and conservation of natural resources.

7.1 Changing resource use in the Mutale Valley

The Mutale valley, and Venda as a whole, have undergone enormous social and economic changes over the past 30 years. Venda was incorporated into the broader South African economy later, and in many ways less completely, than other former homeland areas, and remained for much of this century an extremely peripheral and under-developed part of the country. It retained, at least in central parts, much of its former social and economic structure, and was spared some of the extremes of dislocation and impoverishment suffered by black people in other parts of South Africa. In recent decades, however, Venda has experienced a flurry of development activity, especially in the period immediately prior to and following 'independence'. The construction of roads, bridges, dams, schools, clinics and agricultural projects, the introduction of a wide-range of commercial and welfare services, and the expansion of wage employment in the government and private sectors, have transformed much of this rural society in the course of a generation.

These developments have been accompanied by a dramatic increase in population, both as a result of natural increase and forced removals from 'white' farms and urban areas. At the same time, the relatively dispersed rural population has been concentrated into agricultural villages and 'closer settlements' under the policy of 'betterment', and have swelled the informal settlements around the capital, Thohoyandou. Despite these changes, however, Venda, in common with the other former homelands, remains extremely poor and underdeveloped relative to 'white' South Africa, and continues to rely on what was, for most of this century, the mainstay of its economy, the export of labour to the industrial centres of the Witwatersrand.

Recent decades have also seen substantial changes in the use of natural resources, and in the ability of people to gain access to the resources they require to sustain livelihoods in the rural areas. Overall, the evidence of this study points to an intensification of resource use, particularly of water and irrigable land, in the Mutale River valley over the last 30 to 40 years. While no examples could be found of social groups actually losing access to resources they previously used within the communal areas, the intensification of resource use, both by individuals and the state, coupled with a high rate of population increase, has meant that a growing section of the population can no longer obtain any part of their livelihood from the natural environment.

The most striking change in resource usage in the Mutale area is the increased exploitation of the waters of the Mutale River itself. The absence of any comprehensive hydrological study of the river makes it is difficult to state with any certainty the extent of this problem, or its

precise causes.12 However, the available evidence, from stream flow records and from people living in the area, certainly points to a major decline in the last 10 to 15 years.

The intensification of water use begins in the upper catchment in the eastern Soutpansberg, where there has been extensive afforestation over the past thirty years, and the damming of the Tshirovha river to supply commercial tea estates at Makumbani. On the middle reaches of the river, water use has also increased dramatically, with the main irrigation projects and domestic water schemes abstracting over 14 million cubic meters per year, which may be unsustainable. The last 20 years have also seen the rapid expansion of 'informal' or 'private' irrigation by individual farmers along the length of the Mutale from Tshiombo to Mutele. No information is available on the volume of water extracted by individual irrigators, nor even the numbers of farmers or areas of land involved. In the lower reaches of the Mutale, the formal irrigation schemes account for relatively little water usage, and the main pressure on river water is from private irrigators. There has also been a considerable increase in the pumping of ground water, through the introduction of new drilling and pumping technology, both by the state and by private individuals.

Changes in land use in the area over the last 30 years have also been substantial, the most significant being the rise of irrigated agriculture, both on formal schemes and on individual holdings. Over 1,800 hectares of high-potential land in the Mutale valley have been put under irrigation by the state since 1960, and possibly half that amount again by private farmers, creating opportunities for more commercially-orientated production. As yet, there is no evidence of major degradation of soil resources as a result of these developments. On the Tshiombo scheme, long-term use of irrigation has created gullies in a few places, and water-logging in others, and there was evidence of a build-up of mineral salts in parts of the scheme, but this did not appear to be creating major problem for growers. The cultivation of riverine land along the valley may be causing some erosion of river banks, or changes in the flow of the river, but as this is a relatively recent development it is too early to say.

Other types of farming, particularly dryland cropping and livestock, do not appear to have been undergone the same degree of change in recent years. The area under rainfed crops, particularly maize, has tended to expand as the population grew and as new forms of technology, such as tractors and fertilizer, became available, but is subject to severe climatic constraints, especially in the northern areas of the valley. Certainly, the Mutale area has seen nothing like the expansion of maize cultivation that has occurred in heavily populated, high rainfall areas south of the Soutpansberg, such as Tshakhuma and Lwamondo, where hillsides are being severely eroded. As with irrigated land, however, the lack of any firm longitudinal data on questions such as soil quality or areas under cultivation precludes any definitive conclusions, but there were no reports from farmers, extension officers or others that the intensification of agriculture has led to major degradation of resources.

The over-stocking of homeland pastures is a well-worn point of debate in South African studies, but there is no evidence from the Mutale valley of major problems, such as large-scale soil erosion, caused by excessive grazing. While a number of farmers are managing to overcome some of the old natural restraints through the drilling, transportation and storage

[12] The Mutale is one of the few perennial rivers in South Africa which has not been the subject of a full hydrological survey, but sources in the Department of Water Affairs stated that such a study was being planned for 1997. A study of the nearby Mutshindudi River currently being conducted by a team from the University of Venda (1996-97), should also throw light on this topic.

of water, and the buying-in of supplementary feed, the relatively small numbers involved have, as yet, made little impact on the overall stocking pattern.

The loss of livestock in the droughts of 1982 and 1992 clearly points to a major deterioration in environmental conditions, linked to a decline in rainfall, but farmers in the study area appeared to accept that herd sizes would fluctuate considerably from year to year. High stocking rates in periods of above-average rainfall and abundant grazing do not necessarily point to unsustainable resource usage over the longer term, and there is insufficient evidence to speak of either a long-term increase in stock numbers, or a consequent degradation of pastoral resources. Cousins (1996:173) argues that, "for multi-purpose herds high stocking rates make economic sense, and optimum stocking rates in these systems will be higher than those in single purpose (for example, beef) production systems; furthermore, these high stocking rates may well be ecologically sustainable. This is because livestock herders pursue 'opportunistic' strategies, based on mobility, to optimize their use of the variability of African rangelands".

Other forms of commercial or industrial development in the Mutale valley have been extremely limited. The area has not seen the development of any large-scale tea, coffee or sub-tropical fruit plantations such as are found elsewhere in Venda. With the exception of Tshikondeni mine, there has been no significant industrial development either, and the mine itself, located in a remote and sparsely populated area, has had relatively little impact on overall land use. The establishment of a nature reserves at Makuya Park, in an extremely harsh and unpopulated area, has also had little direct impact on resource use, although it probably has made some contribution to the conservation of the eco-system, particularly the protection of larger mammal species.

7.2 The social impact of changing resource use

Clearly, the changes in resource use in the Mutale valley have not affected all the people of the area in the same way. Those best able to take advantage of developments such as the rise of irrigated agriculture have been those with access to modest amounts of capital, usually from migrant labour or from employment in the Venda government service. They have been able to exploit what is effectively free land and cheap household or hired labour, and subsidized government services, to boost household food supply, and to engage in varying degrees of commercial crop production. Those best positioned to obtain good quality land have been older males, usually over forty, with experience of agriculture and/or with capital to invest, and who are on good terms with the tribal leaders and the homeland authorities. These are the people who have managed to accumulate multiple plots on the Tshiombo scheme, and substantial plots on the Makonde, Senari and Mutele schemes, and who have been to the fore in the colonization of new irrigable lands along the banks of the Mutale.

The system of land allocation does little to advance the interests of the poor and disadvantaged sections of rural society. Unless they came with their own capital, households which have been forcibly removed from other parts of the country have continued to be seen as 'outsiders' in their new homes, and are less likely than long-standing inhabitants to gain access to agricultural land. Women, too, are unlikely to obtain more than the minimum amount of land, such as a single plot at Tshiombo or Rambuda, or small areas of dry land in the rest of the Mutale area. While this is obviously based on the historically subordinate position of women in Venda society, it is heavily reinforced by the fact that control of non-farm income (which could be invested in agriculture) is almost entirely in the hands of men.

Because of their heavy commitment to domestic work, women also tend to have little or no access to either tribal or senior government officials, which is the other essential factor in obtaining prime land.

While many households have not benefited from any of these development, there is little evidence of systematic displacement of any one type of producer by another. At Tshiombo and Rambuda irrigation schemes, for example, it appears that most, if not all, households previously working those lands were able to obtain plots on the new schemes. The formalization of land-holding, and the introduction of a R12 annual fee, which represented a considerable financial burden at the time, may have been enough to deter some households from joining the scheme.13 The basis of eligibility for land has not changed as a result of the introduction of the schemes, however, and the annual fee has, over the years, been devalued greatly.

On the other government schemes, at Senari and Mutele, and especially on the Agriven scheme at Makonde, the much larger plots and higher annual fees certainly deny access to the great majority of households. Senari and Mutele schemes, while small at less than 40ha each, are situated on what is probably the best cultivable land in the Lower Mutale area. Both appear to have been developed on behalf of the chiefs, as part of the distribution of development projects at the time of independence, and the small number of plots on these schemes have been allocated to their close allies. Makonde scheme, many times larger than Senari or Mutele, also occupies prime agricultural land, but in an area where good quality land is more widely available. Altogether, these relatively large-holding schemes represent a considerable shift in land use, as they no longer form part of the communal resource available to local residents, but are reserved for the benefit of a small elite of more commercial, labour-employing (male) farmers, drawn from a much wider geographical area. On the Lower Mutale, the rise of informal irrigation on riverine land does not appear to be displacing any previous users, although like the formal schemes, it has allowed for the emergence of a new class of market-oriented, largely male, farmers.

On rainfed lands, households with access to capital and labour, and the support of the tribal authorities and the state, have been able to expand the area under production. For those households with arable land, however, the existing form of communal tenure would appear to be relatively secure, and no evidence could be found of users losing access to such land.

Far greater inequalities may be seen in the area of livestock farming, but this is not necessarily a modern development. Long-term changes in the economy of the area, particularly access to distant markets and the availability of income from non-farm sources, have allowed some people to expand their herd sizes faster than others, and thus put additional pressure on the shared resource. This pressure on shared resources does not lead directly to exclusion or displacement of particular households, but a declining share for all users, which may operate to the detriment of more marginal producers. The widespread losses of herds reported as a result of the droughts of the 1980s and 1990s have wiped out many smaller herders, who are unlikely to reestablish their herds in the foreseeable future. This leaves the very largest owners, who manage to retain a core breeding herd despite substantial losses, in a strong position to 'capture' the grazing resources of the smaller herders who are effectively being squeezed out. As with dryland agriculture, however, no evidence could be found anywhere in the Mutale valley of particular groups being directly excluded from any grazing areas.

[13] For comparative purposes, R14 was the monthly payment made to workers on official drought relief schemes in the area in 1964 (Desmond 1971: 182).

Overall, the evidence points to a steady intensification of resource use in the study area, fuelled by a growing population and rising market opportunities. While there is no evidence of households in the study area being pushed off land, or denied access to resources which they previously used, the expanding population means that large numbers of people, especially younger people and those forcibly removed from other areas, are unable to obtain land of their own.

7.3 Role of the chiefs and tribal authorities

The main function of the tribal leaders with regard to resource management is to decide how resources, particularly land, are divided between members of the community, so that they may obtain the means of subsistence. Chiefs have an implicit duty to cater for all of their followers, although not necessarily equally, and have the right to retain the biggest share of resources for themselves. The tribal leaders interviewed did not suggest that resource conservation was an issue they considered when allocating land, and any restrictions on the use of natural resources could well conflict with their responsibility for providing access to those resources.

In practice, the power which tribal leaders exercise over land is limited by a number of factors. Firstly, decisions regarding land use - in terms of its division into arable, grazing and residential areas - were made not by the chiefs, but by state officials. Secondly, tribal authorities have little or no control over arable or residential land once allocated, unless it is abandoned or used in a way that interferes with other users, and there appears to be no duty on landholders to conserve soil quality. The situation with regard to grazing land is quite similar. Headmen decide whether or not a person is genuinely a resident of a certain village, and therefore entitled to avail of the communal grazing, but they do not have any formal role in restricting the number of livestock or the manner in which the grazing is utilised. Cousins (1996:185), drawing on work by McAllister in the Transkei, gives examples of ward heads in a village co-ordinating the rotation of stock between different pastures in order to allow grazing to recover, but no evidence of such a system could be found in this study. It is, however, possible that some cattle owners may operate an informal system of control, either individually or collectively.

There is also evidence that some people, especially younger people and members of the civics, are rejecting the authority of the tribal leaders. Two of the headmen at Tshiombo, for example, complained that "youngsters" or "comrades" (i.e. political activists) had allocated themselves house-stands on the outskirts of the villages, and there seemed to be little the authorities could do to prevent this. There were not, however, any reports of people occupying agricultural land without approval.

With regard to water, the power of the ‘traditional’ leaders is even more loosely defined. The chiefs are generally seen as the guarantors of communal access to rivers and springs, but this is largely a symbolic function which confers little practical power to regulate water use. The power to allocate riverine lands could be seen as a form of control in this area but again chiefs and headmen have no direct control over the extraction of water from rivers, either on formal irrigation schemes or amongst 'private' irrigators. Overall, there would appear to be no 'traditional' practices or institutions concerned with the regulation or conservation of water resources, and no institutionalised forms of co-operation between different tribal areas sharing the same resource. At Tshiombo, for example, where six villages, all under one chief,

share the irrigation scheme, there are no structures which allow headmen from the different villages to meet, or to act collectively to resolve common problems.

There appears to be little prospect that tribal leaders will co-operate with other bodies in the area to address common concerns. Chiefs and headmen interviewed for this study expressed support for the new national government, but were extremely resentful of the "youngsters" in the elected councils who were challenging their authority at the local level, and showed no willingness to work with the new democratic institutions. No examples could be found in the study area of tribal leaders intervening in any way to protect a natural resource, or of the 'tribal' institutions, such as village councils, chiefs councils or tribal courts, being deployed by resource users to resolve disputes in the area of resource usage. Overall, the lack of an effective conservation function within the 'tribal' system of governance, and the growing antagonism of the chiefs towards the newly elected local councils. would appear to make them unlikely candidates for an enhanced role in this area.

7.4 Role of the elected local councils

The new, democratically elected, local councils in Venda are struggling to establish themselves and to define their role, and find themselves in direct competition with the tribal leaders for local power.

Interviews with council leaders in the Mutale area revealed a cohort of political activists who were eager to engage with the process of local government, but who were receiving little support from other tiers of government in terms of establishing the new councils or in identifying their powers and responsibilities. Councillors in the Lower Mutale area (Mutale, Masisi, Vutshwema Local Council) had expected that the resources of the old Mutale District Council would be transferred to them, but eight months after the elections this had not happened, leaving the new councillors without offices or other facilities. Similarly, Greater Thohoyandou Council was still waiting for the provincial government to provide it with an establishment grant so that it could begin operating. Councillors were vociferous in their criticisms of both the local chiefs, whom they accuse of resisting the transition to democracy, and the provincial government, which they accused of failing to adequately back the new councils in their struggles with the chiefs, or providing for a timely transfer of powers to the new authorities.

The expressed aim of the elected representatives was that the new council should be at the centre of all local activities, especially the delivery of services and any new development schemes. In the past, councillors complained, various government departments and agencies operated in the rural areas without consulting the local people or involving local leaders. In future, the council would insist that all outside agencies should work through it, and that local councillors must be the ones to inform people within their wards of new developments, and to speak on their behalf.

The priorities expressed by the new councillors in Tshiombo and the Lower Mutale area were largely to do with social issues - housing, health-care, drinking water, electrification of homes - which are undoubtedly the most pressing demands of the local population. None of the councillors spoken to expected to have any direct involvement in farming issues, or in the management of natural resources. When it comes to development of the local economy, councillors were more likely to speak of new industries rather than agricultural development, and throughout the study there was a recurring lack of interest in farming issues amongst

councillors and political activists. This can be attributed to the fact that the new councils have been given no legal powers over communal land, or over natural resources generally, and all physical planning powers rest with the higher level District Councils. However, it also reflects what is probably the most important social and political division within this rural society, between young political activists eager for change, and older, more conservative people who wish to retain elements of the old order. Members of the mass democratic movement in the area, including civic members and the ANC councillors themselves, were drawn mainly from the ranks of landless youth, workers in the industrial or service sectors, the unemployed, and teachers. These are the people who have benefited least from the tribal system in areas such as land allocation, and are most eager for change. Amongst this group, farming tended to be viewed as the preserve of older, more conservative people, and not an activity to which most younger people aspired.

In general, councillors appeared willing to work with other local structures, including the chiefs, in order to promote the development of their area, but they were adamant that they would not allow the traditional leaders to stand in the way of change. Part of their strategy was to promote the civics as the principal democratic structures at the village level, as a counter-weight to the power of the village headmen, and ensuring that they had a say in issues such as the allocation of residential plots. Council leaders stressed that they were not advocating the abolition of the chieftaincy, but believed that chiefs should be restricted to "ceremonial" duties, such as holding initiation schools, rather than "political" issues such as land allocation and local administration.

Newly-elected councillors were searching for tactical means to overcome the powers of traditional authorities in key areas. One proposal from councillors in the Lower Mutale area was to declare a sizeable area around Masisi and Tshikondeni a "rural town", thereby excluding the chiefs from any say in land matters, and, they hoped, accelerating the development of the area. Councillors have also been asserting themselves in organisations such as the Makuya Park Forum, and in meetings with Tshikondeni Mine, with the aim of replacing traditional leaders as the legitimate representatives of the area. Tshiombo has already been incorporated into Greater Thohoyandou, and, in the opinion of the local councillor, had thus acquired the status of an urban area. There seemed to be a widespread belief amongst councillors and others that the acquisition of "urban" status would entitle villages to a higher level of services that what was available in “rural” areas, and would automatically exclude tribal leaders from functions such as the allocation of residential land. Non-residential land - both arable and grazing - was expected, for the time being, to remain under the control of the tribal authorities. The expectation of ‘urban’ status appear to be a highly optimistic reading of a somewhat confused political situation, with little evidence to suggest that the chiefs were about to suffer any major loss of powers, especially with regard to non-residential lands.

Of crucial importance in this regard is the absence of any legislation or policy guidelines, either at national or provincial level, which suggest a diminution in the present powers of the tribal authorities, and this would appear to set them on a collision course with the new rural councils. Senior officials in the provincial Department of Local Government, and the Commission on Traditional Affairs, admitted that they are operating in a policy vacuum, and that clarity and direction concerning rural local government was urgently required. It was the opinion of one senior official that the local government system currently being introduced was modelled on the system for urban areas, where tribal authorities did not exist, and therefore took no account of the potential for conflict it created in the rural areas. For now,

however, there appears to be little political momentum, either inside or outside the government, at national or provincial level, to bring about any changes to the tribal system.

7.5 Civics

There is little involvement of non-governmental, and non-'tribal', organisations in any areas of public life in Venda. Indeed, apart from churches, football clubs and burial societies, there are few examples in the rural areas of organisations which pre-date 1990. Possible explanations for this include the general hostility from the authorities towards any independent bodies or examples of self-help in the area, and a widespread feeling, certainly encouraged by the authorities, that all local affairs had to be conducted through the tribal institutions.

The most notable example of non-governmental public action since 1990 has been the rise of the so-called civics, unofficial village councils, generally opposed to the existing tribal leaders, and loosely affiliated to SANCO, the national organisation of civics. Prior to this, there had been little or no political organisation in the villages, although some individuals were members of trade unions at Tshikondeni mine, in Thohoyandou, or further afield. Civics are open to all members of the community, but draw their membership mainly from the ranks of young men, and from families which are not related to, or supportive of, the village headmen. The civics in the rural areas combine elements of a village council with party politics, acting as a branch of the mass democratic movement (effectively the ANC) at the local level. Civics in some areas are involved in resolving disputes between villagers, and in the administration of justice. One example found in the Lower Mutale area was of a local man accused of killing another he caught trying to steal his donkeys, and, as punishment, was banished from the village by the local civic, without the matter being referred to other authorities.

The civics are one of the main forces behind the newly elected local councillors, and have, in some areas, taken on the role of an additional, unofficial, tier of local governance, in reaction to the slow, and very limited, delegation of powers to the statutory structures. Civics organize support for the ward councillors at the village level, and keep them informed of popular opinion and local needs. They also represent a form of direct participation in local affairs affecting their area, something that the new councillors are eager to encourage as a counter-weight to the tribal leaders. The civics fulfil an obvious need within local politics, given the size of the rural wards. Ward Number One, in Mutale, Masisi, Vutshwema Local Council area, for example, (covering the northern part of the Lower Mutale study area) which is represented by a single councillor, comprises 25 villages, and has a population of close to 15,000 people (1991 Census).

The main areas of concern to all the civics was the need for more standpipes for drinking water, and the electrification of homes. At Tshiombo, only since 1995 have the civics begun making representations to the agricultural officers on behalf of plot holders experiencing problems with the supply of irrigation water, and people who were waiting to acquire plots on the scheme. At Senari, the civic had recently begun allocating house stands to people in the village without reference to the headman or the chief, but dryland arable plots are still allocated by the village headman. This civic was also in dispute with the tribal leaders over the allocation of plots on the Senari irrigation scheme. As discussed above (Chapter Six), only two farmers on the scheme were using their plots, both of them from outside the village and with close ties to the chief. The civic, together with the local councillor, is now agitating for unused plots to be allocated to landless people from the village.

At this stage, it is probably too early to speak about civics having a direct role in natural resource management in the Mutale area. However, as an informal arm of local government, it is likely that they will play an important part in the implementation of official policy at the local level, and will continue to push for the democratization of local affairs. The evidence from Tshiombo would suggest that civics may also begin to agitate on behalf of resource users, especially poorer households and those who have, in the past, been neglected by the tribal leaders.

7.6 Resource User Organisations

There are very few examples of successful organization amongst groups of resource users, particularly amongst farmers. A number of attempts were made to start a farmers' association in Venda in the early 1990s, but without success. Since 1995, the Venda Farmers Union has emerged, with the support of the National African Farmers' Union, but at the time of fieldwork it was still trying to organise district branches and recruit members. The Farmers' Union is working closely with the Department of Agriculture, which sees a well-organised farmers union as a means of mobilising, and communicating with, farmers in the area, and thereby increasing the effectiveness of its own services. The only effective example of collective action by farmers anywhere in the Mutale valley is the Tshiombo co-operative which, as discussed above, plays an important role in providing agricultural inputs and household goods in the area.

The absence of farmers organisations or other forms of collective action is most noticeable on the irrigation schemes, especially the larger ones, such as Tshiombo. According to officials at Tshiombo, at one time there were farmers' committees on each block, and an overall committee for the entire scheme, but these were no longer functioning. What is perhaps most surprising is the lack of any effective means for managing the supply of irrigation water by users on the irrigation schemes. Plot-holders on each irrigation block are at the mercy of those above them, effectively putting the blocks in competition with each for the available water supply. Disputes between users on the same block can be referred to the village headman, but for disputes between villages there are no such remedies. Individual headmen will generally support their own villagers, and are not inclined to negotiate with headmen from other villages. Chief Tshivhase and the Tshivhase Tribal Authority, with a large territory and population under their jurisdiction, appear to be quite remote from Tshiombo, and have no involvement in the operation of the scheme. Decisions regarding the irrigation system have, in the past, been made by government officials, and there is little or no tradition of consulting with users.

What is clearly required at Tshiombo is some form of representative council, drawn from all six villages, which has the confidence of the users and the authority to implement policies across the entire scheme. The difficulties in creating such a structure became apparent during the second period of fieldwork in April 1996. Faced with the prospect of funds being made available for the upgrading of the irrigation scheme, the Agricultural Officers at Tshiombo were instructed by the Department of Agriculture to constitute a new scheme committee, with two representatives from every block. Meetings were duly called of the farmers on each block, and representatives elected. These representatives then met amongst themselves, and elected a chairman and other officer-holders. The new committee was then presented to the farmers at a grand, 'all-structures' meeting, attended by ward councillors, government officials, and local dignitaries.

Once the meeting started, and the committee had been introduced, it became apparent that the elected officers did not have the support of many of the farmers present. This was largely due to how the representatives had been elected and how they were presented to the public, which gave the impression that the entire process was being run by the Agricultural Officers, rather than by the farmers themselves. Plot-holders at the meeting were opposed to the representatives selected by certain blocks, and especially to the choice of chairman, who was described in the meeting as "a criminal". From the little that could be ascertained before the meeting was abandoned in uproar, it appeared that much of the tension was along lines of age: the committee was entirely composed of men over 55 years of age, many of them larger farmers and prominent in organisations such as the co-operative and the tribal authorities, while much of the opposition was coming from men, and a few women, in their 30s, active in the civics.

As with the Makuya Park Forum, (see above) , much of the tension expressed in this instance did not appear to centre on particular issues of policy, but formed part of an ongoing struggle between opposing social or political groups. Many of the younger generation, particularly those associated with the civics and the culture of democratic transformation, were clearly intolerant of the continued domination of local life by the 'traditional' elite and impatient with the slow rate of change following the elections of 1994 and 1995, and were challenging what they saw as representatives of the old order in every possible forum. By the end of fieldwork no committee was in place at Tshiombo, and it was clear that there remained a lot of work to be done before new, acceptable structures could be agreed upon and implemented.

8. CONCLUSION

This study has looked at the use and management of natural resources in the Mutale River valley, a little known and poorly developed part of South Africa. It has attempted to uncover processes of social, economic, political and environmental change over a thirty year period, with particular emphasis on rural household livelihoods. This chapter summarizes the main findings of the study, and identifies a number of issues of importance for development policy in the area.

The main finding of this study is that a dramatic increase in population, accompanied by a limited degree of economic development, has intensified pressure on all aspects of the natural environment, but particularly on water resources, in the Mutale valley over the last thirty years. In social terms, this has not, as far as could be ascertained, caused the displacement of any one group of resource users by another, nor has it greatly increased competition between different groups, but rather has given rise to an ongoing process of differentiation between rural households. At one end, there has emerged a small elite of commercially-oriented farmers, backed by the state and tribal authorities, who have been able to acquire substantial areas of land both on and off official schemes, while at the opposite extreme, a sizeable number of households have access to neither arable land nor livestock. Very few households in the study area obtain a living from farming alone, and the great majority depend on a variety of income sources, including wages, pensions, petty trading and farming. In terms of environmental impact, the study identified a number of areas for concern, particularly with regard to water. The dramatic increase in extraction of water from the Mutale and its catchment area, for commercial plantations, forestry, domestic water schemes and irrigated agriculture, has undoubtedly contributed to the severe fall in river levels recorded in recent years. With regard to land, the expansion of the area under irrigation in the Mutale valley constitutes a substantial change in land use patterns, but does not appear to have had a detrimental impact on the environment or on people's access to resources. Pastures remain vulnerable to periodic failure in times of drought, but there is insufficient evidence to speak of unsustainable levels of grazing over the longer term. Other, non-farm, resource users such as Makuya Park and Tshikondeni mine have a relatively minor impact on the environment. The study also found that the institutions of local governance in the Mutale area have little direct influence over the use of natural resources, despite the position of 'traditional' leaders within the communal land system, and the recent establishment of elected local councils. Independent non-governmental institutions of civil society have yet to establish a significant presence in the area.

The relative poverty and underdevelopment found in the Mutale River valley and throughout the former homelands obviously poses a severe and pressing challenge to the new government's reform policies. During this study, however, it became apparent that very little is actually known about conditions in the homelands, either in terms of documentary sources or general levels of awareness amongst public officials. One of the more surprising discoveries of the study was the existence of virtually an open frontier along the banks of the lower Mutale, possibly the last remaining pocket of irrigable land anywhere in the Province. This land is in the process of being colonized by a small group of pioneer farmers but, as far as could be ascertained, is not referred to in any documentary sources and did not feature in discussions with any government officials other than local field officers. This lack of reliable information on questions such as household livelihoods, farming practices, landholding, and general resource usage created considerable difficulties for this study, and will certainly impose serious limitations on any reform programme in the area. A major overhaul of data

collection and reporting procedures amongst all public bodies and other organizations operating in the former homelands needs to be undertaken as a matter of priority, along with further local studies, to shed light on current economic and environmental conditions and the prospects for reform and development.

The lack of reliable base-line information at the local level tends, amongst other things, to obscure the wide range of social and environmental conditions existing in the former homelands, even within an area as limited as the Mutale valley. The upper Mutale area, with a number of small- and medium-scale irrigation schemes, is well integrated into the economy of greater Thohoyandou and, by homeland standards, supplied with a good range of farm-related and other services. The Tshiombo scheme is well known within the provincial administration, and has been the subject of a number of consultancy reports in recent years. Indeed, between fieldwork in 1995 and 1996, the scheme was visited by both the MEC (Provincial Minister) for Agriculture, and (separately) by the Provincial Director for the RDP, and there were indications that long-promised refurbishment of the scheme would soon be underway. By contrast, the lower Mutale area, only 60km from Tshiombo, rarely feature in documentary sources, and lies beyond the horizon of most senior officials and politicians alike. With the exception of Tshikondeni mine, social and economic services in the area are extremely underdeveloped and poor transport links add much to its geographic isolation. Government agricultural projects in the lower Mutale suffer from severe neglect, and services to farmers are minimal. Such disparities demand considerable caution in generalizing about conditions in the black rural areas, and also raise many questions regarding the continued funding of a few show-piece development projects, such as Tshiombo, while other areas remain relatively neglected.

In the former homelands, where environmental issues have received relatively little attention and the need for economic development is probably most pressing, the promise of major reform following the ending of apartheid has yet to become a reality. Amongst the reasons for this are the severe lack of government capacity within the homeland areas, but also, as this study has show, the absence, or weakness, of other institutions of local governance which could play a part in the reform process. Under apartheid, the state - whether in the form of the South African government or the various homeland regimes - took a highly authoritarian approach to environmental matters and did little to promote effective local governance or popular participation in local affairs. Furthermore, the former Venda government did not possess anything that could be described as an environmental policy or an effective system of environmental monitoring or protection, and was able to allocate agricultural land and water to commercial estates, irrigation schemes and other users with little public debate or consideration of resource sustainability. At the local level, the 'tribal' system imposed by the apartheid regime acted as little more than a bureaucratic device for the allocation of scarce supplies of land, and so-called communal tenure in fact allowed little scope for collective management of shared resources. Since 1994, the chiefs have managed to hold on to much of their power, and remain strongly antipathetic to any changes in the system of land allocation. The homeland administration has been absorbed largely into that of the new Northern Province, but this has yet to have any significant impact in the areas of natural resource use or protection. The newly elected Local Councils have no formal powers in the area of environmental management and do not seem to view it as a priority, while the higher-level District Councils are little more than the service delivery arm of the Provincial Government and are most unlikely to become involved with environmental management issues (or any other areas of governance) at the local level.

The weakness of the official institutions is greatly compounded by the absence of civil, or non-governmental, bodies, particularly in the area of natural resource management. Civics are the most prominent non-governmental organization to have emerged in the area in recent years, but these are still struggling to establish themselves and to find their place within the new political order. One of the few example of a special interest group to emerge in the area is the Venda Farmers' Union, but it too is still in the process of becoming established, and it remains to be seen whether it will survive any longer than its predecessors. The absence of formal organizations amongst resource users is particularly striking in situations where resources are actually used on a collective basis, as with grazing and irrigation water. The difficulties of forming a plot-holders' association at Tshiombo (above) illustrate just how much remains to be done in this area. Much of the weakness of non-official institutions in Venda can be attributed to the active discouragement of independent organizations by the chiefs and the homeland regime during the apartheid era, and activities which do not have the support of the local chief are still viewed with grave suspicion by much of the rural population.

The one notable exception to the general lack of collective action is the Tshiombo Co-operative, probably the only example of an effective non-governmental organization in the Mutale valley, and one of the very few in Venda. The strength of this organization would appear to lie in its clear focus, and the hard work of a committed membership. It serves, and is run by, the farmers on the irrigation scheme, a substantial body of people (over 600 households) who share a common set of requirements for agricultural inputs and household goods. Although it has received some support from the state in the past, the Tshiombo Co-operative has managed to retain its independence, albeit not without some financial problems and claims of minor irregularities. Having survived apartheid, however, the Co-operative now faces what is possibly its greatest threat, competition from much larger organizations originating outside the area. In particular, the powerful Northern Transvaal Co-operative (NTK), the main supplier to white farmers in the region, is rapidly expanding its retail business (as opposed to its membership) in Venda and surrounding areas. With enormous financial muscle, and much more favourable treatment from both state agencies[14] and private suppliers, NTK poses a major threat to the Tshiombo Co-operative, and may well force it out of business.

If local governance in Venda is to be reformed and strengthened, it is likely that the initiative will have to come from a higher level (i.e. from Provincial or National government), and will need to be directed along three main lines: the reform of existing statutory institutions, the creation of (a very few) new specialized bodies, and the empowerment (and, if necessary, the creation) of independent local organizations.

Reform of existing institutions is probably the most difficult of these tasks, and has limited potential, but two critical issues must be addressed if any progress is to be made towards improving local governance or promoting local development of any kind. Firstly, the grounds for conflict between local councils and tribal authorities must be minimized even if, as seems likely, they cannot be removed altogether. Current rivalry between councils and 'traditional' leaders stems in part from a failure at the national level to determine their respective powers, and has the potential to seriously divide rural communities and jeopardize local development initiatives. A clear statement of the precise powers of both institutions, particularly with regard to communal land, is urgently required, and would help to define the social space

[14] A typical example is the 1995 Agricultural Credit Board programme of credit for small farmers, which was almost entirely channeled through the large 'white' co-operatives.

within which other (non-political) organizations might emerge. Secondly, the Provincial Government must delegate the maximum possible powers to Rural Local Councils if they are to act as effective institutions of local governance and be able to engage with other local organizations on a meaningful level. This would require training of councillors and the provision of adequate administrative support at the local level, and would counteract the current concentration of local government powers in the hands of the less representative District Councils.

Where functions do not fall clearly within the ambit of any one Local Council or Tribal Authority, there may be a need for new institutional forms, although in the interest of open government and effectiveness these should be kept to an absolute minimum. The Makuya Park Forum (see above) provides an example of a less than successful attempt in this area, where the provincial authorities attempted to create a new local institution without adequate planning or consultation. Such single-purposes bodies have a potentially important role in the development of local resources, but need to be approached with greater transparency by the authorities, and to include all legitimate local representatives. The most urgently required new body suggested by this study, however, is a catchment authority for the Mutale River, which would have the power to regulate water use in the area at the most appropriate level. It is important that government (whether Provincial or National) resists the temptation to assume this responsibility itself, and rather puts its weight behind a forum where all stake-holders (particularly water users and local representatives) can participate in producing and implementing a sustainable water policy.

The lack of capacity for effective local action within all branches of government operating in Venda makes it essential that appropriate non-governmental bodies be mobilized, even if, as appears likely, the initiative for this must come from government itself. A good start would appear to have been made with the Venda Farmers' Union, which has received active encouragement from the Department of Agriculture. Other, more locally-based, organizations of resource users have yet to emerge, but may do so with sufficient encouragement and the commitment of chiefs and officials to allowing them a say in local affairs. Tentative steps have been made towards a farmers' committee on the Tshiombo scheme, but there have not as yet been any moves in this direction in the lower Mutale area. Users of communal grazing lands also would appear to be likely candidates for collective action, but the open nature of the resource and the widely different scales of users seem to militate against this, and again there was no evidence of organizations forthcoming amongst livestock farmers in the study area.

Central to any substantial change in the former homelands will be the communal land system, and, as has been seen, this has already been identified by central government as a priority for reform. The evidence from this and other studies suggests that the majority of people in the homelands are strongly in favour of communal tenure, mainly due to the fact that land is, in principle, available only to community members, without the need to purchase, and cannot be permanently alienated by individuals. Criticisms of the communal land system from within the homelands are most commonly aimed at the system of allocation (i.e. the chiefs and headmen), rather than at the tenurial form itself, and it is here that reform efforts should be directed. A first step would be for civics, councilors and tribal leaders to take joint responsibility for allocation of residential land, which could, if successful, later be extended to arable land. Such a move would undoubtedly be resisted by the tribal leaders, and would require forceful intervention by government to make it succeed. Alternatively, democratic control of communal land could at first be attempted on 'new' land made available by the government outside the existing communal areas, where representative local structures,

possibly including the tribal leaders, could be responsible for its allocation. By building on the more progressive aspects of the communal land system, it may also be possible to develop new forms of collective land and water management, based on the principles of local democracy and user participation.

Overall, the prospects for development of the Mutale area, and for more effective local control of resources such as land and water, appear to be good. Farmers throughout the area, on and off the official schemes, have shown considerable enterprise in adopting new methods and increasing the area under cultivation. Livestock farming in the northern districts remains severely underdeveloped, but the experience of a few larger farmers suggests that it has considerable potential. The expansion of Tshikondeni mine and the likelihood of further mineral finds in the Madimbo corridor offers the hope of a much-needed increase in off-farm employment, while the development of a limited tourist industry is also possible in the longer term. Institutions of local governance in the area remain extremely weak, but there is widespread expectation of change and willingness to participate in activities aimed at local economic development. The critical challenge for future policy will be to ensure that the benefits of development are more widely distributed that has been the case in the past, and that government spending is concentrated in areas that reach the maximum possible number of rural households. Among the priorities for government action identified by this study are the expansion of tractor ploughing services, the provision of transport services for farm produce, the supply of small-scale production credit to farmers, and a more effective means of reallocating unused plots on irrigation schemes. Specific measures are also required to target resources towards the very poorest sections of rural society, including women, young people, and the unemployed, many of whom have been effectively excluded from access to land and from past development programmes.

BIBLIOGRAPY

Acocks, J.P.H. (1988), *Veld Types of South Africa*. Pretoria: Botanical Research Institute.

African National Congress (1994), *The Reconstruction and Development Programme: A policy framework*. Johannesburg: African National Congress.

Bennett, T.W. (1995), *Human Rights and African Customary Law Under the South African Constitution.* Cape Town: Juta.

BENSO (1979), *The Independent Venda***.** Pretoria: Bureau for Economic Research: Co-Operation and Development; and Johannesburg: Institute for Development Studies, Rand Afrikaans University.

Booher, L.J. (1974), *Surface Irrigation*. Rome: Food and Agricultural Organization.

Budlender, Geoff and Latsky, Johan (1991), "Unravelling rights to land in rural race zones", in De Klerk, M. (ed.), *A Harvest of Discontent: The Land Question in South Africa*. Cape Town: Institute for a Democratic South Africa.

Bulpin, T.V. (1965), *Lost Trails of the Transvaal*. Cape Town: Books of Africa.

Clayton, Andrew (1995), *Land, Water and Local Governance: Botswana Case Study*. Manchester: Institute for Development Policy and Management.

Cock, Jacklyn (1991), "The Politics of Ecology", in M. Ramphele (ed.), *Restoring the Land: Environment and Change in Post-Apartheid South Africa*. London: Panos.

Cousins, Ben (1996), "Livestock Production and Common Property Struggles in South Africa's Agrarian Reform", *Journal of Peasant Studies* Vol.23 Nos. 2&3, pp 116-208. London: Frank Cass.

Cross, Catherine and Rutsch, Peter (1995), "Losing the Land: Securing Tenure in Tribal Areas", *Indicator SA*, Vol. 12, No. 2, pp 23-28.

Delius, Peter (1983), *The Land Belongs to Us: The Pedi Polity, the Boers and the British in the Nineteenth Century Transvaal*. Johannesburg: Ravan Press.

Department of Environmental Affairs and Tourism, Republic of South Africa (1996), *Towards a New Environment Policy for South Africa*. Pretoria: Department of Environmental Affairs and Tourism.

Department of Land Affairs, Republic of South Africa (1996), *Our Land: Green Paper on South African Land Policy.* Pretoria: Department of Land Affairs.

Department of Water Affairs and Forestry, Republic of South Africa (1986), *Management of Water Resources in South Africa.* Pretoria: Department of Water Affairs and Forestry.

Department of Water Affairs and Forestry, Republic of South Africa (1996) *Water Law Principles*. Pretoria: Department of Water Affairs and Forestry.

Desmond, Cosmas (1971) *The Discarded People: An Account of African Resettlement*. London: Penguin.

Development Bank of Southern Africa (1989), *Economic and Social Memorandum: Region G.* Halfway House: Development Bank of Southern Africa.

Development Bank of Southern Africa (1991), *Development Information: Region G. Vol. 6.1 Agriculture and Forestry*. Halfway House: Development Bank of Southern Africa.

Development Bank of Southern Africa (1993a), *Venda Development Perspective.* Halfway House: Development Bank of Southern Africa.

Development Bank of Southern Africa (1993b), *Regional poverty profile: eastern and northern Transvaal.* Halfway House: Development Bank of Southern Africa.

De Wet, Chris (1995), *Moving Together Drifting Apart: Betterment Planning and Villagisation in a South African Homeland*. Johannesburg: Witwatersrand University Press.

Dladla, Yvonne (1995), "An Appreciation of South Africa's Newly Emerging Conservation Policy", in E. Rihoy (ed.), *The Commons without the Tragedy: Strategies for Community Based Natural Resource Management in Southern Africa.* Proceedings of the Regional Natural Resources Management Programme Annual Conference, SADC Wildlife Technical Coordination Unit, Lilongwe, Malawi.

Eales, K.A. (1993), Administrative Requirements: Homelands. Johannesburg: Land and Agricultural Policy Centre.

Forster, Simon (1994), *Critical Water Issues Affecting Rural Development in South Africa.* Johannesburg: Land and Agricultural Policy Centre.

Glazweski, Jan, Dodson, Alan, and Smith, Henk (1991), "Tightening up the Law", in M. Ramphele (ed.), *Restoring the Land: Environment and Change in Post-Apartheid South Africa*. London: Panos.

Haines, Richard and Cross, C.R. (1988), "An historical overview of land policy and tenure in South Africa's black areas", in C.R. Cross and R.J. Haines (eds.) *Towards Freehold? Options for Land and Development in South Africa's Black Rural Areas*. Cape Town: Juta.

Harries, Patrick (1987), "'A Forgotten Corner of the Transvaal': Reconstructing the History of a Relocated Community through Oral Testimony and Song", in B. Bazzolli (ed.) *Class, Community and Conflict*. Johannesburg: Ravan.

Harries, Patrick (1989), "Exclusion, Classification and Internal Colonialism: The Emergence of Ethnicity Amongst the Tsonga-speakers of South Africa", in Leroy Vail (ed.), *The Creation of Tribalism in Southern Africa.* London: James Currey; and Berkeley: University of California Press.

Hill, Christopher R. (1964) *Bantustans: The Fragmentation of South Africa*. London: Institute of Race Relations and Oxford University Press.

Horrell, Muriel (1973) *The African Homelands of South Africa*. Johannesburg: South African Institute of Race Relations.

Indicator SA (1986), "Venda: A One Party State of Affairs". Vol.4 No. 2. Johannesburg

Institute of Soil Climate and Water, South Africa, *Land Type Map 2230 Messina*, and accompanying *Memoir*. Pretoria.

Kuper, Adam (1982), *Wives for Cattle: Bridewealth and marriage in Southern Africa*. London: Routledge & Kegan Paul.

Lacey, Marian (1981), *Working for Boroko: The origins of a coercive labour system in South Africa.* Johannesburg: Ravan Press.

Land and Agricultural Policy Centre (1995), *Working Paper 24. Provincial Overview: Northern Transvaal.* Johannesburg: Land and Agricultural Policy Centre.

Land Research Group (1995), *Land Reform Research Programme: District Report, Far North.* Elim: Northern Transvaal Land Research Group.

Lestrade, G.P. (1932), "Some notes on the ethnic history of the VhaVenda and their Rhodesian Affinities", in N.J. van Warmelo (ed.) *Contributions Towards Venda History, Religion and Tribal Ritual.* Pretoria: Union of South Africa, Department of Native Affairs.

Letsoalo, Essy M. (1987), *Land Reform in South Africa: A Black Perspective*. Johannesburg: Skotaville.

Levin, Richard and Mkhabela, Sam (1994), "The Chieftaincy, Land Allocation and Democracy in the Central Lowveld", in R. Levin and D. Weiner (eds.) *Community Perspectives on Land and Agrarian Reform in South Africa*. Report to the John D. and Catherine T. MacArthur Foundation, Chicago.

Levin, Richard, Solomon, Ian and Weiner, Daniel (1994), "Forced Removals and Land Claims", in R. Levin and D. Weiner (eds.) *Community Perspectives on Land and Agrarian Reform in South Africa*. Report to the John D. and Catherine T. MacArthur Foundation, Chicago.

Levin, Richard and Weiner, Daniel (1994), "Towards the Development of a Participatory Rural Land Reform Programme in a Democratic South Africa", in R. Levin and D. Weiner (eds.) *Community Perspectives on Land and Agrarian Reform in South Africa*. Report to the John D. and Catherine T. MacArthur Foundation, Chicago.

Lipton, Merle (1986), *Capitalism and Apartheid: South Africa 1910-1986*. Aldershot: Wildwood House.

Maloka, Tshidiso (1996), "Populism and the Politics of Chieftaincy and Nation-Building in the New South Africa". *Journal Of Contemporary African Studies,* Vol. 14, No. 2, pp 173-196.

McIntosh, Alastair (1995), "The rural local government question in South Africa: Prospects for locally based development". *Development Southern Africa* Vol. 12, No. 3, pp 413-422.

Moody, Elize and Golino, Christina (1984), *Area Study on Venda* Cape Town: Second Carnegie Inquiry.

Murray Biesenbach & Badenhorst Inc. (1987), *Report on the Upgrading of the Tshiombo and Rambuda Irrigation Scheme*. Tzaneen.

Murray Biesenbach & Badenhorst Inc. (1989), *Venda Farmer Support Programme: Tshiombo and Rambuda Farmer Support Projects.* Pretoria.

Murray, Colin (1987), “Displaced Urbanisation”, in J. Lonsdale (ed.) *South Africa in Question*. Cambridge: Cambridge University Press.

National Land Committee (1990), *The Bantustans in Crisis.* Johannesburg.

Northern Province, South Africa (1995)*, Provincial Gazette Extraordinary, No. 73, 31 July 1995*. Pietersburg: Government of Northern Province.

O'Keeffe, J.H., Uys, M. and Bruton, M.N. (1992), "Freshwater Systems", in R.F. Fuggle and M.A. Rabie (eds.) *Environmental Management in South Africa.* Cape Town: Juta.

Platzky, Laurine and Walker, Cherryl (1985), *The Surplus People: Forced Removals in South Africa*. Johannesburg: Ravan Press.

Rabie, M.A. and Day, J.A. (1992), "Rivers", in R.F. Fuggle and M.A. Rabie (eds.) *Environmental Management in South Africa.* Cape Town: Juta.

Rabie, M.A. and Fuggle, R.F. (1992), "The Rise of Environmental Concern", in R.F. Fuggle and M.A. Rabie (eds.) *Environmental Management in South Africa.* Cape Town: Juta.

Ramphele, Mamphela (1991) (ed.), *Restoring the Land: Environment and Change in Post-Apartheid South Africa*. London: Panos.

RAU (1979), *Planning Proposals for Venda, Vol.1.* Johannesburg: Institute of Development Studies, Rand Afrikaans University.

Republic of Venda (1993a), *Statistical Report No.1 of 1993: Population Census, 1991.* Thohoyandou: Republic of Venda, Statistics Division.

Republic of Venda (1993b), Unpublished Census Data: Population Census, 1991. Thohoyandou: Republic of Venda, Statistics Division.

Ritchken, Edwin (1995), "The RDP, governance and rural development", in P. Fitzgerald, Anne McLennan and Barry Munslow (eds.) *Managing Sustainable Development in South Africa.* Cape Town: Oxford University Press.

Robertson, Michael (1989), "Dividing the Land: An Introduction to Apartheid Land Law", in Murray, C. and O'Regan, C. (eds.), *No Place to Rest: Forced Removals and the Law in South Africa.* Cape Town: Oxford University Press.

SALDRU (1994), *South Africans Rich and Poor: Baseline Household Statistics*. Cape Town: SALDRU.

Schutte, A.G. *Poverty and rural deterioration: Two case studies from post-"Independence" Venda.* Cape Town: Second Carnegie Inquiry, Paper No. 64.

Schwella, E. and J.J. Muller (1992), "Environmental Administration", in R.F. Fuggle and M.A. Rabie (eds.) *Environmental Management in South Africa.* Cape Town: Juta.

Singini, Richard and van Rooyen, Johan (eds.) (1995), *Serving small-scale farmers: An evaluation of the DBSA's farmer support programmes.* Halfway House: Development Bank of Southern Africa.

Southall, Roger (1982)*, South Africa's Transkei: The Political Economy of an 'Independent' Bantustan.* London: Heinemann.

Sowetean, Johannesburg, 22 March 1996, "SANDF Sued".

Sowetean, Johannesburg,26 April 1996, "Diamond search in corridor goes on".

Standing, Guy, Sender, John and Weeks, John (1996), *Restructuring the Labour Market: The South African Challenge.* Geneva: International Labour Office.

Star, Johannesburg, 3 June 1996, "World's largest wilderness on our doorstep".

Stayt, Hugh A. (1931/1968), *The Bavenda*. London: Oxford University Press 1931; Reprinted Frank Cass, 1968.

Surplus People Project (1983), *Forced Removals in South Africa: Volume 5, The Transvaal*. Cape Town: Surplus People Project.

Swilling, Mark and Boya, Lawrence (1995), "Local governance in transition", in P. Fitzgerald, Anne McLennan and Barry Munslow (eds.) *Managing Sustainable Development in South Africa*. Cape Town: Oxford University Press.

Thompson, Leonard (1969) "The Subjection of the African Chiefdoms: 1870-1898", in M. Wilson and L. Thompson (eds.) *The Oxford History of South Africa, vol. 2*. London: Oxford University Press.

Thompson, Leonard (1990), *A History of South Africa*. New Haven: Yale University Press.

TURP (Trade Union Research Project) (1994), *A Users' Guide to the South African Economy*. Durban: Y Press.

Van Nieuwenhuizen, E.F.J. (1984) *A Socio-economic Survey in Tzikundamalema (Venda)*, Cape Town: Second Carnegie Inquiry.

Van Warmelo, N.J. (1940), *The Copper Miners of Musina and the Early History of the Zoutpansberg*. Pretoria: Union of South Africa, Department of Native Affairs.

Wagner, Roger (1980) "Zoutpansberg: The Dynamics of a Hunting Frontier, 1848-67", in S. Marks and A. Atmore (eds.), *Economy and Society in Pre-Industrial South Africa*. London: Longman.

Weather Bureau, Republic of South Africa. Unpublished data from Stations in the northern Transvaal.

Wessmann, R. (1908), *The Bawenda of the Spelonken (Transvaal): A Contribution towards the Psychology and Folk-lore of African Peoples*. London: The African World.

Westaway, Ashley (1995), *Policy Paper 27: Land and Local Government*. Johannesburg: Land and Agricultural Policy Centre.

Wilson, Monica (1969), "The Sotho, Venda and Tsonga", in M. Wilson and L. Thompson (eds.) *The Oxford History of South Africa, vol. 2*. London: Oxford University Press.

Wilson, Monica and Thompson Leonard (eds.) (1969) *The Oxford History of South Africa*. 2 vols. Oxford: Oxford University Press.

Woodhouse, Philip (1995), "Water Rights and Rural Restructuring in South Africa: A Case Study from Eastern Transvaal", in *Water Resources Development*, Vol. 11, No. 4, pp 527-544.

Yawitch, Joanne, 1981. *Betterment: The Myth of Homeland Agriculture*. Johannesburg: South African Institute of Race Relations.