THE ROLE OF VENDA CULTURE IN NATURE CONSERVATION: A CASE STUDY OF THE INHABITANTS OF THE TSHIVHASE AREA

Konanani Christopher Khorommbi

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at the

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Promoter: M. Cameron Co-promoter: M.J. Gaigher

O6 April 2001

DECLARATION

I Kona	anani Christopher Khorommbi hereby declare that:	
•	the work in this thesis is my own original work;	
•	all sources used or referred to have been documented and recognise	d, and
•	this thesis has not been previously submitted in full or partial requirements for an equivalent or higher qualification at any other recinstitution.	
		06 April 2001

SIGNATURE

DATE

SUMMARY

This thesis investigates the role of Venda culture in nature conservation and natural resource management. The project is based on the premise that the survival of human beings is entirely dependent on the extent to which different cultures conserve the natural environment. The researcher assumes that the scientific approach is not the only one that is capable of addressing environmental issues but that indigenous technology has a positive role to play.

The study specifically looks at the relationship between the Venda culture and conservation of land, water, plants and animals. In order to achieve this goal, the study was divided into five chapters.

The introductory chapter includes the statement of problem, delimitations of the study, the definitions of concepts, the assumptions, and the significance of the study. The literature review provides an overview of the indigenous strategies of nature conservation and natural resource management from a broader international approach to a specifically Venda approach. The researcher looked at the cultural perspective of the four areas under investigation. This chapter is followed by the methodological justification that discusses the social survey as a research method for carrying out this study. The results presented in the fourth chapter comprise raw data from the three sectors of respondents, namely traditional leaders, traditional healers and villagers. Under each item, common responses have been grouped together for presentation and specific responses for the three sectors were presented independently from one another. This has provided the researcher with the opportunity to identify areas of similarities and differences among the three sectors. Both complementary and conflicting ideas are summarised and used as a basis for analysis. The results reflect a high degree of agreement among respondents.

The discussion in chapter five was based on the results and relevant literature. The researcher's approach was to depict the most common views among the three sectors and their conservation

implications.

In the discussion, the strengths and weaknesses of the Venda cultural approach were exposed in relation to the five sub-problems under investigation.

The recognition of the Venda indigenous technology of natural resource management has been proposed because of its importance in nature conservation. In the recommendations the formulation of policy that overlooks local values was criticised. The use of the Venda approach as a basis for the development of conservation projects was strongly recommended. Lastly, it was proposed that further investigations of specific aspects of the Venda cultural be considered for possible incorporation in future management of the natural environment.

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CHAPTER 1

INTRODUCTORY ORIENTATION AND IDENTIFICATION OF PROBLEM

1.1 INTRODUCTION

The field of nature conservation is developing so rapidly that it has become essential for nature conservation organisations to understand and use whatever kinds of technology may assist them and make them more productive in the execution of their duties (Munyanziza & Wiersum, 1999). Nature conservationists use a wide variety of technologies in their day-to-day work, and most of the manufacturers of these technologies are also developing new techniques and methods. Nature conservationists therefore face the challenge of identifying and incorporating any new technology, method or technique that will improve the efficiency of their discipline and help them to minimise the harmful impact of modern civilisation on the environment. Because nature conservation utilises such a wide variety of skills and technologies from other fields of study, it is essentially an interdisciplinary endeavour (Hannigan, 1997). If nature conservation is to maintain the momentum, which it has achieved, in modern times, it needs, from time to time, to undergo a process of radical review. Such processes of review, carried out from many different points of view, help nature conservationists to confirm the utility of some procedures while discarding others that have become redundant. Scientific research is one of the strategies that is used to ensure that nature conservation practice is up to date in its procedures, methods and goals (Szaro et al., 1996).

Nature conservation organisations in South Africa have traditionally utilised various kinds of scientific knowledge and practice, such as that which is formally taught in schools and colleges. Published scientific research and debate has for long time been used by nature conservation organisations to identify best practice in the field, and transmit such practice to other practitioners (Gilbert, 1994).

Nowadays, as the demand for community empowerment in the field of environmental management increases, it has become necessary to explore other approaches. It is desirable that such approaches focus more clearly on the human dimensions of environmental conservation and management (Hall, 1999). Such new approaches should identify and explain various factors such as the norms, customs, values and aspirations of traditional societies that have an impact on the environment. While this approach entails an appreciation of the social dynamics of various ethnic groups that reside in South Africa, it is especially applicable to those groups and communities who reside in rural areas where the environment and a number of fragile ecosystems are being degraded or are at risk.

It is only by examining the knowledge, beliefs and practices of people who live in daily contact with scarce resources and natural systems, that nature conservationists will become sufficiently well informed to protect the local environment and encourage those who live in contact with it to do the same. Attempting to understand the attitudes, beliefs and practices of people who have lived "on the land" since time immemorial (McNeely, 1996), is essentially a humanist approach to conservation. Because it takes the human dimension into account, investigations of this kind are able to inform policy that might very well secure for nature conservationists the results which they desire to achieve (Hannigan, 1997)

Indigenous technology in the management of natural resources has recently been the focus of much attention (Garibaldi, 1995; Kamstra, 1994; Matowanyika ET al., 1995; Bunyard, 1989; Kakonge, 1995; Masuku, 1998; Mathias, 1995; Posey, 1989; Anon, 1994). If this newly emergent approach is to be effective, the implication of technology on various indigenous cultures needs to be carefully investigated and understood. Once it has been understood, it can be utilised for the maximum benefit of local communities. In this study, the researcher selected Venda culture for detailed description and analysis. It is the researcher's belief that an in-depth understanding of traditional Venda culture will assist nature conservationists to cooperate with Venda people who reside in areas that are rapidly being degraded by modern technology and industrial and commercial developments that take no account of the natural environment. The researcher hopes that the study will contribute positively to the development and implementation of indigenous technology in natural resource management in the Southern African region.

1.2 STATEMENT OF THE PROBLEM

Natural resources are the basis for human survival. People depend on them for their daily use (Hugo et al., 1997). Because it is inevitable that an indiscriminate use of natural resources will ultimately precipitate their destruction, the conservation of such resources is a matter of fundamental importance. Since human perceptions of the living world are mediated via their cultural understanding of what the living world means the impact which human beings have on their environment is also driven by such cultural understanding (Hannigan, 1997). We therefore need to possess a sound and sensitive understanding of how any particular group of people perceives the natural environment in which they live, for it is these perceptions that compel people to react to the environment in a way that is idiosyncratic to their group. One cannot understand the symbiosis between any specific group of human beings and nature without understanding their cultural and historical attitudes to the natural world. As is the case with most other cultural groups in South Africa, conservation and the management of the environment in the Venda culture has not been fully explored and described. According to Chidumayo (1993) Western approaches have (by default) come to dominate conservation policy and methods in Africa. Following this view it might be concluded that conservation policies in Venda are largely of Western origin.

If nature conservation bodies ignore and/or undermine traditional conservation beliefs of local people, communities may develop negative attitudes towards nature conservation and begin to show little or no interest in the conservation of natural resources. Conservation bodies that ignore or dismiss traditional conservation practices are not likely to succeed in the achievement of their conservation goals. For this reason alone it would be important to pay careful attention to the cultural beliefs and practices of indigenous communities.

The main objective of this study is therefore to determine the extent to which Venda culture already practises (and has practised since time immemorial) the conservation of natural resources. For the purpose of the study, the researcher will focus on the following prominent conservation aspects as subproblems:

- Cultural perceptions and the conservation of land
- Cultural perceptions and the conservation of water
- Cultural perceptions and the conservation of vegetation
- Cultural perceptions and the conservation of animals
- Cultural perceptions and human population dynamics

These focus areas should elicit information that will be useful in establishing the extent to which Venda culture contributes to nature conservation.

1.3 DELIMITATIONS OF THE STUDY

The Vhavenda occupy the far northern part of the Northern Province, and their traditional territory is the Venda Region. In the north, the Vhembe River (Limpopo) separates this territory from Zimbabwe. It borders on the Kruger National Park and the former Gazankulu homeland in the east and southeast. To the south and west, it borders on farms of the Republic of South Africa (figure 1). The area under discussion is 650 000 ha in extent (Anon, 1979).

The Venda region is scenically beautiful, and enjoys a typical subtropical climate. Summers are hot and long, and winters are generally mild. Mean annual rainfall varies from between 300 mm and 800 mm in the low-lying northeast to between 800 mm and 2000 mm in the mountainous forest country in the south. This territory has many perennial rivers – most of which start from springs in the Zoutpansberg mountain range (Anon, 1979). Because the soil is fertile, cattle ranching and the production of subtropical fruit are sources of good income (Anon, 1994). The main economic activity of the people of this region is therefore agriculture.

Venda's physical infrastructure was dramatically expanded and improved after it gained its nominal independence from the South African government in Pretoria in 1979. Such expansion of the infrastructure includes gravel and tarred roads which provide access to economic growth sites, an electricity supply to urban and developed settlements, and a telephone network that links all points of growth. Thohoyandou is the capital town of the region and, as such, is the most

developed urban centre. Makhado, Vuwani and Mutale (all towns) are still in the process of being developed (Department of Foreign Affairs and Information, 1991). The Republic of Venda (as it was known) administered its own affairs as a "homeland", and possessed its own parliament. After the first democratic elections of 1994, the Republic of Venda was incorporated into the Republic of South Africa.

The Venda region still possesses areas of relatively well-conserved vegetation in which a variety of wild animals are found. The provincial Department of Agriculture, Land and Environment currently oversees six conservation projects that were established before 1994 when the area then known as the Republic of Venda was still part of the apartheid government's homeland policy. These six conservation projects cover an area of about 31 124 ha, which represents about 5% of the total area of the Venda region. The conservation policy of this department is based on modern scientific premises, which are entirely Western in design, purpose and origin.

The researcher selected the Tshivhase area for the study because its inhabitants live in the kind of rural circumstances in which they are more likely to have preserved the traditional cultural values, beliefs, norms and customary practices of the Vhavenda. Most of the people in this area still practise subsistence modes of existence and depend on available natural resources for their survival. They have therefore preserved knowledge of traditional methods of natural resource conservation and management – a knowledge that has largely been lost to those Vhavenda who have moved to urban areas and become excessively westernised.

Because this study is primarily descriptive in nature, the researcher will not attempt to provide an analysis or evaluation of cultural practices in terms of modern nature conservation methods. The study will also not attempt to compare modern and traditional techniques of conservation because of limitations in terms of time and money. A thorough and careful description of Venda nature conservation practices will nevertheless provide the kind of data that future studies will need for analytical and comparative research.

1.4 THE DEFINITIONS OF CONCEPTS

1.4.1 Natural resources

According to De Jong (1994: 6), *natural resources* are "those resources which did not originate from and are not dependent on human activities. They comprise biophysical, physical and chemical processes and take on various forms such as animals, plants, ecosystems, soil, water, sunlight, natural gases, rocks and space around the earth". For the purpose of this research, it is assumed that natural resources embrace everything that is part of the natural environment on which human beings depend for their survival.

1.4.2 Culture

Schaefer (1989: 63) defines *culture* as "the totality of learned, socially transmitted behaviour. It includes the ideas, values and customs (as well as sailboats, comic books, and birth control devices) of groups of people".

1.4.3 Nature conservation

"Conservation is the careful use and management of resources, so as to maximise the benefit from them now and in the future. Methods include preservation, reducing waste, recycling and decreased use" (Arms, 1990: 463).

These definitions imply the use of natural resources and nature on a sustainable basis – and the responsibility that human beings have to care for them and restore them when they are threatened.

1.4.4 Environment

"The environment embraces the conditions and influences under which any individual or thing exists, lives or develops. These conditions and influences include: the natural environment including renewable and non-renewable resources such as air, water and all forms of life; the

social, political cultural, economic, working and other factors that determine people's place in and influence on the environment; natural and constructed spatial surroundings, including urban and rural landscapes and places of cultural significance, ecosystems and the qualities that contribute to their value" (Department of Environmental Affairs and Tourism, 1997: 12).

1.4.5 Traditional knowledge

Traditional knowledge is defined as the practical common sense, teachings and experience that have been passed down through generations. It also includes traditional knowledge of the countryside, ways of maintaining spiritual health in dependence on natural resources, traditional ways of life, and indigenous authority structures that generate rules for using and respecting the land. It presupposes traditions of sharing wisdom and using knowledge inherited from the ancestors so that heart and head may function together for the benefit of all the people (Berkes, 1999)

1.5 ASSUMPTIONS OF THE STUDY

In this study the researcher makes the assumption that cultural premises and beliefs always influence people's perceptions, and that they are a dynamic phenomenon. The researcher therefore believes that the successful functioning of any traditional society depends on the extent to which it is faithful to its inherited culture and traditions. The researcher also assumes that the Vhavenda people have been interacting with the natural environment for a very long time in order to ensure their survival.

1.6 SIGNIFICANCE OF THE STUDY

Since what the Venda people believe about their natural environment is *terra incognita* to scientifically based conservation organisations and departments, this study will provide essential information, which these organisations need to design and implement policies that will enable the Vhavenda, who still live in rural areas, to conserve and protect their environment on behalf of all the people of South Africa. Such information is essential for the development of culturally sensitive policies and approaches, which are people-centred, simple and acceptable to local communities.

The researcher also envisages that the results of the study will help to break down barriers and reduce the tensions that exist between most conservation organisations and the communities, which they serve. A study such as this can serve as a basis for the justification of various conservation projects. If existing conservation projects can be justified in terms of cultural practices and needs, they will have a much better success rate – particularly if the results of the study can be used to suggest and promote ways for preserving and sustaining existing indigenous cultures.

CHAPTER 2

LITERATURE REVIEW

In Africa, as elsewhere in developing regions of the globe, Western cultural assumptions have dominated people's view of conservation management (Chidumayo, 1993). Because of this, most of the available literature deals with conservation from Western points of view. One promising development has been that international conservation organisations such as the International Union for Conservation of Nature and Natural Resources (Garibaldi, 1995) and the World Wildlife Fund (Lewis and Garter, 1993) have facilitated the documentation of oral traditions about indigenous systems of resource management. Some of this work has been carried out in the Southern African region. In South Africa specifically, Moganane and Walker (1995) recorded the culture of the Tswana speaking people in the Northwest province. A few papers, such as that of Cunningham and Zondi, (1991), focussed on Zulu cultural beliefs and practices.

The cultural role of the Vhavenda in the conservation of natural resources has not been fully explored. In spite of this, one becomes aware that a positive relationship has existed for long time between the life of the Vhavenda and their environment when one studies past literature on the Venda culture (Stayt, 1968), Venda history (Davenport, 1991) and Venda ethnology (van Warmelo, 1960). Later, Mabogo (1990) documented the uses of various plants by the Vhavenda. Collectively, these sources provide a point of departure for a fuller exploration of the Venda cultural perspective on conservation.

2.1 THE WESTERN CONCEPT OF CONSERVATION IN AFRICA

According to Chidumayo (1993), European conservation perceptions and ideas were incorporated into policies that colonial governments implemented in Africa. This perception is supported by Nsanjama (1993), who argues that Westerners historically introduced conservation measures that were designed for and implemented in Europe and North America. This approach merely co-opted Africans and imposed upon them an existing Western conservation ethos that was and is

essentially alien to African beliefs, attitudes and traditions about the natural world (Kaweche, 1993).

Reij's (1993) research revealed that agricultural projects, which were undertaken at the Ander Doutchi Maggia in Niger, failed because techniques traditionally used by farmers to rehabilitate barren degraded plateaus were ignored. In similar vein, the top-down approach employed by extension services officers imbued with Western attitudes failed miserably to meet the needs of farmers in Nigeria because they simply ignored the practices and emergency measures that smallholder farmers with a profound knowledge of their environment had always possessed (Igbokwe, 1999).

Despite the approaches referred to above, there have been a number of cases where a synthesis of both local and scientific (Western) technologies have rendered good results. Thus, for example, in Ethiopia (Abay et al., 1999), indigenous farmers' methods were used as a basis on which to develop farmer support programmes. Studies for the management of miombo forestry revealed that indigenous knowledge might be successful in the maintenance of species, which are valuable to local households. For more intensive management practices, the introduction of specialised ecological strategies was found to be necessary (Munyanziza & Wiersum, 1999). There have also been other successful projects and studies in which scientific methods were used to confirm the value of indigenous knowledge and practices in agriculture (Birmingham, 1998 and Lamers et al., 1995), the cultivation of indigenous trees (Obua & Muhanguzi, 1998), and the use of indigenous institutional frameworks as points of entry for resource management (Appia-Opoku & Hyma, 1999)

The researcher would like to suggest that the imposition of Western ideas about conservation – ideas that disregard local African knowledge – have invariably proved to be unsuccessful and unviable in nature conservation practice in the longterm. The researcher would like to argue that any attempt to introduce Western practices should incorporate a careful and sensitive consideration of local African value systems and beliefs as part of any nature conservation project.

2.2 CONSERVATION WITHIN THE BROADER AFRICAN CONTEXT

Indigenous African cultures invariably include what Westerners would call "a conservation ethic". A conservation ethic of this kind was necessary for the survival of indigenous people. For example, Mwenya (1993) argues that wildlife conservation and management were an integral part of African life before the arrival of Europeans. These were not defined, understood or practised in modern Western terms. Conservation attitudes were deeply embedded in African cultures, and did not develop as a response to the degradation of environment. Today Western conservationists are responding to environmental degradation. Smith (1993) supports this observation when he notes that most African societies had informal codes of conduct that branded any waste of natural resources as antisocial behaviour. Non-adherence to this code could strain a particular family's relationship with its neighbours. Khan (1990) suggests that indigenous people such as the San (hunter-gatherers) and the Khoikhoi (nomadic pastoralists), as well as settled agriculturists such as the Nguni and the Sotho, enjoyed a nurturing and symbiotic relationship with the land and its natural resources.

The Venda Region, traditionally a land of myths and legends, has retained its many ancient customs in the face of changes brought about by Western colonisation. The traditionally holy places of the Vhavenda, *e.g.* lake Fundudzi, Thathe Holy forest, Phiphidi waterfall, and the Dzata ruins remain unspoilt in the midst of plantations (Anon, 1973). It may be convincingly argued that, like other cultural groups of Africa, nature conservation was an integral part of the lives of the Vhavenda. A detailed study of any specific African culture could therefore lead to a deeper discovery of African conservation ideals and practices.

2.3 CONSERVATION WITHIN THE VENDA CONTEXT

2.3.1 Conservation of land

Because land is the most fundamental resource of all life-supporting systems, the conservation of land should receive the highest priority (Wild, 1993; Ellis & Mellor, 1995). In African culture, land ownership is traditionally vested in the chief, who administers the land and all of its resources on behalf of the tribe. Thus, while the leader or chief has the power to allocate land for specific

purposes, each member of the tribe or community possesses the right to graze cattle or other animals on communal land (Anon, 1979a; Anon. 1979b). In times of war, chiefs take the lead in defending their land from hostile invaders (Mathivha 1985). Davenport (1991) also states that whites who wanted to hunt in territory occupied by the Vhavenda, had to first get permission, which often entailed presenting the chief with guns.

While the Vhavenda practised subsistence agriculture, this kind of agriculture affected the environment adversely. Since the number of goats, cattle and sheep was a measure of the wealth and status that an individual possessed in the community, his or her wealth could not easily be translated or estimated in Western currency values. In any case, animals were only sold for cash in times of dire need or emergency. Consequently, the huge numbers of stock that were being grazed led to overgrazing and all its attendant ills (Anon. 1979b). Elsewhere in South Africa, Hendrick (1998) has noted the negative impact of overgrazing and trampling of indigenous vegetation by large numbers of small stock in the Richtersveld National Park. The other side of the picture is that other research has shed light on the positive impact that communal grazing can have on land. According to de Bruyn et al. (1998), communal grazed land in the Ciskei was found to be in better condition than the land on adjacent farms that were stocked according to conventional agricultural wisdom. It would appear that heavily grazed land maintains species diversity due to all species being equally overgrazed in the communal lands. It is also worth noting that while erosion rarely forms on grazed land, it readily appears on land that has been cultivated. Todd and Hoffman (1998) argue that even though some indigenous tribes in South Africa kept large herds of stock, these had little negative impact on the veld. The Khoikhoi people, for example, depended on the availability of water and good grazing, and thus tended to lead a nomadic lifestyle. Because they were nomadic, their seasonal and opportunistic movements in search of better pastoral conditions permitted the veld and other resources (such as springs or watercourses) to recover and regenerate. The Vhavenda do not follow a nomadic lifestyle and are mainly agriculturists.

It has been stated that in the psat, soil erosion and deforestation never had the opportunity to do really serious damage to the fertile soil and lush vegetation of Venda (Anon, 1973). But this observation alone would not constitute sufficient evidence for what has happened in Venda. In support of the above observation, Anon (1979), for example, argues that the Vhavenda used to practise rotational and other agricultural methods that preserved the viability of the land and its

resources. Such methods required the farmer to ask for new land from the chief or to move to new pastures when the land had been exhausted, eroded or washed away by floods. Contrary to the earlier observatio, Anon's (1979b) research shows quite clearly that erosion did in fact sometimes force farmers to move their operations and engage in rotational agricultural practices. While allowing land to lie fallow for a season or two, gives land an opportunity to recover, the kind of rotational agricultural practices which allowed the land to lie fallow and so recover, was a conscious strategy that the Vhavenda practised for millennia so as to preserve the quality of their land (Anon, 1979b).

Another important land conservation issue revolves around the number of people who are allowed to occupy a specific area. Observation of Venda family life suggests that it was traditional for the Vhavenda to have slightly larger families than one finds among, for example, modern Westernised people. Stayt (1968) and van Warmelo and Phophi (1948) demonstrate that the Vhavenda made every kind of effort to ensure that all married couples should bear children. When a couple could not bear children after marriage, this was regarded as a serious problem that affected both the couple and the community. In such circumstances, the couple resorted to the services of a medical practitioner in the hope that he/she might be able to solve the problem. According to Stayt (1968), a custom existed which ensured that each couple would have two to three children. This was no arbitrary figure. The Vhavenda believed that families with too many children would find it difficult to escape the enemy during times of war.

One finds a rich variety of approaches to family planning in traditional Venda culture, the purpose of which was to limit the number of children that anyone couple might have. Among other prophylactic measures, the Vhavenda practised *vhudavhu* (*pseudo-coition*) and *coitus interruptus* to avoid pregnancy (van Warmelo & Phophi, 1948). The point of these observations is that even if a Venda couple might have wished to have had more children than the average number expected in their culture, the practice of traditional methods of family planning tended to keep population levels within manageable bounds (Wessman, 1969). This in turn tended to prevent the kind of conflict that arises when too many people are compelled to compete for rare and inadequate resources. Traditional family planning was therefore an important factor in the maintenance of social and economic stability among the Vhavenda.

Another practice that reduced population numbers may be found in the methods that were traditionally used in competition for the chieftainship. Bulpin (1989) indicates that when the chiefs became too old in times past, their sons killed them – rather than suffer the inconvenience of waiting for their fathers to die so that they could inherit the chieftainship. On the other hand, if the chief produced numerous male heirs, the tribe could become destabilised if the chief's sons were to compete for the chieftainship. In order to pre-empt such conflict and any destabilisation of the social order; all the sons of chiefs born after the third were strangled at birth. While this practice could not totally eliminate conflict and contention among the chief's sons, it could least minimise it by reducing it to a triangular contest.

It might be argued that while the Vhavenda did not consciously regard population control practices as land conservation measures, such measures did indeed contribute to the reduction of pressure on land. Since we live in an era in which the population explosion (until the advent of the HIV/AIDS epidemic) threatened the very survival of human beings as a species, Venda culture should be given credit for having historically devised ways and means of preventing the land from being degraded and rendered infertile by overpopulation.

2.3.2 The conservation of water

Water was regarded as such an important resource among the Vhavenda that many of their customary myths and beliefs revolve around water sources and the ways in which such resources could be conserved. The Vhavenda believe that spirits inhabit Lake Fundudzi (Harries, 1973; Venda Development Corporation [VDC], undated). They also believe that the hot water from Tshipise (one of the hot springs in Venda) flows from the stomach of the python that lives beneath this water source (VDC, undated).

According to Van der Waal (1997), foreigners may not enter Lake Fundudzi without special permission. If they do, they may anger the spirits who live in the lake and so bring punishment to the Tshiavha clan (who are the custodians of the lake). VDC (undated) also states that the Vhavenda believe to disturb the stones around Tshipise may enrage the python and so cause the water to dry up. Because these traditional beliefs created a deep respect for most water sources

among the Vhavenda, water resources could be maintained in a more or less undisturbed condition.

According to Vhavenda myths, no one can wash himself/herself or his/her clothes in Lake Fundudzi (Jordaan, 1987), or wash a sooty pot in the fountain called Tshamakambu (van Warmelo, 1960). Nor may anyone bend in order to drink the water from this fountain. Only calabashes were used to drink water directly from this fountain. People who did not abide by this code of conduct might expect the snake to rise out of the fountain and strike the transgressing person's head. It is also believed that after collecting water from the Tshamakambu fountains, leaves should not be plucked for the purpose of covering the water container as a way of preventing water from spilling, for the whole pot would then be filled with snakes (van Warmelo, 1960). The taboo, which prevented people from plucking leaves and vegetation close to these water sources, had the effect of protecting riparian vegetation from destruction. All these taboos helped to maintain an aura of fear around the sacred space adjacent to water sources, and this in turn contributed to the conservation of water resources. (pers. obs. 2000)

2.3.3 Conservation of indigenous vegetation.

The Vhavenda also conserved indigenous vegetation by respecting sacred places. Bulpin (1992) remarks that Venda territory contains haunted forests, which are said to be so full of ghosts that no person would dare to venture into them. Sacred places like Thathe Holy Forest (Netshiungani ET al, 1981) and the Phiphidi Waterfalls (Bulpin, 1989) are respected for they are traditional burial grounds for royal families. Bulpin (1989) further states that the spirits of many deceased chiefs are now the guardians of the vegetation around the Phiphidi burial grounds. From the nature conservation point of view, the protection of these water catchment areas is vitally important for long-term water conservation.

The botanical conservation ethic of the Vhavenda is rooted in the belief that trees are important for the survival of human beings. Mabogo (1990), who has made a careful review of the ethnobotany of the Vhavenda, has found that trees like *Sclerocarya birrea* subsp. *caffra* (Marula), *Parinari curatellifolia* (Mobola plum) and *Adansonia digitata* (Baobab) have reputedly saved the nation during times of drought and food scarcity. The conservation of these species the

responsibility of chiefs. Chief Davhana from Venda was, for example, renowned for his exertions to protect the fauna and flora of Venda (Anon, 1973)

Trees such as *Brackenridgea zanguebarica* (Brackenridgea) (Mabogo, 1990; Netshiungani *et al*, 1980) and *Millettia stuhlmanii* (Panga Panga) (Mabogo, 1990) are important in the manufacture of traditional medicines. Because of their importance in this regard, the Vhavenda carefully protects them. According to Netshiungani *et al*. (1980), people who handle Brackenridgea without performing certain rituals may be afflicted with madness and death. This is but one example of the way in which the ritualised sanctity of various trees and plants promotes their sustainability and survival. Another important practice found in Venda culture is the propagation of useful plants. Von Breitenbach (1989) found that localities previously occupied by the Vhavenda bear witness to the Venda penchant for the planting of trees. *Dovyalis caffra* (Keiapple) (in the Soutpansberg) and *Dovyalis zeyheri* (Oval keiapple) (at Roodewal and Waterpoot) were among the many species that the Vhavenda propagated by planting. Plant propagation is important for the maintenance of plant diversity.

2.3.4 The conservation of indigenous animals

History suggests that the Vhavenda lived in a harmonious relationship with indigenous animals. Maylum (1995), for example, argues that in the nineteenth century and before, Venda was rich in minerals and ivory. The Vhavenda also maintained trade links with the Shona people to the North by trading in ivory in order to increase the wealth of the tribe. While modern people may hasten to conclude that the elephant population was devastated as a result of this trade, Bulpin (1992), in contrast, reports that in 1847 the Northern Transvaal was teaming with game. The establishment of Zoutpansbergdorp (present-day Louis Trichardt) was founded as a base for the ivory trade and as a town in which hunters might make their homes. One may argue from these facts that the way in which the Vhavenda traded with ivory had a minimal impact on the elephant population. One might deduce as evidence for this statement that the traditional weapons (bow and arrow) of the Vhavenda were far less effective and potent than modern weapons (guns) used in hunting. Also the Vhavenda did not occupy the whole of the Northern Transvaal (Stayt, 1968).

According to Maphosa (1991), African people have been brought up to view wild animals as

natural enemies or as sources of food, and that they would therefore supposedly kill animals on sight. This statement is certainly not true of all African cultures. Thus, to the Vhavenda, not all animals are (potential) food. They do not, for example, eat fish because they associate these with snakes. Though young boys might eat fish, no woman would ever allow it be brought into her house (Stayt, 1968). In addition, powerful taboos prevented the Vhavenda from eating all animals of the cat family such as the lion (*Panthera leo*), the leopard (*Panthera pardus*), the cheetah (*Acinonyx jubatus*) and the lynx (*Felis caracal*) – as well as specific birds such as kingfishers, hawks, owls, storks and the secretary bird (*Sagitarius serpentarius*) (Stayt, 1968). Mathivha (1985) also mentions that doves were not eaten. The existence of these types of restrictions has also been supported by van der Waal (1994), who found that although the Vhavenda will eat most grasshoppers; there are some species of grasshopper, which are protected from human consumption by strict taboo. Among the various reasons why some species may not be eaten are a bitter taste, an odd or unusual appearance, and slow or apparently awkward movements. In the last analysis, however, the reasons for taboos and superstitions among tribal people are never divulged to curious outsiders.

It was traditionally accepted that snakes were *midzimu* (the goddess) and that they should be worshipped. The reason for this was that when the Vhavenda arrived in Venda, snakes had already lived in the area since time immemorial. The Vhavenda believe that because snakes do not harm anyone except if he or she has broken the laws of the country, they should never be killed (van Warmelo, 1960). Jordaan (1987) likewise supports this concept of snake conservation. He reports that any python killed in Venda during the rainy season might well cause the rains to stay away. Even if it were killed in winter, it had to be thrown into the water. This act would ensure that the rains would come again in the summer.

A further example of animal conservation is the value, which the Vhavenda attached to the baboons of Lwamondo. Since these baboons had helped the Vhavenda of Lwamondo to defend themselves against their enemies in the historical past, they are now treated with the greatest respect. The Vhavenda demonstrate their gratitude to the baboons by not allowing anybody to harm them in any way (Harries, 1929; Jordaan 1987).

No information as regards the use of antelope and other large game by the Vhavenda could be found in the literature sources studied.

CHAPTER 3

METHODOLOGICAL JUSTIFICATION

Since this study is about people, their culture and conservation, social research methods were chosen for being appropriate for the gathering of data. The researcher used social surveys to gather the information that he needed. According to Fowler, (1995), a sample survey brings together three different methodological areas, namely designing questions, sampling and interviewing. These three areas will be discussed briefly in terms of questionnaire construction, face-to-face interviews and systematic sampling.

3.1 QUESTIONNAIRE CONSTRUCTION

3.1.1 The interview schedule

According to Neuman (1997) when a questionnaire is too long, the rate of responses is diminished. A questionnaire must address issues that arise from the contextual effects of answering specific questions before others. A questionnaire has opening, middle and concluding questions. Opening questions should be pleasant, interesting and easy to answer so that they help the respondent to feel comfortable about the questionnaire. Researchers should avoid allowing opening questions to focus on boring background information — or to be threatening or challenging. Mixing questions from different topics may cause confusion in the minds of respondents. Questions that arise out of the same topic should be grouped together so that respondents might find it easier to orientate themselves. Neuman, 1997 and Babbie, 1998 state that the printed format of the questionnaire should be spacious, clear and easy to read. Questions showed not be cramped together or abbreviated in an attempt to save space

Crew (in Babbie, 1998) stresses how important it is that the researcher and the respondent speak *the same language*. This factor has also been emphasised by Nabasa et al. (1995) and Opoku

(1995). Because the researcher took all these factors into consideration, and because the targeted respondents were all Tshivenda-speaking, he translated all the questionnaires into Tshivenda.

The researcher also grouped questions relating to the five sub-problems which he had identified earlier into five separate sections which were: cultural perceptions and conservation of land; cultural perceptions and conservation of water; cultural perceptions and conservation of vegetation; cultural perceptions and conservation of animals; and cultural perceptions and population dynamics.

3.1.2 Formulating questions

One of the objectives of the study was to determine the cultural attitudes and practices of the Vhavenda, and thus most of the questions were open-ended, and only a few close-ended questions were included. The use of open-ended questions has become common in contemporary research, but the benefits of such questions need to be addressed here because they present their own challenges

By giving respondents the opportunity to answer in their own words, one permits scope for an unlimited numbers of possible answers (Fowler, 1995; Neuman, 1997). Apart from enriching the process, open-ended questions benefit both the researcher and the respondents. In addition, they create the opportunity for the researcher to discover unanticipated findings (Neuman, 1997; Fowler, 1995). By using open-ended questions, the researcher learns more about how a respondent thinks and what is important to him/her. This happens because the respondent can answer in detail, and clarify and qualify responses — even in questions with many possible answers. Respondents may thus provide valuable information about complex issues. As far as the respondent is concerned, open-ended questions permit creativity and self-expression and reveal his/her logic, thinking process and frame(s) of reference (Neuman, 1997). The status of the respondent is also elevated by means of this process because there are virtually no false positives (Fowler, 1995). While open-ended questions allow respondents to give their own answers, closed-ended questions force respondents' feelings and opinions into a few fixed categories. While information gathered in this way may seem to be quite plausible on the surface, the information

itself may be skewed by the "leading question" effect, and a consequent loss of important or vital information (Neuman, 1997; Babbie, 1998).

Some disadvantages of open-ended questions are that they may be difficult to analyse (Neuman, 1997; Fowler, 1995). Fowler, (1995) argues that open-ended questions can sometimes provide an unsatisfactory amount of information. A further shortcoming of open-ended questions is that the researcher might misunderstand or misinterpret responses. This would introduce an element of researcher bias into the results. The disadvantages of open-ended questions seem to be the advantages of closed-ended questions — and vice versa. Because of this, Neuman (1997) suggests that ensuring a judicious mixing of both open-ended and closed-ended questions may reduce the disadvantages associated with both types of questions. By mixing these types of questions, the researcher offers respondents changes in pace and helps interviewers to establish rapport. A total reliance on closed-ended questions may distort the results.

Fowler (1993) indicates that good questionnaires maximise the relationship to Fowler (1995), when thinking about whether or not a question fulfils its purpose, it between the answers recorded and what the researcher is trying to measure. According is necessary to consider the question itself, its form and wording and the kind of answers that the question is designed to evoke. Fowler (1993) argues that all respondents must understand questions in a consistent way and in a way that is consistent with what the researcher expects it to mean. A challenge, which faces all researchers, is that respondents differ from the researcher and from one another in the way in which they understand and use language.

Neuman (1997) identifies a number of crucial principles for ensuring that a question is effective. He suggests that survey questions should avoid confusion and keep the respondent's perspective in mind. Such questions will provide the researcher with reliable and valid measures. Survey questions also help the respondents to feel that they understand the questions and that their answers are meaningful. According to Babbie (1998) and Neuman (1997), questions should generally not be "leading", double-barrelled or ambiguous.

The researcher accordingly designed three types of questionnaires for three selected sectors of the

community, namely *traditional leaders*, *traditional healers* and *ordinary villagers* (see appendices 1-4). Specific questions were asked to each of these sectors. Traditional leaders were for example asked questions related to the role they play in their position of leadership. Such questions could not be asked to either traditional healers or villagers for they would not be able to provide relevant answers. Similarly, most of the questions asked to traditional healers were based on them being medical practitioners, the role that leaders and villagers could not fulfill. On the other hand, the majority of questions asked to villagers could also apply to traditional leaders and traditional healers. That is why in some sections similar questions were asked to all three sectors.

3.2 FACE-TO-FACE INTERVIEWS

The researcher conducted face-to-face interviews when he visited individual households for the purpose of interviewing specific individuals. The use of other approaches such as mailed questionnaires would cause problems because the mailing system in rural areas is not reliable. Further, since most of the respondents were illiterate, they would not be able to read and write. Fink (1995) describes face-to-face interviews as that part of the survey system which is mainly used for collecting information to describe, compare or explain knowledge, attitudes, practices or behaviour. He believes that interviews may be used to survey opinions on just about any topic. Researchers have successfully used face-to-face interviews to gather information about indigenous technology of environmental management and conservation, information about ethno-medicine (Abbink, 1995; Maundu, 1995; Costa Neto, 1999), ethnobotany (Mabogo, 1990) and people's attitudes towards natural resources.

As in the words of Neuman (1977), face to face interviews benefited the research through realising the highest response rate and allowing the administration of questionnaires that were long. Babbie (1998) believes that the high success rate of face-to-face interviews arises out of the fact that respondents seem to be rather more reluctant to refuse an interview to an interviewer standing on their doorstep than they would be to throw away a mailed questionnaire. The presence of an interviewer further reduces a number of "don't knows" and "no" answers. Interviewers can also explain confusing questionnaire items to respondents on the spot. They may also help clarify the intent behind questions that are misunderstood and so increase the rate of relevant responses. It can be stated that these further benefits of face-to-face interviews

contributed to the success of the study, for there was no single case where respondents turned down the interviews. Babbie (1998) and Neuman (1997) also state that two of the additional advantages of face-to-face interviews are that interviewers can observe the surroundings of their respondents at first-hand, and observe non-verbal communication (body language) and visual cues of various kinds.

3.3 PILOT STUDY

A pilot study was carried out over a period of ten days in January 1998 at Mapate and Haluvhimbi villages respectively which are villages under the Tshivhase area. The objectives were to test the interview schedule and the method of sampling (Neuman, 1997). According to Fink and Kosecoff (1998) and Litwin (1995) all questionnaires and interviews must undergo pilot testing.

Prior to the administration of interviews, a letter was written to the Tshivhase Territorial Council for permission to carry out a survey in their territory. This letter was followed by a visit during the council's meeting, after which permission was granted. A pilot study was then undertaken.

3.3.1 Problems identified during pilot study

3.3.1.1 *Interview schedule*

Minor problems were experienced with the compilation of schedules. Such problems, which were mainly technical and content-related, were rectified before the final survey was carried out. Also, not all the items of the Venda version of the questionnaire measured what the researcher intended to measure. Such items were subsequently all rephrased in the final schedule.

3.3.1.2 *Timing of interviews*

Another challenge was actually meeting respondents. There were instances where people were busy when the interviewer arrived. But the villagers obviously did not regard this as a problem because none of them refused to be interviewed when the interviewer asked them to participate in

the interview. During the course of the visits, some homesteads were found to be empty. When this happened, the interviewer moved on to sample the next homestead.

The interviewer needed to exercise patience when interviewing leaders because villagers always visit them to settle community matters. This problem was to some extent obviated when the researcher decided to make appointments with leaders a week in advance. The researcher found that traditional leaders were mostly only available to be interviewed during weekends, which were not always free of interferences. It was during weekends that the researcher was obliged to attend village gatherings (tshivhidzo/khoro), in which he was introduced and welcomed. Although this procedure took up a lot of extra time, it ultimately benefited the researcher because it ensured the co-operation of the villagers, which was vital for the success of the project. It also helped the researcher to develop relations with important role players such as administrators and traditional leaders (Maundu, 1995) and ensured his security. It also meant that he did not have to introduce himself anew every time he visited individual households. This custom (the khoro) is accepted as a normal part of tribal life among the Vhavenda.

3.4 SAMPLING TECHNIQUE

Based on the question of logistics, one hundred respondents were interviewed. These included traditional leaders, traditional healers and ordinary villagers who were 18 years of age and above. The researcher believes that these sectors may uphold at least some aspects of the traditional culture of the Vhavenda. The required sample was drawn from eight villages in the Tshivhase area (Figures 2 & 3). These villages were selected on the basis of their geographical location and sizes. Four large villages (Phiphidi, Mukula, Makonde and Tshitereke) and four small villages (Thononda, Tshiheni, Murangoni and Tshidzivhe) were chosen to constitute the sample. The larger villages were among those that enjoyed many modern conveniences like telephones, piped water and electricity. Small villages were less developed. One may attribute this difference in development to the fact that all the large villages are situated in lower-lying areas while the smaller ones are located in the more mountainous parts of the area. (It is logical to expect that larger, more populous villages will receive amenities first.). By including both types of villages (more and less developed) contributes to the validity of the study.

3.4.1 Systematic sampling

Systematic sampling was used to interview respondents. Systematic sampling is usually employed in practice rather than simple random sampling (Babbie, 1998). Bailey (1994) argues that systematic sampling is practical because it provides more information per unit of expense incurred by the researcher. Because this technique is simpler to perform, it may also reduce the level of errors recorded. Systematic sampling is more dependent on the sampling frame than random sampling. In systematic sampling, any ordering in the sampling frame is retained.

Systematic sampling may be equivalent to random sampling when it comes to precision (Babbie, 1998; Fowler, 1993; Neuman, 1997). Babbie (1998) states that if the list of elements is randomised before sampling, one might argue that any systematic sampling derived from this list is in fact a simple random sample. Debates over the relative merits of simple random sampling and systematic sampling have been resolved largely in favour of the latter, simpler method. On the contrary, simple random sampling cannot be substituted for systematic sampling in cases where elements are organised in some kind of cycle or pattern (Babbie, 1998; Fowler, 1993; Neuman, 1997). Traditional leaders and traditional healers were however sampled separately because they were in the minority. Thirteen respondents were interviewed from each of the larger villages and 12 respondents were interviewed from each smaller village. There was one traditional leader and two traditional healers from every selected village. Ten villagers were interviewed from each larger village while only nine were interviewed from smaller ones. It was believed that this would ensure a representative sample from both larger and smaller villagers.

The eldest member of each household served as the respondent in each case. There were very few cases where the eldest members of the families could not be found or were not in a position to be interviewed. In such cases, the second eldest member of the household was interviewed. Because there is only one principal traditional leader in each of the villages, only one was interviewed in each village. The researcher asked each traditional leader for the names of local traditional healers, and in each case he selected two to be interviewed. A researcher followed this approach because there are very few traditional healers in each village. In the case of the villagers, streets were selected at random. In the streets the researcher employed systematic sampling. Every third

homestead from small villages and every fourth one from large villages was sampled. In cases where the third or the fourth homesteads could not be sampled, the fourth and the fifth homesteads were sampled instead. Due to lack of numbering of households and streets, the researcher had to develop his own system so that he could allocate numbers to streets and households.

CHAPTER 4

DATA ANALYSIS

In the analysis, similar responses by leaders, healers and villagers have been grouped. These are then followed by the responses given by a specific group. Data from closed-ended questions was analysed quantitatively and content analysis used to analyse data obtained by means of open-ended questions.

4.1 PERSONAL INFORMATION ABOUT RESPONDENTS

4.1.1 Literacy level of respondents

Of the 58 respondents who attended school, only 45% achieved grade ten. The study is therefore composed of a sample characterised by a low literacy level. The attitudes of such a sample might not therefore have been excessively influenced by formal education in the concepts of nature conservation.

4.1.2 Employment and income

Generally, the sample represents a low-income sector of the population. Only 35% of respondents were employed. Of these, 66% were labourers, 17% were professionals and 17% were self-employed. Labourers and the self-employed received the lowest income (less than R 2000.00 per month), but professionals received from R 2000.00 and above per month. Because the sample included people above the age of 55 years (48%), some of the income respondents received was what they had received as pensions (R 499.00 per person per month).

4.1.3 Gender and age of respondents

Thirty five percent of the respondents were male and 65% female. The sample tended to be dominated by older people. The majority of them (71%) were above 40 years of age.

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4.2 CULTURAL PERCEPTIONS AND CONSERVATION OF LAND

TRADITIONAL BELIEFS AND CUSTOMS IMPORTANT FOR THE CONSERVATION OF LAND. (QUESTION 1.1)

Traditional leaders, traditional healers and villagers' responses:

Respondents referred to customary taboos that were important for the control of land use. Among these was the observance of taboos during funerals and during the carrying out of rituals like "*u rothodza shango*" (literally means, "to cool the territory"). Different taboos are observed for different periods of time. Thus, for example, funeral taboos may be observed for two to four days for commoners – but for up to two weeks for chiefs. It was also considered taboo to sow maize and other summer crops before seed mixing (referred to as *u suka*) takes place at the chief's kraal. This was always done before the first spring rains.

Traditional leaders and villagers' responses:

Large trees could not be cut down indiscriminately

Traditional leaders' responses:

Ploughing adjacent to a river was taboo.

Villagers' responses:

Compost could not be burned while the soil was being cleared and tilled. It was believed that the destruction of organic matter would affect the nutrient cycle and so reduce soil productivity.

All three sectors mentioned some of the traditional beliefs/customs that are important for land conservation. Though few were specific to particular sectors, most of the responses were common to all sectors.

ENCOURAGEMENT OF MAINTENANCE OF TABOOS AND BELIEFS BY TRADITIONAL LEADERS AND TRADITIONAL HEALERS. (QUESTION 1.2)

Traditional leaders and traditional healers' responses:

The calling of gatherings was considered to be important for encouraging villagers. Villagers were educated about the taboos in such gatherings. In some cases, villagers are warned about specific taboos – and they are reminded to observe them. Leaders might also call upon ward headmen to pass on this information to people subordinate to them. They themselves would also conspicuously observe the taboos on the stipulated days so as to encourage others to do the same. Traditional leaders thus took great care to practise the relevant rituals because it is up to them to set an example. When funerals were taking place, traditional healers did not dig out medicinal plants but used those which they had already collected. In the past, people used to perform all the tasks, which related to soil *before* the burial so that they could observe the taboos during the time when the funeral was being conducted.

Traditional leaders' responses:

Leaders indicated that they encouraged the maintenance of taboos and beliefs by making it obligatory for villagers to do so. Failure to observe a taboo was regarded as an offence.

Traditional healers' responses:

About 50% of the healers reported that they took no part in encouraging people to maintain beliefs and observe taboos. The reason for this is that it is the chief's function to encourage observance, and that people were anyway quite knowledgeable about beliefs and taboos. They were also of the opinion that young people tend to defy taboos when they are encouraged to observe them.

These two sets of responses reveal that traditional leaders play a more prominent role than do traditional healers in encouraging beliefs and taboos. It was also evident from the responses of the healers that some young people refuse to observe taboos when they are advised to do so.

INFLUENCE ON LAND CONSERVATION (QUESTIONS 1.2 & 1.3)

Traditional leaders' responses:

A large number of the respondents indicated that it is the traditional leader who most influences people in this regard. Very few of them expressed the opinion that the villagers themselves exerted much influence on questions of land conservation.

Traditional healers' and villagers' responses:

Healers and villagers said that they themselves were not active in influencing people to conserve land.

Traditional healers' responses:

The majority of healers stated that the traditional leader (ward headmen or chief) influences people the most. Thus, for example, a traditional leader warns people not to plough sensitive soil because it might become eroded by water. A fair number of healers were of opinion that agricultural officers influence people the most.

Villagers' responses:

The majority of villagers reported that the traditional leader influences people the most and a smaller number said it was the agricultural officer who did so. Some role players that were also mentioned as having an influence on land conservation were civic organisations, ordinary citizens, elderly people and farmers.

The majority of responses indicate that the traditional leader was regarded as being most influential in encouraging people to conserve the land. A few traditional healers and villagers were of the opinion that no one in particular encouraged people to conserve land.

(QUESTION 1.4)

Although about a quarter of healers indicated they played no part in promoting the maintenance of land, the majority reported that they indeed played a role in promoting land conservation. They mentioned that they performed rituals such as "*u dzivhela shango*" (a practice of using medicine to protect a territory against natural disasters). They were instructed to do this by traditional leaders who wanted to ensure that the soil would be productive when it came to the ploughing season. Traditional healers thought that they contributed to land conservation by replacing soil after digging out medicinal plants and by applying kraal manure for the fertilisation of their fields. They argued that the replacement of soil helps trees and plants to survive and that this in turn promotes the protection of the soil. Traditional healers also discourage members of the tribe from cutting down trees that are not used for medicine. This, they believed, showed that they recognised the role that vegetation plays in soil conservation.

The responses show that traditional healers contribute to soil conservation by protecting vegetation and other features of the environment.

TRADITIONAL METHODS USED TO PREVENT SOIL EROSION (QUESTIONS 1.3,1.4 & 1.5)

Traditional leaders', traditional healers' and villagers' responses:

Members of the tribe used stones to construct contours to regulate the flow of rainwater by diverting it down slopes. In those places where no stones were available, they filled bags with soil and used them to construct ditches to carry away excess water. Where stones occur naturally, these are not moved but are left to hold the soil together – thereby preventing soil erosion. The number of contours constructed depended on the size of the ploughed land. An advantage of having a number of contours is that if water damages one of them, the others will still be able to cope with the water that needs to run off. If stone terraces fail to prevent soil erosion, grass may be planted as a way of reinforcing affected areas. This strategy helps to prevent the loss of topsoil that is rich in nutrients. This practice has been adopted by the Vhavenda because they are mountain dwellers and feel strongly that rainwater should not be wasted and that good soil should

not be allowed to be washed away by rainwater. Other ways of conserving soil involved leaving strips of land untouched for varying periods of time and planting trees and grass to reinforce the cohesion of the soil and its resistance to being swept away by flood waters.

Villagers' responses:

Villagers were in the habit of allowing land to lie fallow. They also used hand hoes on steep slopes instead of cattle. The practice of allowing land to lie fallow promotes regeneration of the kind of vegetation that protects soil from erosion. The Vhavenda also observed through experience that because cattle struggle to pull the plough on steep slopes, their movements tend to undermine the cohesion of the soil and so make it more vulnerable to erosion. For the same reason, villagers did not allow paths to be constructed on ploughed land unless they zigzagged and ran across horizontal ground.

Although different respondents did not all mention the same activities, their views tended on the whole to support one another.

TRADITIONAL METHODS OF SOIL CONSERVATION STILL IN USE (QUESTIONS 1.4, 1.5, & 1.6)

TABLE 2.5 MAINTENANCE OF TRADITIONAL METHODS OF SOIL CONSERVATION

Responses	Leaders	Healers	Villagers	Total
Yes	6	10	66	82%
No	1	6	10	17%
Do not know	1			1%
		TOTAL		100%

The prevailing feeling among the respondents was that traditional methods of soil conservation were still in use. This is evident from table 2.5, which shows that 82% of the respondents (traditional leaders, traditional healers and villagers) supported the idea – while only 17 responded negatively.

THE EXTENT TO WHICH TRADITIONAL LEADERS ENCOURAGED THEIR VILLAGERS TO MAINTAIN TRADITIONAL METHODS OF SOIL CONSERVATION

(QUESTION 1.6)

Traditional leaders encouraged villagers in gatherings to engage in group work for the purpose of constructing contours to promote soil conservation. Most of the people are familiar with this practice and implement it on their fields. It is the chief's responsibility to indicate exactly to landowners the boundaries of the land, which they may cultivate. By doing this, traditional leaders ensure that no ploughing and planting takes place on steep slopes. They verified that villagers complied with their demarcations by carrying out *in loco* inspections in fields that had already been ploughed. Non-compliance was regarded as a serious offence and could lead to the institution of a case against the offending villager. Wherever possible, villagers were exposed to projects where traditional soil conservation methods had been practised so that they could gain experience of the correct methods to use. The role of traditional leaders in encouraging their subjects in this matter is well documented by the responses, which were obtained.

THE ROLE OF TRADITIONAL HEALERS IN MAINTAINING CULTURAL PRACTICES OF SOIL CONSERVATION (QUESTION 1.7)

Traditional healers indicated that they promote these practices by opening up diversion ditches that have been silted up, by protecting trees and grass from destruction and by encouraging villagers in mass gatherings (referred to as "tshivhidzo") to comply with these practices. It was clear from the responses that traditional healers support traditional tribal customs in their villages and (by so doing) also confirmed their support for and loyalty to their own traditional leaders.

PRODUCTIVITY OF LAND (QUESTIONS 1.5, 1.7 & 1.8)

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TABLE 2.6 DECLINE IN LAND PRODUCTIVITY

Responses	Leaders	Healers	Villagers	Total
No	2	1	14	17%
Yes	6	15	61	82%
Don't know	-	-	1	1%
		TOTAL		100%

It is evident from table 2.6 that most of the respondents (82%) were of the opinion that land is currently less productive than it was in the past. A few of them (17) disagreed with this opinion.

REASONS FOR DECREASES IN LAND PRODUCTIVITY (QUESTIONS 1.6, 1.8 & 1.9)

Traditional leaders', traditional healers' and villagers' responses:

Those respondents who agreed that land productivity has decreased argued that the land had become less fertile as the soil had become poorer over time. Historically, the Vhavenda used kraal manure to fertilise their fields. Nowadays, because not enough kraal manure can be obtained and because there is no money to buy chemical fertilizers, fields tend to be less fertile than they were in the past. Those who can afford to buy chemical fertilizers, overuse it in such a manner that it degrades the soil. A number of respondents also mentioned that people today no longer allow land to lie fallow. Instead, they continue to plough the same strips of land over and over again. In the past, land had to lie fallow for two years before it could be ploughed again. After a few seasons of ploughing, the land would be allowed to lie fallow again. It is the understanding of respondents that land productivity is always very high in the first year after bush clearing but that it declines after three years of repeated ploughing.

Traditional leaders' and villagers' responses:

Traditional leaders stated that the decrease in land productivity had been caused by the sowing of jogo beans during the wrong season. It was traditionally accepted that jogo beans should be sown late in the season after the maize has been well established so that it does not compete with the jogo beans.

Traditional healers' and villagers' responses:

The responses of healers and villagers indicated that they believed that the soil had been impoverished by erosion and because people no longer followed the prescribed traditional rituals.

In the past, the Vhavenda used to ask their ancestors to provide them with maize. One ritual

involves the mixing of seeds (this was referred to as "u suka"). Seed was placed in a container

and mixed with medicine. This mixed seed would then be sown on the perimeters of every field

while the unmixed seed would be sown in the middle. It was believed that these rituals had to

precede every ploughing season if one wished to improve the soil's productivity. This particular

ritual was specifically applied to the sowing of maize. Some respondents also identified a lower

than usual rainfall as one of the reasons for reduced productivity.

Traditional leaders' responses:

Leaders pointed out that practices like that of ploughing maize stalk and other organic material

back to the soil [referred to as u guguda] had been discontinued. This practice was carried out

mainly before the rainy season in the expectation that the organic matter ploughed into the soil

would decompose more rapidly when the rains began. In the past, the beginning of the ploughing

season was indicated when trees such as Quinine tree (Rauvolfia caffra) and Tree fuchsia

(Halleria lucida) began to drip water in springtime. Such traditional methods of timing agriculture

operations are no longer used because people simply refer to modern Western calendars.

Villagers' responses:

Farmers do not practise crop rotation and contribute even further to the depletion of nutrients by

sowing only one crop. The weeds that spring up in arable lands compete with crops and so also

reduce productivity.

In those cases where there was agreement among respondents, each of the different sectors

supplied different reasons for their opinions. The responses exposed the extent to which important

traditional practices have been discontinued. They believe that lack of adherence to traditional

practices has resulted in reduction of productivity.

IMPROVEMENT OF LAND PRODUCTIVITY

(QUESTIONS 1.7, 1.9 & 1.10)

TABLE 2.7. IMPROVEMENT OF LAND PRODUCTIVITY

xlv

Responses	Leaders	Healers	Villagers	Total
Yes	7	16	69	92%
No	1	-	6	7%
Do not know	-	-	1	1%
		TOTAL		100%

It is clear from table 2.7 that most of the respondents (92%) agreed with the proposition that land productivity could be improved.

WAYS OF IMPROVING LAND PRODUCTIVITY (QUESTIONS 1.10[a], 1.11[a] & 1.18[a])

Traditional leaders', traditional healers' and villagers' responses:

Generally accepted methods of improving land productivity were (among others) allowing the land to lie fallow, the use of kraal manure to enrich the soil, and the ploughing of maize stalks back into the soil. It was a tradition to allow the land to lie fallow for two years – during which time the villager would utilise another piece of land for crop growing. During such periods of rest, indigenous vegetation (including grass and shrubs) would have an opportunity to regenerate themselves. All these would eventually be ploughed back into the soil because it is believed that organic matter mixed into the soil helps such soil to become more fertile.

Traditional leaders' responses:

They believed in using the "three months" variety of maize seeds and in analysing soil. The analysis of soil helps one to determine which crops will be optimal for various soil types. If this practice of soil analysis is followed, optimum productivity is likely to occur.

Traditional healers' responses:

It is the understanding of traditional healers that important ways of improving productivity are (1) deep ploughing and (2) the relocation of the kraal – so that they could plough the area where it was. They also believe that if the burning of organic matter could be avoided, soil structure and fertility will be enhanced.

Villagers' responses:

Villagers also associated productivity with the kind of seed varieties that were sown. They reported that the use of treated seeds and the Tshivenda maize variety promotes productivity. They also strongly believe that rainfall and sowing in the correct season are of primary importance for increasing productivity. Respondents also reported that crop rotation affects productivity – especially because the Vhavenda believe that the continuous sowing of jogo beans leads to the depletion of nutrients.

There is agreement among leaders, healers and villagers about some of the common methods to improve land productivity. Although responses among the various groups supported each other, there were minor differences of opinion across sectors. For example leaders and villagers both mentioned types of seed sown which healers did not mention.

ENCOURAGEMENT OF TRADITIONAL METHODS OF PROMOTING LAND PRODUCTIVITY (QUESTION 1.10[b], 1.11[b] & 1.18[b]

Traditional leaders', traditional healers' and villagers' responses:

Traditional leaders are advised by ward headmen who tell the traditional leader when a citizen's land is no longer productive. He then requests the chief to visit the land and inspect it. When this is being done, the farmer will be advised about what to do. Methods that were suggested include those provided for questions 1.10(a), 1.11(a) and 1.18(a) above. Another way in which traditional leaders encourage improvement in productivity is by coordinating their efforts with those of agricultural officers so that they can give farmers the best possible advice. Traditional leaders call gatherings (*zwivhidzo*) in which chiefs give advice to villagers about farming. Leaders also encourage people to perform traditional rituals.

Agricultural officers carry out their job by creating "demonstration plots" and by providing fertilizers and seeds which farmers can buy in their local offices. They also conduct courses to educate farmers on how to promote productivity. Agricultural officers maintain this relationship by visiting specialised and general farmers (those who deal with orchards, cash crops and stock), and giving them the advice they need. Seemingly this approach proves to be effective for there are agricultural committees and local structures aimed at promoting a link between the agricultural

officer and the farmers.

Traditional leaders' and villagers' response:

A local agricultural committee encourages traditional practices that promote land productivity by

coordinating their efforts with those of the agricultural officer, who may also be called to the

community meetings.

Traditional healers' responses:

Some of the traditional healers indicated that the civic organisation should encourage practices to

improve productivity but others thought that there was no need for encouragement as these

methods are known by the Vhavenda from childhood.

Villagers' responses:

Villagers believed that elderly people, people with kraal manure and whites should take the

responsibility of encouraging everyone else.

Most of the respondents knew about important stakeholders who encouraged farmers and the

manner in which they did so. It is interesting to note that leaders, healers and villagers all

mentioned the same groups of people as being those who encourage traditional methods of

promoting land productivity. In this way, the most important role players were identified. Even

modern institutions were mentioned as agents who promoted land productivity.

SIZE OF LAND BEFORE AND AFTER HOMELAND (BANTUSTAN) POLICIES

(QUESTIONS 1.9, 1.11, & 1.12)

TABLE 2.8 AVAILABILITY OF LAND FOR SETTLEMENT AND CULTIVATION BEFORE THE INTRODUCTION OF THE HOMELAND POLICY

xlviii

Responses	Leaders	Healers	Villagers	Total
Yes	8	16	70	94%
No	-	-	2	2%
Do not know	4	-	-	4%
		TOTA	100%	

Table 2.8 reveals that the majority of the respondents (94%) are in agreement that there had been enough land for settlement and cultivation before the implementation of the homeland policy. They indicated that people could traditionally settle and plough as they wished. The practice of allowing married couples to stay in one big family with their parents resulted in large families that lived in widely spaced households. This situation facilitated a situation in which young men could receive good advice from elderly people. The effects of soil erosion were minimal. According to respondents, this kind of ideal situation prevailed before whites took over the land.

THE NEED FOR MORE LAND (QUESTIONS 1.10, 1.12 & 1.13)

TABLE 2.9 THE NEED FOR AGRICULTURAL LAND

Responses	Leaders	Healers	Villagers	Total
Yes	8	12	53	73%
No	-	4	23	27%
		TOTAL		100%

Table 2.9 shows that the majority of respondents (73%) still say they need more land.

LAND AREA NEEDED FOR AGRICULTURAL PURPOSES (QUESTIONS 1.11, 1.13 & 1.14)

Traditional leaders' responses:

Traditional leaders reported that their villagers need plots of land that range in size from one to five hectares.

Traditional healers' and villagers' responses:

Healers and villagers reported that they needed plots of land that range in size from one to ten hectares. The majority of respondents believed that plots of this size would help them to sustain their families all year around. Some believed they should receive plots of land that would be big enough to permit them to plant both vegetables and maize. The sizes of the plots allocated were typical of the size of plots most commonly used for subsistence farming. The size of plots

allocated was also dictated by the amount of land that any particular person or group of people could successfully cultivate. There would be no point in allocating tracts of land that were too large for people to cultivate with available human and financial resources. Sometimes larger plots of land were needed by individuals who wished to engage in commercial agriculture and job creation.

While traditional healers and villagers agreed on the size of land needed, traditional leaders tended to think that their villagers needed smaller plots of land than the villagers themselves believed they required.

CULTURALLY PROTECTED AREAS (QUESTIONS 1.12, 1.14 & 1.15)

TABLE 2.10 EXISTENCE OF CULTURALLY PROTECTED LAND

Responses	Leaders	Healers	Villagers	Total
Yes	7	15	57	79%
No	1	1	12	14%
Don't know	-	-	7	7%
Total	8	16	76	100%

The three sectors are largely in agreement that specific protected areas exist in their villages. The names of these areas are listed in Appendix 5.

THE REASONS FOR AND METHODS OF PROTECTION OF CULTURAL AREAS (QUESTIONS 1.13, 1.15 & 1.16)

Traditional leaders', traditional healers' and villagers' responses:

Respondents who confirmed the existence of culturally protected areas argued that such areas are protected because they protect springs (*Tshamashango* and *Tshamuluwa*) and are found in water catchments areas. Some, like *Dzivha Fundudzi* and *Tshitaka tsha Thathe* are sacred places where the royal families perform rituals. The most common rituals performed are the veneration of ancestors and the burial of members of the royal family. Except for "*Dzivha Fundudzi*", which is a holy lake, and *Bako la Raluvhimba*, which is a sacred cave, most of these areas are holy forests.

Respondents said that customs used to ensure the protection of sacred areas include the denial of

access by commoners to such areas. It was indicated that people who enter sacred areas without permission either do not come back or else the ghost confront them inside these areas. Even when members of the royal families are allowed to access these areas, they only go there to perform specific rituals at specific times — and it is always only a chosen few who are given permission to do so. In general, specific activities such as collecting firewood and grazing domestic stock are prohibited in these areas. There is common agreement that something disastrous could befall people who do not abide by these taboos and prohibitions.

RESPECT FOR CULTURALLY PROTECTED AREAS (QUESTIONS 1.16 & 1.17)

TABLE 2.11 RESPECT FOR CULTURALLY PROTECTED AREAS

Responses	Leaders	Healers	Villagers	Total
Yes	4	14	44	62%
No	3	2	6	11%
Don't know	1	-	26	27%
Total	8	16	76	100%

Most leaders, healers and villagers (62%) are in general agreement that specially protected areas are still respected. There are good reasons for believing that this is the case. They note, for example, that when members of the royal family visit such areas, they still remove their shoes and their hats – just as they used to do in the past. Ordinary people do not enter these areas, and wood from these places is not used because no one cuts the trees. Even though some people may cut trees in adjacent surrounding areas, sacred areas are still left untouched. Most of these areas, such as the *Vhutanda*, *Thathe and Musanzhe* forests, still remain pristine in the middle of the pine forests and tea plantations.

Those respondents who claimed that these areas are no longer respected argued that only the core areas are still respected. They confirmed that this is the reason why they have appointed guards to safeguard them. Various activities seemed to indicate that people no longer seem to respect ancient Venda traditions. Such activities include the damming up of the *Guvhukuvhu* waterfalls, the netting of fish from *Fundudzi* Lake, and the reduction of some sacred forests by deforestation. It is said that most of the damage is done by young people who do not observe or respect traditional taboos.

4.3 CULTURAL PERCEPTIONS AND THE CONSERVATION OF WATER

TRADITIONAL BELIEFS AND CUSTOMS THAT HELP TO SUSTAIN WATER SOURCES (QUESTION 2.1)

Traditional leaders', traditional healers' and villagers' responses:

Respondents described traditional Venda taboos that are important for water conservation. They referred to the taboo that one should not wash, bath and bring blackened pots or metal containers and use them to collect water from the fountains. Most of these taboos are based on the belief that a failure to abide by these taboos will cause the fountains to dry up. Once the fountain has dried up as a result of breaking a taboo, water will only flow again after the performance of a ritual ("*u rerela*"). The performance of the ritual serves to apologise to the ancestors that the person who brought the wrong containers was ignorant. Another taboo prohibited the use of cement around fountains because such a practice was believed to disturb the

fountain snakes. Tshamuluwa fountain was cited as one that had dried up after cement had been used to dam up its water. It was reported that the Vhavenda used to clean fountains from time to time but that it was taboo for a young woman to do so. Only elderly women (mostly those who had passed menopause) and young girls (who had not yet reached puberty) were permitted to clean fountains. It is strongly believed that if the women who still menstruate clean fountains, their menstrual cycle may be disturbed. They might, for example, begin to menstruate more than once a month. An example was cited of a woman who had menstruated three times in one month.

When she stopped cleaning fountains, her menstrual cycle returned to normal. Breaking this taboo can also cause a fountain to dry up.

People were also restricted from cultivating land and clearing vegetation close to water sources. These areas were referred to as "the hearts of the fountains". It was reported that the clearing vegetation around one fountain, called *Murenzhele*, had led to its drying up and it only came to life once again after the vegetation had regenerated.

Traditional leaders' and villagers' responses:

There is a taboo, which prevents people from drinking from fountains directly with their mouths. People were required to use a container to scoop up the water so that they could drink it. It is believed that anyone who breaks this taboo will not be able to come out of the fountain. As a safety precaution, a drinking calabash is always hung on the piece of wood stuck into the ground next to a fountain. Even when drinking from a calabash, one has to do so on one's knees.

Traditional healers' and villagers' responses:

It is prohibited to construct paths that cross above fountains. It is believed that anyone who crosses above the fountain will encounter a terrifying snake. Should such a person be a woman, she will experience problems with her menstruation. The collection of water from sacred fountains was also taboo to specific individuals at specific times. Thus, for example, a woman with a young baby could not collect water from these fountains during the night. It was believed that such a woman would disturb the fountain snakes – and that this was something to be avoided at all costs. These snakes incidentally were reputed not to bite.

Traditional leaders' responses:

According to the Venda tradition, stones already in fountains may not be moved.

Traditional healers' responses:

It is prohibited to make fires near a fountain or fish from it.

Villagers' responses:

Villagers indicated that activities like cultivating, collecting firewood and grazing cattle close to fountains are not allowed. Depositing pollutants in fountains is also not allowed.

The respondents were in general agreement that any activities that could damage or pollute water should not be permitted near or inside fountains.

ENCOURAGING AND MAINTAINING TRADITIONAL BELIEFS AND CUSTOMS RELATED TO WATER CONSERVATION (QUESTION 2.2)

Traditional leaders' and traditional healers' responses:

Older people explained taboos to children in the hope that they would understand and appreciate their value. Children were also warned that damaging water sources could precipitate their drying up. Adults were warned to observe the taboos that related to water sources.

Traditional leaders' responses:

Traditional leaders maintain these beliefs by punishing those who did not respect water sources. Acts deserving punishment include the killing of water snakes, destroying riparian vegetation and removing the logs that protect fountains. Gatherings are called from time to time so that people may be discouraged from damaging their environment. Women report those they see damaging fountains. Such people are punished.

Traditional healers' responses:

A small number of healers do not regard encouragement to observe taboos as part of their responsibility. They regard such responsibilities as being the task of civic organisations, chiefs and elders. The majority of them however reported that they themselves observe the taboos. Some believe that there is no special way in which these taboos are encouraged – but that they are already contained in the very fabric of Venda culture because people grow up with them. Others however feel that taboos are no longer being observed, as they should be.

Traditional leaders on the whole play a major role in encouraging the maintenance of the beliefs and customs. A minority of traditional healers, who held views, which were different from those of majority, appeared to play only a minor role in encouraging the observance of taboos.

WAYS THAT ARE USED TO ENCOURAGE SUSTENANCE AND MAINTENANCE OF BELIEFS AND TABOOS (QUESTION 2.2)

Villagers' responses

The majority of villagers indicated that taboos and beliefs could only be maintained by educating the youth so that they would learn to respect their traditional beliefs. According to them, the young could be educated by information, by the good example set by adults, and by the carrying out of projects which are designed to protect fountains. Where education and example fail, people should be punished for not observing the taboos. If a prohibited woman cleaned a fountain, she might begin to menstruate continuously. Ignoring taboos caused fountains to dry up – as do the use of metal or plastic containers instead of a calabash. There were few villagers who mentioned that people were born with these beliefs and they felt that they could never be forgotten. On the negative side, some respondents stated that beliefs were no longer encouraged because people are now using piped water.

Most of the villagers mentioned that these taboos are still being observed – especially by elders. However, some more educated respondents indicated that they did not believe in these taboos. It would apper that the majority of villagers are aware of the ways in which customs and taboos may be encouraged but also that belief in these customs is slowly eroding. The issue of the disappearance of customary taboos was reiterated.

<u>CULTURAL PRACTICES CARRIED OUT IN ORDER TO CONSERVE WATER</u> <u>SOURCES</u> (QUESTION 2.3)

Villagers' responses

The villagers identified a number of practices that are specifically designed for the protection of fountains. The construction of stone walls is designed to protect the fountain bank and prevent siltation. Logs, whose main purpose is to prevent domestic stock from drinking water from the fountain, cover the top of the fountain structure. A very small opening, which allows people with small containers to reach for water, is left on the top. These logs also help to prevent leaves from

falling into the fountains. These protective measures have been reinforced by fencing large areas around fountains. These fences, which are constructed from logs and branches, are yet another barrier to keep domestic stock away from fountains. A narrow or zigzagging path is made so that people can reach the water.

If a fountain becomes silted up, an elderly woman or a young girl who has not reached puberty stage will be allowed to desilt it. This practice is encouraged by a group of women who ululate during the entire process. It is taken for granted that young girls have not yet experienced life because, for example, they do not menstruate. Similarly, elderly women that have passed menopause have the same taboo status as young girls.

Sometimes pools are constructed away from the fountain so that people can bath. The performance of rituals was believed to prevent the drying up of fountains.

Villagers also had strong opinions about which trees were best for shading fountains. Planted tree species included *Ficus natalensis* (Common wild fig), *Errythrina lysistemon* (Common coral tree), *Ensetes ventricosa* (Wild banana), *Salix subserrata* (Safsaf willow), *Typha capensis*, *Breonadia microcephala* (Matumi), *Hyphaene natalensis* (Ilala palm) *and Strelitzia caudatum* (Transvaal strelitzia).

The majority of villagers were familiar with traditional practices that prevented the drying up of fountains.

HELP FOR VILLAGERS WHO CONSERVE WATER SOURCES (QUESTION 2.3)

Traditional leaders reported that they help villagers to conserve water by encouraging them to protect fountains. Leaders would call men and women together. The women would carry stones and logs while the men would construct protective barriers. Traditional leaders joined members of their community to fence fountains with branches so that they would not be trampled by domestic stock. They reported that one dry fountain came to life immediately after fencing — even though this happened at a time before the rainy season. Parents were encouraged to educate their children

about these matters and to plant trees next to the fountains.

Villagers were also discouraged from bush clearing and cultivating close to water sources. It was accepted that this would prevent the silting up of fountains and maintain a regular flow of water. Regulations were also made to discourage people from destroying fountains. Punishment is imposed on offenders who break these regulations.

It is clear that leaders assisted villagers in their efforts to ensure the conservation of water sources.

THE ROLE OF TRADITIONAL HEALERS IN PROMOTING THE CONSERVATION OF WATER SOURCES (QUESTIONS 2.3)

The majority of traditional healers stated that they make little contribution in this regard. They justify this attitude by saying that people no longer observe the taboos associated with fountains and that fountains in any case are too far from where they live. They were also of the opinion that it is the chiefs who should take the initiative to conserve water sources. As elders, they comply with the chief's wishes and support him in gatherings. They were aware that traditional healers in the past used to prevent water from drying up by throwing frogs into the water. In those days, traditional healers also helped to clean and protect fountains when chiefs ordered them to do so. Very few traditional healers indicated that they ever planted trees (e.g. tree ferns and bananas) to conserve water or discourage people from polluting fountains.

While it is clear that traditional healers play a different role from that of chiefs, they nevertheless support their chiefs. They also noted that taboos are no longer being observed, and in this regard their response differ from those of villagers and traditional leaders.

AVAILABILITY OF WATER (QUESTION 2.4)

TABLE 2.12 WATER SCARCITY

Responses	Leaders	Healers	Villagers	Total
Yes	7	12	38	57%
No	1	4	37	42%
Do not know	-	-	1	1%

Total	8	16	76	100%

Respondents are not in agreement about whether water has become scarce. There are two main sets of opinions about this matter.

CAUSES OF WATER SCARCITY (QUESTION 2.5)

Those respondents who believed that water had become scarce, provided the following reasons:

Traditional leaders', traditional healers' and villagers' responses:

Respondents blamed timber plantations and indicated that they absorb too much water. They cited Cluster pine (*Pinus claster*) and Eucalyptus (*Eucalyptus* spp) trees as the well-known water-consuming tree species from exotic plantations. Less rain was also considered to be a cause of water scarcity.

Traditional leaders' and traditional healers' responses:

Leaders and healers reported that people no longer follow traditional rituals and taboos relating to water. One ritual associated with rainfall was the "tshikona" dance that was occasionally performed as a way of asking for rain from their ancestors.

Traditional leaders' and villagers' responses:

This group noted that the population has increased and that the dam, which is the source of water for people, supplies a larger population and can no longer cope with the demand for water.

Traditional healers' and villagers' responses:

Some healers and villagers reported that the only water that is available is polluted and therefore unusable.

Villagers' responses:

Villagers identified common causes of water scarcity as the destruction of riparian vegetation and the location of settlements in water catchment areas. These settlements are believed to cause the silting up of rivers and fountains and to reduce the infiltration rate for the recharging of underground water. A further issue associated with the destruction of fountains is the use of cement for damming water.

All of these three sectors are aware that there are different causes of water scarcity. In some instances, respondents gave similar responses from all three sectors. Villagers, as well as leaders and healers, expressed a deep concern about the increasing disregard for taboos and rituals.

INCREASE IN POLLUTION OF WATER FROM NATURAL SOURCES (QUESTION 2.6)

TABLE 2.13. THE INCREASE IN POLLUTION OF NATURAL WATER SOURCES

Responses	Leaders	Healers	Villagers	Total
Yes	7	12	56	75%
No	1	4	17	22%
Don't know	-	-	3	3%
Total	8	16	76	100%

Table 2.13 reflects the general opinion of respondents that pollution in natural water sources is worse now than it was in the past.

REASONS FOR INCREASE IN POLLUTION OF WATER FROM NATURAL SOURCES (QUESTION 2.7)

Traditional leaders', traditional healers' and villagers' responses:

Respondents made it very clear that they believed that increased water pollution was attributable to the fact that water sources are no longer respected. They reported activities such as bathing and washing in water sources that were respected in the past, the use of water catchment areas for toilets, the deposition of solid waste in the water, the removal of logs that protected fountains, the use of dirty containers to collect water and the fact that domestic stock were allowed to destroy fountains. It was further reported that rivers were silted up during rains because the trees that had previously slowed down the speed of storm water, had been chopped down. The people who had removed riparian vegetation for the purpose of cultivating adjacent to the riverbank had caused this state of affairs.

Respondents also report that modern people no longer clean the fountains. They mention that people no longer clean the fountains because they no longer use them (they use water taps instead). Fountains are therefore always polluted.

Most of the activities identified as problems here were identified as taboo in earlier sections. It is obvious that the erosion of customary practices contributes decisively to an increase in pollution.

ASSISTANCE TO VILLAGERS TO PREVENT WATER POLLUTION (QUESTION 2.8)

Traditional leaders mentioned that they assisted villagers by teaching them about pollution. They pointed out to them the dangers inherent in pollution and they advised them to prevent it at all costs. They also advised them to educate their children in this knowledge. The regulations which traditional leaders make are considered to be measures, which have helped villagers to prevent pollution. Such regulations prohibit cultivation of land close to water sources, the deposition of pollutants and washing in rivers. Prohibitions also prevented domestic stock from roaming freely as they will eventually invade and pollute fountains.

The responses make it clear that leaders help villagers to prevent water pollution.

LAUNDRY PRACTICES (QUESTION 2.10)

TABLE 2.14. PLACES WHERE WASHING IS DONE

RESPONSES	LEADERS	HEALERS	VILLAGERS	TOTAL
At the river	3	11	51	67%
At home	-	3	17	20%
At home and river	5	2	8	13%
Total	8	16	76	100%

Table 2.14 makes it clear that traditional healers and villagers have the same perception about washing that is done in rivers. In contrast to this, traditional leaders thought that most of the washing was done both at home and at the river. They pointed out that they encouraged villagers to wash at home in order to protect them from crocodiles and in order to prevent

water pollution. The only time when they believed villagers needed to visit the river was when they had to wash blankets.

BATHING AND SWIMMING (QUESTION 2.12)

TABLE 2.15 PLACES WHERE BATHING IS DONE

Responses	Leaders	Healers	Villagers	Total
At the river	4	9	31	44%
At home	1	5	33	39%
At home and river	3	2	12	17%
Total	8	16	76	100%

Table 2.15 clearly indicates that both the two practices of bathing in the river and of bathing at home are equally supported (44% versus 39% respondents respectively). It was indicated that the Vhavenda prefer to bath in rivers because dirt flows away rather than bath from basins which compel one to reuse dirty water. On the other hand, respondents argued that rivers were far from their homes. Respondents also indicated that bringing tap water closer to their homes had benefited them.

DISTANCE OF PLOUGHING FROM THE RIVER (QUESTION 2.8 & 2.9)

TABLE 2.16 DISTANCE OF PLOUGHING FROM RIVER

Responses	Leaders	Healers	Villagers	Total
1 to 24 m	2	4	9	15%
25m and above	5	7	61	73%
Don't know	1	5	6	12%
Total	8	16	76	100%

Most of the respondents indicated that ploughing was supposed to start 25 m from the edge of the river.

CUTTING OF TREES IN RIVERINE AREA (QUESTIONS 2.9 & 2.10)

TABLE 2.17 DISTANCE OF TREE CUTTING FROM RIVER

Responses	Leaders	Healers	Villagers	Total
One to 24 m	-	1	5	6%
25m and above	6	6	56	68%
Don't know	2	9	15	26%
Total	8	16	76	100%

Most of the respondents emphasised that the cutting of the vegetation was supposed only to begin

at the distance of 25m from the river.

REASONS FOR PLOUGHING WETLANDS (QUESTIONS 2.12, 2.13 & 2.14,)

Traditional leaders', traditional healers' and villagers' responses:

Wetlands are ploughed because they are fertile and because they are always wet both in and out of the rainy season. Water in these areas is derived from dew and from underground sources. In such places, the water-holding capacity of the soil is very high. Sedges in the area also help to conserve water. When ploughing, furrows are made so that water does not suffocate the crops. Normally people plough wetlands before the spring rains, at a time when other places are still dry. They refer to this practice as "mavuwadzimo" (literally meaning, "earlier ploughing"). Sowing crops in wetlands before the first rains is not taboo, as these places are always wet. When it begins to rain, maize in wetlands is already at an advanced stage of growth. An early harvest helps to feed people before the next harvest. The practice of ploughing wetlands ensures regular harvests at different seasons of the year. Such harvests are important and are one way of maintaining a constant food supply in order to sustain the lives of the people. Supplying fresh maize corn (referred to as "tshikoli") is another way of providing food before the main harvest.

Generally all three sectors explain ploughing of wetlands in the same way (it is a measure that ensures the survival of the people).

4.4 CULTURAL PERCEPTIONS AND THE CONSERVATION OF VEGETATION

BELIEFS AND TABOOS THAT HELP IN THE CONSERVATION OF PLANTS (QUESTION 3.1)

Traditional leaders' and villagers' responses:

The responses received from leaders and villagers collectively confirmed that there are important traditional beliefs and customs that affect the conservation of trees. They agree that it is a cultural

belief that prevents some tree species from being used as firewood or being brought home for this purpose. Among such species are *Bersama tysoniana* (Common bersama). If this tree is brought home, family members will experience conflict (its Venda name is *Sando*, which means "hatred"). *Celtis africana* (White stinkwood), *Trema orientalis* (Pigeonwood) and *Artabotrys brachypetalus* (Purple hook-berry) cannot be used as firewood because they are used for a ritual referred to as "u vhea mudi" (which means "to protect the home"). *Mundulea sericea* (Cork bush) and *Pouzolzia hypoleuca* (Soap nettle) may not be used as firewood in houses where there are cattle kraals. Some species, like *Heteromorpha arborescens* (Parsley tree), may be used to make fire only outside and White stinkwood may only be used as firewood in a chief's kraal. *Rauvolfia caffra* (Quinine tree) is said to cause too much smoke. In addition, they reported that trees that are useful might not be cut indiscriminately. Also, those known to have poor quality timber should not be cut.

Some like *Synadenium cupulare* (Dead-man's tree), which is known to be poisonous, may not be touched. Traditional leaders and villagers further agreed that the roots of some medicinal plants (e.g *Brackenridgea zanguebarica* [Brackenridgea] and *Millettia stuhlmannii* [Panga Panga]) might not be collected before the performance of a specific ritual.

Traditional leaders' responses:

In addition traditional leaders reported that the burning of the vegetation was not allowed.

It seems as if all respondents share the same views about beliefs and taboos that are important for the conservation of trees. (A list of scientific, English, Afrikaans and Tshivenda names of tree species discussed in this report is contained in Appendix 7.)

ENCOURAGEMENT BY LEADERS TO MAINTAIN CUSTOMARY BELIEFS AND TABOOS (QUESTION 3.2)

Leaders reported that they encouraged people to maintain beliefs and taboos by calling gatherings. In the gatherings villagers are told about trees and taboos. Workshops may also be conducted for them. It is expected that every family should teach children the taboos associated with trees (for example, those that should not be collected). In villages under specific leaders, adults inspect

firewood so that when wood associated with taboos is found, they either throw the wood away – or else they instruct the young girls to take it back. These girls are warned not to make the same mistake again. Some leaders maintained that beliefs and taboos did not need to be continuously encouraged because everybody was aware of them.

These responses show that traditional leaders play an important role in encouraging their subjects to maintain those customary beliefs and taboos which are important in the conservation of trees.

<u>CUTTING OF TREES</u> (QUESTIONS 3.2 & 3.5)

Traditional leaders' and villagers' responses:

In their responses, traditional leaders and villagers indicated that edible trees might not be cut or felled because they provide food for humans, birds, monkeys and baboons. In historical times, when the territory was afflicted by famine, fruit from trees such as *Parinari curatellifolia* (Mobola plum) and *Boscia albitrunca* (Shepherd's tree) were harvested to save people from starvation. Others are important for water conservation (e.g. *Alsophila dregei* [Common tree fern] and *Alsophila capensis* [Forest tree fern] for woodcarving (e.g. *Pterocarpus angolensis* [Kiaat] and *Burkea Africana* [Red syringa]), and for medicine (e.g. *M. stuhlmanii*).

Villagers' responses:

Villagers named groups of trees that might not be cut. Such were trees that acted as wind breaks or were believed to attract rain (*Ekebergia capensis* [Cape ash], *Ficus natalesis* [Common wild fig], *Ficus capensis* [Cape fig] and Quinine tree), tree species that were known to grow very large (Mobola plum, *Sclerocarya birrea* [Marula], *Salix subserrata* [Safsaf willow] and *Syzygium cordatum* [Water berry]), shade trees (Cape ash, Common wild fig, *Combretum molle* [Velvet bushwillow] and Quinine tree), trees that maintained the status of the territory (*Adansonia digitata* [Baobab], *Anthocleista grandiflora* [Forest fever tree] and Common wild fig), trees of historical importance (e.g. *muhuyu wa thomba* – referring to a fig tree under which people were vaccinated for small pox in the conventional Western way, poisonous trees (e.g. *Synadenium cupulare* [Dead-man's tree]), and trees from sacred areas.

The responses of traditional leaders and villagers indicated that there were many trees that Venda culture would not allow to be cut or felled. Specific reasons were given for these beliefs. Although some of their responses appeared to be similar, respondents nevertheless supported different points of view.

THE SEASON DURING WHICH THE MARULA FRUIT (Sclerocarya birrea) MAY BE HARVESTED (QUESTION 3.3)

Traditional leaders' and villagers' responses:

All traditional leaders and villagers reported that the Marula fruit is harvested during autumn (February to April). They indicated that during this time the fruit falls from trees — an indication that they are ripe. This harvesting period varies however from one geographical area to another. For example, in the hot areas the harvest extends up to late in the season. When people see that the fruits are ripe, they report this fact to their traditional leader and he then declares the season open for harvesting. After this, the "vhakoma" (ward headman) calls a gathering in which he informs people of the open season.

In the past it was customary to perform a ritual ("thevhula" and "u phasa", which refers to the process of conversing with the ancestors) before brewing marula beer (called "mukumbi"). When the ritual is over, citizens may begin to brew their own beer. Once they had done this, they would call the leader to come and taste their beer or else they would send the sample to his kraal (the act of testing the beer is referred to as "u luma"). When the harvest is over and no more fruits remain on the trees, the last brew would be sent to the leader and he would be informed about the situation. This last "mukumbi" that is sent to the leader was called "musumo" (which means a token that is used to inform a leader)

During brewing, women removed the skin of the fruit, which they then dumped in one place. Respondents also reported that some people shake the trees so that the fruits fall down. These are then collected and stored for some time until they are ripe.

Fruits are harvested in the conventional way only once they have fallen to the ground, which is

usually in autumn.

UNTIMELY HARVESTING OF MARULA FRUIT (QUESTION 3.4)

Traditional leaders' and villagers' responses

Respondents reported that if anyone is caught harvesting marula fruit before the officially sanctioned time, he or she might be fined. It is also believed that snakes might visit him or her at his/her homestead if he/she transgresses this taboo. A traditional healer would have to come and perform a ritual of "*u dzivhela shango*" in order to get rid of the snakes. This is a practice that is found in territories where specific taboos protect the marula trees.

Traditional leaders' responses:

In their responses, traditional leaders reported that offenders would appear before a tribal court. The usual procedure (as mentioned above) is that villagers will tell the traditional leader when the fruits are ripe so that he can declare "open season" and so that they can brew their marula beer. If the fruit of some of the trees ripens early, it will be harvested so that it does not rot and thus be wasted.

Villagers' responses:

According to villagers, people who drink marula beer that has been manufactured from fruits which have been untimely harvested might be affected by a fever referred to as "dali", one of the symptoms of which is shivering). When beer is not pleasant to the taste, it is referred to as dotshidotshi (meaning beer that is not well brewed). It was also believed that the baboon (which was known as tshiendahongolo, i.e. the one who roams alone) might come and raid maize crops of a person who has not brewed the beer properly. In order to stop this baboon from destroying the maize, a ritual has to be performed as a way of apologising to the ancestors on behalf of the offender. After the ritual, the offender is strongly warned to observe the taboo in the future. Another belief was that the leopard might come and kill such an offender or destroy his domestic stock.

Both traditional leaders and villagers believe that something unfortunate and possibly even fatal will happen to those who do not observe the correct timing of harvesting marula fruits.

PLANTS USED ONLY BY TRADITIONAL HEALERS (QUESTION 3.1)

Traditional healers confirmed that there are specific plants that are used only by them. Such plants include *Brackenridgea zanguebarica* and *Millettia stuhlmannii*.

AVAILABILITY OF FIREWOOD (QUESTIONS 3.5 & 3.6)

TABLE 2.18: SCARCITY OF FIREWOOD

Responses	Leaders	Villagers	Total
Yes	7	68	90%
No	1	8	10%
Total	8	76	100%

Table 2.18 shows that the majority of traditional leaders and villagers agree that firewood has become scarce.

REASONS FOR THE SCARCITY OF FIREWOOD (QUESTIONS 3.6 & 3.7)

Traditional leaders' and villagers' responses:

Respondents mentioned a number of issues that they believed contributed to the scarcity of firewood. They attribute the disappearance of indigenous vegetation to the presence of large-scale agricultural projects such as timber plantations. Together with human settlement, such enterprises have now extended right up to mountaintops and this has caused a scarcity of firewood. They also identified deforestation in the form of tree cutting and veld fires as a contributory factor to the scarcity of firewood.

Traditional leaders and villagers both mentioned issues that seriously impact on the natural environment and that cause a scarcity of firewood.

AVAILABILITY OF MEDICINAL PLANTS (QUESTION 3.6)

Nine traditional healers agreed that medicinal plants have become scarce while seven such respondents disagreed with this proposition.

REASONS FOR THE SCARCITY OF MEDICINAL PLANTS (QUESTION 3.7)

Those traditional healers who said that medicinal plants were scarce indicated that this was because traditional healers from outside Venda killed medicinal plants when they dug their roots out. Some of the people who kill these trees use them as a source of income by selling their products. In other areas, various "developments" such as orchards, agricultural fields and human settlements have replaced the kind of indigenous vegetation from which medicinal plants are collected. Veld fires are also cited as being responsible for the disappearance of these plants.

All these factors seriously threaten the very survival of certain medicinal plants and they are all the product of the kind of "modernisation" that does not take traditional beliefs and practises into account.

TRADITIONAL VEGETABLES PROPAGATED BY THE VHAVENDA (QUESTIONS 3.7 & 3.8)

Traditional leaders' and villagers' responses:

Respondents mentioned a number of vegetables planted by the Vhavenda. These include *Urera tenax* (Tree nettle) and *Laportea longipedanculata*. Villagers have variant names for these vegetables. Some vegetables, which are traditionally propagated by the Vhavenda, are propagated by both traditional leaders and villagers.

TREES WHICH ARE PLANTED IN GRAVE YARDS (QUESTIONS 3.8 & 3.9)

These questions elicited the following responses:

Traditional leaders' and villagers' responses:

Leaders and villagers stated that trees like *Erythrina lysistemon* (Common coral tree), *Ziziphus mucronata* (Buffalo thorn), *Synadenium cupilare* (Dead-man's tree), *Euphorbia tirucalli* (Rubber hedge euphorbia). *Ficus natalensis* (Common wild fig) and *Pinus pinaster* (Cluster pine) are planted in graveyards. They indicated that in the past they never planted pine trees but that they planted them now because they grow fast.

Traditional leaders' responses:

They reported that *Opuntia ficus-indica* (Prickly pear) and *Melia azedarach* (Syringa) were planted in graveyards.

Villagers' responses:

Villagers reported that they planted *Jatropha curcus* (Physic nut), *Adenium gumifera* and *Diospyros mespiliformis* (Jackal berry) in graveyards. They also reported that trees like *Erythrina lysistemon* (Common coral tree) are mostly planted in graves that are near their homes, and that such trees are planted to provide shade for the graves and for those who visit them.

It is clear that both leaders and healers were familiar with the culture of tree planting in and around graves, even though different groups named different species.

MAINTENANCE OF THE PRACTICE OF PLANTING TREES NEAR GRAVES (QUESTIONS 3.9 & 3.10)

TABLE 2.19: MAINTENANCE OF THE PRACTICE OF PLANTING TREES NEAR GRAVES

Responses	Leaders	Villagers	Total
Yes	5	16	25%
No	-	56	67%
Do not know	3	4	8%
Total	8	76	100%

Traditional leaders and villagers are not in agreement about this question. It is only leaders who think that trees are still planted around graves. Villagers reported that the planting of trees around graves refer to people who are tending tribal graves – and not graveyards that are used by the general public. Tree planting has been replaced by the use of flowers and tombstones for those

graves that are situated in public graveyards. Another place where tree planting still takes place is around the graves of members of the royal family.

It is fairly clear from the responses that the culture of tree planting around graves is fast disappearing.

MEDICINAL TREES THAT ARE PROPAGATED (QUESTION 3.3)

There is a variety of medicinal plants that are propagated by traditional healers. They mentioned that *Antidesma venosum* (Tassel berry) *and Tecomaria capensis* (Cape honey suckle) were among the medicinal plants that they propagated.

TRADITIONAL RITUALS WHICH ARE PERFORMED BEFORE THE COLLECTION OF MEDICINE (QUESTION 3.2)

Rituals that relate to specific trees such as *B. zanguebarica* and *M. stuhlmannii* require that a traditional healer be naked when he or she collects material from them. It is believed that anyone, who tries to collect *M. stuhlmannii* when he is not naked, will become insane or mentally disturbed. Even when traditional taboos are being observed, one has to slaughter a lamb or chicken and sprinkle the blood on the roots before collecting material from Brackenridgea. After parts have been collected, the meat of the slaughtered animal is roasted and eaten. The bones of the slaughtered animal will later be thrown into the hole, which was excavated and covered with soil.

General rituals include pouring snuff on the ground as a way of communicating with the ancestors. When the traditional healer does this, he or she has to mention that he/she has come to collect roots for specific uses. If no snuff is available, traditional healers used soil to dust the leaves before they collected roots. Another ritual involves crowning a tree with a crown made from grass that has been uprooted in the vicinity. This crown is then hung on top of a tree from which parts are to be collected. If the branches are too high, the crown is placed next to the stem and a stone placed on top of it to stabilise it. Other rituals involve smearing roots with the droppings of *Actophilornis africanus* (African jacana), throwing divination bones and staying

away from one's partner for seven days. Most of these rituals focused on asking the ancestors for permission to gather parts from the tree. In such situations, traditional healers do not wait for an answer. They take it for granted that the mere carrying out of the ritual confers the automatic approval of the ancestors. There is however a strong belief that if these rituals are not performed, the medicine will not work because the permission of the ancestors to use the tree has not been sought.

Traditional healers also mentioned various rituals that are considered to play an important part in healing practices.

THE SURVIVAL OF TREE SPECIES WHICH ARE USED FOR MEDICINAL PURPOSES (QUESTION 3.4)

Traditional healers mentioned that they do not collect all the roots of any particular tree. They do this so that the tree might regenerate and thus be conserved. Thus, for example, they cut a few thin roots from opposite sides of one tree. During this process, they do not cut the stem itself, but dig away from the stem and cut roots that they find there. They completely understand that this is a process that allows the tree to regenerate itself. Another method that traditional healers use is to cut only parts of the bark of any tree. They do this without ring-barking or cutting the xylem. It is the traditional healers' custom that part of the bark they need is cut from the east side of the tree, while another part of the bark they need is cut from the west side of the tree. This practice helps the tree to recover. Less sensitive approaches to gathering parts of the tree might kill the tree altogether. Traditional healers believe that it is important not to kill the tree because they want to be able to come at some time in the future again and gather parts from the tree.

SECRET NAMES FOR MEDICINAL PLANTS (QUESTION 3.3)

Some of the healers stated that the use of secret names is their method of protecting trees so that people will not become jealous and destroy them. Others mentioned that this custom helps to keep the identity of medicinal plants secret from people who are not healers, but who might destroy these plants for commercial gain. While this kind of secrecy is part of the traditional healer's discipline, secrecy also serves to prevent patients and other people from knowing the prescriptions

for different treatments. Should these become widely known, they might be misused and jeopardize the lives of patients. But even if people knew about the medicinal properties of plants, they would not be able to administer them effectively because only traditional healers know how to mix them and administer them for specific ailments and varying degrees of illness.

The rituals that relate to the collection of medicinal plants, the strategies to ensure plant survival and the use of special plant names are part of the professional code of conduct of traditional healers.

A comprehensive list of plant species that are important to the Venda culture and that are referred to in this document may be found in Appendix 7.

4.5 CULTURAL PERCEPTIONS AND THE CONSERVATION OF ANIMALS

ANIMALS PROTECTED BY VENDA CULTURE (QUESTIONS 4.1, 4.2 & 4.4)

Traditional leaders', healers' and villagers' responses:

Respondents stated Venda culture prohibited the killing of a number of animals. Thus, for example, a Cape pangolin (*Manis temmincki*) may never be killed. If it is, the territory might be struck by drought. The blood of a pangolin should never touch the ground. In 1994, the villagers of Tahaulu killed a pangolin and in the following year (1995), the territory was devastated by gale force winds.

While there are traditional healers who may licitly kill a pangolin, they must first perform a specific ritual. When they find the pangolin (it is believed that it falls from above), it should be carried to the leaders' kraal, and he will call a traditional healer. If it is to be killed, a sheep must first be slaughtered so that the pangolin can be slaughtered on top of the sheepskin. This ensures that its blood will not touch the ground. After slaughtering, its meat is mixed with mutton for cooking and eating. A pangolin may only be killed by a traditional healer who wants to use it for medicinal purposes.

Respondents also reported that a Nile crocodile (*Crocodylus niloticus*) might not be killed because people might then be afflicted by influenza. People also believe that the brain of the Nile crocodile is poisonous, and that this poison may be used to poison others. They also reported that other animals like an African elephant (*Loxodonta africana*) and leopard (*Panthera pardus*) might not be killed because they are totems in other Venda clans.

It was generally agreed by respondents that these animals are not killed because they may become extinct (this would prevent future generations from being able to use them). Most of these animals were traditionally prohibited from being killed because people believed they maintained the status of their territory.

Traditional leaders' and traditional healers' responses:

A python (*Python sebae*) may not be killed because it might cause influenza. When someone comes across a python, its presence must be reported to the chief's kraal. The chief is the only one who may give permission for a python to be killed. When a python is killed, oil is extracted from its body by roasting and this oil is used for treating wounds. Respondents also believe that a hippo (*Hippopotamus amphibius*) may not be killed because it has poisonous bones which people might use to kill each other.

Traditional leaders' responses:

The responses of leaders indicated that owls and waterbucks might not be killed. The reasons are that waterbucks reproduce themselves very slowly and owls help in the reduction of mice (which are pests).

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Traditional healers' responses:

Some traditional healers also stated that zebras and hippos should not be killed.

Villagers' responses:

There are a number of animals which villagers believe should not be killed. They adduce several reasons for these taboos. They mention that bushbuck (*Tragelaphus scriptus*), steenbok (*Raphicerus capensis*) and Grey duiker (*Sylvicapra grimmia*) are not killed so that future generations might see them. There is also a taboo against killing the purple crested loerie (*Tauraco porphyreolophus*) because drought might follow. Because baboons are regarded as gods by the people of Lwamondo, they might not be killed. The three sectors of respondents are therefore in agreement that there are specific animal species, which may not be killed, and they all provide reasons why they should not be killed.

PROTECTION OF ANIMALS BY TRADITIONAL LEADERS (QUESTION 4.3)

All leaders agreed that they encouraged their villagers to maintain the culture of not killing animals injudiciously. They argued that they encourage this tradition by promulgating regulations and punishing those who transgress them. They also educate their people by calling gatherings in which people are told about tribal customs. They said that although people are aware of these customs, they no longer follow them. They therefore felt that they should encourage the observance of these ancestral customs once again for the benefit of children and future generations.

ILLEGAL HUNTING (QUESTION 4.4)

The leaders' responses show that they were active in preventing illegal hunting. Leaders reported that anyone who hunted illegally should be arrested or summonsed and fined in a tribal court. This is because leaders do not permit illegal hunting.

HUNTING BY TRADITIONAL LEADERS (QUESTIONS 4.5 & 4.6)

Seven traditional leaders reported that they were not allowed to hunt while only one reported that he was allowed to do so. One leader mentioned that he might hunt the Greater kudu (*Tragelaphus strepisiceros*), Grey duiker and steenbok and mentioned that he was allowed to hunt twice during the year.

HUNTING SEASONS (QUESTIONS 4.7 & 4.8)

Fifty percent of leaders said that there were no open and closed seasons for hunting. Three, on the other hand disagreed and indicated that there were indeed open and closed seasons for hunting. In their responses, leaders stated that hunting during winter was allowed because the animals only become pregnant in summer. They also said hunting of bushpigs in summer helped to frighten them away from arable lands.

ANIMALS USED BY TRADITIONAL HEALERS FOR MEDICINE (QUESTIONS 4.1 & 4.2)

According to traditional healers, animals such as elephants and vultures might be used for medicine. The majority of traditional leaders (88%) reported that they did not hunt for their medicines but rather bought what they needed from farmers and from herbal chemists. A few reported that they did in fact kill medicinal animals if they came across them on their way and used catapults for killing birds.

THE NUMBER OF MEDICINAL ANIMALS KILLED BY TRADITIONAL HEALERS PER MONTH (QUESTION 4.3)

Healers mentioned that one horn or a piece of skin from animals or birds such as eland, vulture, hippo or eagle would be sufficient for their needs. Normally a small portion of an animal hide may be used until the healer approaches his old age (i.e. that it is enough for whole lifetime). This is because medicine is measured by the teaspoonful and the same prescriptions are not used daily. These responses indicate that while there are many animals that are used for medicine, traditional

healers themselves kill very few in a year, and that they usually purchase what they need, and that what they buy can often last for a very long time. Kills are not made on a monthly basis. For example animals such as the hedgehog (*Erinaceus frontalis*) are only hunted once a year. A hand-size portion hide will last for a long time because they mix small amounts of it with other medicines.

<u>KILLING OF ANIMALS WHICH FOR CULTURAL REASONS CANNOT BE KILLED</u> BY VILLAGERS (QUESTION 4.5)

It was revealed that because of their status and specialised knowledge, traditional healers might kill animals that other people may not kill. Nonetheless not every traditional healer may kill a pangolin. Fifty percent of traditional healers agreed that they might kill animals, which could not be killed by villagers while 50% said that they could not. Those who responded positively argued that although other villagers are not allowed to kill a pangolin, for example, healers might kill it if they first perform the necessary ritual.

RESPONSES OF VILLAGERS TO QUESTIONS ABOUT EDIBLE ANIMALS (QUESTIONS 4.3 & .4.4)

Villagers reported that edible animals include various insects, birds, mammals, fish and reptiles (although taboos exist against killing some species, as was discussed above). This shows that the Vhavenda eat a variety of animal species. The researcher has compiled a comprehensive list of these species (see Appendix 8).

Villagers stated that mammals were hunted with bows and arrows, traps, spears, snares, guns, axes and dogs. Birds are hunted with the use of birdlime, catapults, chillies, branches and traps. A trap is meant to capture social birds that are graminivorous. The trap comprises a basket that is suspended in an open area. Bait, in the form of grain, is scattered below the basket. A strong string is attached to the basket and tied to a strong object so that the basket remains suspended above the grain. The hunter then waits for the birds to start eating the bait. When a whole flock of birds have gathered, the string is released and the basket falls over all the birds, which are then collected.

Fish lures and nets are used to capture fish while most insects (e.g. beetles, flying termites and crickets) are collected by hand in their habitats. Other methods of collecting insects involve the use of sedges and clay pots. Sedges were used to draw soldier termites out of the termite mound. To start with, part of the termite hill is dug away so as to expose their underground pathways an sedges are inserted from time to time in these pathways. Soldier termites that are on the path will always bite the sedges. While attached in this way, they are withdrawn and transferred to a container. While the sedge is inside, a two-phrase song is repeated, namely "*Mutokote u vhuye wo dala, wa sa vhuya wo dala u vhuye u denga*". This means that the sedge must be bitten along its whole length – or least to half its length. Worker termites are not favoured because of their small size, but they are not usually the ones that bite the sedges. When a pathway no longer produces enough termites, another one is dug. Similarly a termite mound which does not provide a sufficient harvest of termites is abandoned.

Clay pots are used to collect flying termites. This method of collection is carried out after the first spring rains. Firstly a survey is undertaken in order to identify "active" mounds. The presence of termites becomes noticeable because they start to make outlets, which are called "mato" (which literally means "eyes"). This process (which is referred to as u "tsivha") enables a large number of flying termites to be collected. It involves digging into a termite mound and burying a clay pot into the hole. The darkness, which the termites prefer, is created by using branches for covering the pot. Termites then fall into the pot as they search for a way out. To ensure that the collection is successful, all outlets are closed. This procedure forces the termites to find their way into the pot.

Collecting is done immediately before sunset (as the branches have created enough darkness), but it may also be performed immediately after sunset, and may be carried out several times. The number of collections depends on the quantity of termites that fall into the pot and the number of days during which the termites have been active. Termites are normally more active when temperatures are high immediately after rains.

Some people do not eat termites harvested in this fashion if a specific ritual is not first performed (the ritual is referred to as u "phasa" and involves a conversation with the ancestors, which is

carried out by elders). During this ritual, children are given flying termites to eat before the wings are removed.

There are just as many traditional hunting methods as there are different species of animals that may be hunted. For each kind of animal, a specific traditional method is used.

ANIMALS WHICH MAY NOT BE EATEN ACCORDING TO THE VENDA CULTURE (QUESTION 4.5 & 4.6)

Most of the villagers knew which animals could not be eaten. Among the most common ones mentioned were the baboon (*Pupio ursinus*) and the vervet monkey (*Cercopithecus aethiops*). A comprehensive list has been provided in Appendix 8.

There are different reasons why the Vhavenda do not eat some animal species. Some of these reasons are based on **morphology** (a baboon [*Papio ursinus*] resembles a human being, a Black backed jackal (*Canis mesomelas*) looks like a dog, a Burchell's zebra (*Equus burchelli*) resembles a donkey, a leopard [*Panthera pardus*] resembles a cat, primates do not have cloven hoofs); and **behaviour** (animals of the cat family like lions (*Panthera leo*) and leopards are predators and therefore kill and eat humans). Because of this, they may not be eaten. Snakes can kill human beings, owls feed on mice (that the Vhavenda do not eat.). Other reasons involve culture-specific beliefs (owls are used by witches and an elephant is a totem animal). If a person eats the Cape vulture (*Gyps coprotheres*), his or her head may become necrotic.

REASONS WHY ANIMAL SPECIES ARE RARE (QUESTION 4.9)

The traditional healers' indicate that interactions between various factors have contributed to the disappearance of animals that are used by witches. Among others some animals are believed to be rare because they are enclosed in farms, because witches have hidden them, because their habitat is destroyed and because some people kill them.

THE NUMBER OF DOMESTIC STOCK PER HERD (QUESTIONS 4.7 & 4.9)

Traditional leaders' and villagers' responses:

Eighty seven percent of leaders and 90% of villagers reported that there was no limit to the number of animals of any one species that any one person might keep in a herd. Other respondents did not know. Therefore there is strong agreement between traditional leaders and villagers that the Vhavenda do not have limitations on the number of animals that any one person might keep in a herd.

REASONS FOR KEEPING CATTLE AND GOATS (QUESTIONS 4.8 & 4.10)

Traditional leaders' and villagers' responses:

Cattle and goats were kept for the purpose of paying the bride price (*lobola*), for their supply of milk, for ritual purposes such as conversing with the ancestors, to indicate the status of the owner, for their leather (that can be used for making clothes, mats, blankets and for carrying babies). A further reason for keeping these animals is for their meat. Cattle and goats are slaughtered during ceremonies such as *vhusha* (a celebration marking the closure of the initiation school for females), *davha* (which refers to group work), *murula* (the first visit made by the in-laws to the husband), the occasion on which the traditional leader is crowned, *bepha* (during which traditional dance called *tshikona* is performed), during marriages, and when a traditional leader has visited another leader. Cattle are also kept for ploughing.

Villagers' responses:

Cattle are also kept for selling when there is no food so that people can buy maize. In addition they kept them for their dung, for funerals, for transportation (for riding on, and for drawing a sledge), and for the payment of debt.

Both leaders and villagers agree that there are various reasons why the Vhavenda keep domestic stock, and that none of these reasons warrant the regular slaughtering of such animals. One might expect that any kind of domestic stock that multiplies too rapidly would contribute to the overgrazing of a specific area.

AVAILABILITY OF GRAZING FOR DOMESTIC STOCK (QUESTIONS 4.9 & 4.11)

TABLE 2.20: SCARCITY OF GRAZING FOR DOMESTIC ANIMALS

Responses	Leaders	Villagers	Total
Yes	1	11	14%
No	7	64	85%
Don't know		1	1%
Total	8	76	100%

Both the traditional leaders and villagers agreed that grazing for domestic stock is no longer available in sufficient quantities to feed their livestock well.

REASONS FOR THE SCARCITY OF GRAZING (QUESTIONS 4.10 & 4.12)

Traditional leaders' and villagers' responses:

The responses of leaders and villagers indicated that arable lands, timber plantations and settlements have taken over areas that were formerly used for grazing. They argued that these features have decimated large areas and cause the degradation or extinction of indigenous vegetation. They also believe that drought has exacerbated this state of affairs.

Villagers' responses:

Some villagers reported that in addition soil erosion has contributed to a lack of grazing.

Except for the drought factor, the responses of all the leaders and villagers attribute the degradation of environment to the damaging effects of modern "development".

ANIMALS AS SYMBOLS OF GOOD OR BAD OMENS (QUESTIONS 4.11 & 4.13)

Traditional leaders' and villagers' responses:

Leaders and villagers reported that the call of many birds presage imminent death. Such death-indicating birds include owls, the black-headed oriole (*Oreolus larvatus*), the red-chested cuckoo (*Cuculus solitarius*), the Burhell's coucal (*Centropus superciliosus*) and nightjars. They therefore state that if one hears an owl hooting during the night, one will be likely to hear about the death of a relative soon afterwards. Owls are generally associated with witchcraft because they are said to

be used by witches. If the cry of a red-chested cuckoo is heard, a funeral is imminent. Its call (which is interpreted in Afrikaans as "Piet my vrou"), is interpreted in Tshivenda as "hu na muthu o faho"— which literally means that someone has passed away. Other animals of bad omen that symbolise death include a spotted hyena (Crocuta crocuta) that is found in or near human habitats, a monkey that enters a human settlement, a baboon that does not cry out when it sees human beings, moving snakes (e.g. pythons) and animals that cross roads in front of people. Animals whose actions are symbols of good omens include the Puff-back shrike (Dryoscopus cubla), helmeted shrikes, the Tree agama (Agama atricolus) and the Boubou (Laniarius ferrugineus). These may symbolise visitors, rain, and trekking.

Traditional leaders and villagers share a common understanding that there are a large number of animals that are culturally significant for the transmission of good and bad omens. Most observed omens tend to portent bad news.

TREATMENT OF ANIMALS OF GOOD OR BAD OMENS (QUESTIONS 4.12, 4.14 & 4.15)

Traditional leaders' responses:

The majority of traditional leaders (87%) reported that ominous animals are hated – although one denied this.

Villagers' responses:

Seventy six percent of villagers reported that they hate animals of bad omen and only 34% reported that they like them. Those who indicated that they hate animals of bad omen stated that when an owl cries, they may bang on the door, throw a glowing firebrand, cough, throw a stone on top of the roof, shoot at it with catapult or simply leave it to go on its way. Some believe that a person who throws a stone at an owl may have his or her hand infected or severed. Most of the animals that are hated are also feared.

Of the villagers who reported that they liked these animals, most reported liking animals of good omen. To a certain extent, some also reported liking some animals of bad omen. In such cases, they argued that ominous animals do not actually *cause* the evil but only *report* what is about to happen. Generally there is a bad relationship between animals of bad omen and the Vhavenda. Despite this, most (75%) of the traditional leaders reported that they do not encourage hatred. Very few (25%) said they encouraged hatred towards ominous animals. Although traditional leaders do not encourage it, the *meaning* of the behaviour attached to each animal group largely determines its relationship with people. It is therefore logical that animals of bad omen are the most hated.

USES OF ANIMALS BY WITCHES (QUESTION 4.6, 4.7 & 4.8)

Traditional healers mentioned that witches ride the spotted hyena (*Crocuta crocuta*) during the night and that they use them for opening the doors of other people's huts. They also indicated that witches use the polecat to infect people with mental diseases, and the crocodile for obtaining poison. These responses indicate that witches are believed to use some animals for carrying out cultural rituals, which are in most cases intended to harm others. Some healers (38%) reported that the animals used by witches have become rare, while the others disagreed with this opinion.

All animal species discussed in this document are listed in Appendix 8.

4.6 CULTURAL PERCEPTIONS AND HUMAN POPULATION DYNAMICS

THE ACCEPTABLE NUMBER OF CHILDREN IN A VENDA FAMILY (QUESTION 5.1)

Traditional leaders' responses:

All traditional leaders mentioned that an acceptable figure for the number of children born to one family could be somewhere between three and ten. They also reported that in the past there were no problems in supporting children because people were rich. One man might in those days marry up to seven wives.

Traditional healers' and villagers' responses:

Most of the villagers (68%) reported that there was no limit to the number of children a couple might have because people *wanted* to have more children. In the past, a man might marry more than one wife. It was therefore difficult to determine the exact number of children. Also, a woman might bear children until the onset of menopause. When there is enough rain, there is an adequate supply of indigenous fruits for people to eat. People also normally do not need to buy food. They grow it themselves and kept domestic stock for a regular supply of food. Crop production in good times is high and domestic animals do not die of diseases.

Traditional healers and villagers agree that there is no imposed limit on the number of children that a couple might bear. With the responses of leaders pointing at the maximum number of ten, generally the responses reveal that a large number of children was acceptable in the Venda families.

OVERPOPULATION AS A PROBLEM IN VENDA VILLAGES (QUESTION 5.9)

TABLE 2.21: PERCEPTION OF OVERPOPULATION AS A PROBLEM

Responses	Leaders	Healers	Villagers	Total
Yes	-	1	21	22%
No	8	13	51	72%
Do not know	-	2	4	6%
Total	8	16	76	100%

The majority of respondents (72%) from the three sectors agree that overpopulation is not a problem among the Vhavenda. They argue that people should bear children so that people will be able to help one another during times of trouble. They strate that the territory within which they live accommodates them adequately. There is enough space for settlement and for ploughing and food is plenty. People are nowadays considered to be too little in number. This contradicts the earlier opinions of the majority (73%) of respondents who identified overpopulation as an environmental threat. This earlier understanding is supported by a few respondents to this question (22%) who argue that there are no areas for new settlement or arable land. This minority

also believes that there is a shortage of water and other natural resources and that employment opportunities are scarce because of overpopulation.

WEANING OF CHILDREN IN THE CONTEXT OF TO VENDA CULTURE (QUESTION 5.2)

Traditional leaders' and traditional healers' responses:

All traditional leaders and traditional healers mentioned the ages between three and six years as the period for weaning babies. They justified these ages by saying that the Venda family should be prepared to have another baby when the first one is able to go and fetch water from the river (girl) or to look after stock (boy). Nowadays the age that is significant is the age when a child goes to school. Spacing tends to be natural as babies are allowed to stop breastfeeding on their own. The spacing of children varies however from house to house: some people believe in a shorter period than do others.

Villagers' responses:

Villagers reported that babies could be weaned between the ages of one and seven years. It is evident that the people are in agreement that there should be a reasonably long time period between the birth of two children.

TRADITIONAL METHODS OF FAMILY PLANNING (QUESTION 5.3, 5.4 & 5.7)

Traditional leaders', traditional healers' and villagers' responses:

Respondents (86%) reported that it is part of Venda culture that once a woman has borne a baby, she is not allowed to stay in her husband's hut. During this time, a couple has to live apart, and the wife is restricted in the kind of services that she can render to her husband. Men traditionally married more than one wife. It is said that traditionally, in a family where the husband had more than one wife, it was acceptable for the women to stay in their husband's hut in rotation. The interval between the turns that each wife takes for cohabitation gives the children an opportunity to grow up.

Foreplay and *coitus interruptus* used to be taught at the Venda initiation schools ("vhusha" and lxxxiv

"zwitambo"). Knowledge of these practices allowed for the establishment of close relationships ("vhudavhu") between boys and girls without any fears of unexpected pregnancy. Because most men were migrant laborers, they were compelled to stay for years in urban areas and could only visit their families when the baby had grown up. By that time, the woman might be ready to have another child.

Although there is a diversity of family planning methods, all respondents are in agreement about the use and purposes of these methods. Respondents (100%) stated that a wide spacing between children ensures that each child will have an opportunity to be healthy. If another baby is born too soon after a woman has given birth, there will be competition for suckling and the first would be forced to relinquish suckling too early. To suckle for a short period does not give the baby's body enough time to develop the necessary resistance against diseases like kwashiorkor. Respondents also indicated that if children are widely spaced, parents are able to look after them properly. All Venda woman are expected to work hard. Culturally a child had to be able to attain independence before the next one is born. He or she, for example, should already be able to speak, walk and wash before the next sibling is born.

The responses show that reasons for spacing are for the benefit of both the parents and the children.

TRADITIONAL METHODS OF FAMILY PLANNING STILL IN PRACTICE (QUESTIONS 5.5 & 5.6)

TABLE 2.22: MAINTENANCE OF TRADITIONAL METHODS OF CHILD SPACING

Responses	Leaders	Healers	Villagers	Total
Yes	3	3	6	12%
No	5	12	70	87%
Do not know		1	-	1%
Total	8	16	76	100%

Most respondents (87%) agree that traditional methods of spacing children are no longer being observed. Traditional leaders', traditional healers' and villagers said that people no longer attend

the Venda initiation schools where they were educated about traditional methods. In the past people used to attend schools (such as "Domba" and "Tshitambo") in which family planning was taught. Because young people no longer attend these schools, they remain ignorant of Venda family planning practices. Instead of following their traditional systems, people use modern methods such as pills, hospitals and doctors who are trained in Western medicine.

TRADITIONAL MEDICINE USED TO REDUCE FERTILITY (QUESTION 5.7)

Traditional healers generally deny that they possess medicines, which can reduce fertility among Venda women. There was thus disagreement about this matter amongst the healers. The majority of traditional healers disagreed and only a very few confirmed that these methods exist.

METHODS OF INCREASING FERTILITY IN VHAVENDA WOMAN (OUESTION 5.8)

Traditional leaders', traditional healers' and villagers' responses:

Respondents stated that traditional healers had medicines that could lead to increased fertility among women (e.g. there is a medicine that stimulates menstruation, a process referred to as "u sumetshedza" or "u bikela"). Most of the practices involve interference with the menstrual cycle. This might be through changing its timing, reinstating the cycle that has ceased, and supporting the ovum that fails to fuse with the sperm.

It is clear that the practice of increasing the woman's fertility is well known among the Vhavenda. Thus culturally it appeared not to be common to reduce fertility, but acceptable to try to increase it.

CHAPTER 5

DISCUSSION

A study of the relationship between the Vhavenda and the natural environment reveals the existence of a conservation ethic among the Vhavenda in the past. This environmental ethic was deeply embedded in Venda taboos and beliefs and was reflected in the way in which the Vhavenda used and managed the natural environment.

5.1 VENDA TABOOS IN NATURE CONSERVATION

Taboos and beliefs led to the establishment of a set of rules in relation to the natural environment. Among others, it was considered taboo to perform activities that might damage water resources. Restrictions were therefore placed on any form of activity that involved bush clearance or cultivation close to water sources. The reasons for restricting these activities are that they can cause soil erosion and the consequent drying up of water sources. The researcher was told that some fountains had dried up after bush clearing had taken place in a catchment area, and that the water source had only been resuscitated after re-vegetation. Like the indigenous women of Sri Lanka, the Vhavenda believed that the conservation of vegetation cover in catchment areas enhances the water retentivity of soil and contributed to creation of fountains (Ulluwishewa, 1994). Traditionally therefore cultural groups actively participated in the hydrological cycle and so helped to increase the availability of the volume of water. According to McCullum (1997), such an approach, which considers all activities in a river system as interactive, is similar to the modern-day understanding of catchment management.

In nature conservation terms, Venda people did not assign equal status to different water resources. Most of the taboos related to the conservation of fountains rather than rivers. Activities like bathing and washing in fountains were therefore strongly prohibited by tribal taboos (van Warmelo, 1960). Similarly in his research, Ulluwishewa (1994) found that the women of Sri Lanka also did not allow bathing, washing or the watering of animal stock at a drinking water site. Some water sources were assigned a higher status than others by the Vhavenda, those being

considered sacred (e.g. Lake Fundudzi on the Mutale river and Phiphidi waterfalls on the Mutshindudi river). These features were more respected and revered than other sections of the rivers.

The protection of tree species was related to the uses and beliefs associated with such plant species. A number of plant species including Pigeonwood (Trema orientalis) and White stinkwood (Celtis africana) could not be brought home or used as firewood. These two plant species were used to perform a ritual designed to protect the home. According to Venda culture, bringing White stinkwood home would negate the effects of the ritual performed to protect the home. The destruction of edible trees was taboo because they were considered important for the survival of people, birds, monkeys and baboons. In the past when the territory was stricken with hunger, fruits from trees such as Mobola plum (Parinari curatellifolia) and Shepherd's tree (Boscia albitrunca) saved people from starvation. This is confirmed by Mabogo (1990) who reported the traditional uses of these plants during periods of drought and food scarcity. Furthermore, Venda taboos play a role in the conservation of tree species that enjoy a high conservation status among modern nature conservationists. These include Brackenridgea zanguebarica and M. stuhlmanii, that were traditionally protected because of their medicinal value (Mabogo, 1990), and which have since been classified as protected species (Department of Agriculture, Land and Environment, 1998). According to Williams (1996), B. zanguebarica is among the medicinal plants that face threats of overexploitation (see also 5.2). This shows that serious steps are needed if this valuable plant species is to survive.

Customary beliefs and taboos contributed to the conservation of sacred areas. Places such as Lake Fundudzi and Thathe Sacred Forest were protected because they were used as places of worship. In addition, Thathe Sacred Forest (Netshiungani *et al.*, 1981) and Phiphidi Waterfalls (Bulpin, 1989) were used as burial ground for royal families. The cutting of firewood and grazing animals in sacred areas is taboo (Jordaan, 1987). The results indicate that members of the royal families who had access to sacred areas went there to carry out specific rituals during prescribed times – and only the chosen few were allowed to enter. It was believed that failure to observe the taboos would upset the ancestors and the people involved would be punished. A belief existed that people who went into these areas might either get lost or come across the ghosts or spirits that kept

people out of these areas. Neither could people collect firewood from sacred areas because it was feared that such wood would turn into snakes as soon as they were brought home. Similarly, the influence of cultural beliefs about the conservation of sacred areas has also been noted in the Kolli Hills of India where laws and regulations have been drawn up to protect trees. Local people of Kolli Hills believed that the Hindu goddess of health would punish anyone who cut trees around the sacred area, which is referred to as the temple forest (Rajasekarana & Warren, 1994).

Protection of sacred areas conserves aquatic, terrestrial and cave ecosystems. Of specific interest is that Lake Fundudzi, which is the only true natural inland lake in the interior of South Africa (van der Waal, 1997), is among these sacred areas. From the above it can be deduced that sacred areas contribute to the conservation of a variety of ecosystems than just a single environmental phenomenon.

In the past, the Vhavenda placed taboos on the killing of animals that were related to health hazards. Animals like crocodiles and pythons could not be killed because it was believed their death caused influenza in the people in the area where these animals were killed. This view is slightly different from those of Jordaan (1987) who states that according to the Venda culture, pythons could not be killed during rainy seasons because it would cause the rains to stay away and van Warmelo (1960) who states that the Vhavenda did not kill snakes because they were regarded as Vhadzimu (the goddess). However, these two points of views are only indicative of different angles from which Venda culture promotes the conservation of pythons. In a similar vein, it is believed that the brain of a crocodile and the bones of hippos are poisonous. Because of this, crocodiles and hippos may not be killed because of the fear that people might collect their brains and bones and use them as a poison to kill others.

Other animals that enjoyed the protection of taboos were totem animals like, leopards and elephants baboons (Harries, 1929; Jordaan, 1987 and Whyte, 1993). Ecologically, elephants play an important role in the dispersal and germination of certain plant species and their survival is therefore important for enhancing plant diversity (Whyte, 1993). This is due to their feeding behaviour that allows seeds to pass through their guts and be deposited in a bed of manure. The conservation of elephants has become a matter of international concern (Hutton, 1998; De Graaf, 1993; Di Silvestro, 1991) and they have been declared globally endangered (Mwangeni *et al.*,

1997). This discussion in which the perspectives of both the Venda culture and conservation science strongly support each other, may provide a basis for the development of a better policy for the conservation of elephant populations in Venda. In addition, animals like the pangolin and the purple crested loerie are not killed because it is believed their deliberate killing might bring drought to the land.

Apart from taboos, the relationship between the Vhavenda and wild animals was partly determined by the behaviour of the animals and their interpretation of these behaviours. There are a number of animals that are identified as animals of bad omen. A sub-group of these animals is associated with witchcraft. Fear of this sub-group of animals tends to avert the hatred of people who are scared of them and want to kill them but do not do so for fear of reprisals. Owls for example are associated with witchcraft, and their cry is regarded as a potent of death. Owls are therefore hated and feared, and when their cry was heard, people chased them away. The threat that faces owls is reduced by a belief among the Vhavenda that if the person throws a stone at an owl, his or her arm might be severed. Traditional leaders also did not encourage their villagers to kill owls. Other African cultures also have negative beliefs about owls. In Ghana, for example, local people rarely plant the species known as "Omugo" (Poliscias fulva) because they believe that Omugo would attract owls and that owls could bring misfortune to a homestead (Obua & Muhanguzi, 1998). Ultimately all thse taboos resulted in the preservation of of certain species, others which were seen as food-suc as antelope and buffalo for example were not protected by these norms.

5.2 THE UTILISATION OF NATURAL RESOURCES

It is interesting to note that Venda taboos do not impose a total prohibition on the uses of natural resources. The Vhavenda used natural resources on a subsistence basis.

Thus, although there were taboos about cultivating close to water sources, it was not considered taboo to cultivate wetlands. Because wetlands offered highly fertile soil and high moisture content during dry periods, they were cultivated for the production of maize, a staple diet of the Vhavenda. This practice may be regarded as one of the ways in which the Vhavenda ensured their

survival – even though it is not in line with traditional taboos that are enforced to protect catchment areas. Neither is such a practice in line with a scientific approach to nature conservation. Although Foote at al. (1996) state that the exploitation of wetlands produces great quantities of food, functions such as flood buffering capacities, water quality enhancement, sediment trapping, sewage filtration, wildlife habitat and small scale habitat diversity are reduced when cultivation takes place (Foote *et al.*, 1996; Johnson *et al.*, 1999). Pyrovetsi and Daoutopoulos (1997) found that soil impoverishment, salinity and waste of water were among the negative impacts of wetland agriculture in Macedonia, Greece. Thus the intensification of agricultural activities produces a marked change in the landscape and causes the disappearance of natural systems (Gallego-Fernandes *et al.*, 1999). It may be argued that even if other observers have described Venda culture, as being protective of water resources, the exploitation of wetlands cannot be included in this category.

Because of their status in the community, traditional healers are allowed to collect tabooprotected plant species after performing specific rituals (Netshiungani *et al.*, 1980). The collection
of *B. zanguebarica* and *M. stuhlmanii* for example require one to be naked when the collection
takes place. It was believed that failure to adhere to this requirement might cause one to become
insane or mentally unstable. General rituals relating to any other plant species were performed
because they were ways of asking the ancestors' permission before collecting various parts of a
tree. Some of these rituals were, for example, the crowning of the plant to be collected and the
pouring of snuff onto the ground. It was assumed that merely carrying out the ritual elicited the
automatic approval of the ancestors. There was a strong belief that if these rituals were not carried
out before collecting, the medicine would not work. Such rituals restricted the amount of plant
material utilised and resulted in future survival of the species.

Traditional healers also retained the privilege of killing taboo animals such as elephants, pangolins, hippos and baboons so that they could collect animal parts for medicine. A pangolin for example might be killed only after permission had been sought from the chief. It is emphasised however that only specific traditional healers may kill pangolins. These traditional healers also had to perform a specific ritual so as to avoid the onset of drought. It is important to note that the pangolin, which is featured in the *South African Red Data Book* that lists threatened, endangered

and vulnerable species in South Africa (Holt-Biddle, 1996), enjoys a high cultural status among the Vhavenda. In this instance, we see a strong relationship between the scientific and the Venda cultural approaches to conservation. This is one possible area in which a synthesis may be created between the Venda and the scientific approaches to nature conservation.

When traditional healers used animal parts for medicine, a hand-size portion might last for a long time because it was always mixed with other medicines. If one considers that the measure used was as little as a teaspoonful, it can be argued that the demand for the supply of medicinal parts would not be very high and that "medicinal" animals would therefore not be hunted for their parts all that often. The only threat that is associated with the use of animal parts for medicine is in the form of trade. Since healers stated that they bought most of their hides from farmers, this kind of trade might encourage farmers to hunt endangered species so as to supplement their income. As Costa Neto (1999) has noted, the indiscriminate use of animal species for medicine has become a matter of world-wide concern, especially when one considers that specially protected species (e.g. the Cape vulture and the elephant) and protected species (the hedgehog, the buffalo, the lion and the spotted hyena) are desired "medicinal" animals (Department of Agriculture, Land and Environment, 1998). Trade in these animal parts should be discouraged at all costs.

The Vhavenda also ate indigenous animals. They ate selected insects, birds, mammals, reptiles and fish that they found in their territory. The eating of fish is contrary to the findings of Stayt (1968), who argued that the Vhavenda did not eat fish because they associated them with snakes. Although the Vhavenda are known to be agriculturists and pastoralists who took hunting as a sideline (Ralushai, 1987), they used different methods to hunt indigenous animals to supplement their diet. These hunting methods, which included the use of axes, spears, arrows and traps, were different for each group of animals. Although each of these hunting methods was fairly successful, they were far less effective than modern weapons such as firearms (Stayt, 1968). In contrast, clay pots for capturing flying termites and fishnets are examples of hunting devices that are notably successful. Because the use of fishnets is non-selective, it has recently been prohibited as a method for hunting animals (Department of Agriculture, Land and Environment, 1998).

Venda culture is silent about the consumption of a group of animal species that are regarded as taboo. For example there was no explanation as to why taboo animal species like the purple

crested loerie could be eaten. This is different from the case of a pangolin whre a strong motivation was provided regarding special rituals that were required before traditional healers could kill it. It can only be inferred that may be a pangolin was awarded a higher status than some of the taboo animal species.

5.3 INDIGENOUS ECOLOGICAL KNOWLEDGE

According to Chipeniuk (1998), natural resource planning theory accepts that any layperson may acquire a scientifically correct knowledge of nature by informal means. Earlier discussions about the Venda holistic approach to water resources management revealed that the Vhavenda were also knowledgeable about other environmental processes. Their knowledge includes an understanding of soil-formation processes. They understood that organic material becomes part of the soil in time through a process of decomposition that promotes and enhances soil fertility. As an agrarian society, the Vhavenda observed that productivity was highest when ploughing took place after vegetative clearing. This encouraged them to allow the land to lie fallow for various lengths of time before ploughing on it again (Burgers, 1997).

Allowing land to lie fallow from agricultural productivity might be associated with an increase in soil carbon and nitrogen that results from agricultural abandonment (Knops and Tilman, 2000). The two-year fallow period practised by the Vhavenda is closer to the three to four years period practised in India (Mishra, 1994). Zwahlen (1996) recommends that in order to promote sustainability, the period should not be less than ten years. However his recommendations do not necessarily apply to Venda which has different environmental conditions that influence plant dynamics.

It seems as though the Vhavenda possess knowledge of plant physiology. Since terrestrial plant species acquire their mineral substances via a root system which they have specifically developed for this purpose (Lacher, 1995), traditional healers believe that the total removal of the roots of medicinal plants might detrimentally affect these plants. Because there is a need to continue to harvest the same individual plants in the future, the survival of each plant is ensured when only some roots are collected. Even when the bark was being collected for medicine, ring barking was

avoided.

The Vhavendas' knowledge of zoology shows that they understood the different habits of animals. They saw the relationship between an owl and mouse as that of predator and prey. They understood that the owl fulfilled the important function of controlling mice that were considered to be pests. Some of the respondents argued that this is the reason why owls should not be killed – even though they are regarded as ominous animals. The scientific research of Raber (in Wetly and Baptista, 1998) confirms the predator-prey relationship between owls and mice. They argue that while a well-fed long-eared owl will refuse to eat meat offered to it, they will not refrain from killing live mice. An accurate understanding of the positive role that owls play in the ecological balance of the land is important not only for their survival, but also for maintaining biological methods of pest control. It is this kind of traditional knowledge that can enhance the methods of modern technology.

The Vhavenda also possessed traditional knowledge about seasonal variations. For example, autumn is the harvesting season for marula. Thus marula fruits may only be harvested during this period. However, they were also aware that environmental conditions in different localities determined the time when these fruits matured. Therefore, fruits are harvested according to the seasonal patterns. A similar kind of traditional knowledge was evident in India where women collected forest products for household consumption. These women knew exactly what forest products to collect – as well as the proper season and time of the day in which to collect them (Mishra, 1994). This knowledge is important because it ensures the survival of indigenous fruit trees that might be exploited before their fruits have reached maturity.

Monitoring was an integral part of Venda conservation methods. One can see this in those cases where a decline in land productivity has been identified. Another important part of the Venda monitoring programme included regular examinations of fountains for increases in the influx of silt. Further, parents monitored the utilisation of veld resources by their children. By inspecting firewood that young girls brought home, they ensured that only permissible plant species were collected. This ensured the survival of taboo plant species, which were not allowed as firewood. The importance of monitoring cannot be underestimated because it is a fundamental tool in

5.4 NATURE CONSERVATION AND ENVIRONMENTAL MANAGEMENT PROJECTS

In the past, the Vhavenda deliberately influenced the course of environmental processes. They carried out special projects for the conservation of soil, water and plants. The application of kraal manure and the ploughing back of crop residues into the soil were regarded as means of promoting the fertility of the soil. Soil erosion was known to be a threat because it degraded the soil by causing water and topsoil to be lost (Laker, 1996). These traditional Venda soil conservation practices which were carried out a long time prior to the ploughing season are similar to those Zambian practices known as *kanchomba* (Impinga, 1997). The Vhavenda were concerned about the loss of topsoil because they knew that topsoil is rich in nutrients that are vital for the health of plants. They therefore utilised indigenous technologies such as stone packing and diversion ditches to control soil erosion on steep slopes (Critchley & Netshikovhela, 1998). They also planted grass as a way of reinforcing land susceptible to soil erosion. The Vhavenda also left strips of land untouched between ploughed strips so that they could act as barriers against water erosion.

Although the Vhavenda planted Wild banana and Transvaal Strelitzia to provide shade for fountains (Appendix 7), these plants also served other ecological functions. Ulluwishewa (1994), among others, argues that vegetation growing close to water sources prevents the influx of silt. In order to prevent water pollution, the Vhavenda built stone formations that prevented the influx of silt from other points. In addition, they fenced fountains so as to prevent cattle from invading them. In all cases where supportive formations were built to protect fountains, the local people always used environment-friendly resources such as local stones and logs (and not alien substances such as cement or concrete). When a fountain became silted up, the local women would get together and organise a campaign to clean it. This water quality management strategy is similar to that used by women in Sri Lanka. In his research, Ulluwishewa (1994) found that the Sri Lanka women used cloth to filter water at its source. The cloth, which acts as a very fine strainer, removes solid particles and aquatic insects. They destroyed dangerous micro-organisms

by boiling water. The Vavenda further prevented water pollution by constructing bathing pools well away from the fountains.

Plant propagation – the skill that promotes the conservation of vegetation – was commonly practised and well understood among the Vhavenda. This knowledge permitted the Vhavenda to cultivate herbs and climbers that were used as vegetables (e.g. *Cleome gynandra* and *Momordica foetida*) (Appendix 7). This is an important factor in Venda culture if one considers that, in the past, the introduction of exotic vegetables was the main reason for the disappearance of indigenous vegetables (Swai, 1997; Madisa & Tshamakeng, 1997; Kwapata & Maliro, 1997; Ahmed & Mohammed, 1997; Rubaihayo, 1997). Other plants which were saved from extinction as a direct result of the skills of those who practised plant propagation, were medicinal plants. These very same plants are currently endangered because there are being overexploited (Roff & Nonjinge, 1997; Khan, 1996; Williams, 1996). Planted medicinal plants include shrubs like Cape honey suckle (*Tecomaria capensis*) and Soap nettle (*Pouzolzia hypoleuca*). Riparian plant species (e.g. Transvaal strelitzia and Wild banana) and large tree species (e.g. *Ficus natalensis*) were conserved by means of seed dispersal.

There is evidence that the practice of tree propagation among the Vhavenda has had a long-lasting effect on the conservation of indigenous vegetation. Von Breitenbach (1989), for example, reported that *Dovyalis caffra* (Kei-apple) and *D. zeyheri* (Oval kei apple) still survive in those areas of Soutpansberg, Rodewaal and Waterpoort that were previously occupied by the Vhavenda. One of the disadvantages of this practice was that it enabled the Vhavenda to plant exotic species such as the pine trees and prickly pears that one finds around graves. These are species, which have been designated as weeds by the Department of Agriculture (Department of Agriculture, undated). In general, re-vegetation is recommended by scientists as an efficient way of restoring environments that have been degraded in various ways (Bainbridge, 1990; Carothers et al., 1990; Dixon, 1990; Hamilton, 1990; Horowitz, 1990; Isaac, 1994; Jensen & Platt, 1990; Levine & Willard, 1990; Lowry, 1990; Perry & Amaranthus, 1990). Other indigenous ethnic groups throughout the world have also practised plant propagation. In northeastern Thailand, for

example, women planted indigenous plants for medicinal, religious and decorative purposes (Moreno-Black *et al.*, 1994).

Degraded environments were thus ecologically restored by indigenous people who used knowledge and practices that one generation handed down to another for centuries. Ecological restoration was a response of such people to environmental challenges such as the destruction of the land. The continued use of ancient strategies such as plant propagation and maintenance of water sources can provides a basis of departure in the development and implementation of environmental management plans today. I believe that these ancient methods can be successfully incorporated into modern projects, which are designed to achieve the same objectives.

5.5 MAINTENANCE OF VENDA INDIGENOUS TECHNOLOGY

Traditional Venda taboos have been maintained in various ways. One of the ways in which traditional leaders preserved taboos was by explaining their significance in special gatherings in which environmental problems were discussed. In such gatherings, the importance of taboos relating to soil, water, plants and animals were explained and emphasised. Members of the tribe were always advised to respect all Venda taboos, and the dangers of ignoring taboos and environmental care were a regular feature of these gatherings. While ward headmen were expected to disseminate information about taboos and environmental care to all the people under their authority, parents performed a similar function with regard to their children in the home. This kind of approach ensured that traditional knowledge would be handed down from one generation to another (Moganane & Walker, 1995; Benso and IDS, 1979)

Another way in which traditional leaders encouraged observance of traditional taboos was by promulgating regulations that enforced taboos. A failure to observe taboos was (like damaging the environment) a serious offence for which a fine could be imposed. Sometimes the offender had to appear before the tribal court before the fine could be imposed. In the case of children, parents carried out regular inspections to confirm that children had not collected firewood from plants or trees protected by taboos. When parents found such firewood, they instructed their children to return the taboo-protected wood to the bush.

Traditional leaders made efforts to encourage their villagers to practise nature conservation. These leaders taught by example. They themselves were careful to observe all cultural taboos and personally to participate in nature conservation projects. Above all, they were the ones who initiated and organised the teamwork that was necessary for carrying out nature conservation projects.

The punishments inflicted for those who transgressed taboos and who refused to comply with established rules encouraged the maintenance of Venda cultural traditions. Individuals, clans or specific groups who ignored taboos and traditional rituals were appropriately punished.

Respondents indicated that even today culturally protected areas are still respected by many Vhavenda and that this respect is demonstrated by the fact that people are prepared to perform ancestral rituals and observe tribal taboos. Some of these areas like Lake Fundudzi, Phiphidi Waterfalls, Thathe Holy Forest (Anon, 1973), and the Vhutanda and Masanzhe forests miraculously remain intact in the middle of exotic pine and tea plantations.

It seems that the Vhavenda like to maintain the practice of bathing and washing in rivers. A factor that encourages the maintenance of this practice is that piped water is unavailable in many areas. Apart from this, people prefer to use water from rivers because the river washes away dirt while water for washing in basins quickly becomes polluted. However there are other factors that discoursge people from using natural water sources more regularly. Among others, traditional leaders discourage villagers from using rivers for washing on the basis that they could be killed by crocodiles or pollute water. Indeed people do not seem to frequent natural water sources like in the past. This is confirmed by responses that indicated that people no longer possess the expertise to clean fountains properly because they visit fountains less frequently. Furthermore, nearly half of the respondents stated that they bath at home. This indicates that the availability of tap water might attract people away from using natural water sources for purposes such as washing, which might have the positive effect of reducing pollution of springs.

5.6 THE EROSION OF THE VENDA INDIGENOUS TECHNOLOGY

It is a matter of concern that traditional Venda approaches to nature conservation are being undermined. There are a number of reasons why these traditional approaches are being eroded. In some sectors, respondents from the community indicated that they no longer knew of anybody who encouraged people to observe those cultural practices that are conducive to nature conservation. Others argued that there was no need to encourage people to observe such cultural practices because people internalised them from childhood because they were a fundamental feature of Venda culture. Some no longer believed in the practices These three statements seemed to indicate that (for different reasons) people were no longer encouraged to observe customary Venda nature conservation practices.

Once the Vhavenda had been introduced to modern technology, the maintenance of traditional cultural approaches to nature conservation became compromised. A prime example of this is that the introduction of piped water into people's homes has rendered direct contact with natural water sources generally obsolete. The advantage of having piped water on the one hand is that it reduces the frequency with which people need to visit and utilise natural water sources. The impact of constant use of natural water sources is therefore reduced. On the negative side, the availability of piped water encourages people to neglect their natural water sources. In addition, the availability of piped water means that people are gradually forgetting the rituals and customary practices associated with the cleaning of fountains. It should be noted that piped water supply systems in the rural areas of the Venda Region are not reliable (Mashau, 1997), and that during times of breakdown, they often take a long time to be repaired. While they are being repaired, people have to rely on whatever natural water sources are available to them.

The first people among the Vhavenda to accept modern technology were the educated and the youth. This is probably the reason why respondents identified them as those who no longer wish to observe traditional cultural practices of nature conservation. The reason why the youth the world over, are no longer interested in indigenous technology is that they regard the knowledge which is being passed down to them by their ancestors as inferior to the knowledge and habits which they have gained through formal education (Rajasekaran and Warren, 1994). Their new mindset has made them inclined to rebel against the rules of conduct that have been established by their elders (MacClanahan, 1997). This has created a serious divide between younger and older

generations across the globe and has compromised the transmission of indigenous knowledge from the elders to the youth (Rajasekaran and Warren, 1994). The views which the young entertain about traditional nature conservation practices have been influenced by modern education. The impact of modern technology on the lives of the Vhavenda means that one can no longer assume that all Venda people understand or appreciate traditional Venda approaches to nature conservation (in spite of the insistence of many older people that the Vhavenda are "born" knowing about traditional Venda practices).

It became clear, for example, that the Vhavenda have lost much of their traditional knowledge associated with the enhancement of land productivity through traditional practices of ploughing. It is no longer possible to perpetuate the practice of allowing land to lie fallow because of lack of land in the region (Wille *et al.*, 1997). The impact of land shortage on the fallow system has also been observed in Zimbabwe (de Villiers, 1997; Masilela & Weiner, 1997). In spite of this the Venda community did not identify their need for larger tracts of farming land. Instead they indicated their need for small tracts of land in which they could practise subsistence agriculture. The practice of applying kraal manure in order to improve soil productivity might have been lost because people nowadays own fewer cattle. People also no longer practise ploughing plant residues back into the soil. The general decline in land productivity has seriously impacted on the lives of the people because the productivity of land determines crop yield and people need minimum yields in order to survive.

There is insufficient land for practising the fallow system because of increases in the population of the Venda Region. Although direct responses to questions about population growth did not identify population size as a problem, responses from other sections have identified population growth in the area as an environmental threat. Many respondents associated population growth with unemployment and the current scarcity of both water and land. One of the most important reasons why the population has increased to current levels in the area is the abandonment of traditional methods of family planning. People in fact abandoned traditional methods of birth control before adopting modern family planning methods. In the past, traditional methods of birth control counteracted the desire of people to have an unlimited number of children (Wessman, 1969). Another factor that has exacerbated the problem is that due to former government policies, people have become overconcentrated on land that is not able to support the basic needs of those

who live there a situation also found in neighbouring countries (see Mpinga, 1997; Arnold, 1992)

Even while the population grew and land became evermore scarce, commercial forestry and other settlements expanded indiscriminately into mountain catchment areas that had been preserved and respected since time immemorial. This rampant expansion destroyed indigenous vegetation to which inhabitants attribute the shortages of firewood and medicine, a reduction in the size of wild animals' habitats, serious soil erosion and the silting up of water sources in the area. Hailman and van der Schiff (1996) noted a similar impact made by the uncontrolled expansion of settlements and commercial forestry into the habitat of *Warburgia salutaris* in Kwazulu Natal. Another serious effect of commercial forestry is stream flow reduction (van Wilgen, 1995; Dye, 1995) and catchment area destabilisation (Dye, 1995).

It is doubtful whether environmental considerations were taken into account before timber plantations were established (Department of Environmental Affairs and Tourism, 1998). Hydenrych and Claassens (1998) note that, in terms of the National Strategy for Integrated Environmental Management, the people of the Venda Region should have been compensated for negative impacts made on their traditional catchment areas.

The adoption of modern agricultural technology and approaches in the Venda region has already been remarked upon. Agricultural technicians, who have already begun to exert a favourable influence on land productivity through their extension services, form part of the new approach to agriculture which one finds in the Venda region. This undoubtedly affects the extent to which traditional practices are being maintained. Those that have been less affected include soil conservation methods such as stone packing and grass strips (Critchley & Netshikovhela, 1998). These approaches should not be underestimated for the positive role they play in soil conservation in the Venda region.

One most important area, in which the erosion of Venda culture is evidence, is in the conservation of sacred areas. The damming of the Guvhukuvhu Waterfalls, the netting of fish from Lake Fundudzi, and bush clearing on the edges of some sacred forests are all indicative of the negative impact which human beings have had on these areas.

It is also clear from the fact that water pollution is now far more serious than it ever was in the past, that taboos that prevented water pollution are no longer being observed. As we have noted frequently above, responses indicate that most people no longer respect water sources in the way that their ancestors did. This is evident from the serious erosion of those traditional taboos that were instrumental in the prevention of water pollution. The microbial research of Venter (1997) revealed that the water of the Mutshindudi River that flows through area defined by this study, was not suitable for human consumption because of the presence of faecal-coliform—an indicator of unacceptable drinking water quality. Because of the presence of these micro-organisms, most children from communities along the Mutshindudi River are affected by water-borne diseases such as diarrhoea. Venter's research confirms the increase in water pollution in the area defined by this study.

Most respondents indicated that they either start ploughing or cutting timber at a distance of 25m or more from the river. Studies of the Mutshindudi River, one of the major rivers in the study area, revealed rather different results. Studies showed that most of the riparian vegetation had been removed for the cultivation of maize (Gaigher *et al.*, 1997) and for timber (Ligavha, 1997). In an associated study, van Ree (1997) noted an increase in the suspended load in the Mutshindudi River – a factor caused by increased runoff from the densely populated area of Sibasa. One may therefore conclude that these responses did not provide a true reflection of the status of the rivers in area defined by this research, but rather what the respondents know to be the regulations.

The impact that modern technology has had globally on indigenous technology as a result of the exposure of indigenous people to modern medicine (Abbink, 1995) and the loss of natural resources (Mishra, 1994), has been noted. In the implementation of modern development projects, indigenous technology has been largely overlooked because it has been assumed to be both primitive and inefficient. Modern Western scientific technology therefore replaces the indigenous technology which in many places is still only retained in the memories of older people (Ulluwishewa, 1994).

CHAPTER 6

MANAGEMENT IMPLICATIONS AND CONCLUSION

6.1 MANAGEMENT IMPLICATIONS

While this research has shown that certain aspects of the Venda culture promoted nature conservation, it is necessary for conservation organisations to translate this useful knowledge into practice. With this end in mind, the researcher makes the follow recommendations:

- 6.1.1 To ensure that indigenous technology is not lost forever, community-based programmes that combine the use of scientific and indigenous technology should be promoted. Such programmes would also serve to protect indigenous approaches to natural resource management. Living projects, such as those of soil conservation that have proved to be conspicuously successful in the traditional context, should serve as a point of departure for the education of a new generation that has been indoctrinated to regard traditional ways as being outmoded and unhelpful in the modern world. Traditional institutional arrangements must be allowed to operate in the regulation of the relationship between people and the environment.
- 6.1.2 Venda culture, that is rich in indigenous technologies for natural resource management, should be preserved and sustained so that it may continue to contribute positively to nature conservation.
- 6.1.3 Traditional water management approaches should be used as a point of departure in catchment area management strategies. The value of traditional water management approaches resides in their contributory nature to scientific approaches, especially their holistic approach that includes the principle of sustainability. Traditionally, the Vhavenda have employed a number of strategies to ensure that their natural water sources would not dry up. This approach to the management of water resources was responsible for

sustaining the supply of water in the past. Furthermore, the fact that water conservation was never viewed in isolation from other parts of the environment, suggests that the Vhavenda applied integrated water resources management.

- 6.1.4 It is necessary that the future viability of the mountain catchment areas in the Venda region be reviewed. Such an initiative will necessitate considering the removal of commercial timber plantations so that an ecological restoration programme for the regeneration of indigenous forests can be implemented. Such a programme would need to define short-, medium- and long-term objectives, and be financed by a realistic budget. It should therefore be implemented in phases. The programme should also entail the resettlement of those people who now inhabit these mountain catchment areas.
- 6.1.5 In the development of catchment management strategies, the protection and conservation of natural water sources should receive the highest priority. This will ensure that even while people become accustomed to modern water supplies, they will not neglect the rivers and fountains on which people depended in the past. If this is done, the status and viability of natural water sources will be maintained. It would be beneficial if a catchment area management strategy were to take into account the traditional cultural expertise in the management of catchment areas that has been passed down by countless generations of indigenous people. The importance of the traditional approach is that it is not alien to the mentality of the population and that it can enhance understanding of the other applications of an overall strategy.
- 6.1.6 It is evident that the Vhavenda attach great importance to the survival of animal species. What these people need therefore is an ecological educational programme that addresses the issue of species extinction. Such a programme would enlist the support of the Venda people in the conservation of threatened and endangered animal species.
- 6.1.7 Since most of the sacred areas are nowadays too small for conserving biodiversity, a pilot project should be conducted in order to identify ways of extending the creation of larger ecological areas.

- 6.1.8 There is a need to survey all existing culturally protected areas so that an adequate database may be established. It is necessary to identify the extent of the damage that has already been inflicted on each of these areas so that a master strategy can be devised to address all relevant problems and their consequences.
- 6.1.9 Management strategies for indigenous protected areas need to be documented so that standardised approaches can be implemented. Implementation may also be extended to the management of scientifically managed protected areas that lie on the boundaries of indigenous communities. Such an approach can lead to the development of management programmes that synthesise both indigenous cultural and scientific approaches to the management of protected areas.
- 6.1.10 People need to be encouraged to keep domestic stock for slaughter if the pressure on the hunting of wild animals is to diminish. Because of the lack of grazing for domestic stock, two programmes for the achievement of this objective may be considered. Firstly, traditional farmers may be educated in modern intensive farming methods. Farmers who would appreciate such methods are those who are already engaged in farming. Secondly, land redistribution programmes urgently need to address the aspirations of potential traditional farmers who practise stock farming because they do not have sufficient land for grazing.
- 6.1.11 South African policies on hunting should be reviewed so that they support sustainable traditional hunting methods. This can only be done if traditional hunting methods are considered when such policies are drawn up. Policy makers, for example, need to consider traditional African indigenous methods when they develop codes of conduct for hunters.
- 6.1.12 Maintaining the indigenous tree-planting practices of the Vhavenda is important and these can be linked to modern institutions such as the national tree planting day. Because the use of tombstones over sacred graves was not a traditional practice, the manner in which continued tree planting might be encouraged needs to be investigated.
- 6.1.13 The ecological impact of tombstones in graveyards should be investigated. The results

should be made known to the community through a programme that will encourage a greater use of plants. Different tree species may be utilised on graves for memorial purposes. Species may be numbered according to the national tree list and recorded as such in a graveyard database. This could assist people to remember their graves. The use of alien plants should be discouraged at all costs.

- 6.1.14 Because of the ability of indigenous vegetables to survive in harsh African environmental conditions, the mixing of indigenous and exotic crops in agriculture may be important to ensure the production of a sufficient amount of food from communal land.
- 6.1.15 There is a need to develop strategies and mechanisms to enhance the *in situ* conservation of genetic resources of indigenous vegetables (Mushita, 1997)
- 6.1.16 Conservation of edible plant genetic resources should be promoted by the development of an educational initiative that includes an appreciation of their value in educational resource materials.
- 6.1.17 In order to conserve Venda medicinal plants, it is important to establish special nurseries for their propagation (Hollman and Van der Schiff, 1996). Research should also investigate the possibility of growing other indigenous medicinal plants that are not currently being propagated. This strategy may help in the conservation of highly-sought-after plant species like *B. zanguebarica*.
- 6.1.18 The behaviour and habits of cultural animals of ill omen should be investigated, and their relations with human beings for whom they have cultural meanings, should be detailed by researchers. The results of the study should be used to develop educational programmes that explain the ecological implication of human behaviour on these animals. As a point of departure, people can be educated to appreciate those animals, which they regard as transmitting good omens. People also need to be taught that they do not need to fear or harm animals of ill omen.
- 6.1.19 The historical role of the traditional leaders in environmental conservation and in the

monitoring of natural resource utilisation should be re-emphasised. This can be achieved by developing a programme that empowers the leaders to resume the powers and responsibilities, which they exercised at the local level in times past. The House of Traditional Leaders may be used as a forum for propagating this approach. A programme to educate traditional leaders in all environmental concerns within their area of jurisdiction should also be started. Such a programme could (in addition) determine whether or not traditional leaders have lost touch with their people and, if so, to what extent. The traditional roles and responsibilities of traditional leaders in the community could then be restored. Once such an initiative has been instituted, its progress over time should be carefully monitored. If traditional leaders are to retain their historical responsibility as conservators, they need to be knowledgeable and able enough to educate and encourage their people on how to sustain and utilise the natural resources of the land. In addition, the resumption of such responsibilities by traditional leaders will return to them some of their historical prestige which, to some extent, has been diluted by the advent of universal democracy in South Africa.

6.1.20 Once the new land reform process truly begins to operate efficiently, the rural people of Venda should be incorporated into the process so that they can benefit from the appropriation and reallocation of land.

6.2 CONCLUSION

This research has explored traditional Venda cultural knowledge about nature conservation in some depth. Central to this nature conservation ethic, are the taboos, rituals and beliefs that have been established in Venda culture since time immemorial. These taboos obliged people to perform various kinds of rituals before they used certain categories of natural resources. Taboos of this kind did not enforce a total ban on the use of natural resources. Their primary purpose was to establish control measures that would promote a sustainable utilisation of resources.

The Vhavenda preserved the environment by responding to environmental challenges and by practising sound traditional methods of environmental management. Apart from preserving a strong oral tradition, traditions of law enforcement and an indigenous tribal judicial system, these projects also helped the Vhavenda to develop environmental management skills and transfer their knowledge from one generation to the next. The Venda belief that the ancestors punish offenders also helped to preserve the Venda conservation ethic.

The complementary nature of both the scientific and Venda cultural approaches has been emphasised in various parts of this research. Important traditional Venda contributions in this regard are the sustainable use of natural resources, indigenous ecological knowledge and a holistic approach to environmental management. Both the Western and indigenous Venda approaches are concerned about population management. Although population control measures among the Vhavenda were not originally related to issues of nature conservation, they did help to reduce excessive human pressure on the natural environment. These are areas in which traditional Venda knowledge and Western approaches could be synthesised for the benefit of all concerned. On the other hand, the value and uniqueness of the Venda approach to conservation resides in the fact that traditional Venda knowledge has always been holistically integrated into life processes of the Vhavenda.

Credit should be given to those Venda traditional institutions, which played a role in the development of an environmental management policy. Key factors that ensured success were (among others) the careful planning and joint implementation of programmes. All these strategies promoted a positive relationship between the Vhavenda and their natural environment. The environment was regarded as being of primary importance to the Vhavenda because it was literally regarded as the basis for survival (in terms of food).

Modernisation has often been identified as a threat to the maintenance of traditional Venda approaches to nature conservation. This has been especially evident in those places where the natural environment has been threatened by modern "developments" such as timber plantations. There is no real evidence on the other hand that modern scientific approaches to nature conservation have contributed to the maintenance of the traditional Venda approach to

conservation – a factor that has indeed contributed to its erosion. Because of this mutual lack of appreciation and understanding, traditional Venda conservation methods have failed to address most of the problems that have been caused by modernisation.

This research has revealed that historical Venda culture played an important role in nature conservation. This research has also made it clear that cultural practices that are central to the Venda conservation ethic, are being steadily eroded. As a result of this unhappy situation, the natural resources of the Venda region have deteriorated radically both in terms of quality and quantity. It is therefore true to say that the traditional Venda approach to nature conservation plays a far lesser role than it did in the past.

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PPENDIX 1

THE ROLE OF THE VENDA CULTURE IN NATURE CONSERVATION: A CASE STUDY OF THE INHABITANTS OF THE TSHIVHASE AREA

QUESTIONNAIRE

(general)

1.	Interviewer:
2.	Date:
3.	Time:
4.	Name of village:
1.	5. Age:
6.	Gender:
7.	Educational level: None up to Std. 22 up to Std. 53 up to Std. 84

	up to Std. 105 Tertiary education6	
Occı	upation :	
9.	Which amount of money do you get per month Less than 200	

APPENDIX 2

QUESTIONNAIRE

For traditional leaders (magota/vhamusanda)

1. Land

- 1.1. Which (if any) traditional beliefs or customs help to protect land?
- 1.2. In which way do you encourage the maintenance of these traditional beliefs and customs?
- 1.3. Who mostly influences the villagers to conserve the land?
- 1.4. Which (if any) traditional methods are used to prevent soil erosion?

1.5.	Are these methods still used?
	Yes:
	No :
	Don't know
1.6.	If yes, how do you encourage villagers to maintain these practices?
1.7.	Has the land become less productive than in the past?
1.8.	If yes why is the land less productive than in the past?
1.9.	Can land productivity be improved?
	Yes
	No
	Don't know
1.10.	If yes:
	(a) How can land productivity be improved?
	(b) Who should encourage the promotion of land productivity and how?
1.11.	Was more land available for settlement and for cultivation before the
	homeland (bantustan) policy was introduced?
	Yes
	No
	Do not know
1.12.	Do your villagers still need more land for agriculture?
	Yes
	No
	Do not know
1.13.	
1.14.	Are there certain areas that are culturally protected in your village?
	Yes:
	No :
	Do not know:
1.15.	
1.16.	Are these areas still respected?
11101	Yes:
	No :
	Don't know
	2 on t anon
2. W	ater
2.1.	Which (if any) traditional beliefs or customs help to protect water resources?
2.2.	If so in which way do you encourage the maintenance of these traditional beliefs and customs?
2.3.	How do you help your villagers in the conservation of water sources?
2.4.	Did water become scarce nowadays?
	Yes:
	No
	Don't know
2.5.	If yes, what causes water scarcity?
2.6.	Are natural water sources more polluted than in the past?
	Yes:
	No :

	Don't know		
2.7.	If yes, give reasons.		
2.8.	How do you assist villagers in preventing water pollution?		
2.9.	How far from the river bank do you allow your villagers to start ploughing?		
2.10.	How far from the river bank do you allow your villagers to cut trees?		
2.11.	Where do your villagers do their laundry?		
2.12.	Where do your villagers bath?		
2.13.	Do you encourage these practices?		
2.15.	Yes		
	No		
2.14.	What is the main aim of ploughing wetlands according to the Venda practice?		
2.	Indigenous vegetation		
3.1.	Which (if any) traditional beliefs or customs help to protect plants?		
3.2.	· · · · · · · · · · · · · · · · · · ·		
	If so in which way do you encourage these traditional beliefs and customs? What is the correct season to harvest marula fruits?		
3.3. 3.4.			
	What happens to someone who harvests marula before an open season?		
3.5.	Which trees may not be cut according to the Venda culture?		
3.6.	Is firewood scarce nowadays?		
	Yes		
	No		
2.7	Don't know		
3.7.	If yes, what is the cause of firewood scarcity?		
3.8.	Which indigenous vegetables are propagated by the Vhavenda?		
3.9.	Which trees are planted in the burial grounds of the royal family?		
3.10.	Is this practice still followed?		
	Yes:		
	No:		
	Don't know		
3.	Indigenous animals		
4.1.	Which indigenous animals may not be killed according to the Venda culture?		
4.2.	Why may they not be killed?		
4.3.	How do you encourage this cultural practice ?		
4.4.	What may happen to someone who hunts indigenous animals without your		
	permission?		
4.5.	As the leader, are you allowed to hunt wild animals?		
	Yes:		
	No:		
4.6.	If you are allowed, which are the species you may hunt and how many per		
	month?		
4.7.	According to the Venda culture, are there closed and open seasons for the		
	hunting of		
	indigenous animals?		

	Yes:
	No :
4.7.	If yes, why?
4.8.	What (if any) is the limit to the number of the following animals that people
	may keep in
	your area?
	Cattle :
	Goats :
	Sheep:
	Donkeys:
	No limit :
4.10.	For what reasons do the Vhavenda keep:
	Cattle?:
	Goats? :
4.11.	Has grazing for these animals become more scarce?
	Yes:
	No :
	Don't know
4.12.	If yes, what are the reasons?
4.13.	Which (if any) animals are considered symbols of good or bad omen
	according to the Venda culture?
4.14.	How are these animals treated?
4.15.	Do you encourage the manner in which they are treated?
	Yes:
	No :
5.	Population development
5.1.	What is an ideal number of children for a Venda couple living in a rural
	village?
5.2.	At what age is the Muvenda child weaned?
5.3.	Which traditional methods are used to ensure that children are weaned at the
	correct age?
5.4.	What is the aim of spacing children with the number of years mentioned
	above?
5.5.	Do your villagers still follow the traditional methods of spacing children?
	Yes:
	No :
5.6.	If not, why?
5.7.	How do the Vhavenda reduce a woman's fertility?
5.8.	How do the Vhavenda increase a woman's fertility?
5.9.	Is overpopulation a problem in your village?
	Yes:
	No:
	Don't know

APPENDIX 3

QUESTIONNAIRE

For villagers (vhadzulapo/vhalanda)

1. Land 1.1. Which (if any) traditional beliefs or customs help to protect land? 1.2. Who mostly influences the villagers to conserve the land? 1.3. Which (if any) traditional methods are used to prevent soil erosion? 1.4. Are these methods still used? Yes:-----No:-----Don't know:-----1.5. Has the land become less productive than in the past? If yes why has the land become less productive than in the past? 1.6. 1.7. Can land productivity be improved? Yes-----No-----Don't know-----1.18. If yes: (a) How can land productivity be improved? Who should encourage the promotion of land productivity and how? 1.9. Was more land available for settlement and for agriculture before the (bantustan) policy was introduced?

	Yes
	No
	Do not know
1.10.	Do you still need more land for agriculture?
	Yes
	No
	Do not know
1.11.	If yes, what is the sizes of land that you need?
	Are there certain areas which are culturally protected in your village?
	Yes:
	No :
	Do not know:
1.13.	If yes, why and how are these areas protected?
	Are these areas still respected?
	Yes:
	No :
	Don't know
4.	Water
2.1.	which (if any) traditional beliefs or customs help to protect water?
2.2.	In which way is the maintenance of these beliefs and customs encouraged?
2.3.	What are the cultural practices that you do in order to conserve water sources?
2.4.	Is the water scarce nowadays?
	Yes:
	No
	Don't know
2.5.	If yes, what causes water scarcity?
2.5. 2.6.	If yes, what causes water scarcity? Are natural water sources more polluted than in the past?
	If yes, what causes water scarcity? Are natural water sources more polluted than in the past? Yes:
	If yes, what causes water scarcity? Are natural water sources more polluted than in the past? Yes: No:
	If yes, what causes water scarcity? Are natural water sources more polluted than in the past? Yes:
2.6.2.7.	If yes, what causes water scarcity? Are natural water sources more polluted than in the past? Yes: No:
2.6.2.7.2.8.	If yes, what causes water scarcity? Are natural water sources more polluted than in the past? Yes: No: Don't know If yes, give reasons. How far from the river bank do you ploughing?
2.6.2.7.2.8.2.9.	If yes, what causes water scarcity? Are natural water sources more polluted than in the past? Yes: No: Don't know If yes, give reasons. How far from the river bank do you ploughing? How far from the river bank do you cut trees?
2.6.2.7.2.8.2.9.2.10.	If yes, what causes water scarcity? Are natural water sources more polluted than in the past? Yes: No: Don't know If yes, give reasons. How far from the river bank do you ploughing? How far from the river bank do you cut trees? Where do you do your laundry?
2.6. 2.7. 2.8. 2.9. 2.10. 2.11.	If yes, what causes water scarcity? Are natural water sources more polluted than in the past? Yes: No: Don't know If yes, give reasons. How far from the river bank do you ploughing? How far from the river bank do you cut trees? Where do you do your laundry? Where do you bath?
2.6. 2.7. 2.8. 2.9. 2.10. 2.11. 2.12.	If yes, what causes water scarcity? Are natural water sources more polluted than in the past? Yes: No: No: Ton't know If yes, give reasons. How far from the river bank do you ploughing? How far from the river bank do you cut trees? Where do you do your laundry? Where do you bath? Are these the Venda cultural practices?
2.6. 2.7. 2.8. 2.9. 2.10. 2.11.	If yes, what causes water scarcity? Are natural water sources more polluted than in the past? Yes: No: Don't know If yes, give reasons. How far from the river bank do you ploughing? How far from the river bank do you cut trees? Where do you do your laundry? Where do you bath?
2.6. 2.7. 2.8. 2.9. 2.10. 2.11. 2.12.	If yes, what causes water scarcity? Are natural water sources more polluted than in the past? Yes: No: No: Ton't know If yes, give reasons. How far from the river bank do you ploughing? How far from the river bank do you cut trees? Where do you do your laundry? Where do you bath? Are these the Venda cultural practices?

5. **Indigenous vegetation**

- 3.1.
- Which (if any) traditional beliefs or customs help to protect plants? Which tree species may not be cut according to the Venda culture? 3.2.
- What is the correct season to harvest marula fruits? 3.3.
- What happens to someone who harvests marula before an open season? 3.4.

3.5.	Is firewood scarce nowadays?
	Yes
	No
	Don't know
3.6.	If yes, what is the cause of wood scarcity?
3.7.	Which indigenous vegetables are propagated by the Vhavenda?
3.8.	Which trees do the Vhavenda plant in the graveyards?
3.9.	Is this practice still followed?
	Yes:
	No :
	Don't know
3.	Indigenous animals
4.1.	Which indigenous animals may not be killed according to the Venda culture?
4.2.	Why may they not be killed?
4.3.	Which animals are edible according to the Venda culture?
4.4.	How do you hunt these animals?
4.5.	Which animal species may not be eaten according to the Venda culture?
4.6.	Why may these animal species not be eaten?
4.7.	What (if any) is the limit to the number of the following animals that people
	may keep in your area?
	Cattle :
	Goats :
	Sheep:
	Donkeys:
	No limit:
4.8.	For what reasons do the Vhavenda keep:
	Cattle ?:
	Goats ?
4.9.	Has grazing for these animals become more scarce?
	Yes:
	No :
	Don't know
4.10.	If yes, what are the reasons?
4.11	Which (if any) animals are considered to be symbols of bad or good omen
	according to the Venda culture?
4.12.	How do you treat these animals?
4.	Population development
5.6.	What is an ideal number of children for the Venda couple living in a rural village?
5.2.	At what age is the Muvenda child weaned?
5.3.	Which traditional methods are used to ensure that children are weaned at the correct age?

What is the aim of spacing children with the number of years mentioned

5.4.

above?

5.5.	Do you still follow the traditional methods of spacing children?
	Yes:
	No :
	Don't know
5.5.	If not, why?
5.7.	How do the Vhavenda reduce a woman's fertility?
5.8.	How do the Vhavenda increase a woman's fertility?
5.9.	Is overpopulation a problem in your village?
	Yes:
	No :
	Don't know

APPENDIX 4

QUESTIONNAIRE

For traditional healers (vhomaine)

1.

Land

1.1.	Which (if any) traditional beliefs or customs help to protect land? Describe.
1.2.	In which way (if ever) do you encourage the maintenance these traditional
	beliefs and customs?
1.3.	Who mostly influences villagers to conserve the land?
1.4.	As a traditional healer, what is your role in promoting land conservation?
1.5.	Which (if any) traditional methods are used to prevent soil erosion?
	Describe.
1.6.	Are these methods still used?
	Yes:
	No :
	Some :
	Some people still use them:
1.7.	If yes, what is your role in maintaining these practices?
1.8.	Has the land become less productive than in the past?
1.9.	If yes why has the land become less productive than in the past?
1.10.	Can land productivity be improved?
	Yes
	No
	Don't know
1.11.	If yes:
	(a) How can land productivity be improved?
	(b) Who should encourage the promotion of land productivity and how?
1.12.	Was more land available for settlement and for agriculture before the
	homeland (bantustan) policy was introduced?
	Yes
	No
	Do not know
1.13.	Do you still need more land for agriculture?
	Yes
	No
	Do not know

1.14.	If yes, what is the size of land that you need?
1.15.	Are there certain areas which are culturally protected in your village?
	Yes:
	No :
	Do not know:
1.16.	If yes why and how are these areas protected?
1.17.	
1.17.	Yes:
	No :
	110
6.	Water
2.1.	which (if any) traditional beliefs or customs help to protect water?
2.2.	If so in which way do you encourage the maintenance of these traditional
	beliefs and customs?
2.3.	What role do you play as a traditional healer to promote the conservation of
	water sources?
2.4.	Is the water scarce nowadays?
	Yes:
	No
2.5.	If yes, what causes water scarcity?
2.6.	Are natural water sources more polluted than in the past?
	Yes:
	No :
2.7.	If yes, give reasons.
2.8.	How far from the river bank do you ploughing?
2.9.	How far from the river bank do you cut trees?
2.10.	Where do you do your laundry?
2.11.	Where do you bath?
2.12.	What is the main aim of ploughing wetlands according to the Venda culture?
3. 7.	Indigenous vegetation
3.1.	Which (if any) of the plant species are solely used by traditional healers only?
3.2.	Which traditional rituals are followed in order to collect medicinal plants?
3.3.	Which medicinal plants are culturally propagated by traditional healers?
3.4.	What do you do to ensure that medicinal plants do not die after collecting medicine?
3.5.	What is the importance of calling medicinal plants by special names only
5.5.	known to traditional healers?
3.6.	Are medicinal plants scarce nowadays?
2.0.	Yes:
	No:
	Do not know:
3.7.	If so, what are causes of the scarcity?
	•

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4.	Indigenous	anıma	k

4.1.

Which indigenous animals are used as medicine?

4.2.	How do you hunt them?
4.3.	How many kills do you make per month?
4.4.	According to the Venda culture which indigenous animals may not be killed?
	Explain.
4.5.	May traditional leaders kill such animals?
	Yes:
	No :
4.6.	Which animals are used by witches?
4.7.	For what do they use them?
4.8.	Are some of the animals used by witches scarce nowadays?
4.9.	If so, what are the reasons?
5.	Population development
5.1.	What is an ideal number of children for the Venda couple living in a rural
	village? Explain.
5.2.	At what age is the Muvenda child weaned?
5.2.	Which traditional methods are used to ensure that children are weaned at the correct age?
5.3.	What is the aim of spacing children with the number of years mentioned above?
5.5.	Do villagers still follow the traditional methods of spacing children?
	Yes :
	No :
	Do not know:
5.6.	If not, why?
5.7.	Is there medicine with which you may treat a woman to reduce her fertility?
	Yes:
	No :
5.8.	Can you treat a woman in order to increase her fertility?
5.9.	Is overpopulation a problem in your village?
	Yes:
	No :
	Do not know

APPENDIX 5

COMMON CULTURALLY PROTECTED AREAS UNDER THE TSHIVHASE TERRITORY

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Sacred forests

Phindula

Tshamapfamesa

Thogwe

Sididzhani

Tshitaka-tsha-Mafhoni

Mudzadze-nduni.

Tshakhuma

Musanzhe

Tshiendeulu tsha ha Ramovha

Tshitaka-tsha-Tshamulondo

Tshiendeulu-tsha-Tshiheni

Thathe

Mutshikilini (Hamakuya)

Vhutanda

Tshiswavhathu (Murangoni)

Tshitaka-tsha-Tshiungani

Waterfalls

Guvhukuhvhu (Phiphidi)

Mahovhohovho

Tshirovha

Sacred fountains

Tshamurenzhe (Mukula)

Tshisima-tsha-Mukuvhoni (Makonde)

Tshisima-tsha-Tshamukono (Makonde)

Tshisimani tsha Mukwatakwata.

Tshamuluwa

Tshankukuli

Tshamashango

Mountains

Tshipange

Tshambobvu

Raluvhimba Sacred Cave

Fundudzi Sacred Lake

APPENDIX 6

IMPORTANT CUSTOMS/NORMS RELATED TO SACRED AREAS UNDER THE TSHIVHASE TERRITORY

6.1 Prohibiting access

Prohibited places cannot be visited by everyone. Those who go in either do not come back (*Vhutanda*) or come across snakes (*Thathe*).

There are specific places where people are not allowed to walk when they visit Phiphidi Waterfalls. If they were to walk in those places, they would fall into the water. It has also been reported that no one may pass near Tshamukonwa and Mukwatakwata fountains during the night because such a person would be showered with stones or be laughed at by invisible beings.

No one may go past *Dzivha Fundudzi* if she or he is going to sell goods without first having reported to the chief's kraal at Tshiavha. If she or he does, her or his goods will be confiscated. It is also said that if one visits *Dzivha Fundudzi*, he is likely to come across ghosts (*zwidudwane*).

While no one is allowed free access to *Mahovhohovho* without first seeking permission, there is a specific site at Lake *Fundudzi* and *Guvhukuvhu* Waterfalls to which access is prohibited. It is also reported that if one enters *Thathe*, there is a place which may not be entered. Any person entering this place will not come back. If perchance he or she does manage to get out, she or he will be insane.

6.2 The prohibition of some activities

No one is allowed to collect veld products (timber, firewood, fruits and vegetables) plough, allow domestic stock to graze and browse, or burn any sacred area. Should wood be collected from sacred forests, a pangolin will trace them up to the owner's home. A person who has collected firewood may have stones thrown at him or her, and will not come out of their hut for fear that a leopard will come to kill the stock at the house. Women who try to collect firewood from Lake Fundudzi might get confused and fail to find their way out of the area.

If ordinary people could collect *Urera tenax* vegetable from Tshamutshikili at Ha-Makuya, guardians (ancestral spirits) of this sacred forest could be pelt them with stones. When *Tshambovu* Mountain is set alight, it should not be burnt up to its peak. If it is, the territory will be struck by hunger for seven years.

Anyone who contravenes these traditional norms may be summoned to appear before the traditional court (*khoro*). However, traditional rituals are carried out to appease the spirits on behalf of those people who contravene traditional taboos unintentionally.

6.3 Prescribing what should be done

Even if it is difficult for the general public to make use of sacred areas, the owners of these areas do use them. For example, the Vhutanda clan goes to the sacred area to perform traditional rituals at the end of each year. In their rituals, they use sorghum which they carry it with to a central spot in the sacred forest and leave it there.

When no rain fell, the royal family from Makonde visited Bako la Raluvhimba to ask God for rain. They would play *tshikona*. First they played it at Mutsenene Sacred Fountain, then at the chief's kraal, and finally at the cave. Historically Nwali (God) used to visit Bako la Raluvhimba. His coming was signified by thunder and vibrations of the land. In response, people would ululate (referred to as *u lidza mifhululu*) because they knew that it was Nwali who was passing. His coming was a blessing because he brought good rains and a good harvest.

When he came, he communicated to Mr. Magwabeni, who acted as mediator between him and the people of Makonde. It is said that Nwali no longer visits his people because of modernisation. They have put up structures with corrugated iron; they use tractors to plough; they work on Saturdays and on Sundays, and they have put up wire fences.

Another place which is accessed for purposes of asking for rain is Tshipange Mountain. Below this mountain, the people of Thononda gather to plough a piece of land which is referred to as *tshirenwarenwane*. Then a traditional doctor uses medicine, and when he is finished, it begins to rain even before the villagers arrive home. The mist is said to start from Tshipange. Then it moves to Tshipangana Mountain before moving on to the village.

When a member of the Phiphidi Royal family (Tshivhase) had died, Guvhukuvhu is visited so that a report may be submitted to the gods. Another visit will later be made. On this second visit, people search for signs that will tell them if they have permission to prepare for the burial. A positive response is to find malt which has been soaked and taken out of the container again (*mufhoho wo nulwaho*). Before ploughing, some rituals are performed at Guvhukuvhu. It is said that when rain is about to fall, a special sound will be heard from the waterfalls.

It is customary for the Tshiavha clan to gather at Dzivha Fundudzi to perform a ritual which is called *thevhula*. While this happens, no one is allowed to roast mealies because there mealies with roasted nuts are brought to the lake for rituals. Should anyone *intentionally* roast mealies, he will get lost on his way to the chief's kraal. Most of those who get lost are subsequently found at Ngomani dza vhadzimu, a core area which no one is allowed to visit at Lake Fundudzi (one woman was once found there because of roasting mealies). Vhamusanda would then take him to his kraal where *thevhula* would have been brewed. From the chief's kraal the elderly women (referred to as *vhomakhadzi*) will carry thevhula to the Lake (to the core area which is a specific site designated for carrying out rituals at the lake).

Once every year, the royal family of Tshidzivhe clan visit Thathe Holy Forest to worship their ancestors. They do so by performing a ritual referred to as *u phasa*. This holy forest is also used as a burial ground for members of the royal family. Except for the chief, members of the royal family who die are first buried at *tshiendeulu* (closer to the chief's kraal) and then later re-interred in the sacred forest. During all rituals they slaughter a cow and play *tshikona* dance.

When the chief visits Thathe Holy Forest for rituals (referred to as *u phasa*) and for burial, it becomes an important ceremonial occasion. During the occasion, *tshikona* dance music is played to accompany him. The royal executives, which include the elderly brothers and sisters from the royal family (referred to as vho-khotsimunene na vhomakhadzi), lead the procession to the sacred area. This is an extremely important occasion. Trumpets made out of kudu horns (referred to as

phalaphala) are blown and women ululate. It is during this time that they converse with their ancestors. When the chief enters the sacred area, thunder, storms and lightning which only occur in the sacred precinct are witnessed. When he comes out of the area, these weather conditions stop.

Mahovhohovho is mostly visited for throwing divination bones (referred to as u *tungula*). At some places like Mafhoni, every group that goes out to play tshikona dance (referred to as *u bva bepha*) has to stop at the place first and dance before they go to wherever they are going to dance.

There are ways in which ordinary people (other than members of the royal family) may get access to the sacred areas. In the case of Lake Fundudzi, it is reported that in order to pass the place, one should bend with one's back facing the lake (this ritual is referred to as *u kodola*) – hence the saying "Fundudzi la Nyankodolela".

6.4 Historical incidents which resulted from non-compliance with customary norms in sacred areas of the Tshivhase Territory

A number of frightening incidents have been reported to have affected individuals who have ignorantly entered sacred areas without permission. At one stage a white official from Thathe Vondo Plantation entered Thathe Sacred Forest without permission. He stayed there for seven days lost in the area. People went out to look for him with the assistance of the royal family. When he was found, his eyes were sunk deep back into his head. From that time on, he never wanted to work in that area again, and asked for a transfer. This man had been warned but he did not want to listen. Once a white man who passed near Thathe Forest saw a beautiful branch which he decided to take. Having gone into the area to reach for it, he failed to come out. Luckily the chief (vhamusanda) came to perform a ritual (*u rerela*) in order to rescue him. He eventually left the branch there.

It was reported that when a fence post was put on top of Tshambovu Mountain, a large stone detached its self from the top of the mountain. After that, water rushed down and destroyed

houses and the Murangoni School in the area.

At Mudzadzenduni children once stole mangoes from the orchard of the owner of the sacred area. When the owner made enquiries about the incident from the parents, they pretended not to know about the theft. He then warned that a miracle would happen. A short while later, the house in which the children stayed was visited by numerous snakes. It became so serious matter that the father of the children had to take a cow to the owner of the sacred area and ask for forgiveness. After that a big hairy snake came to swallow all the other snakes and the problems ceased.

It has been reported that once when fire burnt towards the Tshamapfamesa Sacred area, it approached its edge it could not continue and the area was kept safe from the fire.

At one stage during the funeral of one member from the Sididzha family, many people entered the sacred burial grounds. Snakes came out as a sign that the ancestors were offended. It was only after vhomakhadzi had conversed with the ancestors that they disappeared. The conversation was a way of apologising and requesting that the ancestors to allow the burial to continue in the presence of the outsiders who were the friends of the deceased.

During the establishment of the Tshivhase Tea Estate, whites tried to chop down the sacred forest of Vhutanda. When they tried to cut the edge of the forest, they heard a baby crying. As it was difficult for them to determine the direction from which the cry had come, they continued chopping. Later they heard a second cry and were surprised when they observed blood oozing from the stem of the tree that they had cut. They then threw the axe away and tried to escape. Even today this sacred forest remains untouched in the middle of the tea plantation. Once a boy went there to collect honey and got lost in the same area. His friends went home to report his disappearance. In order to find him, Vhakoma vho-Nevhutanda had to converse with the ancestors. Other whites who also entered this area, became confused and did not know how they had got in.

Another incident took place when the whites constructed a water system from Tshirovha Sacred Area. Instead of water coming out of the tap, they saw a snake coming out. As they looked on in shock, the snake disappeared immediately. This snake had gone to block the water system so that

water from the sacred area should not be collected by pipes.

A number of people have lost their lives at Guvhukuvhu Waterfalls. This includes a white man and one Sotho-speaking tourist who died in January 1997. They were pulled into the mud and eventually died. Others died while they were swimming. In most cases, these have been people who came from different cultures. Although they were warned to respect the place, they ignored the warnings.

It is reported that the river has a slippery stone on one part of the bank. Should someone swim up to this point, it becomes difficult to come back. Again it is said that no fish will feed on the corpse of the deceased if they die in this place because dying is one way of being taken by gods. When the corpse is taken out of the water, it should be done in the presence of the custodians of the sacred place.

Lives have also been lost in Dzivha Fundudzi. For example, it has been reported that a few years ago two boys died while they went out to catch fish. There is a belief that one member from the royal family of Tshiavha clan (*mukololo*) must die in the lake every year. Such deaths are caused by drowning or by a crocodile. If no one dies in a particular year, the number will be made up in the following years.

There was a case where one man escaped. He found himself drowning and because he was a good swimmer, he managed to come out of the water although he was quite breathless. It took him some time to get out of the water, and he could hardly breathe by then.

At one stage a woman who visited Tshiheni happened to collect marula fruits at the edge of Tshiungani Sacred Forest. When she arrived at the house she was visiting, a family member was surprised to see snakes coming in. After investigation, they discovered that the marula fruits had been collected from the sacred place. They took them back and the snakes disappeared. The same happened to a boy who, after having hunted birds, covered them with leaves. When he removed the leaves, the snakes also disappeared. Another way in which snakes may disappear is by calling the owner of the sacred area to come and perform a ritual as a way of apologising to his ancestors (gods).

When the Mukumbani Tea Estate was being constructed, the contractor tried to remove the bush from the sacred area of Masanzhe. The tractor broke before he could fell one tree. Though the tree was affected to a certain extent, the following morning it was once again standing as though nothing had happened. The driver of the tractor died. Similarly a bulldozer that went in Vhutanda Forest stuck inside until the Vhutanda clan went to apologise to their ancestors (by carrying out a special ritual)

In order to supply water through a pipe system, a cement slab was constructed at Tshikuvhoni Fountain. To everybody's surprise a large fish came and blocked the inlet of the pipe and caused the slab to crack. As a result the water found another way to flow out. The authorities tried to reconstruct the slab three times – but without success.

APPENDIX 7

CULTURALLY PROTECTED PLANT SPECIES

7.1 PLANT SPECIES THAT MIGHT NOT BE BROUGHT HOME

SCIENTIFIC NAMES	ENGLISH	AFRIKAANS NAME	TSHIVENDA
	NAMES	S	NAMES
Adenia gumifera			Bopha
Androstachys johnsonii	Lebombo	Lebombo-ysterhout	Musimbiri
	ironwood	•	
Anthocleista grandiflora	Forest fever tree		Mueneene
Artabotrys	Purple hook-berry	Groothaakbessie	Mudzidzi
brachypetalus			
Bersama tysoniana	Common bersama	Gewone witesenhout	Sando
Brackenridgea	Brackenridgea	-	Mutavhatsindi
zanguebarica			
Burkea africana	Red syringa	Rooisering	Muvhambangoma
Celtis africana	White stinkwood	Witstinkhout	Luvhambo
Cussonia spicata	Cabbage tree	Gewone kiepersol	Musenzhe
Diospyros mespiliformis	Jackalberry	Jakkalsbessie	Musuma
Erythrina lysistemon	Common coral tree	Gewone koraalboom	Muvhale
Gardenia amoena	Spingy gardenia	Doringkatjiepiering	Murombe
Gardenia thunbergia	Transvaal gardenia	Transvaalkatjiepiering	Tshiralalala
Halleria lucida	Tree fuchsia	Notsung	Murevhe
Heteromorpha	Parsley tree	Wildepieterseliebos	Muhathavhanna
arborescens			
Millettia stuhlmannii			Muangaila
Mundulea sericea	Cork bush	Kurkbos	Mukundandou
Osyris lanceolata	Transvaal somach	Bergbas	Tshitasiri
Parinari curatellifolia	Mobola plum	Grysappel	Muvhula
Peltophorum africanum	Weeping wattle	Huilboom	Musese
Pouzolzia hypoleuca	Soap nettle	Seepnetel	Muthanzwa
Rauvolfia caffra	Quinine tree	Kinaboom	Munadzi
Schefflera umbellifera	Bastard cabbage	Basterkieprsol	Munkho
	tree		
Spirostachys africana	Tamboti	Tambotie	Muonze
Synadenium cupulare	Dead-man's tree	Dooiemasboom	Muswoswo
Syzygium cordatum	Water berry	Waterbessie	Mutu
Trema orientalis	Pigeonwood	Hophout	Mukurukuru
Vangueria infausta	Wild medlar	Wildemispel	Muzwilo
Vernonia stipulacea	Poison tree	Bosbloutee	Mufhuluta-vhana
	vernonia		
Ximenia caffra	Large sourplum	Grootsuurpruim	Mutanzwa
Ziziphus mucronata	Buffalo-thorn	Blinkblaar-wag-n-bitjie	Mutshetshete

7.2 MEDICINAL PLANTS

SCIENTIFIC NAMES	ENGLISH NAMES	AFRIKAANS NAMES	TSHIVENDA NAMES
Artabotrys brachypetala	Purple hook-berry	Groothaakbessie	Mudzidzi
Brackenridgea zanguebarica	Brackenridgea	-	Mutavhatsindi
Celtis africana	White stinkwood	Witstinkhout	Luvhambo/Mumvum
			vu

Heteromorpha arborscence	Parsley tree	Wildepieterseliebos	Muhathavhanna
Millettia stuhlmanii	·	•	Muangaila

7.3 EDIBLE PLANT SPECIES

SCIENTIFIC NAMES	ENGLISH NAMES	AFRIKAANS NAMES	TSHIVENDA
			NAMES
Adansonia digitata,	Baobab	Kremetartboom	Muvhuyu
Annona senegalensis	Wild custard-apple	Wildesuikerappel	Muembe
Bequaertiodendron magalismontanum	Stem fruit	Stamvrug	Munombelwa
Berchemia discolor	Bird plum	Voelpruim	Munii
Boscia albitrunca	Shepherd's tree	Witgat	Muthobi
Bridelia micrantha	Mitzeerie	Mitserie	Munzere
Carrisa bispinosa	Num-num	Noemnoem	Mutungulu
Cephalanthus natalensis.	Tree strawberry	Witaarbeibos	Murondo
Diospyros emespiliformis	Jackals berry	Jakkalbessie	Musuma
Ficus capensis	Cape fig	Kaapsevy	Muhuyu
Ficus natalensis	Common wild fig	Gewone wildevy	Muumo
Garcinia livingstonei	African mongosteen	Laeveldse geelmekhout	Mupimbi
Gardenia amoena	Spingy gardenia	Doringkatjiepiering	Murombe
Grewia microthyrsa	Lebombo raisin	Lebomborosyntjie	Mupfuka
Hexalobus monopetalus	Shakama plum	Shakamapruim	Muhuhuma
Lagynius dryadum	Lagynius		Muzwilongala
Landolfia kirkia			Muvhungo
Mimusops zeyherimutaladzi	Transvaal red	Moepel	Mububulu
	milkwood		
Parinari curatellifolia	Mobola plum	Grysappel	Muvhula
Sclerocarya birrea	Marula	Maroela	Mufula
Strychnos spinosa	Spiny monkey orange	Groen klapper	Muramba
Syzygium cordatum	Water berry	Waterbessie	Mutu
Syzygium legatii	Mountain waterberry	Berg waterhout	Mutawi
Vangueria infausta	Wild medlar	Wildemispel	Muzwilo
Ximenia americana	Small sourplum	Kleinsuurpruim	Mutanzwa-
	•	•	Tanzwane
Ximenia caffra	Large sourplum	Grootsuurpruim	Mutanzwa

7.4 PLANT SPECIES IMPORTANT TO WATER CONSERVATION

SCIENTIFIC NAMES	ENGLISH NAMES	AFRIKAANS NAME	TSHIVENDA NAMES
Alsophila capensis	Forest tree fern	Bosboomvaring	Tshidima
Alsophila dregei	Common tree fern	Gevone boomvaring	Tshidima
Anthocleista grandiflora	Forest fever tree	Boskoorsboom	Mueneene
Breonadia microcephala	Matumi	Mingehout	Mutulume
Bridelia micrantha	Mitzeerie	Mitserie	Munzere
Ekebergia capensis	Cape ash	Essenhout	Mutovuma
Ensete ventricosum	Wild banana	Afrikaanse Wildepiesang	Mulolo
Rauvolfia caffra	Quinine tree	Kinaboom	Munadzi
Salix subserrata	Safsaf willow	Safsafwilger	Munengeledzi

Strelitzia caudata	Transvaal strelitzia	Transvaalse wildepiesang	Nami
Syzigium caudatum	Water berry	Waterbessie	Mutu

7.5 TREES USED FOR WOODCARVING

SCIENTIFIC NAMES	ENGLISH NAMES	AFRIKAANS NAMES	TSHIVENDA NAMES
Burkea Africana.	Red syringa	Rooisering	Muvhambangoma
Pterocarpus angolensis		Kiaat	Mutondo

7.6 PROPAGATED INDIGENOUS VEGETABLES

SCIENTIFIC NAMES	ENGLISH NAMES	AFRIKAANS NAMES	TSHIVENDA NAMES
Biddens pilosa	Black jack	Duiwelskerwers	Mushidzhi
Cleome gynandra	Kaffir cabbage	Palmbossie	Murudi
Cleome monophylla		Rusperbossie	Mutohotoho
Corchorus spp.		_	Delele
Grewia occidentalis	Cross-berry	Kruisbessie	Mulembu
Laportea longipedanculata.			Dzaluma
Momordica balsamina	African cucumber		Lugu
Momordica foetida	Bushman-karo		Nngu
Pouzolzia hypoleuca	Soap nettle	Seepnetel	Muthanzwa
Solanum retroflexum	Black nightshade	Galbessie	Muxe
Urea tenax,	Tree nettle	Bergbrandnetel	Muvhazwi

7.7 PLANT SPECIES PLANTED IN GRAVEYARDS

SCIENTIFIC NAMES	ENGLISH NAMES	AFRIKAANS NAMES	TSHIVENDA NAMES
Adenium gumifera			Bopha
Diospyros mespiliformis	Jackal berry	Jakkalsbessie	Musuma
Dovyalis caffra	Kei-apple	Kei-appel	Mutunu
Dovyalis zeyheri	Oval kei apple	Wilde-appelkos	Mutunu
Erythrina lysistemon	Common coral tree	Gewone koraalboom	Muvhale
Euphorbia tirucalli.	Rubber hedge	Kraalnaboom	Mutungu
	euphorbia		
Ficus natalensis	Common wild fig	Gewone wildevy	Muumo
Jatropha curcus	Physic nut	Purgeerboontjie	Mupfure
Melia azedarach	Persian lilac		Muserenga
Opuntia sp	Prickly pear		Mudoro
Pinus pinaster	Cluster pine		Mupaini
Synadenium cupulare	Deadma's tree	Dooiemansboom	Muswoswo
Ziziphus mucronata	Buffalo thorn	Blinkblaar-wag-n-	Mutshetshete
		bitjie	

7.8 PROPAGATED MEDICINAL PLANT SPECIES

SCIENTIFIC NAMES	ENGLISH NAMES	AFRIKAANS NAMES	TSHIVENDA NAMES
Aloe spp	Aloe	Alwyn	Tshikhopha
Antidesma venosum,	Tassel berry	Tasselbessie	Mukwalikwali
Asparagus spp			Tshiwamatata
Bolusanthus speciosus	Tree wistaria	van wykshout	Mukamba
Bophane disticha.			Kholomo
Carissa bispinosa	Num-num	Noemnoem	Mutungulu
Euphorbia spp,	Candelabra tree	Naboom	Mukonde
Mimosa pudica			Mushona
Opuntia spp	Prickly pear		Mudoro
Pouzolzia hypoleuca	Soap nettle	Seepnetel	Muthanzwa
Synadenium cupulare	Dead-man's tree	Dooiemansboom	Muswoswo
Tecomaria capensis	Cape honey suckle		Tshilambila
Terminalia sericea,	Silver terminalia	Vaalboom	Mususu

APPENDIX 8

ANIMAL SPECIES OF CULTURAL IMPORTANCE

8.1 ANIMALS THAT COULD NOT BE KILLED

SCIENTIFIC NAMES	ENGLISH NAMES	AFRIKAANS NAMES	TSHIVENDA NAMES
Bubo africanus	Spotted Eagle Owl	Gevlekte ooruil	Tshikhithanwongo
Bubo lacteus	Giant Eagle Owl	Reuse-ooruil	Gwitha
Crocodylus niloticus	Nile crocodile	Krokodil	Ngwena
Equus burchelli	Burchell's zebra	Zebra	Mbidi
Hippopotamus amphibius	Hippopotamus	Seekoei	Mvuvhu
Kobus ellipsiprymus	Common Waterbuck	Waterbok	Davhu/Phidwa
Loxodonta africana	African elephant	Olifant	Ndou
Manis temmincki	Cape Pangolin	Ietermagog	Khwara
Panthera leo	Lion	Leeu	Ndau
Panthera Pardus	Leopard	Luiperd	Nngwe
Papio ursinus	Chachma baboon	Bobbejaan	Pfene

Python sebae	Phython	Luislang	Tharu
Raphicerus capensis	Steenbok	Steenbok	Phuluvhulu
Struthio camelus	Ostrich	Volstruis	Mphwe
Tauraco porphyreolophus	Purple-crested Loerie	Bloukuif-loerie	Khurukhuru
Tragelaphus scriptus	Bushbuck	Bosbok	Mbavhala
Tyto alba	Barn Owl	Nonetjie uil	Muswoo

8.2 MEDICINAL ANIMALS:

SCIENTIFIC NAMES	ENGLISH NAMES	AFRIKAANS NAMES	TSHIVENDA NAMES
Actophilornis africanus	African Jacana	Langtoon	Khuhumulambo
Aepyceros melampus	Impala	Rooibok	Phala
Canis mesomelas	Black-backed	jackal Rooijakkals	Phunguhwe
Cercopithecus aethiops	Vervet monkey	Blouaap	Thoho
Corythyxoides concolor	Grey Loerie	Kwevoel	Mukuwe
Crocuta crocuta	Spotted hyaena	Tierwolf	Phele
Erinaceus frontolis	Hedgehog	Krimpvarkie	Tshitoni
Gyps coprotheres	Cape Vulture	Krans-aasvoel	Danga
Hieraaetus spilogaster	African Hawk	Afrikaanse Jagarend	Goni
	Eagle .		
Hippopotamus	Hippopotamus	Seekoei	Mvuvhu
amphibius			
Hystrix sp	Crested porcupine	Ystervark	Nungu
Lamprotarnis nitens	Cape Glossy	Klein Glanspreeu	Liholi
	Starling		
Loxodonta africana	African elephant	Olifant	Ndou
Oreotragus oreotragus		Klipspringer	Ngululu
Orycteropus afer	Antbear	Aardvark	Thagalu
Panthera leo	Lion	leeu	Ndau
Panthera pardus	Leopard	Luiperd	Nngwe
Pupio ursinus	Chachma baboon	Bobbejaan	Pfene
Raphicerus capensis		Steenbok	Phuluvhulu
Scopus umbretta		Hamerkop	Tshirukhwe
Sylvicapra grimmia	Grey duiker	Gewone duiker	Ntsa
Syncerus caffer	Cape buffalo	Buffel	Nari
Taurotragus Oryx	Cape eland	Eland	Phofu
Tragelaphus	Greater kudu	Koedoe	Tholo
strepsiceros			

8.3 ANIMALS HUNTED BY LEADERS

SCIENTIFIC NAMES	ENGLISH NAMES	AFRIKAANS NAMES	TSHIVENDA NAMES
Conochaetes	Brindled gnu	Blouwildbeest	Khongoni
taurinus			
Potamochoerus	Bushpig	Bosvark	Nguluvhedaka (Nami)
porcus			

Pychnonotus	Black-eyed Bulbul	Swartoog-tiptol	Gwede
barbatus			

8.4 EDIBLE ANIMALS

SCIENTIFIC NAMES	ENGLISH NAMES	AFRIKAANS NAMES	TSHIVENDA NAMES
Equus burchelli	Burchel's zebra	Zebra	Mbidi
Giraffa	Girafe	Kameelperd	Thudwa
camelopardalis			
Kobus ellipsiprymus	Common	Waterbok	Davhu/Phidwa
	Waterbuck		
Raphicerus campestris		Steenbok	Phuluvhulu
Sylvicapra grimmia	Grey duiker	Gewone duiker	Ntsa
Tauraco	Purple-crested	Bloukuif-loerie	Khurukhuru
porphyreolophus	Loerie		
Tragelaphus angasi	Nyala	Nyalabok	Nyala
Tragelaphus	Greater kudu	Koedoe	Tholo
strepisiceros			

8.5 ANIMALS THAT MIGHT NOT BE EATEN

SCIENTIFIC NAMES	ENGLISH NAMES	AFRIKAANS NAMES	TSHIVENDA NAMES
Acinonyx jubatus	Cheetah	Jagluiperd	Didinngwe
Aonyx capensis	Cape Clawless Otter	Groototter	Tshiphu
Arundo histica	European Swallow	Europise Swaei	Thambelamadi
Bubo africanus	Spotted Eagle Owl	Gevlekte ooruil	Tshikwithanwongo
Bubo lacteus	Giant Eagle Owl	Reuse-ooruil	Gwitha
Bubulcus ibis	Cattle Egret	Bosluivoel	Lilisakholomo
Camprimalgas spp.	Nightjar	Naguil	Gombambudzi.
Canis mesomelas	Black-backed jackal	Rooijakkals	Phunguhwe
Cercopithecus mitis	Blue monkey	-	Dulu
Ciconia ciconia	Wite Stork	Wit Sprinkaanvoel	Liavhelwa
Corvus albus	Pied Crow	Witbiors-kraai	Funguvhu
Corythornis cristata	Malachite Kingfisher	Kuifkopvisvanger	Thungununu
Crocodylus niloticus	Nile crocodile	Krokodil	Ngwena
Crocuta crocuta	Spotted hyaena	Tierwolf	Phele
Equus burchelli	Burchell's zebra	Zebra	Mbidi
Felis caracal	Caracal	Roiikat	Thwani
Galago senegalensis	Lesser galago	Nagapie	Dzeleane
Geneta geneta	Common genet	Kleinkolmuskejaatkat	Mutsherere
Giraffa	Girafe	Kameelperd	Thudwa
camelopardalis			
Gyps coprotheres	Cape vulture	Krans-aasvoel	Danga
Hagedashia hagedash	Hadeda		Linaanaa
Hieraaetas spilogaster	African Hawk Eagle	Afrikaanse Jagarend	Goni

Hippopotamus amphibius	Hippopotamus	Seekoei	Mvuvhu
Hystrix spp	Crested porcupine	Ystervark	Nungu
Larius collarir	Fiscal Shrike	Fiskaal	Sukhwa
Lepus capensis	Cape hare	Haas	Muvhuda
Loxodonta africana	African elephant	Olofant	Ndou
Milvus aegyptus	Yellow-billed Kite	Geelbekwou	Lurwanzhivha
Panthera leo	Lion	Leeu	Ndau
Panthera pardus	Leopard	Luiperd	Nngwe
Passer domesticus	House Sparrow	Huis Mossie	Lithandaphalishi
Procavia capensis	Dassie	Dassie	Mbila
Sagitarius serpentarius	Secretary Bird	Sekretarisvoel	Thaame
Tyto alba	Barn Owl	Nonetjie uil	
Varanus albogularis	Water leguan	Water lekkewan	Mpwashe

8.6 ANIMALS OF BAD OMEN

SCIENTIFIC NAMES	ENGLISH NAMES	AFRIKAANS NAMES	TSHIVENDA NAMES
Bubo africanus	Spotted Eagle Owl	Gevlekte ooruil	Tshikhwithanwongo
Bubo lacteus	Giant Eagle Owl	Reuse -ooruil	Gwitha
Camprimalgas spp	Night jar	Naguil	Gombambudzi
Centropus superciliosus	Burchell's Coucal	Vleiloerie	Gwigwi
Coculus solitarius	Red-chested	Piet -my-vrou	Hunamuthuofaho
	cuckoo		
Crocuta crocuta	Spotted hyaena	Tierwolf	Phele
Oreolus larvatus	Black-headed	Swartkop-wielewaal	Mugwidou
	Oriole	_	
Python sebae	Python	Luislang	Tharu
Tyto Alba	Barn Owl	Nonetjie uil	Muswoo

8.7 ANIMALS OF GOOD OMEN

SCIENTIFIC NAMES	ENGLISH NAMES	AFRIKAANS NAMES	TSHIVENDA NAMES
Agama atricolus	Tree agama	Koggelmander	Tshikwavhavha
Dryoscopus cubla	Puff-back Shrike	Sneeubal	Tshitohwio
Laniarius ferrugineus	Boubou.	Waterfiskaal	Sagombo
Prionops plumata	White Helmeted	Withelmlaksman	Liendangasambi
	Shrike		

8.8 ANIMALS USED BY WITCHES

SCIENTIFIC NAMES	ENGLISH NAMES	AFRIKAANS NAMES	TSHIVENDA NAMES
Bubo africanus	Spotted Eagle Owl	Gevlerkte ooruil	Tshikhwithanwongo
Bubo lacteus	Giant Eagle owl	Reuse-ooruil	Gwitha
Crocodilus nyloticus	Nile Crocodile	Krokodil	Ngwena

Crocuta crocuta	Spotted hyena	Tierwolf	Phele
Ictonyx striatus	Stripped polecat	Stinkmuishond	Thuri
Orycteropus afer	Ant-bear	Aardvark	Thagalu