

COMMUNITY BASED NATURAL RESOURCE MANAGEMENT SYSTEMS

**AN EVALUATION OF THE CAMPFIRE PROGRAMME IN ZIMBABWE: With
Special Reference to Omay, and Makande Communal Lands in Nyaminyami District.**

THESIS

**Submitted in fulfilment of the requirements for the Degree of
DOCTOR OF PHILOSOPHY
of Rhodes University**

by

BACKSON M.C. SIBANDA

November 1998

TABLE OF CONTENTS

ABSTRACT	vii
ACKNOWLEDGEMENTS	viii
CHAPTER ONE	1
INTRODUCTION	1
1. Introduction	1
1.1 Wildlife Perspectives Old and New	5
1.2 The Problem	7
1.3 Objectives of the study	18
1.4 Community resource management	19
1.5 CAMPFIRE Precursors	21
1.6 The CAMPFIRE Concept	24
1.7 The Need for Evaluating CAMPFIRE	30
1.9 Zimbabwe Policy on Resource Ownership and Conservation	34
1.10 The Study Area	44
1.11 Thesis Structure	69
CHAPTER TWO	71
STUDY METHODOLOGY, DATA PROCESSING AND ANALYSIS	71
2.1 Methodological Approach	71
2.2 Secondary Data Collection	78
2.3 Research Team	80
2.4 The Sampling Process	87
2.5 Primary Data Collection	97
2.6 Data treatment and analysis	104
2.7 Weaknesses of This Study Methodology	108
CHAPTER THREE	110
LITERATURE REVIEW	110
3. Introduction	110
3.1 Globalization and Global Commons	115
3.2 Poverty, Development and Environment	130
3.3 African Perspectives and CAMPFIRE	142
3.4 Common Property Theories and Resource Management	165
3.5 Community Participation and Natural Resources Management ...	189
3.6 Conclusions	197
CHAPTER FOUR	199
RESULTS OF HOUSEHOLD AND IN-DEPTH STUDIES	199
4.1 Introduction	199
4.2 The Household Survey	201
4.3 Benefits From CAMPFIRE	205

4.4 Decisions on Income Utilisation	207
4.5 How Income is Distributed and by whom	210
4.6 Decisions on Wildlife Use and Problem Animals	211
4.7 Open Ended Household Questions	218
4.8 Key Informants	237
4.9 Insights From the Elderly	245
4.10 Case Studies	252
4.11 Conclusion	273
CHAPTER FIVE	274
NATIONAL INFORMANTS: GOVERNMENT AND NGO OFFICIALS ...	274
5.1 Introduction	274
5.2 Policy and Legislation	278
5.3 Issues of Sustainability, Incomes and Benefits	291
5.4 Conclusions	306
CHAPTER SIX	308
DISCUSSION	308
6.1 Introduction	308
6.2 Discussions based on study objectives	309
6.3 Crosscutting Issues	354
6.4 Understanding CAMPFIRE, some unexpected results	372
6.5 Conclusion	381
CHAPTER SEVEN	382
CONCLUSIONS AND RECOMMENDATIONS	382
7.1 Introduction	382
7.2 Conclusions on Major Debates	383
7.3 Recommendations	385
7.4 Conclusion	388
APPENDIX ONE	390
APPENDIX TWO	402
APPENDIX THREE	412
APPENDIX FOUR	419
REFERENCES	433
Primary Data	433
News Papers	433
Personal Communication/Interviews	433
Secondary Sources	436

These are missing

LIST OF TABLES

TABLE 1.1 Environmental legislation	38
TABLE 2.1 Objectives, Methods, and Analysis	74
TABLE 2.2 Nyaminyami Population Breakdown	88
TABLE 2.3 Example of the Sampling Method	94
TABLE 2.4 Population and Household Figures	96
TABLE 4.1 Demography of Nyaminyami	200
TABLE 4.2 Respondents by Age	202
TABLE 4.3 Respondents by Sex	202
TABLE 4.4 Wildlife Ownership	203
TABLE 4.5 Traditional Ownership	204
TABLE 4.6 Cash Benefits from CAMPFIRE	206
TABLE 4.7 Community Projects	206
TABLE 4.8 Meat as a Benefit	206
TABLE 4.9 Decisions on income utilisation	207
TABLE 4.10 Who should decide on income utilisation	208
TABLE 4.11 Present income distribution	210
TABLE 4.12 Desired income distribution	210
TABLE 4.13 Problem Animals	212
TABLE 4.14 Poaching who should police	213
TABLE 4.15 Sources of Conservation messages	214
TABLE 4.16 Best Institutions to manage wildlife	215
TABLE 4.17 CAMPFIRE: who decides about wildlife utilisation	216
TABLE 4.18 Question 8: Traditionally how was wildlife managed?	220
TABLE 4.19 As far as you understand, what is CAMPFIRE?	222
TABLE 4.20 What is the advantage of CAMPFIRE if any?	225
TABLE 4.21 In your view, who are wildlife producers?	227
TABLE 4.22 Who should National Parks belong to and why?	227
TABLE 4.23 What has CAMPFIRE done for you either as an individual, household, or community?	229
TABLE 4.24 How are decisions made on wildlife utilization?	231
TABLE 4.25 How is traditional knowledge utilized in CAMPFIRE?	233
TABLE 4.26 Question 33: What is the greatest problem challenging/facing wildlife conservation in your area today?	236
TABLE 4.27 Key Informants	238
TABLE 4.28 Natural resources, challenges & parks management	240
TABLE 6.1 Distribution of Revenue per Ward from 1989 to 1994	336

LIST OF FIGURES

Figure 1.1 Map of Zimbabwe Provinces	4
Figure 1.2 Mashonaland West Province and District Population	46
Figure 1.3 CAMPFIRE Districts Including Nyaminyami	47
Figure 1.4 Natural Regions IV and V and National Parks	49
Figure 2.1 Omay Chieftain Areas and Makande	72
Figure 2.2 NYAMINYAMI LOCAL STRUCTURES	91
Figure 6.1 Income Distribution	339
Figure 6.2 Income Utilization	339

LIST OF PLATES

Plate 1.1 Zambezi Valley Escarpment	59
Plate 1.2 Tonga Homes	61
Plate 4.1 Mushayatumbu and Bangandi	259
Plate 4.2 Goats: Tonga Economic Mainstay	264
Plate 4.3 Mapfunde: Expert on the Legend of Nyaminyami	266

ABSTRACT

Communal Areas Management for Indigenous Resources (CAMPFIRE) is an innovative community based natural resource management strategy which transfers management and conservation responsibility from the state to the local communities. This thesis critically examines CAMPFIRE's potential for introducing sustainable natural resource management through the detailed examination of CAMPFIRE's implementation in Nyaminyami District, which is located in the Zambezi Valley of Zimbabwe. Comparisons with other districts are made as appropriate.

The theoretical framework of this research is based on an examination of common property theories, theories of bundles of rights, globalisation and the notion of global commons. It is also based on critically examining Zimbabwean, African and international literature dealing with the management of natural resources used in common.

There are five specific contributions which the thesis makes. Firstly, common property management is redefined and the difference between resources used in common but which are not common property and common property resources is clarified. Secondly, the study shows that CAMPFIRE is not sustainable whilst it remains dependent on wildlife alone and on a single species - the elephant. Thirdly, the thesis has attempted to extricate the CAMPFIRE concept from the wildlife debate in which it has become entangled and, fourthly, it examines the issues of globalisation and the global commons to show how decisions made at the international level impact on resource utilisation and management at the local level. Finally, the study examines what residual Tonga indigenous knowledge still exists and which aspects can be incorporated into present management systems.

Overall, the results of the research suggest that while CAMPFIRE is an innovative strategy for sustainable natural resource management it, has not achieved its major objective of becoming a grassroots rural development strategy. It has become a top down elitist programme which is NGO and donor driven and government constrained. Legislation and policy need formally to address this problem.

Finally, the thesis recognises the potential of the CAMPFIRE concept, especially if the weaknesses of the programme are addressed.

ACKNOWLEDGEMENTS

I would like to express my gratitude and thanks to my supervisor, Prof. Roddy Fox for his invaluable advice, guidance and friendship in carrying out this research and in writing this thesis. His advice was particularly important in aspects of Methodology and on how to keep the thesis focussed on objectives throughout. His sound guidance and support made the completion of this thesis possible.

Thanks must also go to my colleague and friend Barbara Williams who spent many hours reading the early drafts of this thesis, making corrections, asking questions and pointing out what was not clear. She also spent many hours at the end of this process proof reading and checking for consistency. I am indebted to her for this assistance she offered willingly. Thanks must also go to Colleen Higgs who proof read the thesis and gave editorial advice. Colleen took on this task at very short notice and did a sterling job. I am grateful to Susan Abrahams of the cartographic unit at the Geography department for all the time she spent producing the maps. For the many hours that John Landman spent doing the tables and layout production of this thesis, I am truly grateful.

My sincere gratitude goes to Prof. Sam Moyo director of Southern African Regional Institute for Policy Studies for encouraging me to do a PhD and for supporting my efforts thereafter. His efforts in ensuring that I got a grant to do my field work is particularly worth mention. In that respect I gratefully acknowledge the SAPES TRUST and its Executive Director, Dr. Ibbo Mandaza for the financial support that I got for my field work. I also acknowledge with thanks the financial support I got from Prof. Kate Rowntree's research grant which went towards the finalisation of this thesis.

My appreciation and acknowledgement goes to the United Nations Secretariat for granting me four months Sabbatical Leave, and for providing financial support for my travel to and a housing subsidy while at Rhodes which enabled me to complete this thesis. A special word of thanks goes Dr. Klaus Topfer Executive Director of UNEP and Director General of UNEP, HABITAT and UNON for releasing me from work at a very crucial time for the organisation. This release enabled me to effectively take up the Sabbatical Leave.

A special word of thanks must go to my research assistants; Cynthia, Kudakwashe and Chifunde for the many weeks they spent with me collecting data under very difficult conditions. I am grateful to Mr Nyathi of World Vision for all the arrangements he made in the field including organising the field guides. My special thanks go to all the local people of Omay and Makande who shared with me their knowledge, their hopes and their fears for no direct benefit to themselves. I particularly want to mention the wonderful elderly people, namely; Kambiri Dweza, Peter Mapfunde, Mushayatumbu, Bangandi and councillors Ngwenya and Million Ncube for sharing with me their knowledge, wisdom, culture and their cosmovision. This thesis would have been poorer without their invaluable contribution.

Several individuals deserve a special mention for their assistance and influence in helping me understand CAMPFIRE issues better, these include; Prof. Marshall Murphree, formerly of CASS at the University of Zimbabwe, Dr David Cumming director of WWF, Ian Bond and

R.D. Taylor of the same organisation, Mr July Moyo formerly of Ministry of Environment and Tourism, Mr Chiwewe of Ministry of Local Government, Rural and Urban Development, Mrs Tvsakwi of Ministry of Lands and Water Development, James Murombedzi formerly of CASS UZ, Simon Metcalfe and Chinoyi of Zimbabwe Trust, Dr Makombe director DNPWLM, Wilson Mhlanga and Kenneth Ngwarayi of Fisheries and National Parks Kariba respectively.

Two people's names deserve a very special mention for their immense contribution and sacrifices namely; the late Aggrey Mhlanga and the late T.N. Maveneke both tragically killed in separate car accidents in 1998. Both spent many hours and personal funds collecting documents and sending them to me in Nairobi. Maveneke also spent many hours discussing CAMPFIRE and travelling and showing me the work he and the Zimbabwe CAMPFIRE Association was doing for the poor farmers. Both their untimely deaths had a direct impact on this thesis.

Finally, I would like to express my greatest appreciation to my family, my wife Shirley Thabani and the boys Bhekuzulu and Mzwandile for their unquestioning support, encouragement and for their tolerance for being deprived of the time I should have spent with them, especially when I was in the field, working at night and for the months of July to October 1998 when I was in South Africa and they in Nairobi.

CHAPTER ONE

INTRODUCTION

1. Introduction

There are many different views about Africa's wildlife conservation strategies and the role of wildlife in the development of the poor. The debate among Africans and the international community is about how best to manage this resource for the benefit of such a diverse clientele. The following quotations demonstrate just how polarized the debate about wildlife is, local communities claim that the resource belongs to them, nation states want to use it for the benefit and economic development of their people while the international community wants to claim it as a human heritage.

"The Zimbabwean philosophy has always been that conservation is linked closely with human values and economic factors. Our management of elephant is first and foremost for the people of Zimbabwe: without their support we believe that all efforts to conserve major ecosystems and biological diversity will fail" (Nduku, 1992:v).

"Lift the ban and I guarantee you that a new kind of butchery will descend on Africa's elephants. The slaughter will start anew; the elephant herds will once again be ravaged; courageous park rangers will once again have to put their lives on the line. WE JUST CAN'T LET THAT HAPPEN!" (Bonner, 1993:283).

".....the debate asks whether people are the custodians or the nemesis of East Africa's

wildlife. David Western, the current KWS director, believes strongly that they are the custodians, that for wildlife to survive we need to win space for it outside protected areas, and that community conservation initiatives sustained by ecotourism and consumptive utilization of wildlife are the way forward" (Simpson, 1997:1).

"Wildlife is nothing but a nuisance. Elephants destroy our crops every night. They (the government) can kill everything bigger than a hare as far as we are concerned." (Peck, 1993:1).

History, culture, economics and politics in Zimbabwe form an important context for the discussion of wildlife management and the implementation of the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE). Equally important are the debates about resource conservation. Often these resources are seen as being both a local resource and a heritage of humanity as a whole. It is essential to understand why the issue of wildlife conservation has become such a high profile one on the world environmental agenda. The focus of the study, however, is on the evaluation of how displaced and marginalised people in Zimbabwe's Zambezi valley are participating in the implementation of CAMPFIRE and how they are benefiting from wildlife as a result of CAMPFIRE.

✓ Issues of environment and sustainable development have moved up in the world and African agendas in recent years. The core environmental concern is the sustainable management and utilization of natural resources. Specifically, sustainability targets the ability of individuals and communities to productively and sustainably utilize natural resources. However, the issues are also about the collective responsibility of national governments and the international community to conserve natural resources. While there is a growing realization and recognition

that social organizations, management systems, property regimes and tenurial systems play a critical role in the sustainable utilization of natural resources, there is however, no agreement on whose responsibility it is to conserve and pay the bill for the preservation of this biodiversity. Because these resources are claimed at many different levels questions arise over who really owns the resource.

This chapter introduces the problem of wildlife as a diminishing resource given its fast declining numbers due to human land use needs, conversion of wildlife habitats to other uses, poaching, and illegal hunting. The chapter focuses on seven objectives, which create a justification for the evaluation and discussion of the CAMPFIRE concept. An analysis of Zimbabwe's natural resource legislation and policies provides an understanding of resource ownership, tenurial systems and management. The chapter outlines background information and creates a framework for the study and contextualises the many debates that impact on the management, utilization and conservation of wildlife and other natural resources. The chapter discusses the Tonga people, their history and their way of life and articulates the objectives which focus the research. It also discusses local government structures and how these impact on wildlife utilization. Finally, this chapter focuses on the study area, by examining its physical geography, the people and their cosmovision, and the economy of the area.

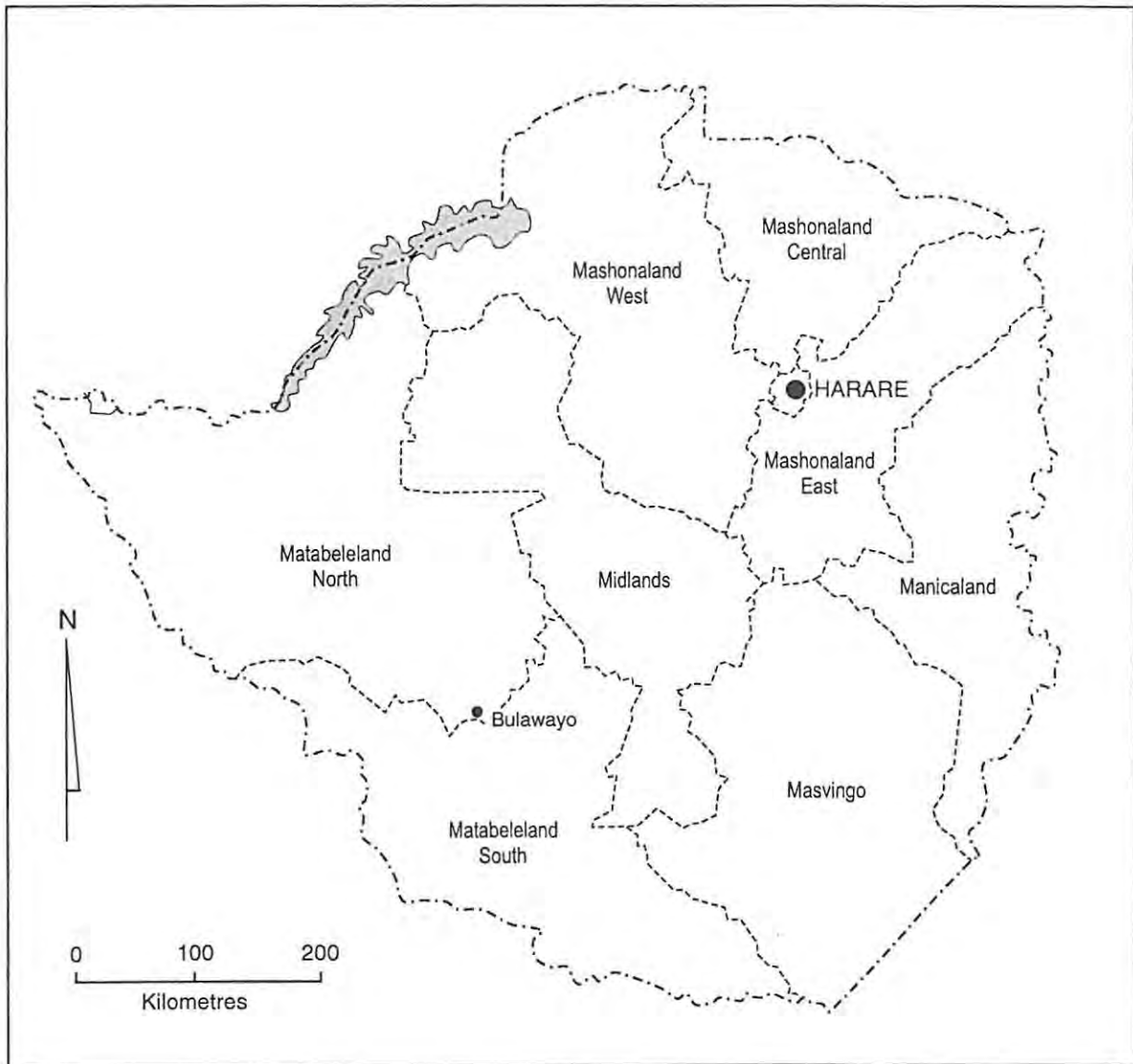


Figure 1.1 Map of Zimbabwe Provinces

1.1 Wildlife Perspectives Old and New

In the last 50-100 years wildlife numbers have been drastically reduced, following the widespread extermination of wild animals as agriculture and animal husbandry expanded. But wildlife populations have also been impacted on by conventional approaches to wildlife management which have over-emphasized the creation of protected areas, law enforcement, prevention of communities' utilization of the resource and the promotion of only aesthetic Western values. The desire to preserve wild animals by the ecologists and others has led to wildlife losing value in the eyes of those who live with it. Traditional wildlife habitats have been converted to other uses which would generate food and incomes for the people. This alienation of wildlife from humans has also caused conflict between humans and wild animals which has led to poaching and illegal hunting. All these forces combined have contributed to huge reductions in wildlife numbers. This decline in numbers has precipitated a world debate about extinction and utilization of wild animals. Debates on wildlife extinction have been epitomised by the trade ban on ivory and animal welfarism.

Zimbabwe's CAMPFIRE programme has taken a lead in trying to address some of these major concerns by transferring responsibility for the management and utilization of wildlife back to the communities involved. CAMPFIRE restores wildlife as a resource for local communities to utilize, to derive incomes and other benefits from and hence to let wildlife contribute to their development. The concept promotes sustainable utilization of wildlife with the hope that this will foster positive attitudinal and perceptual changes in local people which will enable them to participate in and promote the conservation of wild animals. These changes in attitudes and perceptions regarding wildlife were to become the pillars of a new conservation

ethic.

This study focuses on the management, utilization and conservation of wildlife in Zimbabwe under CAMPFIRE with a view to establishing how this approach can contribute to sustainable natural resource management. The study raises issues of how wildlife is managed in a situation where there is a diversity of interests, dynamic socio-economic processes, changing and competing organizational structures and institutions, limited local political and economic power and an overbearing central government. The study further focuses on how and what access local people have on a resource that is fugitive, and co-managed at national, district, and local levels as a pseudo common property resource. It also assesses how the utilization of the resource is impacted by international decisions, laws, conventions and issues of globalization.

Wildlife exists on land and is dependent on the proprietorship and management of other resources such as forests, water, soil and grasslands. Since it is dependent on these other resources, issues of land tenure and ownership become pertinent to the whole discussion. This characteristic of wildlife makes ownership, management and utilization difficult and the sharing of benefits even more challenging. The discussion of wildlife management is further complicated by the colonial administration that took away the ownership of this resource from the local people and placed it in the hands of the state. The state then denied the local people access to this resource. The denial of the wildlife resource use has manifested itself into the conflict that currently exists between the indigenous people and wildlife where once there was harmony.

1.2 The Problem

The greatest challenge to wildlife conservation today is the rapid decline in population numbers. This is due to poaching and the destruction of the wildlife habitat which is usually related to an increasing demand for land. Many believe that Africa's wildlife is threatened with extinction especially certain species like the elephant, rhino, the gorilla and others as highlighted in the media (Musokotwane, 1993). The dilemma of elephants and rhinos as 'flagship carriers' of species conservation has captured the imagination of villagers and urban dwellers in Africa and the international community. Preservationists in the West argue that the survival of these species is a race against time. But many conservationists now agree that it is a race that cannot be won without the full participation of those who live with wildlife and who make a living from wildlife and other natural resources in rural areas.

There is no doubt that wildlife numbers are decreasing, but this is not a new phenomenon in Africa, wildlife has been declining for the last 100 years (Loefer, 1998). Part of the problem has to do with the fact that information on what is happening to wildlife is often distorted by emotions, inaccurate data and a concept of a mythical Africa which was created by the early explorers, and is now being promoted by the media and the tourism industry. The images of Africa are those where exotic jungles are filled with animals, thousands of wildebeest march nose to tail across endless grassy plains while lions laze in the grass nearby (Makombe, 1993). This view tends to ignore that Africa is home to millions of people who go hungry and where millions of children die of starvation and 150 million people suffer from acute poverty (Makombe, 1993). All this happens in the midst of abundant resources including wildlife.

There are disagreements today among Scientists about what causes wildlife to decline and how to manage and conserve habitats and species. There are African perspectives about resource conservation and wildlife management which are at variance with some of the popular notions from the West. Africans do not necessarily advocate the extermination of wildlife, nor do they agree with the management options that focus on denying the use of the resource. Wildlife and other resources are valued for their utility properties and not merely for their aesthetic or sentimental value. While the people from the developed world romanticize the elegance of the African elephant or sunset in Africa as wild animals march across African plains, Africans talk about the destruction that elephants cause to their crops and property. Villagers in Africa cry out as people are maimed or killed by these wild animals. These are two realities that belong to two different perspectives - those who view African wildlife through their television sets and those who live with it.

The real challenge to Zimbabwe's wildlife management and conservation efforts are the debates on sustainable utilization and preservation of wild resources. Should wildlife be sustainable utilized or should it be preserved and people denied the right to use it? The challenge is about finding an acceptable management and conservation strategy that ensures that wildlife and other resources can be utilized sustainable in the face of the complex common property relations, private ownership, state ownership and co-management. The challenge is also about being able to convince the international community and animal welfare groups that wildlife as a resource must be utilized sustainable and that strategies which promote preservation by denying use will not succeed.

Wildlife numbers are impacted by human population growth in a continent where the majority

of people are dependent on the land. The population of Zimbabwe has been growing at a rate of more than three percent per year for the last 20 years (Moyo, 1991). In pastoral communities human population growth is accompanied by an increase in the number of livestock. In agricultural areas it is accompanied by deforestation as more and more land is converted to croplands. In the absence of industrialization and economic diversification, population growth seems to be a key factor in environmental degradation. The majority of the population, about 80 per cent, is engaged in subsistence agriculture. Increases in population result in the expansion of agriculture and animal husbandry. Since cultivation and livestock rearing are already taking place in ecologically marginal areas such as semi arid and dry lands and on steep hill sides, more wildlife habitat is converted into these other land uses, which also means that the environment degrades. All these factors contribute to degradation of the natural resource base as evidenced by the disappearing plant and animal species and the destruction of whole habitats.

1.2.1 Rapid decline in wildlife populations

While it is true that wildlife numbers are declining rapidly, the international community has not paid attention to species such as giraffe, buffalo and the many antelopes which are of no interest to them. The wildlife debate is distorted by the lack of accurate data about what is happening to the totality of wildlife. A few species do not constitute the world's biodiversity.

This study has used one of the conservation flagships, the elephant, to show how this decline is reflected in different countries but also to demonstrate the fact that information is not readily available about other species. It is easy to use the elephant because data is readily

available for most countries, given the international interest in this species. It must be remembered however, that there are many species which suffer greater losses than the elephant but whose statistics are not available because those species have not generated similar level of interest as the elephant or the rhino. Bonner (1993) for instance shows how animals like giraffe, antelopes, the Thomson gazelles have virtually disappeared in many areas in Tanzania and Kenya. Child (1995) shows how buffalo have been totally eradicated in parts of Zimbabwe in an effort to control foot and mouth disease. The smaller animals such as the klipspringer, gemsbok, duiker and busbuck which are more valuable to local communities than the conservation flagship carriers have disappeared. But no data is available on them and they are therefore treated as though they are not part of the biodiversity that we want to conserve.

It is reported by the Ivory Trade Group (ITRG) that Africa's elephants experienced a decrease of just over 50 per cent in ten years, from 1,343,340 in 1979 to 631,930 in 1989 (Sugg and Kreuter, 1994). Rotich (1997) claimed that between 1960 and 1989 poachers killed 90 per cent of Africa's elephants to satisfy the ivory trade. According to the Ivory Trade Review Group (ITRG), Zaire's elephants have declined from 360,000 in 1981 to 103,000 in 1992; Kenya's elephants came down from 65,000 to 18,000 and Tanzania from 204,000 to 75,000 during the same period (Sugg and Kreuter 1994). But IRTG also shows that elephant populations have increased in Gabon, Congo, Botswana, Zimbabwe and South Africa. However, some increases are too high to be credible: Gabon's elephants are supposed to have increased from 13,400 in 1981 to 92,000 in 1992, Botswana from 20,000 to 58,000 in the same period. These figures must take into account the fact that survey techniques have improved over the years, and some of the initial estimates could have been too low. But

elephants also move across the borders freely and the chances of double counting are significant. Elephants can also recover fairly rapidly, in Kenya for instance elephants recovered from 19,000 in 1989 to 26,000 between 1989 and 1994 (Rotich, 1997). This figure could also be questionable given the natural increase rate of five per cent in elephants (Sugg and Kreuter, 1994).

In Zimbabwe the elephant population has steadily increased from 5,000 in 1900 to 80,000 in 1994 (Sguazzin, 1995). These figures demonstrate firstly that elephants have the ability to recover fast, a factor which has constantly been ignored by many western ecologists. Secondly, these figures show that the decline in elephant numbers is not uniform. While elephants may be endangered in some parts of Africa they are not threatened in Southern Africa. Overall, elephants are not an endangered species. Blanket measures like the ban on ivory trade are not solutions because they may well prove counter-productive in those countries where conservation has been more successful. In Zimbabwe, the focus of this study, elephants already outstrip the land carrying capacity (Zimbabwe Trust 1992). In 1995 Zimbabwe had a total of 80,000 elephants and yet its carrying capacity was only 50,000 as determined by the Department National Parks and Wildlife Management (DNPWLM). Even given the lower elephant counts of 65,000 in 1997 and a national carrying capacity of 35,000, (Tawengwa, 1997) the carrying capacity has been exceeded and is thus not sustainable. Some culling is necessary before elephants destroy the environment and cause serious ecological disasters that would not only be detrimental to elephants, but to other wild animals.

Generally, the West has over emphasized the role played by the so-called conservation flagship carriers. However, most of the disappearing species are more critical for the needs

of local people than the 'flagship species'. The value of some of the disappearing species has not yet even been discovered. Many less noticeable animals such as the antelope, gazelle, duiker, klipspringer and water bucks are virtually extinct in some parts of Zimbabwe and yet they do not make the news. The Western world has decided to be selective about what it will protect. The selective treatment of wild animals makes it impossible for wildlife to be conserved in its totality, and limits the options for local communities who may not value the rhino, but who would prefer to protect the antelope or eland instead. When animal welfare groups talk about a decline in wildlife population they are often talking only about the 'flagship carriers.'

1.2.2 Human population growth and land needs

The issue of wildlife conservation cannot be effectively resolved without adequately addressing the issue of increasing land demand. Millions of acres of traditional wildlife habitat are lost every year as land use changes to cropland, grazing and human settlement. The current emphasis on curbing population growth alone will not solve the problem unless it is used together with other measures such as the creation of wealth and employment. Millions of subsistence farmers across Africa depend on the land for their livelihood and do not have an alternative means of income. The issue of conservation cannot be separated from development, wealth creation and a more equitable wealth distribution mechanism.

1.2.3 The increasing people wildlife conflict

There is increasing conflict between local people and the authorities a result of failed wildlife

preservation strategies and approaches. The people-beast conflict continues to grow regardless of efforts that are being made. Preservation strategies have fueled the conflict. Some conflicts arise from actions which are carried out in ignorance on the part of those who carry them out, however, there are many conflict causing actions today which result from the intransigence of authorities. Conventional conservation has relied on law enforcement as a conservation measure and this has failed because law enforcement has alienated communities from wildlife. The state ownership and management of wildlife and the creation of national parks and reserves have taken away the responsibility of conservation and management from the local communities. According to Kiss (1990) rural people should be allies of conservation with the state. These communities regard wildlife as state property and as far as they are concerned conservation is state business. The state however, gets surprised by the local communities' attitudes towards wildlife, oblivious of the fact that it is the state's wildlife management machinery that treats local people as poachers. How can the communities have a positive attitude towards wildlife when the state leaves them no alternative to poaching?

The conflict is fueled by wildlife continually wandering out of protected areas onto private property and destroying crops and livestock, maiming and killing humans. This creates animosity between the farmers and wildlife because farmers have no recourse. The situation is made worse by the fact that governments have neither the resources nor the will to compensate the farmers for loss of property (Sibanda, 1995). There have been no benefits to communities and therefore wild animals are not regarded as a resource but as a nuisance. Nevertheless, local communities illegally hunt for meat and other needs whenever they get a chance. The state and its law enforcement machinery tend to treat all rural people as poachers and sometimes people poach in fulfilment of this prophecy. While the state and the local

communities play their war games, wildlife becomes the victim.

1.2.4 Wildlife ownership and property rights

The ownership of wildlife and access rights are at the centre of the conservation and utilization issues. State ownership of land and wildlife in Zimbabwe's communal areas is viewed by the CAMPFIRE proponents as a major source of conflict. The people who live on these communal lands do not have the same attachment to land as do their counterparts who own land as private property. They cannot even collectively invest in improving land that is not theirs. Similarly, they do not protect wildlife found in communal lands in the same way the private land owners do. Land and wildlife in communal areas is seen as state property. It is essential to understand that state property does not mean that these resources are "free for all". The local people have usufruct rights only. Much as they have lived here for generations, they still do not own this land. It should also be clarified at this stage that ownership does not refer just to individual or private ownership, it also means group ownership. The present Zimbabwean government has evaded the issue of ownership of land by communities in communal areas. Many writers claim that problems of natural resource management and conservation emanate from this issue of ownership or the lack of it. This thesis questions whether state ownership of resources in communal lands works against sustainable resource management or whether lack of defined access rights is the problem.

Traditionally in Zimbabwe, wildlife was owned by the community, and the chief or king held it in trust for the community (Mavaneke, 1992). Wildlife was therefore, owned, managed, conserved and utilized within a complex community-based resource management system.

Wildlife ownership was transferred to the state during colonial days and has remained so to this day. While most wild animals are in national parks and reserves, large numbers of animals exist on private farms and in communal lands. The government has no capacity to police the communal areas and therefore, wildlife which is state owned but lives among the people tends to fall into an open access situation (Murphree, 1991). Therefore in this case open access is not a result of the failure of common property management, but the failure of the state to manage a state-owned resource.

In 1975, legislation granted 'appropriate authority' to private farmers and was subsequently extended to the district councils in 1982. The ownership/custodianship of wildlife has since become a major debate. The conservation of wildlife is limited by the lack of clarity about the ownership of wild animals, but access rights are not well defined either. This lack of clarity creates conflict between the rural district councils which have appropriate authority and the Ward Development Committees (WADCOS) and Village Development Committees (VIDCOS) who want to be the owners of wildlife and the state which actually owns it. The rural district councils have custodianship and not ownership of natural resources in communal areas. Some of the key questions one can ask here are:

- Is wildlife in communal areas a common property resource?
- How can it be common property when it is state owned?
- Is it critical for wildlife to be owned by the group for it to be effectively managed?

1.2.5 Poor environmental education

One of the major reasons for the failure of the conventional conservation approach is its failure to teach people why conservation is important. Once the traditional value system was destroyed by the scientific conservation methods there was nothing left in its place. Traditional education and wisdom were despised by the colonial administration and therefore, began to fall out of favour with the communities. In the absence of education and new values, the authorities had running battles with the local people who continued to utilize wildlife by what the authorities termed as poaching. The state had to establish an elaborate and ruthless anti-poaching machinery. This has proved to be too expensive to maintain and in many cases ineffective (Murphree, 1991; Sibanda, 1995). The result is that people have continued to see conservation as the responsibility of the state and not of the local people who live with the animals. Rural people see wildlife as a high-risk potential source of meat. It should have been obvious to the colonialists that the indigenous people must have conserved wildlife and that is why animals were so plentiful. The colonial administration should have realized that conservation of wildlife by the indigenous people must have been guided by a value-based system. Undermining those indigenous values and then not replacing them with acceptable substitutes was indeed a formula for disaster. Destroying indigenous knowledge and traditional practices and replacing these with the brute force of the anti-poaching machinery was not going to be accepted nor supported by the indigenous people. The same methods are still very much in force today, even with all the wealth of evidence which proves its ineffectiveness.

1.2.6 The falsehood of communal regimes

During the colonial period, communal lands were in theory, under a system of indirect rule where traditional leadership structures were in place and were supposed to play a role in resource management. The authority and the ability of traditional structures to manage had been seriously eroded by the colonial rule which had taken away most of the power from the chiefs and left the positions as ceremonial only (Murphree, 1991). Traditional leadership and their constituencies were on state land with usufruct rights only. The indigenous people had no powers of exclusion or inclusion which normally go with common property regimes, and they were denied access to certain resources like wildlife. In this way, the conditions for a genuine communal property-rights regime were removed (Murphree, 1991). What existed was a class of people who had limited access rights to state property. They used the resources communally but did not make the rules or decisions about how the resource was to be used. The same still applies today. Communal farmers use the land but do not make rules about how the land is utilized, even their democratic institutions such as the district councils do not make these rules.

Under these conditions, where the community does not own wildlife nor make rules about how the resources are used, the resource tends to look like an open system. The situation is further complicated by the fact that the state also failed to clearly define multi-jurisdictional access rights. But the state is also far removed from where the action is taking place, the resources fell into an 'open system' which allowed anyone to utilize the resource which resulted in extreme degradation. Local people treated these resources as belonging to no one since the state that owned them could not enforce exclusivity. Even private property or land can fall into 'open access' if there are no mechanisms to enforce the exclusion of others.

It is, therefore, possible to conclude that the communal systems broke down leading to open access and resource degradation and yet what broke down was the government management. The exploitation and degradation of wildlife and other resources in communal areas must be understood in this context. This study examines whether, under CAMPFIRE, a genuine common property rights regime has developed which would guard against open access to resources. The study also examined whether a common property regime is necessary to effectively manage resources which are used in common.

1.3 Objectives of the study

The purpose of this study is to evaluate the performance of a community based resource management strategy - "Communal Areas Management Programme for Indigenous Resources" (CAMPFIRE) in Zimbabwe. The overall objective of the study is to evaluate the contribution of CAMPFIRE to common property resource management, its effectiveness as a resource management strategy and its sustainability.

The study addresses the following sub-objectives, in which it aims to:

i) Establish if ownership, decision making, utilization and management of wildlife have been transferred from the state to the local level producer units and how this has impacted people's attitudes towards wild animals.

ii) Determine if and how local institutions have been developed or enhanced and how they now facilitate the efficient and effective management of natural resources.

iii) Determine the role of cash and other material benefits as incentives for local community participation in the conservation and management of wildlife.

iv) Establish if Tonga indigenous knowledge and traditional practices have been incorporated into natural resource management under the CAMPFIRE programme as well as to determine how this impacts on sustainable natural resource utilization.

v) Establish CAMPFIRE's effectiveness as a natural resource management strategy, and establish its sustainability and that of wildlife under the management of CAMPFIRE.

vi) Establish if conflict exists as wildlife is viewed the local communities as a resource which is owned, controlled, and utilized at three levels, and to establish whether there is lack of enabling legislation, policy, and guidelines on how to manage and share benefits from the wildlife. This objective also needed to determine whether CAMPFIRE has been able to resolve these conflicts if they exist.

vii) Establish CAMPFIRE's contribution to common property management.

1.4 Community resource management

Most resource management strategies have ignored the socio-economic realities that determine the interaction between people and natural resources. According to Musokotwane (1993), this process has turned people into dispossessed onlookers of wild resources, and

eventually into trespassers and poachers of these resources. New natural resource management strategies, however, are beginning to view conservation as evolving from having a purely biological focus to a more comprehensive discipline which incorporates the socio-economic dimension, which has been neglected until recently. An important aspect of this process is to determine how rights to resource use, control and ownership are changing.

Pre-requisites of sustainable development require that communities fully participate in decision making, management, and conservation of resources. Conservation in the 1990s and beyond faces unprecedented challenges as human populations rapidly increase, and pressure is placed on resources which can lead to loss of biodiversity, extinction of species, and general resource depletion. Planners, conservationists, and development experts have ignored people and their central role in resource utilization and management for decades.

Advocates and practitioners of community development believe that local people must be involved in decision-making as this gives them a sense of project ownership. They argue that participation increases the chances for the success of projects. This argument views projects which are generally externally conceived as the answer to development. This school of thought does not see people as initiators of their own projects or development but as participants in someone else's project or development plan. The participatory approach to resource management has been gaining considerable momentum in the field of community development (Kiss, 1990; 1992; Chambers 1983, 1986 and 1998). According to Silitshena (1989) and Sibanda (1995) people's participation is also consistent with the values of democracy, self-determination and empowerment.

1.5 CAMPFIRE Precursors

1.5.1 Traditional wildlife management

In most Zimbabwean traditional societies, wildlife management and conservation were the responsibility of the community. Natural resources were closely linked to customs, religion, taboos and the clan name system. Traditionally wildlife was only harvested with the consent of the chief or king, for it was culturally agreed that the traditional leader held game in custody for the benefit of the community (Mavaneke, 1992).

Certain animals had the same names as those of clans and it was sacrilegious to eat the flesh of the animals with the same name as one's clan. This practice is still prevalent today. The system controlled the killing of animals since each clan protected its clan animals because the survival of the clan was dependent on the survival, numbers, and productivity of the clan animals. In addition to this animals were also protected for religious purposes. Further, wildlife was never killed unless it would be used as food, or for medicine, clothing and other such uses. There was no waste.

1.5.2 Wildlife management under colonial rule

The colonial state did not understand how wildlife had been managed by traditional societies. The colonial masters had their own ideas of how game should be owned, managed and utilized to meet their own needs. Wildlife was changed from community property to state property and legal wildlife utilization became a privilege enjoyed by white people only.

Management was centralized in the hands of government officials. The local people were not only denied access to wildlife but lost their land when National Parks were created. African people were treated as trespassers in the game parks and as poachers in communal areas, where previously they had enjoyed free access to the same land and resources.

This new management approach also alienated local people from wildlife. It allowed the local people no rights to utilize wildlife and no responsibility for its management and conservation. They saw wildlife as state property which should be stolen if the opportunity arose. The local people, therefore, responded to this new management system by poaching wildlife for food and other purposes. Poaching was a way of utilizing wildlife for themselves, while the authorities viewed poaching by indigenous people as a threat to wildlife.

Central government put laws in place about wildlife utilization, management, conservation, and protection of wildlife areas. The government established a ruthless law enforcement system that protected national parks and reserves and policed both the protected areas and the former tribal trust lands (communal areas). The colonial administration enforced the laws using the paramilitary wing of the national parks. The present warden and scouts system in Zimbabwe are vestiges of that colonial paramilitary institution.

While the law enforcement agencies of government were ruthless and efficient, they did not deter local people from illegal hunting nor from harvesting wildlife resources whenever they could (Kasere, 1996). Trying to police every corner of the wildlife estate and the communal areas proved physically impossible and eventually uneconomical (Murphree, 1993). Law enforcement was stretched to the limit and the state realized it could not completely control

wildlife utilization. The state was no longer able to exclude local people from using the resources. It is this breakdown of law enforcement that created conditions of 'open access' to wildlife. 'Open access' was not caused by the failure of the communal management system as has often been said. Open access is a result of the failure of state management. This issue is important in understanding the potential of local people in the management of wildlife today. The issue is discussed in greater detail in this thesis as it relates to objectives one and two.

The National Parks and Wildlife Act of 1975 gave land owners the right to utilize and exploit wildlife on their lands. It gave the access to wildlife to private land owners who were predominantly white. This provided an economic rationale for these land owners to exploit the wildlife on their property, but also reinforced the scientific, aesthetic, and moral justification for conservation as it was based on Western model of wildlife management (Murindagomo, 1990). The Act empowered the white farmers but did nothing for the communal farmers who were all black. The communal farmers continued living with a resource that they perceived as state property. Above all the state did not regard the indigenous people as having the ability and capability to conserve wildlife. The state did not even regard these people as allies of the state in wildlife conservation. This created animosity towards wildlife, a situation which did not previously exist.

1.5.3 Operation Windfall

Operation Windfall was the first attempt by the colonial administration to have residents of Tribal Trust Lands (Communal Areas) benefit from wildlife. This programme attempted to

reduce the animosity which communal farmers felt towards wildlife. The programme organized safari hunting of wildlife within the Sebungwe Tribal Trust Lands. Omay, the study area was then part of Sebungwe. The government returned a portion of the proceeds from wildlife hunting to local people via a complex route involving treasury and district councils of the day (Murindagomo, 1990).

This programme did not take off because it experienced problems with lack of participation in decision-making by the local people. Further, communities did not receive enough benefits to motivate them to participate in a more meaningful way. It was concluded that too little money came too late and that the money could not even be related to wildlife by the recipient communities. But above all Operation Windfall failed to educate and create awareness about conservation among the indigenous communities. It did not provide an opportunity for the local people to develop or express their own values about wildlife. Operation Windfall did not present wildlife as an alternative land use option nor could local communities have made a living from wildlife as the realized incomes were insignificant. Most of the money from safari hunting went to the treasury and a small portion was given to the communities. The proponents of this scheme had expected the rural people to be grateful for the meager income and then to protect wildlife. Operation Windfall was developed by the same Department of National Parks and Wildlife Management that later established the CAMPFIRE programme.

1.6 The CAMPFIRE Concept

The Communal Areas Management Programme For Indigenous Resources (CAMPFIRE) is considered to be an innovative approach to sustainable natural resource management.

According to Maveneke (1992), it is an amplification and improvement of the earlier traditional natural resources management method which placed responsibility for wildlife utilization and management in the hands of local communities. Its aim is to ensure the sustainable utilization of natural resources (wildlife, forests, water, and soil) in such a way that producer communities will benefit directly. The programme concept paper described those communities who suffered direct inconvenience from wildlife as producer communities. These benefits can be in the form of cash incentives to households, community projects, or other benefits such as meat and employment.

CAMPFIRE seeks to transfer custodianship of resources in communal areas from the state to the communities by giving 'appropriate authority' or the legal right to manage natural resources to the district councils. The Zimbabwe Trust (1989) described this approach as one which aims at the conversion of 'open access' resources (non-property regimes or *res nullius*) to common property resources (private property for the group - *res communis*). It further aims at empowering local people to make decisions and to manage their resources. CAMPFIRE was developed in Zimbabwe by the Department of National Parks and Wild Life Management (DNPWLM). DNPWLM wanted producer communities to be given full choice of how to spend money generated by their district from wildlife utilization. This choice included both projects and payments in the form of household dividends. The CAMPFIRE programme gave the local people only the freedom to choose how to spend the income from wildlife and not make any provisions for the communities to play any major role in deciding how the resource should be utilized or is managed. This point is significant for this study as will be seen later because it creates conflict between the authorities and local people. The 'appropriate authority' given to the district councils did not give them any power to decide how the resources would

be utilized. Custodianship in this case meant limited access. In theory, local communities are supposed to take more responsibility for the management of natural resources, but in reality there are no legal nor practical provisions for this to happen. This subject is discussed in some greater detail later because of its significance to wildlife management under CAMPFIRE, and it also addresses objective one of the study.

The genesis of CAMPFIRE came about because of the realization that conventional wildlife conservation approaches had failed and that it was necessary for the custodianship of wildlife and other resources to be vested in the hands of local people as it had been in traditional times (Maveneke, 1992). In order to transfer this custodianship from the state to the communities some legislative changes were necessary. As shown earlier, the 1975 National Parks and Wildlife Act had given private land owners the right to utilize game for their own benefit. The 1982 amendment gave the district councils 'appropriate authority' or legal authority to manage resources, including wildlife in their areas for the benefit of their citizens. The state, however, retained ownership of land and the resources on it. It is therefore a misconception to view wildlife as a common property resource. This concept is discussed in greater detail later in this thesis in relation to objective one. At this point however, it is essential to note that the state did attempt to address some of the problems of the past by giving local people some access to utilizing wildlife. It is also essential to note that the weakness of CAMPFIRE has its roots in the reality of the amendment of a Wildlife Act which tried to include other resources which do not fall under the jurisdiction of the Ministry of Environment.

Thomas (1991) says it is misnomer to perceive CAMPFIRE as a programme covering the management of indigenous resources. He argues that at present it is a programme focusing on

the wildlife resources. The reason for the emphasis on wildlife is that historically CAMPFIRE originated from DNPWLM which has no authority over resources other than wildlife, and yet wildlife is dependent on land, forests, and grasslands which are controlled by different arms of government. While CAMPFIRE has been embraced by other government agencies, only the wildlife component has been implemented. This thesis examines how CAMPFIRE has impacted on wildlife management, and indeed on the management of land and other natural resources in a situation where there is no clear legislation, policies, or guidelines. This particular point relates to objectives five and six which deal with the effectiveness of CAMPFIRE and the conflict which arises from the of lack of policy clarity.

CAMPFIRE is also caught between what are known as the microcosmic and the macrocosmic views. The microcosmic view interprets the CAMPFIRE concept to mean that benefits from wildlife should be received exclusively by those who carry the costs of living with wildlife. This is a noble position, but one which is difficult to implement given the fugitive nature of wildlife and the resource distribution and management in communal areas. Those advancing the macrocosmic view interpret CAMPFIRE to mean that the benefits from wildlife should be broadly distributed to all communities in the district. This notion too is justifiable. The proponents of the microcosmic view, however, argue that rewarding everyone will kill the incentives for communities to conserve wildlife since even those who have not participated in wildlife protection can receive benefits. These two views have significance for this study as they address objective three and pose great challenges to the management of wildlife under CAMPFIRE.

The DNPWLM in 1986 defined the objectives of CAMPFIRE as:

a) To initiate a programme for the long term development, management, and sustainable utilization of natural resources in communal areas. The programme would involve forestry, grazing, water, and wildlife. The areas covered by CAMPFIRE would be natural regions III, IV and V on the periphery of Zimbabwe. Communities would join the CAMPFIRE programme on a voluntary basis. Natural regions I and II have high agricultural potential given the soil types, rainfall and climatic conditions. Natural regions III, IV and V (see Figure 1.4) are dry lands, semi arid and arid areas with low agricultural potential but are suitable for ranching and game.

b) To achieve the management of resources by placing custody and responsibility for them on the resident communities.

c) To allow communities to benefit directly from the exploitation of natural resources within the communal areas. The benefits would take the form of income (household dividends), employment and production.

d) To establish the administrative and institutional structures necessary to make the programme work. Administration would be through the established system of Village Development Committees (VIDCOs), Ward Development Committees (WADCOs) and District Development Committees (DDC) to Provincial and National levels.

The CAMPFIRE concept recognizes the fact that wildlife survival depends on changing the perceptions of people who live with it. The concept can therefore help to restore a perception of wildlife as a valuable resource rather than as a nuisance with no mitigating features.

CAMPFIRE viewed by many writers as creating a powerful incentive for rural people to adopt wildlife management as an adjunct to conventional agriculture (Zimbabwe Trust, 1989). The concept is not a blueprint for rural development or wildlife conservation. It is a way of thinking which is revolutionary in some aspects. It is still evolving as ecologists, planners, implementing agencies, and rural people change their perceptions of natural resource economics and conservation.

CAMPFIRE has adopted a multi-disciplinary approach involving wildlife managers, ecologists, sociologists, technicians, economists, and legal experts (Hasler, 1996). It has also adopted a multi-institutional approach to its implementation by working with government departments, Non Governmental Organizations, the private sector, and with villages, wards, and districts (Sibanda, 1995, 1996).

The programme is government sanctioned because of the belief that peoples' participation in wildlife management and in sharing the benefits which accrue will ensure the sustainable utilization of natural resources (Hasler, 1996). Conservation is therefore not seen as an end in itself, but occurring as a result of resource utilization. According to Hasler (1996) CAMPFIRE makes the following assumptions:

a) that involving local people in the economic benefits and management will result in the sustainable utilization of resources.

b) that once people are the proprietors of the resource, they will participate in decision-making about and management of the resource.

c) that economic benefits targeted for local communities through district council will reach local people .

1.7 The Need for Evaluating CAMPFIRE

Most contemporary research tends to paint a picture of CAMPFIRE as a successful, innovative, revolutionary approach which is on the cutting edge of the sustainable management of natural resources. CAMPFIRE's success is viewed by writers like Murphree (1990, 1991), Murombedzi (1992), Metcalfe (1991), as its ability to transfer proprietorship and resource management to 'local management units'. Hasler (1996), however, contradicts this rosy picture from evidence collected in Chapoto, in the Zambezi Valley. He argued that CAMPFIRE is an elitist programme designed by the DNPWLM that has been imposed on the populace and has made the poor in Chapoto poorer. He notes that local people in Chapoto do not participate in the deliberations on wildlife; the discourse of conservationists, lobbyists, and planners does not always mirror what happens in the programme and "...the locus of administrative and political control of the distribution of revenues, lay largely in the hands of outsiders" (Hasler, 1996:38).

There are many policy issues which are not yet clear nor have they been analyzed, and their impact on CAMPFIRE is not yet known. Most of the research has tended to emphasize the failures of government bureaucracy and has glorified the success of local resource management institutions without even adequately defining what these structures are. The tendency has also been to treat wildlife as a common property resource, to emphasize resource ownership, to identify what type of tenurial system exists in communal areas, without

resolving access rights over resources. Further, although writers like Murphree (1991) and Kamushiga and Stahl (1993) advocate for local level management, it is still not clear how to define local level management nor how to demarcate producer units. The proponents of producer units do not tell us if these units are social units, economic units, administrative units, or political cells.

The DNPWLM describes these units as small, 100 - 200 households. The guidelines do not give any criteria as to how one arrives at such units and why this size of unit is preferred to any other. Further, the advocates of local level management do not show how these local management institutions would relate to government structures at the local, district, or national levels. It is, therefore, necessary to establish what these relationships are because while resources occur in local, areas they are still district and national resources. While these resources can be privatized, or ownership given to a group, and their management devolved to the lowest level possible, they still need to be guided by central government policy. Policy would ensure that resource use by this generation does not compromise the availability of the resource for future generations. Most of the writers also do not deal with the issues of what rights, responsibilities, and duties should be conferred to the different levels of government: national, provincial, district, ward and village. As Hasler (1996) points out, there are many levels and entities that lay claim to rights of access to wildlife resources, such as the international community, the state, district council, churches, safari operators, hunters, and traditional institutions. What Hasler (1996) does not discuss is what responsibilities, duties, and obligations each of these entities have. There are many entities which lay claim to rights of access to wildlife but which do not take any responsibility for its management and conservation.

Another group of writers are those who are nostalgic about traditional wildlife conservation approaches. They tend to see CAMPFIRE as restoring those approaches without adequately examining what is left of traditional practices and their relevance to the management of wildlife today. The tendency is to romanticize about indigenous knowledge and traditional practices which creates an impression that traditional African cosmologies have always protected natural resources. These views do not show how traditional leadership can now participate given the many modern institutions and structures that compete for power and influence. It is not clear how traditional leaders can exercise power given the complexities of a modern state with its democratic institutions. The success of local level management is really not proven, nor is it clear that there is still adequate indigenous knowledge left in these communities which can be translated into action. In his argument, Hasler (1996) says that there is no community based resource management system, but that wildlife is co-managed. He demonstrates how the bundle of rights concept accommodates multi-jurisdictional access claim rights to resources. Common property theories do not allow for these multi-tiered access rights. This study has addressed these issues with a view to determining the critical contribution of CAMPFIRE.

1.8 CAMPFIRE and Common Property Theory

In 1968 Hardin proposed a theory that he called 'the tragedy of the commons'. The theory has become a dominant framework within which social scientists portray environmental and resource issues (McCay, and Acheson, 1987). The theory is powerful and controversial. It poses irreconcilable contradictions between the individual and systems interests (McCay and Acheson 1987). The tragedy of the commons theory locates the problem in common property,

broadly understood to mean free unregulated access to scarce resources. Hardin's intention was to show how freedom in the commons becomes a tragedy for all. Hardin falsely interpreted common property to mean a free-for-all and yet in fact these are structured ownership arrangements within which management rules are developed, group size is known and enforced, incentives exist, and sanctions work to ensure compliance (Bromley and Cernea, 1988).

It has already been said that wildlife in the communal lands of Zimbabwe is a pseudo-common property resource. Common property theories have been used to create the framework for the analysis of wildlife management under CAMPFIRE. Theories of common property are discussed in detail in the literature review. CAMPFIRE is viewed by many writers as a unique experiment in common property resource management (Peterson 1991). Wildlife in the communal lands of Zimbabwe is a pseudo common property resource because local communities have only a limited access to it since it is state property. Local communities do not have proprietorship over this resource since the 'appropriate authority' is in the hands of the district council. Local communities therefore do not make decisions about how to utilize this resource because they do not have such powers nor do they have full excludability rights.

The district council, however, makes decisions about how the benefits from CAMPFIRE are distributed at the district level. Given its emphasis on excludability, common property theories cannot adequately explain co-management. The bundles of rights theories, however, seem to provide accommodation for multi-tiered access rights.

The district council participates (in a supervisory capacity) in the management of the resource. Local communities make decisions on the sharing and utilization of the benefits from CAMPFIRE. These complex arrangements make wildlife under CAMPFIRE extremely vulnerable because the local people do not have the power, authority, rights or duties that are normally found in a true common property resource regime. The success of CAMPFIRE does not lie with the ability of the local people to manage a common property resource, but with the ability of the three levels to co-manage. The full value of common property theories, therefore, cannot be realized under these conditions.

1.9 Zimbabwe Policy on Resource Ownership and Conservation

The management of natural resources and CAMPFIRE programme have been impacted by lack of clarity in policy. This section analyses past and current policies in Zimbabwe that affect the ownership and management of natural resources. Policies are examined to gain an understanding of how they provide a framework for management. This section also addresses objective one which deals with the transfer of ownership of natural resources to the producer level units.

1.9.1. Land ownership and tenure

In traditional pre-colonial times land was owned by the community and held in custody by the chief or king. Therefore, the ownership of other land-based resources were so owned and controlled (Land Commission, 1994). Colonialism dispossessed the local communities, and the state took the land, parceled it out as gifts or sold land to private individuals. It pushed

indigenous people into marginal lands and called them 'native reserves' or Tribal Trust Lands, while the independence government called them Communal Areas. This land, however, continued to be owned by the state to this day (Moyo, 1995). While traditional leadership remained in the tribal trust lands, it had no meaningful power to administer land and natural resources' and the people had only the right to use the land.

Laws were enacted over the years to control the ownership and utilization of resources such as minerals, forests, wildlife, and water. In all these cases rights were granted to users and exploiters. This process largely left the indigenous people outside of the land ownership and utilization approach (Land Commission, 1994).

The post independence government has shown reluctance in giving ownership of land in communal areas and land based resources to the indigenous people (Moyo, 1995; Land Commission, 1994). The present government, like the colonial one, has continued with the land tenure systems described above and has added resettlement tenure to these. It is with the resettlement areas that the government has shown its unwillingness to give ownership of land to the indigenous people. Here government had an opportunity of doing something, but it preferred the state to retain ownership of the land. The Government has not changed ownership of land in communal areas regardless of the fact that the land question was the major factor which motivated people in the rural areas to participate in the independence struggle. Interestingly, the government has allowed private land to change hands on a willing buyer willing seller basis (Land Commission, 1994). Policy and law clearly prevent the poor from owning land, since the poor will never have the money to purchase it. The present government knows that the colonial administration gave power to the settlers by giving them

land, and yet it is not prepared to do the same for the majority of its citizens. It is not surprising that local people view programmes like CAMPFIRE with suspicion because they can see their government refusing them what they consider a basic right as well as a source of wealth and power, and yet it is willing to allow them benefits from wildlife. It should, however, be noted that the issue of land in Zimbabwe is a very sensitive one that has yet to be resolved.

The fundamental issue at stake, therefore, is lack of ownership of land by the communities in communal areas. The Land Commission evaded this issue and recommended that present communal tenure be retained. The government of Zimbabwe needs to come to terms with the issue and transfer ownership of communal land from the state to the communities. It is discriminatory to allow one section of society to own land while holding the other section at ransom by refusing them ownership and giving to them only the right to use land. The class that owns land has become rich and influential, the class that has usufruct rights on state land has remained poor and powerless. This kind of discrimination creates major problems in the management of resources in Zimbabwe. It is not clear why the government is unwilling to transfer ownership of communal land to the communities. It is clear, however, that without laws and policies that facilitate co-management at different levels, resource utilization and conservation will become even more complicated than they are already.

Murphree (1993), suggests that legislation should be updated to harmonize policy with the law and proposes that the preamble to the 1975 National Parks and Wildlife Act should be changed from 'to confer privileges on owners or occupiers of alienated land as custodians of wildlife, fish and plants' to 'confer privileges on occupiers of land, whether private or

communal, as custodians of wildlife, fish and plants.' This is a noble suggestion but one that does not go far enough. For as long as one group owns the land and the other merely occupies the land, that legislation will still be discriminatory. Those who own the land can own the land-based resources, while those who have user rights to land will continue to have user rights over land-based resources and those user rights can be curtailed by those who own resource. To a very large extent the ownership of land in communal areas is used by the government and the ruling party to control the majority.

It is in this context that ownership of wildlife and other land-based resources is being studied. Policy on resource ownership has and continues to be influenced by an array of colonial legislation. This study contends that it is the land ownership question and the surrounding legislation that have paralyzed the independence government policy-making bodies from addressing squarely the ownership of resources in communal areas.

1.9.2 Environmental and related legislation

The colonial government passed many laws that had a bearing on the ownership, management, utilization, and conservation of resources. The outline that follows is by no means exhaustive, but clearly shows how privileges were entrenched by law on some, while the poor and colonized were ignored.

The lack of clear environmental policy has meant that there is a general lack of specific targets for practitioners in the field to work towards. Zimbabwe's body of environmental legislation reflects economic and political motives rather than environmental concerns. The new

government has not rationalized the various sectoral pieces of legislation or produced a comprehensive one as demonstrated by Table 1.1

TABLE 1.1 Environmental legislation

LEGISLATION	IMPACT
Native Husbandry Act 1951	- Enforce private ownership of land; - Enforce de-stocking and conservation practices on black small holders.
National Parks and Wildlife Act 1975	-Gave private land owners the right to utilize wildlife on their properties.
National Parks and Wildlife Amendment Act 1984	-Gave appropriate authority to the District Councils to utilize wildlife in communal areas; -CAMPFIRE is a product of this legislation.
Communal Land Act 1982	-Transfer of Authority for land allocation from traditional leadership to the district councils; -Undermines traditional leadership and creates conflict between traditional and modern local government institutions.
Water Act 1976	-Restrict access to water by majority of communal farmers who do not have the title to their land; -Land ownership guarantees water rights.

<p>Natural Resource Act (Chapter 50)</p>	<ul style="list-style-type: none"> -Provides for the conservation and improvement of natural resources at a national level; -Provides for the establishment of intensive conservation areas; -Provides that the Natural Resources Board may reserve "deteriorated" areas against human occupation, cultivation or other activity in communal areas.
--	--

The Land Commission concluded that there is no hierarchy of precedence among the Environmental and Land Acts currently in place. There is no Act that supersedes others on the protection of the environment. The current decision-making power indicates that decisions about land and environmental issues is shared by too many Ministries. Responsibility for resource conservation is further clouded by the fact that there are multiple levels that claim rights to the same resources and yet there is no legal framework for co-management.

The Land Commission also concluded that the legal and administrative structures in communal areas have collapsed because there is lack of clarity about roles and functions of various institutions at local levels over issues of land and natural resource management. This study concentrates on how this lack of clarity has paralyzed an innovative resource management strategy. No amount of cosmetic surgery to the policies and laws of the land will solve this issue of resource management. Radical changes to environmental laws and policies are necessary, otherwise resources will continue to degrade. While laws and policies may not transfer ownership of land to the communities, they will have to clarify issues of co-

management of natural resources that are used in common.

1.9.3 Government and local government structures

In order to fully appreciate how government structures work in Zimbabwe, it is essential to outline briefly the various central government and local authority structures. There are some conflicts as a result of confusion about some structural relationships. It is discussed later in this thesis how lack of clarity in structures affects policy and in turn impact on the management of natural resources.

Central Government

Central government consists of several ministries as established by the President. These ministries are generally sectoral with each ministry looking after a particular area of responsibility, for example: Lands, Environment or Local Government. Only those ministries that have a bearing on the subject are discussed in some detail here. The sectoral approach of central government to the issue of resource management creates major problems for practitioners and communities on the ground.

Ministry of Local Government, Rural and Urban Development

Authority over land in communal areas is vested in the President who holds all Communal Land in trust for the people. Thus all communal land is state land. The Ministry of Local Government Rural and Urban Development is responsible for administering communal land

through the Rural District Councils. The administration of communal land is provided for under the Communal Lands Act 1982, and District Councils Act 1982 which has been superseded by the Rural District Councils Act 1988. This Rural District Councils Act only became effective in 1993. The Ministry of Local Government, Rural and Urban Development is responsible for all the Rural District Councils and for administering the above Acts. Rural District Councils are empowered by law to control, regulate and direct development within the districts. The council can make bye-laws on matters relating to finance and capital development funds, and the protection of common property, vegetation and conservation of natural resources (Land Commission, 1994).

The councillors are democratically elected by voters at ward level. There is provision for council elections to be held every two years. Therefore, the rural district councils have legitimacy and can claim to be the true representatives of the people. The only problems that have been experienced with the legitimacy of rural district councils has been when councils become co-opted by the state (Silitshena, 1989).

In 1984, a statement of policy and a directive by the Prime Minister established the Ward Development Committees (WADCOs) and Village Development Committees (VIDCOs) below the District Council. VIDCOs were created to initiate development at grassroots level, but in the process they have usurped the role of traditional leadership with regards to land, the Land Commission found in 1994. In practice VIDCOs have no modus operandi allowing regular elections or other recognizable characteristics of democratic governance. It is therefore extremely questionable as to how representative of the peoples' wishes these structures are.

A VIDCO consists of six adults elected from 100 households, the other two members represent youth and women's organizations. Six VIDCOs constitute a ward, and the VIDCO chairpersons constitute the WADCO. Each ward of approximately 600 households would have a WADCO. The WADCOs and VIDCOs do not have any legal status and derive their authority from delegation by the Rural District Councils. The Land Commission found that in general, government officials interpreted the law to imply that Rural District Councils execute their functions through VIDCOs and WADCOs, whose function include the identification and articulation of village needs.

It is important, however, to note that arable and residential land in communal areas are held under a traditional freehold tenure right on state land which gives exclusive rights to the family. Therefore, this land is not under communal tenure like grazing land and other commonly held resources. The Land Commission (1994) refers to these exclusive rights as freehold tenure. Interestingly enough, this freehold is not recognized by financial and other institutions. This demonstrates that it does not carry the same value as other forms of freehold which have title to them. Communal farmers cannot use this freehold land as equity, for instance. The land is only transferable within the family. It is difficult to see this as true freehold. Further, it should be observed that under the present land laws, traditional leadership is excluded from the administration of land. However, there is a requirement in the law which says that land administration is done with regard to customary law. This suggests there is some role for traditional leaders, given their status as executors of customary law. The concept of a freehold land on state property further complicates the resource management process. This is pseudo freehold and cannot be equated to other forms of privately owned land.

Ministry of Environment and Tourism

This ministry is responsible for administering environmental laws such as the Natural Resources Act (Chapter 150), Parks and Wildlife Act (14/75) and Communal Land Forest Act. It is responsible for the conservation of all natural resources including wildlife. The Department of National Parks and Wild Life Management (DNPLWM) is responsible for wildlife utilization and conservation. The Ministry of the Environment has no jurisdiction over land, yet it is responsible for land based resources. The administration of communal land is vested in the ministry of Local Government Rural and Urban Development. This means that the two ministries must cooperate in the management of land based resources without clear guidelines for co-management.

The mandate of the Ministry of the Environment is effected through two parastatals, the Forestry Commission and Parks and Wildlife Board. The department of Natural Resources is responsible for the technical issues relating to the utilization and management of natural resources which are not wildlife or forests.

Ministry of Lands, Agriculture and Water Development

The Ministry of Lands, Agriculture and Water Development is responsible for administering Leased State Land, with or without an option to purchase. Its mandate is governed by the Agricultural Land Settlement Act (Chapter 137) as well as the Rural Land Act (Chapter 155). This ministry is responsible for agricultural development, providing extension services and the administration of Rural State Land. The Minister of Lands, Agriculture, and Water

Development is also responsible for the compulsory acquisition of agricultural land through the Land Acquisition Act (3/92).

The Department of the Surveyor General falls under this ministry. The department is responsible for the change of status of cadastral boundaries, excision of areas from Communal Land, sub-division or alienation of State Land and sub-division or consolidation of existing freehold title properties.

The foregoing evidence demonstrates that there is substantial overlap among ministries and institutions in the administration of natural resources. The overlap is more pronounced in communal areas. There are also contradictions and ambiguities which cause conflict and sometimes confusion. The management of wildlife is caught up in these complex relationships and ambiguities which adversely affects the implementation of CAMPFIRE. As can be seen the various legislation are sectoral and are therefore not necessarily complementary to each other.

1.10 The Study Area

The study area is the Nyaminyami district which is located in Mashonaland West Province and is one of the six districts in that province (Figures 1.1, 1.2 and 2.2). Nyaminyami is the poorest and most marginalised district in the province. Even from a national point of view, Nyaminyami is amongst the poorest districts in the country. The district has 16 administrative wards, but only ten wards form the study area (Figure 2.1). The remaining six wards consist of Gatshegatshe communal area, three safari areas, and one National Park. While some

comparative data is used from National Parks, safari areas, and Gatshegatshe, these areas are not studied in any detail since they are not inhabited.

1.10.1 Geography of the study area

Nyaminyami lies in the Zambezi Valley which stretches from the North West in Zambia through Zimbabwe and Mozambique and all the way to the Indian Ocean. The Zambezi and Valley is an area of great research interest because it is home to hundreds of wildlife species but also rich in other natural resources. The valley also contains many tourist attractions such as Victoria Falls, Lake Kariba, Mana Pools and National Parks like Matuzviadona and Chewore, which have abundant wildlife. According to Pantzare and Vredin (1993), 70 per cent of the Zambezi Valley supports wildlife.

Nyaminyami District consists of three communal areas, one National Park, three safari areas, and Kariba town. The three communal lands are Omay, Kanyati (now Makande), and Gatshegatshe. These three areas form a "U" surrounding Matuzviadona National Park on three sides (Peterson, 1991). Omay, Gatshegatshe and Matuzviadona all have extensive lake shore frontage, a major tourist attraction (Figure 2.1).

Due to its low elevation below the Zambezi escarpment, Nyaminyami is hot and dry. The district endures some of the harshest climatic conditions in Zimbabwe with low erratic rainfall of 400-800 millimeters per year and high temperatures. The majority of the area falls into

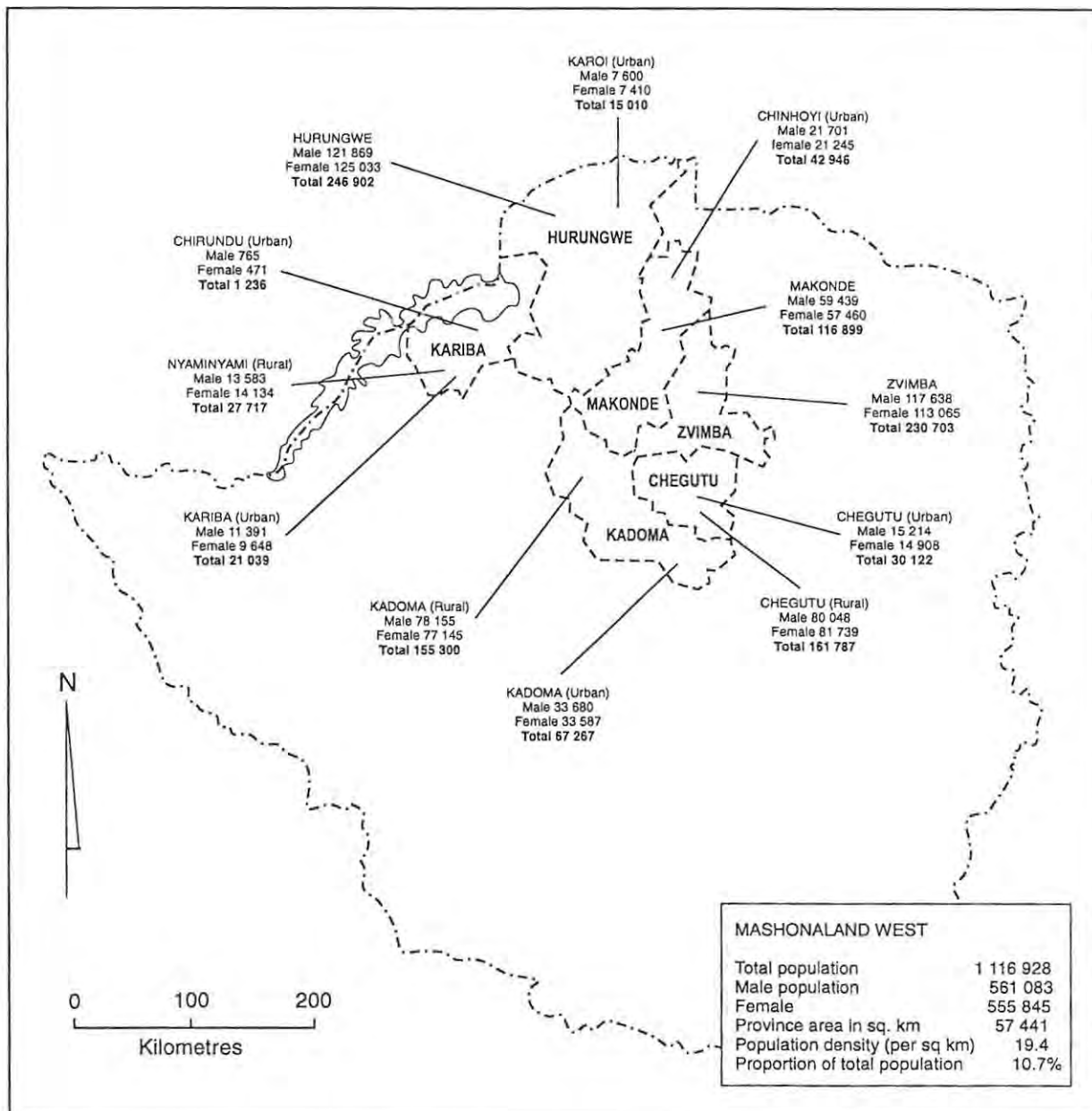


Figure 1.2 Mashonaland West Province and District Population

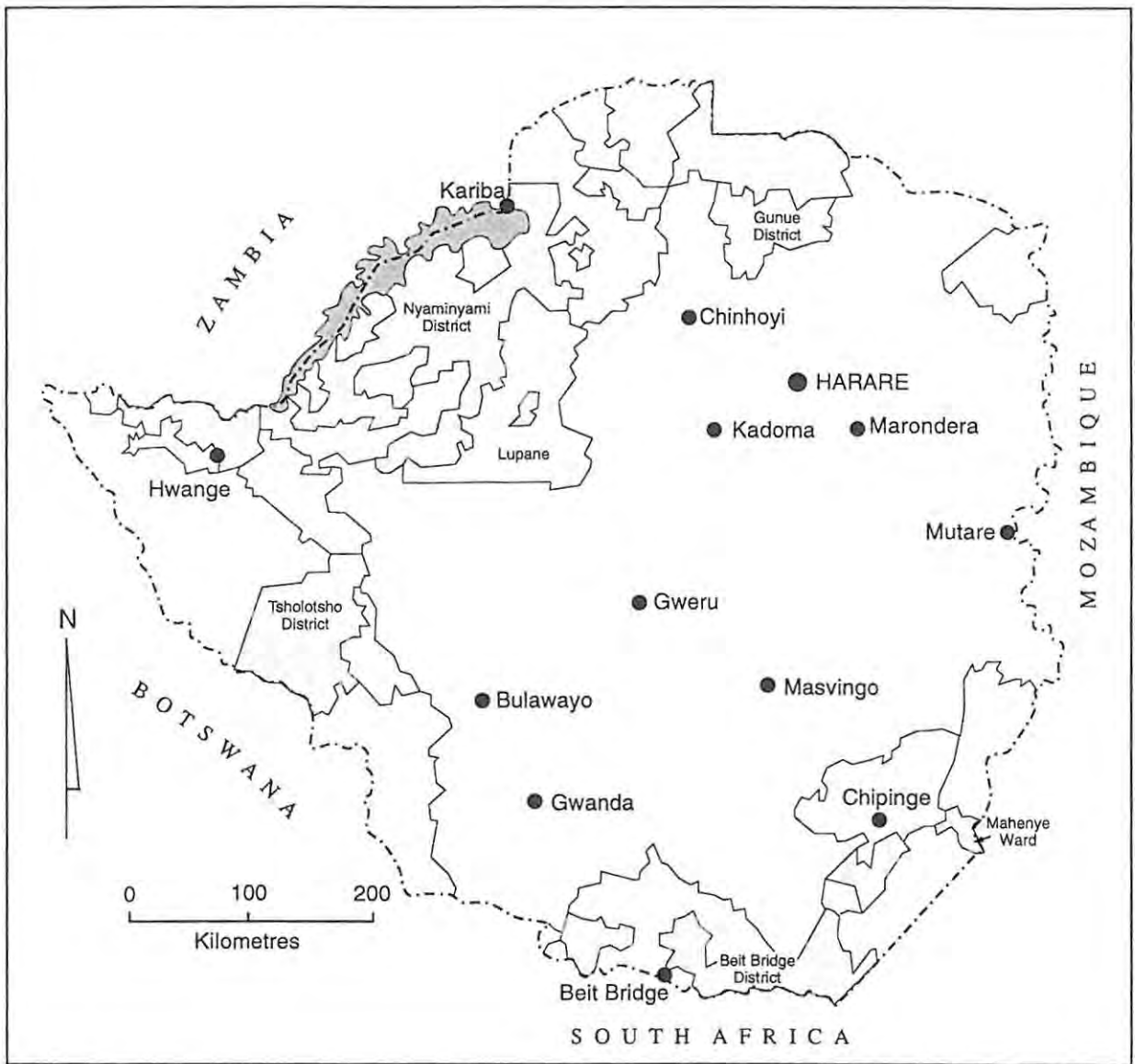


Figure 1.3 CAMPFIRE Districts Including Nyaminyami

natural region V, Figure 1.4 which is unsuitable for agriculture, except for extensive cattle grazing. The soils are generally shallow and sandy with arable land being found along the main rivers flowing into the Zambezi. The vegetation consists of woodlands on higher altitudes and mopane scrub woodland and jessie thickets on the valley floor (Metcalf, 1991).

The Zambezi Valley is generally infested with the tsetse fly and mosquitoes which make human habitation difficult and the rearing of domestic animals nearly impossible. These two factors are major contributors to the survival of wildlife in such large numbers. The low human population densities and the marginalisation of the Tonga people have led to the neglect and underdevelopment of the district, both in terms of human development and physical infrastructure. Omay has remained an underdeveloped and marginalised region. Infrastructure and social facilities such as roads, schools, health care, and commercial centres are still poorly developed and in certain areas unavailable. In Makande, however, all these are more developed, and services are of a higher quality.

The total land area of the Omay communal area is 2710 square kilometre (Kronburg and Halcrow 1988). The major cultivable lands are Mola 4211 ha, Negande 1308 ha, and Musambakaruma 1665 ha (Kronburg and Halcrow, 1988). Therefore cultivable land only forms a small fraction of the total land area. It is estimated by Kronburg and Halcrow (1988) that this cultivable area could be increased by 30 per cent if micro-irrigation was developed. Most of the soils are poor and cannot be cultivated, consequently settlements are confined to Mola, Negande, Musambakaruma, and Nebire. Crop production is limited by lack of cultivable soils, water, draught power, and wildlife damage. Development of livestock is

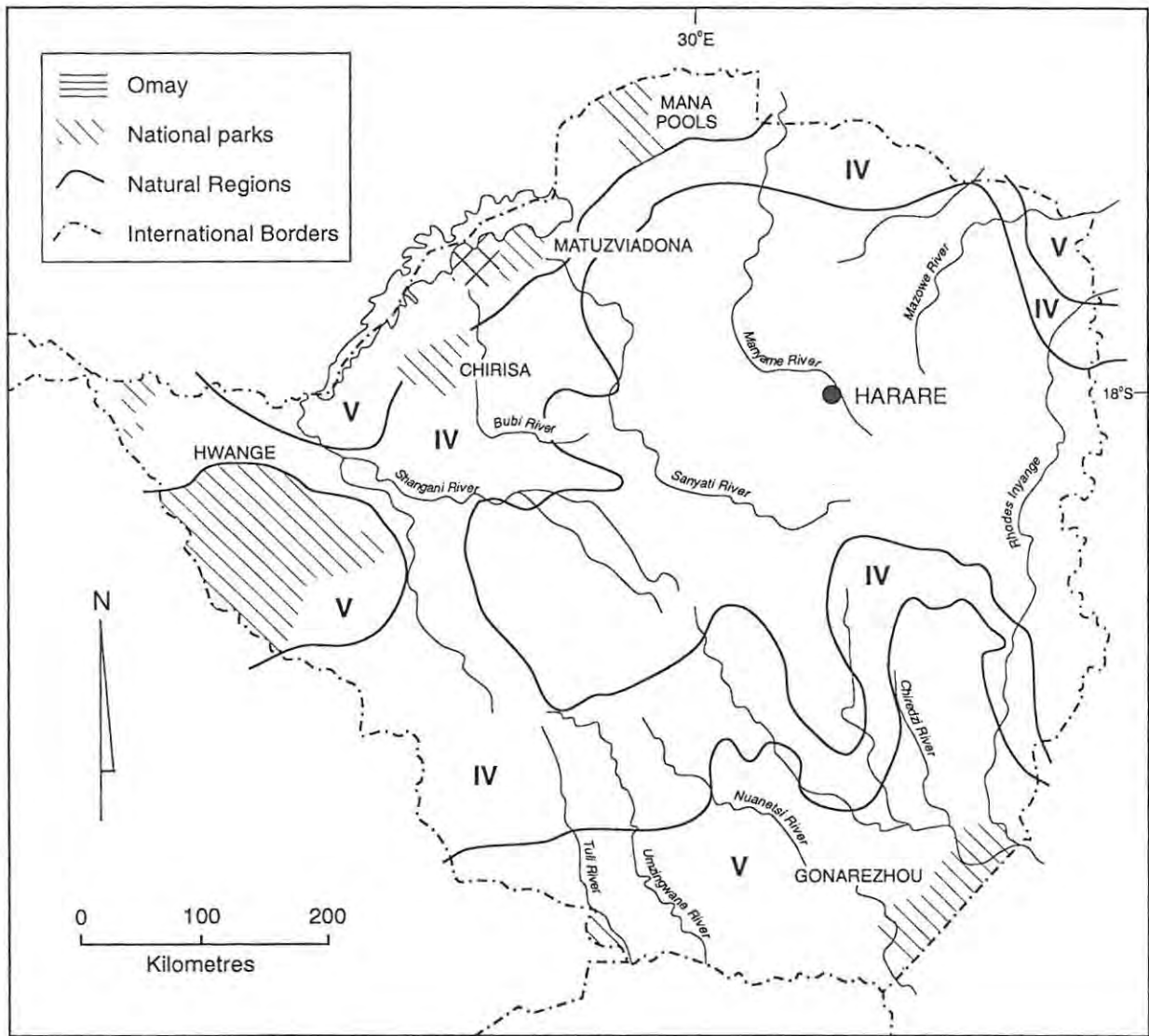


Figure 1.4 Natural Regions IV and V and National Parks

constrained by the tsetse fly which carries a parasite that causes sleeping sickness and kills domestic animals (Sibanda, 1996).

Crops often fail because of the unpredictable rainfall, while the abundant wildlife in communal areas and from the National Park cause severe damage to crops, to livestock, and even injury to humans (Peterson, 1991). The people of Nyaminyami are not self sufficient in food production because of these reasons. The Omay communal land was chosen as a target for CAMPFIRE because of this low agricultural potential, relatively low human densities, and high wildlife populations.

There are more arable lands in Makande as the soils are more fertile and the rainfall is higher than in Omay. The wildlife populations are smaller here and animals are not as much of a problem. The tsetse fly is not so prevalent in this area and therefore farmers keep livestock such as cattle, goats, sheep, and donkeys. Crop production is higher here because the farmers use animal draught power to plough their lands and the land is less rugged.

The Makande communal land has a total land area of 62,000 hectares and a population of 12,995 and constitutes two wards. The area has been settled since independence in 1980. This was a spontaneous settlement where immigrants mainly from neighbouring Hurungwe communal land came to settle. But there are also some other groups from other parts of the country although these are an insignificant number. Makande is implementing a land use plan which has clearly demarcated land uses, settlement areas, croplands and wildlife areas. Here wildlife is confined to very specific areas and is fenced off from the croplands and settlement areas. Again the experience of Makande is very different from that of Omay where no such

land use plan exists. The animal problem in Makande is certainly different from that of Omay. Wildlife management in Makande and in Omay differ significantly even if both projects are under CAMPFIRE. People's attitudes towards wildlife are different in these areas. The people of Makande do not have a recent history of living with wildlife as do the Tonga. Traditionally they are not hunters, nor are they familiar with foraging. Their lives are not dependent on wild resources as the Tonga are.

Makande communal area falls under natural regions III and IV and has a higher agricultural potential than both Omay and Gatshegatshe (Figure 1.4). In good years Makande is self-sufficient in food production (Murombedzi, 1991). Consequently agriculture forms the major economic activity and wildlife is only a supplementary activity.

The Gatshegatshe communal land is the smallest communal area with a total land area of 18,000 hectares and a population of 895 (Pantzare and Vredin, 1993). It constitutes just one ward. The settlements in Gatshegatshe consist of fishing villages located on the shores of lake Kariba within the 10 kilometre recreational corridor. The majority of the people who live in Gatshegatshe came from Omay communal land. The ward has very little wildlife and the major occupation is kapenta fishing with very little gill net fishing. The kapenta is a small sardine like fish which was introduced into the Kariba and which breeds extremely well. A whole fishing industry is based on this fish and it has become one of the important economic activities of the lake. Fishing in Gatshegatshe is a seasonal activity, normally done during the winter. Once the rains start, most of the fishermen return to their agricultural lands (Mhlanga, 1997). Cultivation is prohibited within this corridor and generally the tourism industry prohibits settlements within the recreational area.



1.10.2 The Tonga People and their Cosmivision

A brief overview of the Tonga people is given in this section. Tonga history is discussed, as is their cosmivision, their displacement, and their new lives in the escarpment. This account is not exhaustive of any of the issues discussed here. Only those issues that have a direct bearing on this study, such as resource utilization, management and conservation are discussed. The history is discussed to provide background information which assists in understanding where the Tonga have come from in terms of their relationship with nature.

1.10.2.1 Tonga brief history

This brief historical review helps to put the Tonga and the study area into context. The Tonga are generally regarded as primitive, poor, and lazy and are presented that way by many scholars and officials alike. This history shows that the Tonga were once a prosperous group of people who have become marginalised and underdeveloped by processes of war and defeat. The Tonga lost most of their wealth to the Ndebele, Kololo, and to a certain extent to the Rozwi. Therefore, the present situation of the Tonga is a result of many processes which occurred over a long period of time. When colonialism came the Tonga were already in a very weak position and were easily marginalised and exploited by the victors. The colonial administration ignored the Tonga until the building of the Kariba dam which further pushed them into depths of poverty hither to unknown to them. The present position of the Tonga people must be understood from this perspective and historical reality.

Reynolds and Cousin (1993) say historians disagree about the origin of the Tonga. The Bantu

theory claims that all the peoples of Southern Africa came from Northern and Eastern Africa and brought agriculture and domestic animals with them. There is no evidence however from the bones, pottery or language that new people came to the Zambezi Valley. Reynolds and Cousins, 1993 claimed that change came from within the Stone Age itself. The Tonga are therefore considered indigenous peoples of Zimbabwe and Zambia. Tonga culture and way of life have been influenced by the Rozwi, Kololo and the Ndebele who conquered them, intermarried and lived with them.

According to Reynolds and Cousins (1993) the area occupied by the Tonga has been permanently settled since the Stone Age period. For at least 1,500 years the ancestors of the Tonga shared the same Iron Age culture as the other people in Southern and Central Africa. Up to this point in time, very little archaeological work has been done on the Tonga people and there is even less information available on the people who occupy the Southern bank of the Gwembe (Zambezi River) in Zimbabwe. Some archaeological work done on the Zimbabwean side of the Gwembe before the valley was flooded seems to be related to Kalomo pottery dating as far back as the fourth century (Reynolds and Cousins, 1993). On the Zambian side in Machili Valley - pottery, iron, and cattle bones have been dated to several centuries before Christ. According to Reynolds and Cousins (1993) the Tonga, as a group, started farming on the Zambezi banks long before Christ was born. Historically, most people lived independently since the Tonga had no kings, instead they had many small chiefs and headmen (Reynolds and Cousins, 1993).

According to Reynolds and Cousins (1993) the Tonga were self-sufficient in food production before the Kariba dam was built in the mid 1950s. Like the Nile, the Zambezi River used to

flood annually and the flood water left deposits of rich silt brought down from the watersheds in Zaire, Angola, and Zambia. When the flood receded the silt kept its moisture until the next flood, ensuring food all year round (Reynolds and Cousins, 1993).

The original Tonga territory was much larger than it is today. The Tonga were settled over a large area of Northern Zimbabwe. The Portuguese reported powerful Tonga communities in the Kadoma region in the 1500s (Reynolds and Cousins, 1993). That community exploited gold in the region and traded gold widely (Figure 1.3). According to Reynolds and Cousins (1993) another ethnic group, the Rozwi invaded and defeated the Tonga, settled down, married Tonga women, continued to maintain the shrines in the area, observed religious rites, and became Tonga speakers. The chieftainships of Saba, Pashu and Sayi were founded in this way and the Tonga effectively absorbed the Rozwi (Reynolds and Cousins, 1993).

Another important development was the establishment of the Sileya dynasty. Reynolds and Cousins (1993) claim that the Rozwi overcame another Tonga ethnic group, the Shangwe (present day chief Musambakaruma's people) and inter-married with them and again the Rozwi were absorbed by the Tonga. Later the Sileya appointed subordinate rulers like Negande, Mola, and Nanika; these chieftainships have survived to this day.

Rozwi power reached its peak at the end of the 1700s, after which they were gradually absorbed by the Ndebele, who had fled the Zulu rampage by Shaka in the 1830s. The Ndebele conquered the weakened Rozwi state and at about the same time the Sotho-speaking people of Sebentwane, the Kololo, also left South Africa. They took advantage of a war between Subiya and the Leya peoples, to cross the Zambezi near Victoria Falls and established

themselves in the heart of Tonga territory between 1840 and 1860.

The plateau Tonga in Zambia were rich in cattle which made them targets of both the Kololo and the Ndebele. The Kololo raided the Tonga and the Ila (a plateau Tonga group) for their cattle and the Tonga leaders Sinemani and Mweemba had to pay tribute to them. The Tonga lost vast herds of cattle to the Ndebele and were forced to scatter. While the valley Tonga had few cattle and were not a target for raids, many villages were destroyed by the Ndebele and this seriously weakened the Tonga as a group and subordinated their culture and traditions to these latter day victors.

The Tonga are one of the small ethnic groups who lived largely without interference from the colonial rulers until 1957 when they were removed as the valley began to flood due to the construction of the Kariba dam (Tremmel, 1994). The Kariba dam in many ways forms the centre of the Tonga tragedy.

According to Mathews (1978) the Tonga speaking people of southern Zambia and northern Zimbabwe have for a long time been ignored by historians and only cited in passing as passive and defenceless victims of Ndebele raids. In Zambia they inhabit not only the Gwembe valley, but extend right over the fertile southern plateau, and in Zimbabwe they form the third largest African ethnic group after the Shona and Ndebele (Mathews, 1978). In Zimbabwe no serious study of the Tonga society or language was done until Weinrich's (1977) book. On the Zambian side however, the situation is different, the missionary work was initiated earlier, missions were started at Chikuni in the Gwembe valley, at Sicooba and Kanchindu in the opening years of the twentieth century. The result of this was a number of

scholarly articles on various aspects of Tonga society and the beginning of the study of the Tonga language (Mathews, 1978). Many articles have been produced by Elizabeth Colson since the late 1940s about the Tonga in Zambia. Mathews claims that even Weinrich's book and many of the publications on the Zimbabwe side still draw from the Zambian data. Reynolds and Cousins (1993) demonstrated the same thing, they said that since 1980 many history books have been written in Zimbabwe that claim the rich and fascinating history of the rise and fall of states in Zimbabwe before the colonial invasion. But Tonga history is not yet written they concluded and this makes accounting for Tonga history difficult.

According to Reynolds and Cousins (1993) there are other ethnic groups in Southern Africa who are known by the same name as the Tonga of Zimbabwe and Zambia but who are not in any way related to this particular group. The following are the examples they quote:

- The Tsanga, or Tonga of Mozambique
- The Tonga from Barwi region near Tete who speak giTonga
- The lake-side Tonga of Malawi
- The Thembi-Tonga of Zululand

These groups are all Bantu speaking like the Tonga, Ndebele and Shona but are not related to the people of the great river.

1.10.2.2 Tonga displacement

Large populations throughout the world have been victims of displacement and resettlement

programmes because of technical development, politics, and environmental disasters. The Tonga of Zimbabwe and Zambia are just one group of people who were resettled following the building of the Kariba dam. In Zimbabwe the Tonga have suffered more from being resettled by this programme than any other group of people. Their stories are told in the resettlement studies by Colson (1971), Scudder (1975), and the ethnographies by Tremmel (1996).

According to Weinrich (1977) there were a total of 18 Tonga chiefdoms located in the Zambezi valley in what was then Southern Rhodesia. The three chiefdoms of Pashu, Dobola, and Siabuwa were already located far from the Zambezi River and were not directly affected by the displacement. However, the 15 remaining chiefdoms had to abandon their homes near the banks of the river, leaving behind fertile fields, gardens and the abundant water from the Zambezi (Tremmel, 1996). The people were forced to move and were not permitted to resettle anywhere close to where the edge of the lake would be, as this was reserved for National Park land and future tourism. Chiefs tried to find areas with surface water, grazing land and arable lands for their people, but this proved difficult to find. Only one chiefdom, Saba, according to Weinrich (1977) refused to leave their ancestral homes when the people were ordered to move. The administration left them alone and they merely moved a little up to higher ground as the water of the lake rose. The Saba chiefdom is located on the head of the lake, most of its villages were not affected by the displacement (Tremmel, 1996). The majority, however, were afraid of the District Commissioner and the police so they moved as ordered. Tremmel (1996) reports that in another village on the Zimbabwean side people were physically forced to move by the police when they refused to move. He says in Zambia over 30 people in one village were shot and killed when they refused to move and this sent fear among the people

so they moved.

The ethnographies done by Tremmel (1996) demonstrate the agony which resulted from the displacement of the Tonga people from their ancestral land. Despite great hardships such as illness and high mortality rates, the river Tonga enjoyed an inner sense of happiness and integrity (Tremmel, 1996). Memories of this happiness continued to overshadow the suffering of their former life by the river. They remember more about their links with neighbours and relatives across the river, the proximity of water, their fertile fields and gardens, and their freedom to hunt. In his account Kenmuir (1978) confirmed this when he noted that on December 3rd, 1958, the two sluice gates through which the Zambezi was flowing were closed which marked the end of the former life of the river Tonga along the banks of the Zambezi. Many chilling stories are told by the Tonga to this day about everything they left behind and about being displaced to the escarpment (Plate 1.1)

A number of things stand out from the Tremmel ethnographies which summarize the feelings of the Tonga people about their forced move. The issue of ancestors, ancestral spirits and spirituality come out very strongly. Most of those who told their life stories spoke about how they organized ceremonies to inform their ancestral spirits that they had to settle elsewhere. When they got to the new area they performed other ceremonies to tell their ancestral spirits that there were now settled on new land. As will be seen later the issue of spirituality and ancestral spirits has a very strong bearing on resource use and management among the Tonga people.



Plate 1.1 Zambezi Valley Escarpment

Another theme that is repeatedly mentioned in these ethnographies and stories told by other writers is the Tonga separation from their relatives and friends in Zambia. Many of the Tonga in Zimbabwe have relatives on the Zambia side whom they have not seen since 1957. They feel deprived because they can no longer visit them or hold joint ceremonies. The Tonga never even had a chance to say goodbye to their relatives and many left their ancestors in Zambia. But the Tonga also lost property when they moved, such as grain, goats, chickens and their homes. Above all the Tonga still cry about their river which they left behind, and they claim that the district commissioner had told them that the water would follow them (Tremmel, 1996). In the resettlement areas they came to share land with many wild animals something they had never done before, and the water never followed them.

Since Kariba was built the Tonga also talk about how animals have been treated better than them. This started with 'Operation Noah' which was a programme that rescued wild animals which were stranded as the lake formed. The ten kilometre corridor between the lake frontage and the Tonga villages was created for wildlife. The Tonga say the government wanted animals to be closer to the water than the people. This issue is important to understand as it has impacted on Tonga attitudes and perceptions towards wildlife.

1.10.2.3 New life in new lands

When the Tonga arrived in these lands resettling was not easy because homes had not yet been built and fields had not been cleared. They had been forced to surrender their former way of life, and permitted to establish new lives only in certain areas (Plate 1.2). The river Tonga began the task of building new villages and farming marginal lands. According to Tremmel

(1996) the Tonga were no longer able to rely on riverine gardens which supplemented the

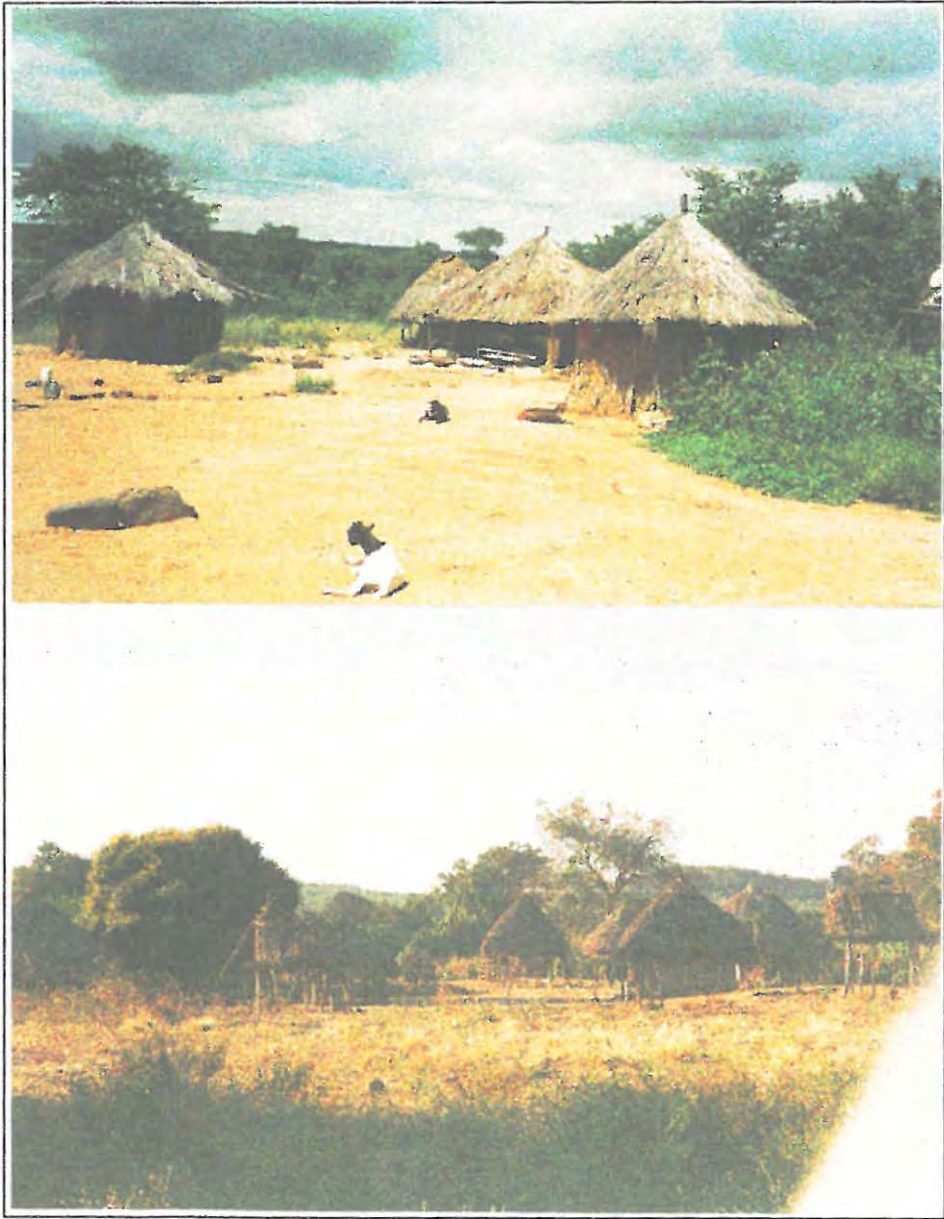


Plate 1.2 Tonga Homes

harvest from their fields, villages had to spread out because people needed more land in the resettlement areas. Soon after resettlement, they were no longer permitted to hunt, like many other Africans under colonial rule. Farming failed most of the time because of lack of rain and poor soils, the Tonga people became dependant upon the government for food. They were no longer self-sufficient in food production.

Since the Tonga were displaced by the Kariba dam, they see wild animals as being afforded better treatment than themselves. This perception does not have to be real but once it exists it causes major problems for conservation. The story of 'Operation Noah' is told repeatedly by the Tonga elders emphasizing the bitterness that people still feel today. They claim that even today wild animals still receive better treatment than them, a common reference to Matuzviadona and the wildlife within the 10 kilometre corridor (Sibanda, 1995). In Chief Mola's story (Sibanda, 1995) the chief quotes a number of laws, bye-laws and activities that protect wildlife and asks the question which laws protect the Tonga and their interests. The Tonga view themselves as dispossessed people whom the nation has sacrificed. The Tonga feel cheated and powerless.

The Tonga still have no access to local resources and the laws still do not allow them to settle on the lake frontages. The conventional planners and administrators argue that the people would spoil the lake frontages for the tourists and sportsmen who bring foreign currency if they were allowed to settle there (Moyo, 1991). The question to ask is, what would create a greater environmental impact the Tonga fishing villages or the tourists' accommodation, boats, and other related activities? It is hoped that the CAMPFIRE programme will redress some of the Tonga marginalisation and attempt to resolve some of these contradictions.

The Tonga are not only marginalised, but are today reluctant participants on the forefront of this great human/wildlife experiment - CAMPFIRE. Contrary to CAMPFIRE popular literature the Tonga are not participating in CAMPFIRE voluntarily, they simply do not have a choice. This land use strategy was decided by the government and passed on to the district council. The Tonga need resources to live on and have been given limited access to these resources, therefore they do not want to invite the wrath of the authorities by refusing to participate in this scheme.

Part of the Tonga estate has been made into a National Park and they no longer have access to those resources. Traditional leadership no longer has control over the allocation and use of resources. The Tonga now survive by subsistence cropping of maize, millet, and sorghum in an area that is predominantly habited by wildlife. They supplement their food needs by keeping goats, sheep, and chickens. The Tonga have become extremely impoverished and suffer from wildlife encroachment and a lack of laws that protect their lives (Sibanda, 1995).

Many illegal immigrants came to the Zambezi valley soon after independence and chose Omay in particular as it was relatively uninhabited. These illegal immigrants were eventually returned to their home districts in the late 1980s following a protracted conflict between the newcomers and the indigenous people. The government had to take action only after it decided to introduce CAMPFIRE. It had to give CAMPFIRE a chance by maintaining this low human population densities and by keeping out the invaders who would have introduced more sophisticated cultivation methods and livestock, but who would have also encroached on the habitat of the wildlife. In the early 1980s this had already started to happen. The threat from immigrants is still a real one in Nyaminyami as other groups from the surrounding

districts tend to see this district as open land.

1.10.2.4 Tonga social organization

Tonga society is matrilineal with the mother taking centre stage in social organization. The main bond of kinship is between the mother and her children, who form a household unit and can be described as a matricentric family. The Tonga kinship system combines matrilineal descent with a strong emphasis upon man's control over his marital family (Reynolds and Cousins, 1993). Even the Tonga spirit mediums, especially those associated with the rain shrines, are women.

Tonga society is organized in groups called clans which have certain animal names attached to them, usually more than one each. The clan names have significance for this study because it is sacrilegious for one to consume the flesh of one's clan animal. The survival of the clan is also dependent on the numbers of clan animals, therefore each clan protects its clan animals. This was used traditionally, and even today as a way of balancing wildlife utilization and avoiding the extermination of wild animals. Therefore social organization and belief systems have an impact on this study.

Tonga clans have no recognized heads and members of the clan do not claim any common property. Clan membership is traced through the female line and each member is also an honorary member of his father's matrilineal group. Each matrilineal group has a single body of ancestral spirits, which can affect any member of the line and to which all members of the line have equal right of appeal (Reynolds and Cousins, 1993). The ancestral spirits are also

significant for this study because spirituality is at the centre of Tonga people's conservation ethic, philosophy, and practice.

In Tonga culture a man's children are never his prime heirs and a wife never inherits from her husband, nor does a husband inherit from his wife. The successor (one who takes the name and position) for example a child, does not get all the property either, but may get a large share. A woman's successor is usually the main heir. When a man dies, his widow may use the grain to feed the children until the next harvest and if she remains in the village she will continue to use the fields he cleared (Reynolds and Cousins, 1993).

The basic principle of the land tenure system was the right of a farmer to any land which he or she had brought under cultivation. This system of land-holding derived from the Tonga use of land on the flood plains. The land in the flood plains was good land and made it possible for people to grow crops all year round. The Tonga made rules about passing on the rights to this land down through small lineages (Reynolds and Cousins, 1993). When land was passed on through lineage the control of that land stayed with the lineage. It did not pass on to the person who farmed it. The community did not own the land but oversaw it. No authority within the community had the right to hand out land or to take it away. Even the ritual leader (Siakatongo) did not have special rights to the soil or to the produce of the land that was occupied by some one. Traditionally, the Tonga did not regard land as private property, but people had land rights which could be passed on to someone, but there was no ownership. This Tonga land tenure system was first disrupted by the colonial administration which appointed chiefs and gave them power to allocate land since all 'tribal land' was considered by the colonial administration to belong to the state. However, before Kariba was built even

the chiefs appointed by the colonial administration could not give or take away land. According to Reynolds and Cousins up until the 1950s it was still possible for a stranger to find unoccupied land, clear it and cultivate it without asking either the headman or Siakatongo. This notion suggests a form of 'open access'. This is significant for the study because major disruptions to Tonga life came with the construction of the Kariba Dam.

After independence in 1980, the new government gave the power of land allocation to the district council. This has totally disrupted the Tonga people and marginalised them further. It has disrupted centuries of land allocation institutions and practice, which has negatively affected security of tenure for the Tonga. In the Tonga land tenure system security of tenure had nothing to do with ownership, but rather the right to remain on the land. These rights were just as secure as title deeds. This point is relevant to the study because it should be established if and how CAMPFIRE has addressed the issue of land tenure. This is also discussed further in Chapter Six.

1.10.2.5 Tonga cosmovision

This brief overview of Tonga cosmovision provides a broad understanding of Tonga spirituality, cosmology, and the way the Tonga understand the biophysical environment, the elements, and how humans relate to physical and spiritual worlds. In order to put the discussion of cosmovision in perspective it is essential to define briefly what cosmovision is. Cosmovision is a concept of life, it is the perception of an individual or group of the basic principles about the way the natural (ecological environment), the supernatural (spirit beings) and the human worlds are linked. It includes the philosophical and scientific assumptions and

the ethical positions on the basis of which people relate to each other and shape their practical relationships with nature and the spirit world (Haverkort, Hiemstra, and Millar, 1996).

In the Tonga cosmovision the natural world, the spiritual world, and the human world are on the same continuum, and life is not dichotomised. The spirit is in nature and in humans, hence the natural world is an extension of humanity and the spirit is an extension of humanity (Sibanda, 1998). Life is celebrated through the utilization of natural resources, therefore natural resources are conserved to guarantee the continued celebration of life. There is no resource utilization without responsibility. For the Tonga, natural resource management and utilization had a physical, human, and spiritual dimension (Sibanda, 1998). Life is not seen outside the supernatural because it is the supernatural that controls all life processes. People do not die but move from one world to another, from one form to another. People become shades, ancestors or spirits and watch over the living as well as intercede on behalf of the people to God since the living cannot talk to God directly (Reynolds and Cousins, 1993; Sibanda, 1998). The Tonga believe that there is Leza, the high God, the creator, and the cause of all that happens. Leza, is the ultimate power but is not concerned with the everyday affairs of humans. No offerings are made to Leza and no priest or prophet claims direct access to the power of Leza (Reynolds and Cousins 1993). There are Basangu who are spirits that have an effect on affairs of the general community. Basangu speak through people who are possessed. But there are also spirits of animals or foreigners which can cause illness. Zelo are ghosts or spirits of dead people who are not ancestors. Mizimu are shades or ancestral spirits and they give protection against other spirits (Reynolds and Cousins, 1993). Mizimu only affect those within the kinship system to which they belonged when they were alive.

According to Sibanda (1998) the Tonga cosmovision views all natural resources as belonging to God and humans having a responsibility (not a right) of using them in a manner that does not displease God. Natural resources could never be owned, but people have access rights (Reynolds and Cousins, 1993). The basic principle of land tenure was the responsibility of a farmer over any land which he or she brought under cultivation. The community does not own land but oversees it (Reynolds and Cousins, 1993). Therefore, for the Tonga, resource utilization is very much influenced by spirituality, customs, and taboos. It is also guided by a philosophy of responsible use, and by need not greed.

The Tonga believe that a bountiful harvest is not only dependent on the biophysical elements of soil, water and light, but is also dependent on using the resources in a manner that is in harmony with nature and pleases the ancestors and God (Sibanda, 1998). Similarly those who are good hunters are possessed by the hunting spirit not only to be successful hunters but the spirit guides them to avoid killing sacred animals or those that personify spirit beings (Tremmel 1996; Sibanda, 1998). According to Reynolds and Cousins (1993) Tonga society is also organized in groups called clans and clans have certain animal names. These animals are not honored or avoided, but eating the flesh of a clan animal is sacrilegious. In concluding his argument Sibanda (1998) says each clan protects its clan animals because the vitality and survival of the clan are dependent on the abundance of clan animals. This Tonga culture creates a natural balance in the consumptive use of wild animals. The spiritual and cultural values of the Tonga people were responsible for regulating the use of wildlife. These values are embedded in their cosmology. The Tonga indigenous knowledge and traditional practices are only a small part of the cosmovision and they often have been treated as if they are independent. These practices cannot be used nor implemented outside of this broad

framework and understanding of this peoples' cosmovision.

1.11 Thesis Structure

The thesis covers a discussion of research methods, the literature surveyed, the results of the household surveys and key informants, the results of surveys of policy makers and NGOs. The final part of the thesis discusses the findings of the research and makes recommendations.

Chapter Two deals with the research design, which had as its primary aim the generation of data so as to produce a rounded picture of what is happening to CAMPFIRE and its contribution to natural resource management. The chapter also outlines the study objectives, methods, and how the data was analyzed. It discusses the sampling process, primary and secondary data collection, and concludes by examining some of the weaknesses of the study methodology.

In Chapter Three the thesis reviews literature that is considered essential in understanding the major debates that concern wildlife and natural resource management and conservation. The major issues addressed are globalization and the notion of global commons and how these impact on wildlife management and utilization decisions at the nation state level and at the village or community level. Also covered by this review are the issues of poverty, underdevelopment and the environment. Questions of poverty influences the way people utilize their resources and what impact underdevelopment has on the environment are examined. The chapter discusses African perspectives on wildlife and how these impact on CAMPFIRE implementation. It also demonstrates the polarization of views between Africa

and the West and how this negatively affects the management and conservation of wildlife. This literature review discusses the theories of common property management with a view to understanding their applicability to CAMPFIRE and the management of wildlife. The section deals with the historical myth as described by Hardin which says all resources used in common will inevitably suffer from degradation. This is central to the understanding of common property management. Finally, the chapter addresses community participation in natural resource management. Participatory approaches are reviewed to provide an understanding of one of CAMPFIRE's performance indicators. The main pillar of CAMPFIRE is community participation, therefore an understanding of this would shed light on what has worked and what has not.

Chapter Four discusses the results of three surveys; household, key informants, and ethnographies of the elderly. These surveys provided the bulk of the primary data and therefore make a major contribution to the findings of the study. In Chapter Five results from the semi-structured interviews with the policy makers and officials of participating NGOs are presented. These results form part of the primary data and findings of the study.

In Chapter Six the major findings are discussed in relation to the specific objectives of the study, the reviewed literature, and the theories of common property management. The success of CAMPFIRE is measured against these objectives by using the evidence from the research. Chapter Seven makes policy and programme recommendations and presents CAMPFIRE's contribution to common property management as well as the contribution of this thesis to knowledge on the management of resources used in common.

CHAPTER TWO

STUDY METHODOLOGY, DATA PROCESSING AND ANALYSIS

2.1 Methodological Approach

In order to meet the specified objectives of the thesis, appropriate research methods, techniques, and assessment criteria were reviewed and are dealt with in this chapter. Research and theoretical issues relevant to the research design and methodology are examined here. The chapter deals with the levels at which the study is pursued, provides a summary of objectives, and methods used to meet those objectives as well as providing an analysis. Examined here are the secondary data that have been used in the study, methods used to collect primary data, the sampling framework, and weaknesses of the research.

The research was pursued at three levels; national, district and local (Figure 2.1 and Table 2.1). At the National level the study attempted to establish how wildlife is managed as a national resource, what institutions played a major role in its management and conservation as well as what guiding laws and policies existed. The National sources of information for this study were secondary and primary. Secondary data was obtained from government and Non Governmental Organisations (NGO) records, policy documents, legislation, official administrative procedures, and primary data from interviews with relevant officials.

The District level analysis assessed and examined how wildlife was managed as a district common, it looked at who the major players were and how the district commons concept fitted

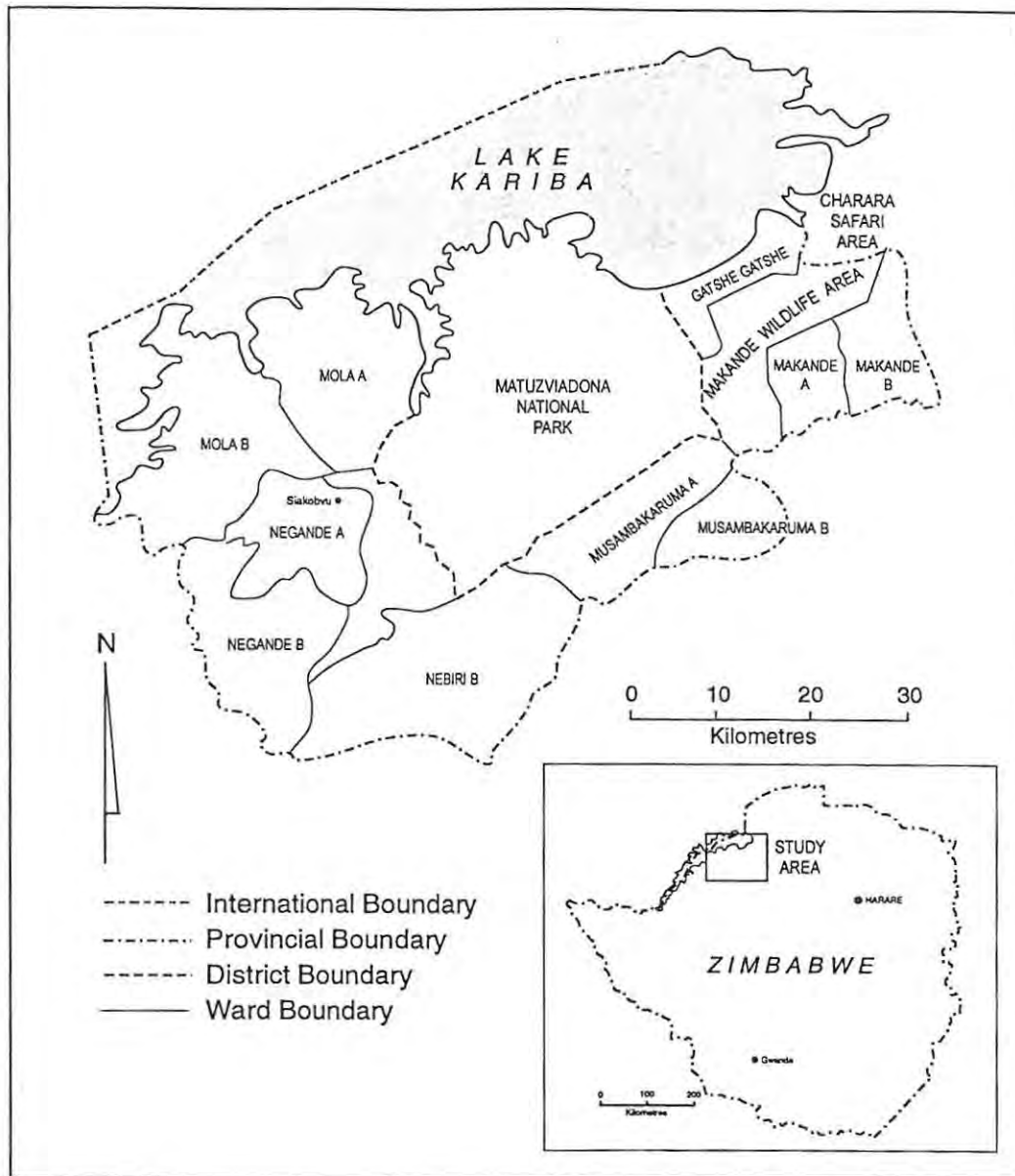


Figure 2.1 Omay Chieftain Areas and Makande

into the national resource utilisation perspective. The district level data sources were documents, records, and reports of the district administration, district council and the structured questionnaire interviews with the district administration and the council officials.

Local level assessment sought to demonstrate how local people participated in the utilisation, management, and conservation of a resource that is perceived to be owned at three levels. It also sought to establish how people's indigenous knowledge was incorporated into the management of wildlife. The technical and physical attributes of common property resources (CPR) were examined through literature review, testing theories of common property resources and assessment of their applicability to CAMPFIRE, with a view to understanding the institutions and rules of how this resource is managed (Blakie and Brookfield 1993; Bromley and Cernea, 1989). The local level sources consisted of primary interviews with councillors, chiefs, the elderly and heads of households. In addition the Local level sources also included informal discussions, participatory observations, and rapid appraisal.

Various methods of data gathering (Table 2.1) were used, including structured household and key informant questionnaires, semi-structured interviews and ethnographies, informal interviews, and Participatory Rural Appraisal (PRA). The field work was accomplished in three steps, first three weeks in September 1996 covered eight semi-structured interviews with government policy makers. The second step was to interview seven NGO officials for three weeks in November, 1996. The third was eight weeks in March and April, 1997. This component consisted of 224 household questionnaires, 15 key informant questionnaires, and seven semi-structured interviews and ethnographies with the elderly.

The research team composition was two female research assistants, two male research assistants, one male researcher, three male guides and interpreters. The team was based at Siakobvu (Nyaminyami Rural District Council Headquarters) as this was central (Figure 2.1.) In Nyaminyami district, unlike other districts, the district administration headquarters and the rural district headquarters are in different centres, separated by hundreds of kilometres. As will be seen later, this creates great difficulties in co-ordinating the activities of the council and those of central government as performed by district administration.

TABLE 2.1 Objectives, Methods, and Analysis		
Objective	Method	Analysis
1. Establish if ownership, utilisation, and management of wildlife have been transferred to the local level producer units and how this has impacted people's attitudes towards wild animals.	Structured household and key informants surveys, semi-structured questionnaires for policy makers and NGO officials. Official documents from council.	Qualitative and quantitative with descriptive statistics. Review documents.
2. Determine if and how local institutions have been developed and how they facilitate efficient and effective wildlife management.	Semi-structured interviews with government and NGO officials. Examined local institutions and talked to officials.	Qualitative, data grouping, and cross tabulation. Verification of data.
3. Determine the role of cash and other material benefits as incentives for local community participation in conservation.	Household and key informants structured interviews, district council income records, benefits sharing records.	Qualitative and quantitative with descriptive statistics.

TABLE 2.1 Objectives, Methods, and Analysis		
Objective	Method	Analysis
4. Establish if Tonga indigenous knowledge and traditional practices are incorporated into natural resource management under the CAMPFIRE programme as well as determining how this impacts on sustainable natural resource utilisation.	Participatory rural appraisal, ethnographies, semi-structured interviews and structured interviews. Project documents and council records.	Rereading primary materials, listening to tapes, reconstructing events, open coding, labelling interpretation and synthesis.
5. Establish CAMPFIRE's effectiveness as a natural resources management strategy, its sustainability and its contribution to community based property management.	Structured and semi-structured Surveys and secondary data sources. Review theories on common property, and community based resource management systems.	Relating field results to theory to measure success against plans. Relate CAMPFIRE to other community based management strategies.
6. Establish if a conflict exists due to the fact that wildlife is viewed as a resource which is owned and controlled at three levels, and whether there is lack of enabling legislation and policy. The study must also examine whether CAMPFIRE has resolved these conflicts.	Analyse natural resource and wildlife legislation, policies and programme documents, related to CAMPFIRE and its performance interview government and NGO officials. Examine bundles of rights and its applicability to CAMPFIRE.	Relating field results to legislation, policies and programme documents. Relating results to multi-jurisdictional access rights.
7. Establish CAMPFIRE's contribution to common property management.	Relate and test CAMPFIRE concept to common property theories. Examine bundles of rights theories.	Analyse CAMPFIRE to see if it fits common property theories. Relating CAMPFIRE to bundles of rights.

2.1.1 Research design

Research is usually designed to handle a problem, something which needs describing, explaining or improving, or about which information is needed so that future occurrences can be predicted (Peil, 1982). Research should add to the growth of knowledge and it can also be used to criticise or correct what has gone before, as well as move into new fields.

The aim of this research was to generate data to produce a well rounded picture of what is happening in CAMPFIRE and in order to establish the role and contribution of CAMPFIRE to natural resource management strategies. This information will come from multiple sources such as government officials who make natural resources management policies, programme planners, NGOs which are participating in research, planning, and implementation of this programme, key individuals in the field, households in the study area as well as special groups of local people. It is also important to learn from existing literature on community-based resource management approaches, legislation, policies and bye-laws governing the use and control of natural resources, including wildlife.

The design of the research took all these variables into account and included semi-structured interviews with government and NGO officials, structured interviews with key informants and heads of households as well as semi-structured interviews and ethnographies with the Tonga elders in order to establish a baseline of information. This information provided the data to meet the various objectives of this study (Table 2.1). The sample size, the key informants, and the government and NGO officials solicited for views and experiences were all included as part of a comprehensive strategy to capture broad, but specific data. The individual

ethnographies collected as part of this overall master plan were identified in the field using information from the councillors and the field guides on elderly people who were adults at the time that Kariba dam was built.

2.1.2 The approach

A case study approach is applied to assessing the Communal Management for Indigenous Resources (CAMPFIRE) programme. Community wildlife management has been impacted on by policies on resource ownership, changing political and economic forces, changing resource ownership and tenurial systems, emerging national environmental legislation, international conventions, the new human-animal relations and the dynamic socio-economic and cultural developments. Wildlife conservation is also impacted on by changing governance structures and institutions, management strategies and inequitable sharing of benefits from common resources, and the role of cash incentives on conservation. This study has used a 'multi-data sources approach' (Anderson, 1990; Crano, 1981). This approach generated the needed data to meet the objectives of the thesis.

This study has adopted a multidisciplinary approach in the examination of socio-cultural, economic, political and biological systems. The technical and physical attributes of common property resources (CPR) have been evaluated as a basis for determining the rules and institutions that govern common property resource use and management. This enabled the study to systematically summarise existing knowledge, explain observed activities in a systematic manner, as well as create a framework to predict events and relationships. Quantitative and qualitative methods used include: participatory rural appraisal, rapid rural

appraisal, primary questionnaires, key informants interviews, in-depth discussions, ethnographies and secondary data. The Statistical Package for Social Science (SPSS) was used in the quantitative analysis of the data from questionnaires.

2.2 Secondary Data Collection

2.2.1 National and archival sources

Secondary data were collected from multiple sources and levels. Data from archival sources was examined to reconstruct historical processes as well as reconstruct how wildlife legislation developed from colonial days to the present. Other consulted sources are government records, statistics, CAMPFIRE programme documents, and policy documents. National legislation and the data from three ministries; Environment and Tourism, Local Government and Lands, Water and Agriculture was reviewed and analysed to provide a clear picture of wildlife ownership, utilisation, and management systems. This information addressed objective number six which establishes how conflict in the management of a resource owned at three levels is resolved in the absence of enabling legislation or policy.

Data from NGOs, the World Wide Fund for Nature, the Zimbabwe Trust, the International Union for Conservation of Nature and Natural Resources (IUCN) and Centre for Applied Social Science (CASS) at the University of Zimbabwe, the District Administration, and the District Council provided background information about how the wildlife resource was managed and by whom. This information addressed objective number one which establishes if ownership, utilisation, and management of wildlife in communal areas has been transferred

from government to local communities under CAMPFIRE. This information also partly addresses objective two, which is to determine if local management institutions have been developed, how they have been developed, and if these are now facilitating a more efficient and effective management of wildlife under CAMPFIRE. These two objectives are also impacted on by the debates on globalization and global commons which are designed to curtail local decision-making power and introduce a system of managing resources globally.

District council records along with NGO project documents provided information on programme performance, income generation, and on how this income and other benefits are distributed. This data addresses objective three which determines how critical cash and material benefits as incentives were to the local people's participation in the management of wild animals. It also addressed objective five which establishes the effectiveness and sustainability of CAMPFIRE as a natural resource management strategy.

Examining CAMPFIRE documents and Nyaminyami project documents provided background on this concept, its major objectives and how it differs from the conventional approaches. This data responds to objective four which determines how CAMPFIRE has incorporated local people's conservation knowledge and practices into modern scientific strategies.

Information from electronic and print media gave an overview of current and critical issues being discussed in the country and how CAMPFIRE was viewed by people from different socio-economic backgrounds. It is essential to understand how these issues affect economic performance, especially tourism, which is the fastest growing industry at the time. This data is essential in the evaluation of the CAMPFIRE programme as a whole.

Literature on property concepts, common property theory, and common property management was also examined and this formed the theoretical grounding on the subject. These theories (discussed in the literature review chapter) provided an evaluation framework and benchmarks against which CAMPFIRE performance can be measured. It provided an understanding of common property management and enabled a comparison to be made between CAMPFIRE and other community-based resource management programmes. Also reviewed is the literature on globalization and global commons to see how these affected resource utilisation at the local level. It was also essential to assess the impact of these global debates on National and local decision-making processes about how resources are utilised. Literature on community participation is reviewed to provide some understanding on the subject since CAMPFIRE has made participation one of the pillars of its programme.

2.3 Research Team

The administration of 224 household questionnaires or a five per cent sample size of the rural population of Nyaminyami was a big task which could not be undertaken by the researcher alone. Research assistants were needed to administer these questionnaires. Three guides were also needed to help the team with identification of villages and households. These guides also assisted where necessary with interpretation and translations. One particular guide was needed to work with the researcher and was valuable for translating certain concepts for the elderly, but also proved valuable in explaining Tonga culture during discussions. This was a 60 year old man who knew CiTonga and Tonga culture but who also had worked in Bulawayo for many years and understood SiNdebele, which is the mother tongue of the researcher. He was able interpret and translate, as well as explain concepts, cultural issues, and customs of both

the Tonga and the Ndebele.

2.3.1 Researcher: My background and relationship with communities

The relationship between the researcher and the Omay communities dates back to March 1990 when I was invited to attend a workshop in Siakobvu organised by the Nyaminyami district council and the district administration. I was then a National director of World Vision International (Zimbabwe) (WVIZ) a non governmental organisation (NGO) which was preparing a project document to assist the farmers in Omay to improve their agricultural production in order to ensure family and community level food security. A number of government departments such as AGRITEX, Department of National Parks and Wildlife Management, Department of Co-operatives, the Agricultural and Rural Development Authority (ARDA) and other NGOs like Save the Children Fund UK, the Zimbabwe Trust and the University of Zimbabwe had also been invited to the same workshop and were requested to provide their plans for the district. This information would assist the district council and administration to co-ordinate efforts as well as to avoid duplication of activities by these agencies.

It was at this workshop that I was introduced to CAMPFIRE, which had been started in 1988, and first implemented in Nyaminyami district. World Vision International, the NGO that I worked for was going to implement an agricultural project that was viewed by CAMPFIRE, government, and NGO officials as directly undermining the wildlife management efforts, much as the agricultural project had been sanctioned by the district council. After extensive consultations with the officials concerned and the district council, I as the then director of

WVIZ decided in consultation with the local farmers and the councillors to scale down the agricultural project. A new emphasis was placed on small-scale irrigation instead of dry-land cropping, along with a small livestock development, instead of the wide scale introduction of cattle which is what the communities had initially requested. Tillage would be done by tractors provided by WVIZ. The farmers had wanted cattle so that they could use oxen for draught power which would have increased their croplands. Everyone agreed that the modified project was the better choice. The choice was based on what would be the more environmental friendly land use, as well as examining the benefits that could be derived from a combination of activities.

I subsequently visited the Omay communal area six times between March 1990 and September 1992. Some of the visits were to carry out further discussions with councillors and chiefs for the purpose of further understanding their needs, while others were to monitor and follow up on the development of agriculture in the area. During these visits, some of which lasted a number of weeks at a time, I developed relationships with a number of people in the communities, attended many meetings, functions and ceremonies. I also carried out two surveys and a number of ethnographies during that period and was able to learn about the Tonga culture, their cosmovision, and their conservation knowledge and practices.

Therefore, when I returned in 1997, to undertake my PhD research, five years after leaving my previous employment, I was still known to most of the chiefs, councillors and community people. I had visited the area in 1995 and in 1996 to collect some data in order to complete a monograph I was writing. Even though I had left WVIZ, I was still viewed by many in these communities as coming from the NGO sector. This perception impacted on the answers that

were given during the survey, especially during the one-on-one interviews. As will be seen later in Chapter Four many continued to discuss general development issues, asked for projects and were willing for me to quote their views without hiding their identities.

While I had been involved with the early stages of land use planning in Makande in the mid 1980s when I worked for ARDA, no meaningful relationships had been established with the community or its leadership. In any case, most of those who were finally resettled in this area were not in Makande at that time. No one seemed to particularly remember me when I came back in 1997 to do the survey for my PhD and therefore previous contacts did not impact on the answers given.

2.3.2 Research assistants background

There were four assistants, two had Bachelors degrees in social science, one was a Masters student in policy analysis and the fourth had a Masters degree in social policy. Each possessed a minimum of two years working experience. The research assistants could therefore be trusted to do a professional job after being trained, given their level of education and work experience. It was critical to have females and males as team members since the fieldwork aimed at capturing as much information as possible from both men and women. Previous fieldwork by myself in 1990 - 1991, 1995 and 1996 had shown that women, especially older women are often reluctant or shy to talk to strange men on their own. Having two female research assistants was an effective research strategy to address the problem. The local guides were all males and knew which households were headed by females. Their knowledge of the area helped in making sure that the survey captured households headed by both men and

women.

2.3.3 Guides

The three guides were local citizens of the area who were known by the local people. They were able to introduce the research team to the people and allay any fears or suspicions that the people may have had. This introduction was essential because local people are always suspicious about giving information to strangers who may use that information to incriminate them. The mistrust between the local people and the authorities regarding wildlife still exists, therefore talking about wild animals is still a sensitive matter. The guides were pivotal in reassuring people that this information would be used for the purposes of this study only and that strict confidentiality would be maintained.

The guides were known to me, having worked with me in WVIZ agricultural project in this area, but they had also participated in the field work I had done in 1990-1991, 1995 and 1996. I had developed a strong working relationship with the guides during previous contacts and this was essential in reassuring the community about this research.

2.3.4 Survey instruments

When collecting primary data, four different instruments were used to:

- structured household questionnaires
- structured key informants questionnaire

- semi-structured questionnaire for government and NGO officials at National level
- semi-structured in-depth discussions and ethnographies.

These instruments provided the needed data to meet the seven objectives of the thesis. Details of each questionnaire are given under the respective sections dealing with each type of survey.

2.3.5 Questionnaire pre-testing and training

The household and key informants structured questionnaires were pretested to see how long the administration of each of these would take, in order to accurately estimate the amount of time needed for the field work. Pretesting was also necessary to determine clarity of questions and concepts as well as to establish if there was any information loss when questions were interpreted from English to ChiShona. In September, 1996 I and one research assistant pretested the two structured questionnaires on 10 people in Chief Mola's area which is part of the study area. The household structured questionnaires were pretested on eight people while the structured key informants questionnaires were pretested on two people. The research assistant received training, at this point, and also became a leader during the actual field work. The pre-testing of the questionnaires was essential in identifying unclear questions, terminologies and concepts that may not be readily understood, as well as in determining the amount of time needed for each interview. The problems which were identified were addressed before the main period of field work began.

The actual field work was carried out in March and April 1997. Four research assistants and

two local guides assisted with the identification of communities and the administration of household questionnaires.

2.3.6 Practical training in the field

In order to ensure a uniform process of collecting data and guaranteeing the quality of the data it was necessary to train the assistants in the administration of the questionnaire. In March of 1997, all four research assistants were trained in Harare for two days. The training involved describing the goals of the research and determining what data the study aimed at obtaining from this exercise. The training also involved going through the household questionnaire to familiarise the research assistants with the terminologies, and issues in it and to enable the translation of questions from English to ChiShona without loss of meaning.

The questionnaire was in English to facilitate easy analysis but the basic working language for the household questionnaire was ChiShona. ChiShona and SiNdebele are not languages which are indigenous to the Tonga however, the majority of the Tonga people speak either one or both languages. ChiShona and SiNdebele are the two major vernaculars spoken in Zimbabwe. The smaller ethnic groups like the Tonga would therefore know their own language plus either ChiShona or SiNdebele or both. All the research assistants knew both ChiShona and SiNdebele but none knew CiTonga. Where necessary a back up interpretation service was provided by the local guides who knew English, ChiShona and CiTonga. The training and back up services in interpretation were necessary to ensure the accuracy of the data collected. Interpretation was sometimes needed by the main researcher when dealing with particular Tonga groups who spoke only CiTonga and needed to express certain concepts

which the researcher was not familiar with.

Practical training was conducted in the field by myself and I demonstrated how to obtain information politely from the interviewees. Each of the research assistants then conducted their first two interviews under my supervision. After each interview, the research assistant and I discussed what went well and what presented problems. Also at the end of each day, the whole team met to discuss their experiences and review the answers to questions. By the end of two days of practical field training the research team was confident that the remaining field work could be done without much supervision.

2.4 The Sampling Process

2.4.1 Nyaminyami demography

Nyaminyami is a sparsely populated district with vast areas of unoccupied land with a number of scattered clusters of human settlements. Most of the land is ragged with poor soils and therefore not habitable. The population of this district is divided into two, the rural Nyaminyami which consists of the Omay wards, Gatshegatshe, Makande, and Kariba urban which consists of Kariba town dwellers (Figure 2.1).

The average household size in rural Nyaminyami was given by the 1992 census as 4.6 and the total number of households as 5996. The average household size in Kariba urban was 4.1 and 5090 households. In Nyaminyami there is only one urban centre, Kariba town the rest of it is either communal areas, National Parks, or safari areas. The 1992 census figures provide the

following general population breakdowns.

	Rural	Urban
Males	13,583	11,391
Females	14,134	9,648
TOTAL	27,717	21,039

The population in the surveyed area which excluded Gatshegatshe communal land was 12,058 males and 10,566 females making a total of 22,624. There were 4,535 households in the surveyed area and the average household size was 4.9. The highest average household size was in Makande where it was 6.0 and the lowest was in Negande where it was 4.3. The above figures were provided by the Zimbabwe Statistical Office as quoted in the 1992 National census figures. Average household figures are however distorted by polygamy in Omay, since polygamous men will have more than one household. In the Tonga culture each married woman in a polygamous situation has a separate home of her own with her children and is therefore counted as a separate household and yet she is not considered the head of that household. The polygamous husband normally stays at the home of the senior wife and visits the other wives from time to time. Therefore, while the average household appears to be small it masks the fact that the husband is responsible for more than one household. In Makande, where the community is basically monogamous, the family size is larger because the husband, wife and children live in the same home and are counted as one household.

Nyaminyami has one of the lowest literacy levels in the country. The 1992 National census showed that 64.1 percent of persons between the ages of 15 and 24, have attended school, but

that only 13 per cent have completed the third grade of school, this level has not attained literacy. The corresponding figures for women in the same age group show that only 1.8 per cent have completed the third grade of school. In this district education, health facilities and infrastructure are very poor.

2.4.2 Administrative arrangements

Each chieftainship is divided into two administrative wards in line with the local governance structures as explained by Moyo (1996), also see Figure 2.2. A councillor represents a ward and in each ward there are 6 villages but several settlement clusters. Omay is sparsely populated and settlements occur in clusters. The approach used in administering the questionnaires was to take the chieftainship as the basic working unit, and use the ward as a sub unit. The ward is an administrative unit for government officials, but the communities still operate under the chieftainships system. Data collection is therefore based on chieftainship as the basic working unit. As shown later the sample size was decided at the chieftainship level and pro-rated at the ward and cluster levels depending on the population size (Table 2.3). The people in Omay neither follow nor recognise the villages as delineated by government but stick to their own settlement clusters and that is why this study used the clusters. In the Makande area where there is no chief, the area is divided into two administrative wards; Makande ward two and Makande ward three, and these two wards were treated as one working unit for purposes of this research since it is equivalent to a chieftainship. The use of both chieftainships and wards also demonstrates dualism in governance structures at the local level. This dualism causes difficulties and conflict for resource management at the local level, this issue is discussed in depth later.

2.4.3 Sampling

The sample size for this study was derived using the 1992 population census figures (Statistical Office, 1992). The population figures and numbers of households are summarised in Table. 2.4. A five percent sample of all households in the study area was taken giving a total of 224 households. For the reasons given below it was logistically difficult and too expensive to do a larger sample given the population dispersal over a large area.

The household survey was not the only method used in collecting data; another structured questionnaire was administered to key informants, semi-structured interviews and ethnographies were also administered along with participatory observation. Each of these methods were planned as a comprehensive strategy to provide specific data which would respond to the various objectives of the study. It was considered that all these methods if properly implemented would reinforce each other and provide a rounded picture of the research subject.

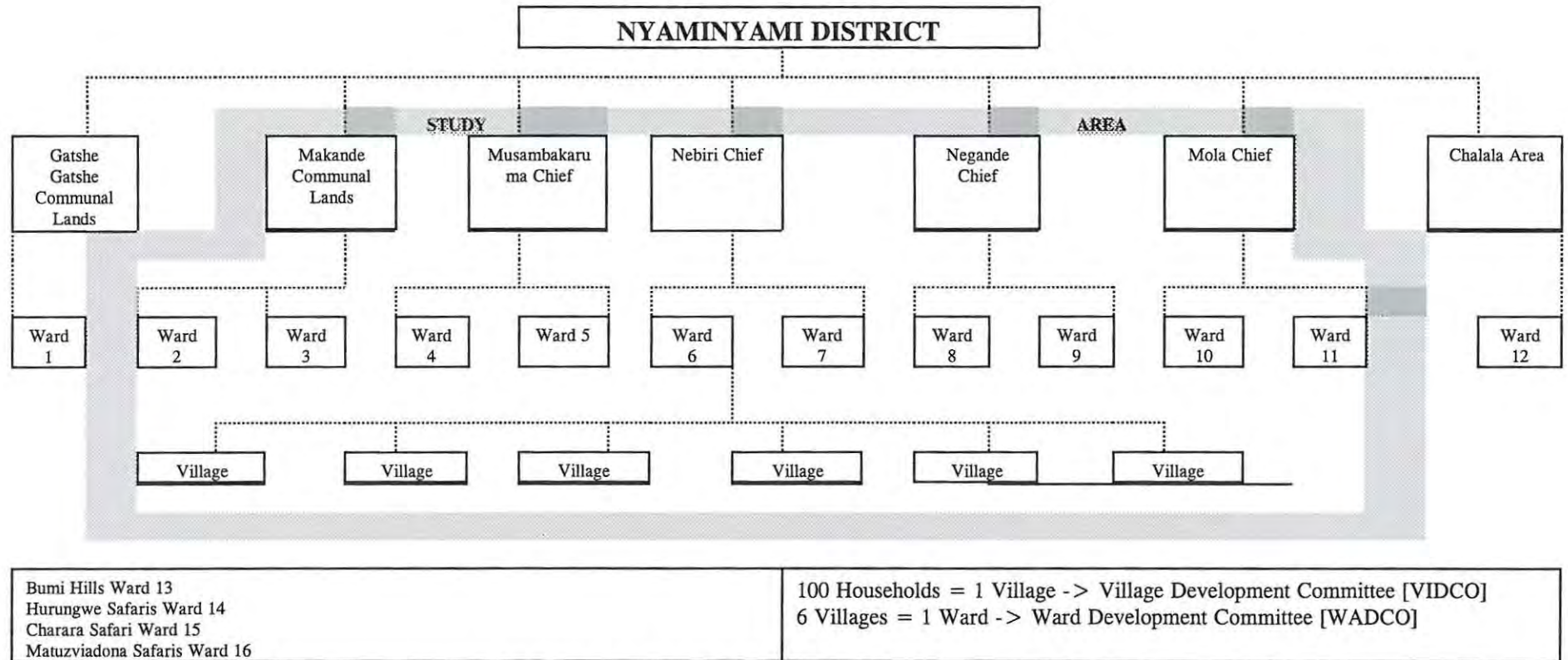


Figure 2.2 NYAMINYAMI LOCAL STRUCTURES

The decision was made to conduct in-depth interviews which could be coded and analysed. Emphasis was put on the quality of the data collected rather than on the quantity. It was recognised that there are weaknesses associated with a small sample size. A larger sample may have been more representative if the population were heterogeneous. Given my previous knowledge of the area we considered that the populations within each of the chieftainships was homogeneous and that a smaller sample would just be as representative as a large sample (Peil, 1995). It is also important to note that in order to cut the standard error down by half, one needs a sample size that is four times the size of the original sample (Peil, 1995). This factor was also taken into consideration when the sample size was chosen. The sampling error rises if a small number of large clusters are used (Peil, 1995). In this case every chieftainship, ward and settlement cluster (villages) were sampled. This sample, while small, did cover the population as a whole, and this made the sample more representative.

The method used was a mixture of stratified and systematic random sampling. I decided that since the sample was small, using simple random sampling would not have captured as many female-headed households as the study would want to capture. Female-headed households are fewer and it would have been impossible to capture the required number if the simple random sampling technique had been used. The survey had to capture female-headed households to make sure that their views were represented since Tonga society is matrilineal, consequently women possess power in that they can own land and other property as well as inherit land. It is important to capture their views as owners of resources. Systematic random sampling was used by picking the 20th household from each cluster. A sample size of five percent was chosen from each chieftainship which is divided into two wards. The five percent rule was applied to each ward since the household numbers differed from ward to ward. Stratification

also involved adjusting the ratio between men and women and using my knowledge from previous surveys which I had conducted in 1990-1991 and 1995-1996 it was estimated that 25 percent of the households were female-headed. Equal sampling fractions stratified randomly were done to choose the male respondents who constituted 75 per cent. This means that three men were sampled for each woman. This involved sampling in each settlement cluster by pro-rating the five percent sample in each cluster according to the size of the settlement but maintaining the one to three female/male ratio. This means that of two settlement areas if village A had double the population size of village B, twice as many people were interviewed in village A than in B. But it also means that one woman was interviewed for every three men. In order to get the right number of female interviewees the assistants went from household to household and identified female headed households with the help of the guides. This approach increased the representativeness of the sample.

Table 2.3 shows how sampling was done in each chieftainship. The following steps were taken:

Step 1. The total number of households under each chieftainship were divided into the two wards as shown in the table and a five per cent sample was worked out for each ward.

Step 2. The sample size in each ward was divided into a one to three ratio between women and men to give the exact numbers of women and men to be interviewed in each ward.

Step 3. A sample size in each village was worked out.

Step 4. The one to two ratio was used at the village level to determine how many females and males would be interviewed in that village or cluster.

TABLE 2.3 Example of the Sampling Method			
Using Mola Area			
Step 1			
	Households		Total
	Ward	Ward	
	10	11	
Number	905	734	1639
5% Sample	45	37	82
Step 2			
Men Interviewed	34	28	62
Women interviewed	11	9	20
Step 3			
Settlement cluster	1	2	3
Households	200	305	400
Sample size	10	16	19
Step 4			
Men interviewed	8	12	14
Women interviewed	2	4	5

In deciding to interview the head of the household a number of considerations were made. Firstly, it was considered that in order to interview anyone in any household the permission of the head of the household would be needed. But it was also coincidental that the head of the household was the most knowledgeable about the subject matter, especially about income from wildlife and other economic activities. In choosing female-headed households it was considered that women would hold different views from men. It was essential to capture women's views since they constituted 51 percent of the population of the area (Statistical Office 1992). It was also thought that trying to increase the number of women interviewed beyond the female-headed households would be difficult since the male heads of household

would not allow that to happen. Although Tonga society is matrilineal, the man is still head of his immediate family (Reynolds and Cousins, 1993).

The study needed to capture the views of a special group of people, the elderly that had lived under colonialism before and after the building of the Kariba Dam. This information would respond to objectives 1, 4, and 5. It is essential to establish how people's attitudes about wildlife have changed over time, as well as how the incorporation of their own knowledge impacted on their participation and perceptions about wildlife. These people would have the experience of losing their land and their rights to utilise wildlife and other natural resources as well as knowledge of Tonga traditional resource management system. The same people would have also experienced the coming of independence and the CAMPFIRE programme. The objective of this survey was to capture the changes in attitudes and perceptions about wildlife and its conservation given these different experiences. But it would also allow for the reconstruction of the Tonga indigenous knowledge and conservation practices. This group of people would have to be more than 60 years old.

A total of seven elderly people aged 70 years and above were also interviewed. Sampling was not possible in this group of people since their numbers were not known but also their ages were estimated based on recorded events in oral history. Five men and two women were interviewed about Tonga history, culture, cosmovision and indigenous conservation knowledge. The elderly people who were interviewed were acknowledged as being experts in the various subject matters mentioned above.

TABLE 2.4 Population and Household Figures				
Chief	Ward	Population	Household	5% spl
Mola	Mola 10	3995	905	45
	Mola 11	3381	734	37
Musambakaruma	Musamba 4	1513	281	14
	Musamba 5	1347	248	12
Nebiri	Nebiri 6	1038	190	10
	Nebiri 7	2541	496	25
Negande	Negande 8	2331	546	27
	Negande 9	1073	240	12
Makande	Makande 2	2261	404	18 (20)
	Makande 3	3144	521	24 (26)
Source: Zimbabwe Census Report 1992				

It should be noted here that the above wards are sometimes referred to in other literature and by the statistical office simply as Mola A and B, Negande A and B and so forth. The Makande figures shown in brackets in Table 2.4 represents what would have been the actual five percent of the households in the ward. However, due to heavy rains some of the villages were inaccessible and therefore a smaller sample was taken than intended. The figures, 24 and 18 represent the actual samples taken.

The survey had aimed at a 100 percent sample size for the councillors in the survey area to cover objectives three and five. This would have meant interviewing 10 councillors all together, but seven were interviewed since three councillors were away during the survey period. Councillors were interviewed from the following areas: two each from Negande and Musambakaruma; one each from Nebiri, Mola, and Makande.

The study aimed at a 100 percent sample size for chiefs in Omay to cover objectives three and

five. There are four chiefs in the study area. Three chiefs were interviewed namely; Mola, Negande and Musambakaruma. Chief Nebiri was not interviewed because his home was inaccessible following the washing away of the bridge due to heavy rains during the 1997 rainy season. Two council employees who had responsibility for CAMPFIRE were also interviewed. The total number of Key Informants interviewed therefore was 15.

2.5 Primary Data Collection

2.5.1 Semi-structured Interviews (Policy Makers and NGOs) at the National level

A total of 16 semi-structured interviews were held with government and NGO officials, eight were from the government of Zimbabwe and were based in Harare while the other eight were officials of NGOs working in Zimbabwe and associated with wildlife management and CAMPFIRE specifically. The NGO officials were all based in Harare and were senior officials of the World Wide Fund for Nature (WWF), the International Conservation Union (IUCN), the Zimbabwe Trust, Zimbabwe CAMPFIRE Associations, and the University of Zimbabwe's Centre for Applied Social Science (UZ CASS).

The selection of government ministries and NGOs depended on their involvement with natural resources and the CAMPFIRE programme. The government ministries identified as having a stake in CAMPFIRE and natural resource management were the Ministry of Tourism, Environment and Natural Resources, the Ministry of Local Government, Urban, and Rural Development, and the Ministry of Agriculture and Water Resources. Those interviewed in government included the three Permanent Secretaries in the Ministries, and the Director

of the Department of National Parks and Wild Life Management and other senior officials in these ministries. Among the NGOs some heads of the organisations were interviewed but others were senior officials who had a direct interest and knowledge of CAMPFIRE given their work. One of the officials from the Zimbabwe Trust had worked in Nyaminyami for many years from the start of the CAMPFIRE programme in that district. He was considered a very valuable source given his direct experience with CAMPFIRE for many years. The Chief Executive of CAMPFIRE Associations in Zimbabwe was another valuable source who provided an overview of CAMPFIRE in Zimbabwe, but had also worked as district administrator in Guruve district at the time when CAMPFIRE was introduced in that district. Guruve was the second district in Zimbabwe that adopted and implemented CAMPFIRE after Nyaminyami.

✓ The instrument used for these semi-structured interviews was a broad qualitative questionnaire which addressed major policy and strategy issues. Not every question was relevant to every interviewee, but only those questions on issues relevant to a particular respondent were asked. The questionnaire was structured to assess:

- the historical aspects of CAMPFIRE,
- government policy on wildlife and natural resource ownership, management, strategies, and
- natural resource management institutions.

The questionnaire also sought to get information on the role of NGOs, their perceptions, involvement and strategies.

The information was captured by using an audio-tape and some written notes. All interviews were tape recorded to make sure that no information was missed. During analysis the written notes were supplemented and complemented by the tape recorded answers. This provided a solid record and source of information on what each of the officials will said. This method allowed for social verification later, or for clarification as data was being analysed. Some officials were be visited more than once to clarify or corroborate what other officials had said. Information from government officials addressed objective six of the study which needed to establish if there was conflict in the management of wildlife resulting from the fact that it is owned and utilised at three levels.

2.5.2 Key Informants at the district level

I worked in three main languages; English, ChiShona and SiNdebele depending on the preference of the interviewee. But I also have a working knowledge of CiTonga. As explained earlier while CiTonga is the mother tongue for most people in Nyaminyami the majority speak both ChiShona and SiNdebele but few also speak English. The officials of the council were normally interviewed in English. None of the council officials were Tonga. Knowing these three languages was useful since old people normally spoke CiTonga and SiNdebele only.

The instrument used to capture information at this level was a structured questionnaire which was completed by the interviewer during the survey. Information that was provided which was not covered by the questionnaire was tape recorded to complement the notes taken during discussions. The questions covered the following issues:

- wildlife ownership and management,
- local management institutions,
- poaching and illegal hunting,
- use of Tonga knowledge by CAMPFIRE,
- benefits from CAMPFIRE,
- ownership of national parks,
- as well as people's attitude towards wildlife and CAMPFIRE.

This provided critical information on local governance structures and local management institutions and how all these facilitate the implementation of CAMPFIRE and the management of wildlife. But it also provided information on the contribution of Tonga knowledge to common property management.

The key informants questionnaire addressed objectives two, three, five, and six which dealt with institutions, benefits and incentives, the effectiveness of CAMPFIRE as a strategy, policy, and conflicts.

2.5.3 Household data collection at the local level

The approach taken during the survey was to interview the head of the households. In the absence of the head of the household the spouse was interviewed and if both were absent the next household was interviewed instead. Female-headed households were given the same treatment as households headed by men. The use of both female and male research assistants paid dividends because the local women were relaxed and comfortable being interviewed by

women. This was demonstrated by the details and the quality of information provided by the women, men were comfortable being interviewed by women or men.

The structured household questionnaire was used to collect data at the local level. The objective of using this instrument was to capture broad information from a wide range of respondents.

The first group of questions addressed objectives one and two which deal with the following issues:

- ownership of wildlife,
- management of natural resources under the traditional system as well as present arrangements,
- responsibility for wildlife conservation under the traditional system and CAMPFIRE,
- management institutions.

The next group of questions responded to objectives three and five. These questions dealt with the following issues:

- people's understanding of CAMPFIRE,
- benefits from the programme,
- income distribution,
- decisions about wildlife utilisation,

- the human/beast conflict,
- poaching and illegal hunting,
- sources of conservation messages, and
- who should own and manage National Parks.

This group of questions met objectives four and six which dealt with the incorporation of Tonga knowledge into CAMPFIRE and partly with issues of conflict. The issues addressed were

- ownership of livestock,
- crops cultivated,
- income from various sources,
- incorporation of traditional knowledge by CAMPFIRE, as well as
- who should manage and benefit from National Parks.

2.5.4 In-depth discussions with the elderly at local level

The aim of semi-structured interviews and ethnographies with people who were at least 60 years old or more was to obtain historical information about the Tonga cosmovision, indigenous knowledge, Tonga culture and customs, as well as how wildlife was traditionally managed. This information addressed objective four of the study. These interviews were also to determine if attitudes and perceptions of the Tonga people towards wildlife have changed over the years given some of their unpleasant experiences. If changes had occurred the study would try and establish which factors have caused attitudes and perceptions to change.

Finally, these discussions would help establish whether Tonga knowledge, experiences, and traditional practices had been incorporated into the CAMPFIRE resource conservation and management approaches as well as to determine what impact these had made on natural resource management.

The instrument used was semi-structured questions designed to structure the discussions. The questions sought to obtain a broad understanding of Tonga life and experience. Most of these discussions were tape recorded but, hand written notes were also made to record some of the discussions where taping was either not possible or not appropriate. The respondents were also given an opportunity to tell their life stories and to talk about those issues they considered most important to them or their communities. Observational data was collected during the visits to the respondent's homes and sometimes at meetings.

A total of seven elderly people were interviewed all of whom were more than 70 years old, two were women and five were men. The study had aimed at interviewing at least two women and it succeeded in doing that. Five respondents were from Omay and two from the Makande area. The initial discussions took an average of three hours each, but further discussions were held with each discussant in an effort to authenticate, verify and corroborate the given information. Information obtained from one person was verified against at least three other people by asking the same questions in an effort to see if the information could be corroborated. During the initial discussions the respondents were not told what others had said; in this way each respondent was able to give their own views openly. The views were recorded as given by the respondents. After the initial round of discussions some general areas and issues of agreement emerged. However, areas of difference also came up and were

equally reflected.

2.6 Data treatment and analysis

The two sets of structured surveys which were conducted consisted of 15 key informants and 224 household respondents. The questionnaires were coded and the household respondents were classified by gender, age group as well as the areas they came from, namely; Mola, Negande, Nebire, Musambakaruma and Makande.

Descriptive data analysis was done on all the questionnaires. Frequency of response was noted. Other questions had multiple answers and had to be coded a second time and the data had to be inputted again for further analysis and each case was taken independently. Three cases had their means and standard deviation found; for incomes, the number of livestock owned and the number of bags of crops harvested in the last season. Correlation looked at some of the questions to test how some particular observations affected others. Not much correlation could be done for key informants. I did a comparison between household and key informants manually.

On all the structured questionnaires relative frequencies were calculated based upon the total number of people surveyed and the type of data. Some other variables like absence of wildlife and amounts of household dividends received were further broken down and analysed. The value of wildlife to the Tonga people was calculated using individual dividends, community projects, as well as traditional values such as spiritual needs. The traditional value system was also assessed looking at people's attitudes and perceptions towards wildlife and at whether

wild animals are seen as pests or as resources.

Data obtained from semi-structured interviews was analysed manually and classified into a number of categories. This information was treated as qualitative data although some quantitative analysis was also performed. Areas of agreement and disagreement were established among government officials through this analysis. Further, areas of agreement between government and NGOs were identified and classified. Areas of conflict between government officials and NGOs were also classified as another category. Quotations from both government and NGOs are used to illustrate the positions taken by the major participants of CAMPFIRE.

In order to allow for proper analysis of the semi-structured interviews a number of important areas were identified by reviewing the frequency with which issues or events were mentioned. These major issues were analysed so as to discern the way in which resources were managed by the Tonga. This information was divided to five major categories:

- traditional management approaches,
- philosophies of conservation,
- management institutions,
- the role of local people, and
- change of attitudes.

Ethnographies were also analysed and the Tonga knowledge system was reconstructed. This process required a certain amount of subjective interpretation.

In order to make sure that the information being collected from the elderly could be corroborated, part of the analysis and information construction was performed in the field. This ensured that as much data as possible was verified while still in the field.

There was general agreement averaging 85 per cent during round one of discussions on all the issues that had been raised with the respondents. These issues include events, cultural practices, conservation, and natural resource utilisation knowledge and experiences. However, there were issues where respondents differed either fundamentally or just in detail. The differences were also analysed to see if a pattern emerged among them. However no discernable patterns emerged from these differences. The high percentage of those who agreed on events and issues therefore tended to discredit those with different views. However, the analysis maintained these opinions because contradictions and inconsistencies are not uncommon in ethnographies, they also provide the reality of life itself which is often full of the same.

This process was slow since it involved putting together one piece of the jigsaw puzzle after another until a complete picture emerged. This process was helpful in building confidence between me and the discussants. It also enabled the discussants to provide further information which initially had been overlooked, forgotten, or not considered important. The process also enabled the participants to reflect and sometimes to consult with others or refer me to someone else to verify the information. Very often I was invited to come back and have further discussions on some issues if these were considered important. Once the full picture developed it was presented to the discussants on a third round to see if they agreed with it. On more than 90 per cent of the issues, the interviewees agreed with the interpretation and this

included some of the issues where there might have been disagreement during the first and second rounds of interviews. It took me 26 days in Omay and eight days in Makande to complete three rounds of discussions. But even more time was spent at meetings and other social gatherings. The information obtained from the two discussants in Makande was not verified against the Omay information but that information was used as a control since Makande is not really a wildlife area, much as it has a CAMPFIRE programme. The information in Makande was only verified against the Makande discussants. The Makande people are predominantly Shona and agriculturalists, while the Omay people are mostly Tonga, pastoralists, fishermen, and gatherers, their agricultural activities are curtailed by poor soils and little rainfall.

The information obtained through the analysis of oral history records and ethnographies was corroborated and is therefore considered authentic. Views, knowledge and culture of peasants have generally been ignored or considered as inauthentic because it is not recorded on paper. The knowledge and wisdom of rural people is often treated as inferior and unscientific. This study did not find any difficulties with using oral information after adopting this method of authenticating information. This thesis therefore treats the information as authentic and the elderly people as experts in their areas of specialisation. This research challenges the Western knowledge system to enter into a genuine dialogue with the African knowledge systems like the Tonga's as a way of finding new knowledge synergies to foster the sustainable utilisation of natural resources.

It must be noted here that reconstructing these knowledge systems involves a certain amount of interpretation which should not disqualify this information from being truthful. Telling life

stories involves recasting the past, omitting some events, stressing others, forgetting much more and constantly referring outside the research encounter, as a result there will be inconsistencies and contradictions (Hedges, 1985; Mile and Crush, 1993; Pile, 1993 as quoted by Cook and Crang, 1995). The research was aware of these weaknesses but was not deterred by them because it is known that ethnographies do not deal with absolute truth but rather with inter-subjective truth and their strengths lie in that they present the reality of life itself which is full of inconsistencies and contradictions.

2.7 Weaknesses of This Study Methodology

While in developed countries gathering opinions of the public is common, in Africa this is done infrequently and this is true of Zimbabwe as whole, but areas like Nyaminyami which is a backwater area are even more disadvantaged. Systematic surveying in Africa is impeded by inaccessibility, language, availability of resources, and differences in culture between researchers and residence (Akama, Lant and Burnett, 1995). These same constraints affected this survey, as all the field assistants and I came from outside the research area. As shown earlier these constraints also affected random sampling but even some sampled areas were inaccessible. In order to overcome some of these constraints, two structured questionnaires were used and two semi-structured frameworks were also used. Much care was taken to be sensitive to local people when collecting information. However, I was still an outsider and may not have understood the finer points of the culture and traditions of the communities studied even with the assistance of local people.

Oral history and oral traditions present their own challenges. Differences among the various

Tonga experts did emerge on a number occasions, creating problems of corroboration and authentication of data. This however, did not cripple the research since these were in a minority of cases. But also information gaps arose due to information line loss from one generation to another. These constraints were acknowledged and attempts to minimise them were done by interviewing as many people as possible on the same subject and then taking a majority view. However, differing views were also analysed to see if certain trends emerged from them. In other instances pieces of a jigsaw puzzle had to be put together with the help of the local experts in order to get a complete picture. There are obvious constraints to piecing together a puzzle since some subjectivity and interpretation inevitably creeps in.

Some of the limitations of this study come from the sheer size of the area, the size of the sample and maintaining randomness in clusters of settlements that differed a great deal in size but also where the concept of a household was affected by polygamy and other social arrangements. Stratification helped minimise the problems of random samples.

Using questionnaires to study cultural systems, traditions, and how natural resources are utilised by communities has its own limitations. These are issues that require in-depth learning which cannot be obtained from administering a questionnaire (Chambers, 1993). This limitation was minimised by adopting various means of collecting data, including ethnographies, semi-structured frameworks, participatory observation, and my knowledge of the people and their culture from previous associations.

CHAPTER THREE

LITERATURE REVIEW

3. Introduction

The literature that is reviewed in this chapter is considered essential in understanding the major issues and debates that concern this study. There are five major areas to be covered:

- globalization and the notion of global commons,
- poverty, underdevelopment and the environment,
- African perspectives on wildlife and CAMPFIRE,
- the management of common property natural resources,
- participatory approaches and resource management

The first part of the chapter covers globalization, a notion that calls for a new global ethic and a collective stewardship of nature. It views the world as one global village where the actions and decisions of one group affects everyone and hence the desire to limit individual nations and groups from making independent decisions about how to utilise resources. Globalization means that increasingly liberty for communities and nation states to make independent decisions will be curtailed and more powers will be placed in the hands of international agencies and ecocrats. Further, the notion of global commons takes this argument even further as it regards certain natural resources as the heritage of humanity as a whole. The debates on globalization and global commons have serious implications for developing countries in particular because most of the biodiversity which must be conserved is found in developing

countries. But the notion of global commons is also juxtaposed with that of sovereignty and begs a question as to whether nation states and local communities still own their resources and whether they can make decisions about how to utilise those resources to develop themselves. Wildlife is being advocated as a global commons and therefore a heritage of the whole of humankind. The concept of global commons means that while the Tonga people of the Zambezi valley in Zimbabwe can exclude adjacent communities from utilising Tonga resources, but the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) could give access to those same resources to a group of people who live outside the country. Globalization demonstrates the complexities of thinking globally and acting locally in a situation where the powerful can revoke the rights of the poor to exclude others on the basis that the resource is considered a heritage of humanity as a whole while other similar resources are not treated in the same way. This debate impacts on the study directly and addresses along with examining issues arising from CAMPFIRE the effectiveness and sustainability of the programme which are addressed by objective five.

The second part of the chapter covers another pressing debate on poverty, underdevelopment and the environment. Most of the biodiversity that must be conserved is in the developing countries and is therefore owned and controlled by the poor nations. The poor however need to utilise their resources to meet their needs now, and given their level of poverty they do not have the luxury of considering sustainability, when they do not even know where their next meal will come from. Denying the poor the right to utilise their resources because the world wants to conserve them is not even an option. Poverty and underdevelopment are viewed by many as posing the greatest threat to resource and environmental degradation. But questions arise from this debate such as if this biodiversity were to be conserved because it is a human

heritage who will pay the conservation bill? The poor cannot be asked to do this on behalf of humanity. If poverty is not addressed how will the international community stop the poor from using their resources? The debate has a direct bearing on this research, and is essential to understand the major trends, particularly given some of the decisions made by CITES in the last ten years which are viewed as threatening CAMPFIRE. But from this debate also addresses objective three which links community participation in conservation to economic benefits. It asks the critical question about whether development and conservation are mutually exclusive.

The third part deals with the debate raging between Africa and the West based on different perspectives on wildlife. Africans generally see wildlife not as something to look at but as a resource that should be utilised to meet their development needs. Africans' sense of the value of wildlife is largely derived from its utility and how its profitability is compared with other economic activities. Wildlife for African people has other values too, such as religious, spiritual, medicinal, and food values which are generally not recognised when major decisions about wildlife conservation are being made. On the other hand, wildlife values in the West are based on a notion of the wilderness, on romanticism and aesthetics, and the consumptive utilisation of wildlife is opposed by many. A conflict currently exists about what should happen to African wildlife, with the West setting the conditions and influencing international bodies to make decisions that favour their conservation paradigms. On the other hand, Africans are going ahead with the consumptive utilisation of their wildlife or converting wildlife habitat to other uses which are more beneficial to them. As this polarisation and debate continues, the real victim of all this is wildlife. This debate has a major bearing on this research because it deals with issues raised by objectives four and five.

The literature on CAMPFIRE is reviewed because the programme is seen as having the potential to resolve some of the conflicting perceptions between the West and Africa, particularly on common property management. But CAMPFIRE is viewed by many writers as an innovative rural development strategy that has the potential for ushering in sustainable utilisation of natural resources. The review shows how Zimbabwe's wildlife management, CAMPFIRE and community participation are all affected by globalization and the notion of global commons, poverty, and the commons debate. Discussed in this theme are the polarised interpretations of the microcosmic and macrocosmic views about CAMPFIRE between the government and the NGOs and how this impacts on programme implementation.

The fourth part addresses concepts of property, common property theories, and the management of common property natural resources, which are important for this study for the following reasons:

- concepts of property are reviewed here to establish different types of ownership and property relations and how these impact on the management of resources.
- management of common property is reviewed here in order to understand issues of property rights in order to determine how they impact natural resource management. Common property is often misunderstood to mean open access, it is necessary to review other forms of property to see why common property is viewed as problematic when other forms are not.
- resource degradation in developing countries has been attributed to common property systems by many development planners. It is essential to understand

if and how common property affects the management of natural resources.

- a review of common property theories will help in determining if wildlife under CAMPFIRE is in fact common property or not.
- the evaluation of CAMPFIRE by this study assumes that wildlife in communal areas can be treated as a common property resource to which the theories of common property are applicable.
- there is also a growing realisation by many writers and development planners that most natural resources in developing countries are managed and utilised as common property. Thus common property management is viewed as having the potential to resolve some of the sustainable natural resources management issues.

It is therefore essential to review the literature on common property management as well as to contextualise the commons debate by examining how other scholars have conceived property and property rights. But it is also necessary to see whether or not the theories of common property are applicable to wildlife under CAMPFIRE. This review will assist in determining whether CAMPFIRE has created common property regimes as stated in most popular literature on the subject.

The fifth part of this chapter reviews literature on community participation and participatory approaches in rural development. The CAMPFIRE programme says community participation is one of its major pillars and that the success of the programme will depend on local participation in decision making, planning, management, conservation and in the sharing of benefits. The use of indigenous knowledge and traditional practices are also considered to be

important contributions to the management of natural resources. This study evaluates community participation in CAMPFIRE and uses it as one of the success indicators of the programme. It is therefore essential to gain an understanding of the different participatory approaches by reviewing the literature on the subject. There is now a growing consensus from many development experts that participation is essential for any project to succeed, because it puts power in the hands of local people and allows them to direct their own development. Objective one of this study also assesses if ownership, utilisation, and management of natural resources have been transferred to the local communities, which would be an indicator of whether there is community participation.

3.1 Globalization and Global Commons

The concept of globalization and the notion of global commons have created a new tension at three levels; the global, national and local regarding the ownership and management of certain natural resources. These natural resources occur in specific geographical locations at the village level, but are also viewed by nation states as belonging to them, and there is a claim by the international community that such resources are a heritage of humanity as a whole. Part of the debate that is now developing is why natural resources like wildlife and forests are being treated as global commons whereas other natural resources like oil are not viewed in the same way. There are those who see this selective treatment of natural resources as another imposition by the powerful developed nations on poor developing countries about how they should run their affairs. This move is seen by the poor as a measure by rich Western nations to share and control the resources of developing countries while keeping their own resources for themselves. The concept of globalization wants to control how such resources

are utilised in order to ensure that the whole of humanity can have access to and enjoy them. This process is impacting on decisions being made at village and at national levels about the use and management of these resources. It is taking away power from local people at a time when the world is also engaged in the support of empowering local communities and democratising national governments. Globalization is therefore viewed by its opponents as further marginalising the poor which will result in their conditions getting worse and in a situation that will force the poor to exploit their resources in an unsustainable manner.

Another part of this debate is the one raised by Sugg and Kreuter (1994) who believe that the notion of global commons is mischievous because it is juxtaposed to that of sovereignty but also introduces an element of 'open access', because anyone from anywhere could feel justified in exerting control over virtually any species of wildlife in any country. The debate also deals with if the notion of global commons is accepted, whose responsibility will it be to conserve and pay the bill of wildlife conservation, since the developing nations cannot be expected to do this on behalf of humanity. Writers like Swanson and Barbier (1992) add another dimension to the debate as they view the conservation of biodiversity as an important activity requiring collective action by the whole international community, but recognise that most of these resources are owned and controlled by the poor nations.

3.1.1 Development of the environment agenda

The issues of globalization and global commons are a response to the environmental agenda that has developed in the last 25 years because of growing awareness about natural resource degradation and the disappearance of millions of species. The key aspects of this problem are

clearly described by Swanson and Barbier (1992) and by some of the pronouncements by the United Nations Environment Programme (UNEP) and the International Union for the Conservation of Nature and Natural Resources (IUCN). According to Swanson and Barbier (1992) the earth's genetic stock is being depleted by human activity through action or inaction and the future stock of genetic capital will henceforth be determined by human decision making. The crux of the current crisis in biodiversity is the projected rate of extinction relative to the historical rates of extinction which averaged nine per cent of the existing species per million years (Swanson and Barbier 1992). Swanson explained that extinction is a natural process, fossil records show that the natural longevity of many species lies in the range of 1-10 million years. According to Wilson (1988) present extinction rates are 1,000 to 10,000 times the historical rates referred to by Swanson which are based on fossil records. Swanson and Barbier (1992) say projections by eminent scientists indicate a mass extinction crisis over the next 50-100 years. However, these projections are debatable because they are based on species that have neither been identified nor analyzed. This debate, however, does not take away the fact that human beings today are transforming the planet, destroying species, and degrading the environment at a faster rate than at any other time in human living history. Swanson and Barbier (1992) explained that many observers of the deforestation problem would view the current rate of decline of great hardwood forests as environmental degradation. They further demonstrate this point by asking how the loss of half a million African elephants in one decade does not constitute a clear case of how fast human beings are degrading the environment.

Since the Stockholm Conference on the Human Environment in 1972 the UN message has been loud and clear, humanity is at risk because it is misusing natural resources and pressing

the earth to the limits of its capacity (UNEP 1995). The IUCN' (1991) repeats the message, and explains that we are now gambling with the survival of civilisation. Regardless of these warnings the planet is still not any better, in fact during the special session of the general assembly in 1997 the world body said environmentally the world was worse off in 1997 than in 1992. The environment is in danger, something is always threatening our existence and that of other life forms with which we share the planet (UNEP 1995). In all these cases, human beings are at the centre of the destruction of the world's biodiversity and of damaging the environment. Are humans incapable of doing something about this destruction? Are we that short sighted and opportunistic that we are incapable of stopping ourselves from destroying the planet and destroying ourselves? Indeed there are indications that an unprecedented movement of citizen groups are mobilizing to address issues of social and environmental concern (UNEP 1995).

3.1.2 Environmental decline and resource degradation

In most parts of the world the environment continues to decline and natural resources get degraded, even as human beings are waking up to the reality that we are using natural resources in an unsustainable manner. According to Swanson (1996), in most parts of the world the environment continues to decline as demonstrated by the following examples:

- Asia's newly industrialised regions emit massive amounts of pollution to previously clean air.
- Eastern Europe - the so called black triangle stands as a monument to the excesses of the industrial policies of the regimes there, past and present.

- Sub-Saharan Africa - vast populations of elephant have been halved in one decade from 1,343,340 to 631,930 and the rhinoceros is on its way to oblivion.
- Tropical forests in South Eastern Asia, Central Africa and the Amazon are disappearing and with them millions of species.
- Europe's lakes and forests continue to be destroyed by the acid rain phenomenon.
- In the USA the quality of water in the Ogalala aquifer is no longer fit for infant consumption.

Swanson (1996) concludes that there are very few regions of the world which are immune to this trend of decline and despoliation.

He says some believe that this despoliation is rooted in human short-sightedness and opportunism. Those who support this line of thinking argue that humans pursue personal pleasure and profit without considering social costs and consequences, therefore human activity must be controlled otherwise the tragedy of the commons is inevitable. The tragedy of the commons claims that property managed in common will inevitably suffer degradation because each individual maximises their benefits and do not care about the costs because these are passed on to the group as a whole. The resource becomes over-exploited and every one's freedom in the commons becomes the collective tragedy.

The argument by Swanson and Barbier (1992) shows that diversity and development need not be mutually exclusive. Maintaining diversity of wild resources is one of the necessary conditions for sustainable development they say. Swanson and Barbier (1992) identify human

population growth in developing countries as one of the major problems of environmental decline. They illustrate this by showing that between 1950 and 1990 the population in the developing world grew by 150 per cent, while in the developed world it grew by 50 per cent during the same period. This population growth places pressure on the countries' resources and creates demand for intensive utilisation of resources. The threat to the remaining biological diversity derives from the scale of changes now taking place in the developing world. The argument about population adds yet another dimension to the global control mechanisms which are seen by the developing world as a threat to their independence which curtails their ability to utilise resources to develop themselves. Swanson and Barbier (1992) do not address the issue of how population problems can be solved, but imply that population control should be part of the way in which natural resources are managed. Developing countries often argue that population is not the problem, but that access to resources is the constraint. Bonner (1993) however, argues that even if Africans reduced their population rates to a level acceptable to Westerners, African populations would continue to grow, and as they do, the competition for land would increase and wildlife populations will decrease. He explains that wildlife in the United States of America and in Europe disappeared as populations grew, open spaces were settled, agriculture was expanded and economies industrialised. Bonner (1993:9) concludes by saying "The game is disappearing, but it's not over yet. Just as he has destroyed it man can save it. We must...Whatever the reasons, the issue is not whether we should preserve Africa's wildlife. The only issue is how we do so."

3.1.2 Diversity conservation the international dimension

According to Sachs (1993) the globalization ecocrats perceive the earth as an object of

environmental management: managing planet the earth and sustainable development, are conceived as a challenge for global management. He continues to say that sustainable development, according to the experts, means keeping the human extraction/emissions in balance with the regenerative capacity of nature; ecocrats have set out to identify how this would work on a planetary scale by mapping, monitoring, measuring, and calculating resource flows and biochemical cycles around the globe. But it is also said that genetic capital is declining and most of the disappearing biodiversity has not even been studied, hence its value and utility to humans is still unknown. It is asserted, as shown by Sachs (1993) that this can only be done if the planet is managed as a whole. This section also looks at whether and how developing countries should be compensated for conserving their biodiversity. The role of international conventions, laws, agreements and decisions that affect national and local level resource utilisation are also examined here.

Agenda 21 says it is essential for experts to balance human extraction/emissions and the regenerative capacities of nature in order to be able to more accurately estimate the carrying capacity of the planet earth and its resilience under the many stresses placed upon it by human activities. Sachs (1993) argues that it is implicit that the agenda of this endeavour is to eventually be able to moderate the planetary system, supervising species diversity, fishing grounds, forests felling rates, energy flows and material cycles. He says that claims for global management are in conflict with aspirations for cultural rights, democracy and self determination. This issue is relevant for this study as it deals with the three way conflict between globalization, national and local level resource utilisation, and the aspirations of local people.

Swanson and Barbier (1992) say that from an international point of view, biodiversity conservation is concerned with the world's continuing loss of genetic capital i.e. the amount and extent of genetic variety within the earth's ecosystem. Hence biodiversity conservation is necessarily about sustainable development, Sachs (1993) agrees. These views are echoed by the Convention on Biological Diversity, Agenda 21 and by the various messages from the United Nations Conference on the Environment (UNCED). As shown earlier these arguments support the globalization approach.

According to Swanson and Barbier (1992) species wealth is located in developing countries and virtually all the most significant sites for biodiversity conservation are situated in countries with some of the lowest per capita incomes in the world. The irony is that the poorest nations hold the species wealth of the world and yet that stock of wealth does not always generate an obvious return to its holders, and sometimes returns from an investment flows to persons other than those in possession of it (Swanson and Barbier 1992). This point which is made by Swanson and Barbier (1992), Murphree (1991), Metcalfe, (1992), and Sibanda (1995 (b), 1996 (a)) sums up what happens to Africa's wildlife when the local people who make sacrifices because of living with wild animals, yet do not always receive the benefits, but instead the tourism industry and some conglomerates earn the incomes from wildlife-based tourism. Swanson and Barbier (1992) conclude this point by showing that most of the value of biodiversity is chiefly held by developing countries, most of its value flows to the developed world. When discussing the trade ban on ivory Sugg and Kreuter (1994) come to the same conclusion as Bonner (1993) who also concluded that Africa's wildlife resources contribute nothing or very little to the development of the African people.

O'Connors (1993) says that while large animals are a highly distinctive feature of the African environment, and while their pressure raises crucial issues about whose animals they are, and hence whether paying for their preservation is a national or global responsibility, their contribution to the relief of poverty is very small. Bonner (1993: 285) quoting Garth Owen Smith says "Africa's wildlife does not belong to the world. It belongs to Africa. It is an African resource to be used by Africans. Decisions about African wildlife will not be made in Washington or Geneva. They will be made in Africa." It is clear from the above discussion that there is polarisation between those in favour of globalization and global control, who predominantly come from the developed world and those who believe that these natural resources belong to the developing countries where they exist. This polarisation negatively impacts on wildlife conservation.

Swanson and Barbier (1992) when addressing the issue of compensation, pose a question which is central to this study but which has not been addressed by the proponents of globalization: How is it possible to develop a flow of the full value of this stock of wealth to its holders in a manner that creates incentives to maintain it? The role of the developed world in wildlife utilisation could be to provide compensation to the developing countries for conserving wild lands and wildlife. At the heart of CAMPFIRE is the desire to utilise wildlife and other resources to generate a flow of goods and services for the benefit of the local communities and by so doing to create incentives for these communities to continue to conserve wildlife. The crux of the matter is how this is to be achieved, should the West compensate developing countries as suggested by Swanson, or should conservation be part and parcel of an endogenous development process which enables communities to sustainably utilise their resources? Swanson and Barbier (1992) realise that developing countries cannot

be expected to do this without compensation, when their populations are poor and starving. Hasler (1996) introduces yet another dimension of the debate by saying how can local people benefit from these resources when they do not even have jurisdiction over them and when there are so many interested parties such as CITES, and national governments, who all claim control over the utilisation and management of those same resources. He shows how a local community can exclude its neighbours from using the resource and yet CITES can easily revoke that excludability right and instead grant access to that resource to people who live outside the country.

Wildlife utilisation, argue Swanson and Barbier (1992), involves issues of sustainable development in some of the smallest and most remote communities in the world. This also means that the conservation of an important global resource, namely, biological diversity requires collective action by the whole international community, is however, controlled and owned by the poor, a situation which creates tension. The tension is really about how to ensure the conservation of this important biodiversity which the developed world has an interest in, and is a process which the developed world would want to control, and yet it does not have jurisdiction over those resources.

Swanson and Barbier (1992) suggest that the exploitation of these resources to meet the development aspirations of the poor is perceived by the West as the principal threat to the continued survival of wildlife and wild lands. The West advocates the stopping of both development and the use of resources as the best means of ensuring preservation of wild lands and wildlife, and this view is shared by the animal welfare organisations. However, Swanson and Barbier (1992) argue strongly that for the developing world, the preservation of most of

their natural habitats as 'nature reserves' is not feasible, given the social and economic pressures in those countries. They argue that there is a need to use these resources to address economic development and to alleviate poverty. This issue is now better understood by conservationists and ecologists than was the case 15-20 years ago, when conservation or preservation was seen as an ecological necessity but which was not linked to development. How this should be done is still not clear, which is why there are now new efforts in global resource control.

3.1.3 International community - the overriding influence

In addressing the overriding influence of the international community and its justification for the ban on ivory trade, Lapointe in *Elephants and Ivory* (1994: 6-7) told the international community that "...by continuing to dissociate human beings from nature and human activities from conservation efforts, may already have missed one of the last chances to achieve long-term conservation of the African elephant...it is my hope that those truly concerned with the conservation of wildlife will strive to thwart future manipulation of the international decision-making process and do what is right for wildlife and the peoples who depend on them." He had predicted four years earlier that the ban on ivory trade would not in the long term achieve the conservation of the African elephant.

This view is echoed by Musokotwane (1993), Sugg and Kreuter (1994) and Murphree (1991). The ban on the ivory trade very much impinged on ethics, economics, property rights and illustrated the overriding influence of the international community. This ban was seen by the international community as morally justifiable since it was viewed as protecting a 'global

resource' and a 'human heritage'. It was however viewed as unjust and manipulative by those countries which own and depend on the ivory trade but also by those in the West, like Lapointe, who felt that the ban would never solve the problem of poaching. But there were others in Africa, especially in East Africa, like Leakey and Rotich (1997) and others who supported the ivory ban as they believed this would curb poaching in the continent. Rotich (1997) said that if the ban had not been imposed, Africa's elephants would have disappeared by now. It was people like Leakey and Rotich who persuaded Tanzania to move the motion to have the elephant put in Appendix 1 of CITES.

The international conventions, agreements, and decisions are part of the globalization process that wants to regulate how natural resources are utilised globally. According to Sugg and Kreuter (1994) the international community through CITES broke its own criteria by the listing the African elephant as an endangered species when it was not. They argue that environmentalists from the developed world have tended to oppose the consumption of natural resources, whether sustainable or not. As a result, the ethical concerns of animal welfare and fears of unsustainability have often thwarted the development of institutions and economic incentives that would ensure successful wildlife conservation. The polarisation between the developing countries, which want to use their own resources, and the West which wants to impose its non-consumptive uses of wildlife has only served to accelerate the degradation of wildlife as a resource (Sugg and Kreuter, 1994). But Bonner (1993) raises yet another dimension and demonstrates that the public has been given deliberate distortions and lies about what the issues are by some animal welfare and conservation organisations. He points to the distorted messages sent out by World Wide Fund for Nature (WWF) and African Wildlife Foundation (AWF) to their members just before the CITES meeting in Kyoto. These

messages told the members and the public that the meeting in Kyoto was about lifting the ban on the ivory trade, whereas the truth was that only three countries in Southern Africa were asking for temporary permission to sell existing stocks of ivory.

Increasingly the United Nations system of conventions, conferences of parties (COPs) and protocols is being used as a vehicle for delivering to the poor, unpopular Western decisions as shown by Sugg and Kreuter (1994) and Lapointe (1994). Sugg and Kreuter demonstrate how at the Kyoto CITES meeting, developing nations like Zimbabwe were openly threatened by powerful nations like the United States that aid would be reduced if the country did not support the ban on the ivory trade. The developing countries see the United Nations system as serving the interests of the powerful developed Western nations. But blackmailing of poor nations by the rich and powerful nations will not produce sustainable resource utilisation strategies either.

While many now recognize that wildlife as a resource will be consumptively utilised more often than not, others in the international arena still strongly oppose this. Presently, the debate internationally is at two levels; there are those who are genuinely concerned about the sustainability of consumptive wildlife utilisation and the animal welfare groups that oppose consumptive use of wildlife whether or not it is sustainable. There are three fundamental elements of this debate:

- **Ethics:** The consumptive use of certain wildlife species is repugnant to many preservationists and animal welfare groups. Writers like Hasler (1996), Sugg and Kreuter (1994), Kiss (1990), and Hopcraft (1993) claim that while

preservationists do not want consumptive uses of certain species, especially the elephant, denying use is also objectionable to those who need to better their lives. This polarisation is harmful to wildlife because it creates conflict between the international community and the poor nations who own and utilise these resources. These writers also say there is an ethical fallacy that justifies the consumptive use of some wildlife species and not others. Whose ethical yardstick is being used when denying the poor the right to utilise their resources which condemns them to perpetual poverty?

- **Economics:** Some environmentalists like Ehrenfeld (1992) and Geist (1994) say that the consumptive commercialization of wildlife is inherently unsustainable. They show how the West plundered its own wildlife resources and those of other countries in an unsustainable manner. They do not believe that wildlife is consumptively sustainable and argue that this form of utilisation will always lead to degradation of the resource. However, others recognize that unless wildlife has some use to the people who live with it, then it will lose value. This point is passionately argued by Hopcraft (1990), Sugg and Kreuter (1994) Musokotwane (1993), Barbier and Swanson (1992), and Swanson (1996). If wildlife has no value, then wildlife and its habitat will be destroyed to make way for other land uses (Robinson and Redford, 1991). These writers also argue that material benefits to those who live with wild animals will provide the strongest incentives for wildlife conservation.
- **Property rights:** Environmentalists have generally supported the notion that

wildlife is and should remain *res nullius* [that is, the property of no one] (Bean, 1977). In many countries wildlife is unowned and has fallen under the rubric of government control. Bean (1977) argues that without private property rights (including community ones) valuable wildlife resources will be over-exploited, especially under open access conditions. Swanson and Barbier (1992) show how the establishment of protected areas has worked against local interests. Bromley and Cernea (1989) say that property is not an object, but rather a right to a benefit stream that is as secure as the duty of all others to respect the conditions that protect them.

Many analysts have also tended to classify wildlife either as *res nullius* and therefore an open access resource or as common property resource. Others, like Murphree (1991), explain that there is a difference between common property and communal property regimes. Others like Hasler (1996), McCay and Acheson (1987), regard the use and management of wildlife as property rights or streams of benefit. Most of these writers have demonstrated that common property does not mean open access and yet the management of resources used in common is viewed as problematic, while other forms of property are not viewed in the same light. Murphree (1991) and others show that there are rights and rules that control the utilisation of this resource. Common property, as it is described by these writers, runs counter to the notion of global commons because it locates the ownership of resources in the hands of a specific and well-defined group of people, in a locality, who have the right to exclude others, and where others have a duty to respect those rights. Indeed the notion of global commons promotes disrespect for these rights by encouraging humanity as a whole to abandon its duty of respecting the rights of those who own the resources.

Sugg and Kreuter (1994) argue that there is no better species than the elephant to demonstrate the clashes between ethics, economics, and property rights. But the elephant also demonstrates the limitations of preservation, the necessity for conservation, and the fundamental schism between the two. Proponents of the ivory trade ban also argue that elephants are the 'common heritage of mankind' (Sugg and Kreuter, 1994). This notion of global commons is juxtaposed with an internationally recognized principle of sovereignty. They further argue that if wildlife has no value to the people who live with it, the value for those who live far away will add nothing to its conservation or survival. This is a point many environmentalists from the West still misunderstand, it is particularly not understood by animal welfare groups.

3.2 Poverty, Development and Environment

This section deals with issues of poverty, underdevelopment, sustainable development and how all these impact upon natural resource utilisation and the environment. It is important to understand these issues because this research deals with the poor in their endeavour to sustainably utilise their resources as they improve themselves in a developing country. These poor people impact on both the resource base and the environment as they use resources in situations where options are few and poverty threatens their very existence on a daily basis.

3.2.1 Poverty and underdevelopment

One of the most pressing debates today that impacts natural resource utilisation and

management is poverty. There is no doubt that poverty is clearly linked to natural resource and environmental degradation. In developing countries, poverty means fewer assets and hence reduced options in response to shocks, which means increased reliance on natural resources (Swanson, 1996). According to Swanson (1996) poverty does not necessarily generate degradation because many people and societies have been able to generate remarkably stable and resilient institutions for coping with fewer assets. He suggests that in many cases it is other destabilising factors such as civil unrest, change of land tenure and droughts that create unstable institutions that result in degradation. He concludes that poverty and degradation are therefore more likely to be linked to outcomes occasioned by other destabilising forces, there being no direct cause and effect between poverty and environmental degradation. This point is relevant to this study because the Tonga people were destabilised by the construction of the Kariba dam and most of their problems today and their poverty state are a result of that displacement.

Also addressed in this section, is the whole issue of how poverty impacts on the environment. According to UNEP (1995) the problem of environmental degradation has social roots, and poverty alleviation is a prerequisite for sustainable development. UNEP (1995) says poverty and environmental degradation are the results of economic systems that externalise environmental social costs. This externalisation tends to enrich particular social groups at the expense of the environment and the population at large. This UNEP argument views environmental degradation and poverty as symptoms of poorly functioning economic and political systems.

Another issue which is related to poverty and which is dealt with in this section is

underdevelopment, which affects two thirds of the world's population (Sachs, 1992). According to Sachs, underdevelopment is a threat that has already been carried out; a life experience of subordination and of being led astray, of discrimination and subjugation. While many may not agree with this definition of underdevelopment it nonetheless describes the conditions of millions of people who are extremely disadvantaged.

Many also believe that benefits encourage the poor to participate in conservation of natural resources and that without them most of the poor would have no reason to be involved because their priorities are to meet their own daily needs. They argue that if wildlife provides those benefits which meet local people's needs then they will participate in its conservation. The cash that can be earned by villagers is seen as the most important incentive. If this cash is not available, then the community would either illegally exploit the wildlife or convert the wildlife habitat to other uses to meet their food needs.

Rihoy (1991), Taylor (1990), CAMPFIRE (1990), Zimbabwe Trust (1991), Murphree (1991), Metcalfe (1992) and others have placed emphasis on the importance of cash income as an incentive for wildlife conservation, because this is viewed as one of the ways of alleviating poverty. They argue that because local people have been denied these benefits in the past, a tangible benefit is needed for them to participate in the conservation of wildlife. Rihoy (1991) and Taylor (1990) have spent time working out details of incomes from CAMPFIRE that are received by the communities under the programme. Kiss (1991), however, sounds a caution on the over emphasis on cash incentives and argues that some of these projects may not necessarily yield that much direct income to local people. Sibanda (1995) raises similar question on whether cash incentives alone can sustain wildlife conservation efforts in the long

term and points out the small dividends received by the people in Omay, and questions whether these would be enough to sustain conservation; he also asks what will happen to those resources that may not yield an immediate cash income to the people, will these resources be conserved or will they suffer degradation because of this. Birgegard (1993) places more emphasis on other material benefits and not just on cash incentives, believing that success would be determined by the totality of benefits that accrue to the communities.

This issue of incentives is important for this study as it is necessary to learn if these play a critical role in the management of natural resources and whether these benefits actually improve the economic wellbeing of the poor. The section further examines how critical cash incentives are to the conservation of wildlife as well as what other incentives are critical. Murphree (1991) claims that for the majority of rural people, money is synonymous with development. Many writers on CAMPFIRE agree with Murphree and tend to put emphasis on cash, often arguing that without cash incentives the communities would not participate in the management and conservation of wildlife. This argument is similar to that made by Swanson (1996) which assumes that if the developing countries are compensated for conserving this biodiversity then development will take place and developing countries will continue to conserve these resources. Some of these arguments sound simplistic and rationalise poverty, which is a result of a more complex interplay between deprivation and denial.

3.2.2 Sustainable development and the environment

A link has finally been created between the sustainable utilisation of natural resources and

development following the United Nations Conference on Environment (UNCED) in 1992. Barbier (1992) argues that sustainability of livelihood of the poor is linked to sustainability of natural resources system. He explains that sustainable management of these assets may therefore be just as important for intra-generational equity (the right of the poor to gain better livelihoods now) as it is for inter-generational equity (meeting the needs of the future and future generations). In other words, for the poor it is just as important to improve the livelihoods of people now as in the future. Most of the community-based resources management approaches agree with Barbier's conclusion. Chambers (1986) and Hasler (1996) however, show that in theory there is concern for improving the lives of the poor, but in practice the poor continue to be marginalised and do not even know where their next meal is coming from, let alone think about future generations. They claim that many international decisions and actions today do not reflect a serious commitment to improving the conditions of the poor.

Swanson (1992) explains that biodiversity conservation must be about determining the policies that will effectively transfer value that exists in the developed world (i.e. funds) to those developing countries that possess this biodiversity. He says this must be done in a way that creates incentives and suggested the following:

- development of a framework for selecting the optimal amount of diversity to be conserved;
- valuation of some important but intangible goods and services, and
- the creation of incentive-based transfer mechanisms across international boundaries.

Swanson (1996) sees this as a way of addressing both poverty and underdevelopment, but also as a way of allowing biodiversity to be conserved. The challenge is how this can be done and by whom given the stark difficulties alluded to by Murphree (1988); Hasler (1996); and Chambers (1986) in which they concluded that the poor do not have access to findings from research and surveys and programmes do not seriously address the needs of the poor. It is difficult to see how this can be achieved when the ecocrats and the powerful countries have not turned their attention to how to bring about equity in wealth distribution, but to how to globally control the utilisation of natural resources.

In discussing sustainable practices, Hasler (1996) poses a critical question when he asks, sustainability for whom and in connection with what? He argues that the majority of populations in the world are not concerned with the sustainability of global resources, such as the ozone layer or the rhino, except in as far as these are perceived to impinge on their immediate livelihoods. In a rapidly changing world the majority of societies are concerned with short-term maintenance because these people and their children may not be around to witness the possibility of a sustainable world in the future given their level of poverty and its threat to their lives (Hasler, 1996). He says that this does not mean that the poor do not think about the future, but they have to deal with each day as it comes. This obviously poses a threat to the whole concept of sustainable resource utilisation and the nostalgia promoted by CAMPFIRE and others that communities will always conserve resources if they benefit from them. Hasler's point cannot be ignored, he shows how the poor cannot participate in these programmes, much as they are designed for them. This point is discussed elsewhere in this thesis because it demonstrates the difficulties experienced by communities in participating in outside-initiated programmes, but it also shows that the eradication of poverty cannot be

achieved by allowing the poor to have limited access to a few resources and benefits.

Chambers (1986) argues that the perspective of the poor is at variance with that of most economists and biologists, because the poor place immediate satisfaction of their needs and the avoidance of risk before sustainability or higher productivity. Chambers shows that the rationale of economists and ecologists is not going to be the determining factor in resource utilisation if the poor remain poor.

Redcliff (1987) poses a relevant question when he says that for sustainable development to become a reality it is necessary for the livelihoods of the poor to be given priority, but how can this priority be pursued at the local level, while the effects of international development aid systematically marginalizes them. There is agreement between Chambers (1986), Redcliff (1987) and Hasler (1996) about the importance of putting the needs of communities at the centre, if conservation efforts are to succeed, but they also realise the constraints of achieving this in a world that does not make the poor a priority. The issue of putting the interests of communities first is important to this study because community-based resource management approaches are designed to address this specific problem. It must be understood how the development expert will achieve this against a background of the marginalisation of the poor and the growing globalisation.

There is a clear recognition by all these writers that sustainable development is not possible without addressing poverty. In other words there is a direct relationship between poverty and resource utilisation and the quality of the environment (Swanson, 1996). He says there is a clear recognition of the fact that most of the biodiversity which the international community

wants to see conserved is within developing countries or in possession of the poor. Therefore sustainability is only possible if poverty is eased and the risks that threaten poor people are diminished. But the ecocrats believe that the answer lies in controlling resource use at the global level.

According to Swanson and Barbier (1992) the loss of biodiversity and wild lands habitat is usually portrayed as a conflict between development and preservation options. Over-exploitation and extinction of key wildlife species is seen as the failure to preserve these species by limiting or controlling human activity or harvesting. Swanson and Barbier (1992) argue that development is therefore perceived as the principal threat to the survival of wildlife and wild lands. Stopping development is advocated for as the best means of ensuring wildlife and wild lands preservation (Barbier 1992). They suggest that this portrays a polarised choice between development and preservation, and this works against wildlife and other resources.

Fortunately there is a growing realisation that wildlife is a resource to be utilised, but also that there is need to integrate conservation and development, Townsend and Wilson (1987), Kiss (1990), CAMPFIRE (1990, 1991), and others. A number of projects and programmes have now been initiated in Africa which embrace this new thinking such as CAMPFIRE in Zimbabwe, the LIRD and ADMAD in Zambia, the Nazinga Wildlife Utilisation Pilot Project in Burkina Faso (Kiss, 1991). There is a growing recognition that rural people must utilize their natural resources and even the IUCN (1980) Conservation Strategy have embraced this principle. Ideally, all these projects should be community-initiated (Kiss, 1991) and (Nyeki, 1992) and yet this rarely happens, notable exceptions are Beza Mahafaly in Madagascar where the local people approached the government and WWF for assistance to

protect their sacred forests (Kiss, 1991).

It is generally assumed that these community-based resource management programmes promote development or that if money is given to those who conserve this biodiversity, development will take place (Swanson, 1996). Hasler (1996) casts doubts on community based resource management approaches, like CAMPFIRE, as he shows how this programme has in fact further underdeveloped the Mvura people by undermining their traditional foraging and hunting which is the only means of making a living in the harsh, but fragile ecosystem where they live. He questions the value of such developmental programmes to these people. Hasler addresses an important consideration of this study, which is how do these communities participate in deciding how to use their resources or are these decisions made elsewhere.

3.2.3 Value of wildlife/natural resources

The international community, lobbyists, and many conservationists have by and large used Western values regarding wildlife when making decisions or negotiating conventions, a process that has further alienated those who live with wild animals. There are, however, other values such as consumptive, spiritual, and social values of wildlife which can provide equally strong incentives for conservation which the international community has paid no attention to. These other values have been recognized by writers such as Hasler (1996), Sibanda (1997), Hillman and Salter (1997), and Beemans (1997). These writers suggest that this is an important area that can contribute significantly to natural resource management. It must be noted, however, that the globalisation process will further marginalise these values.

According to Barbier (1992) the failure to assess the total economic value of wildlife and wild lands often results in the distortion of economic incentives. He suggests that if the market fails to fully reflect these values, then a market failure exists, and where government decisions or policies do not fully reflect the social beneficial values of natural areas, there is policy failure. Barbier (1992) insists that a complicated and thorough analysis must be carried out before any land-use options are adopted. Currently there are weaknesses that place value only on the more conventional wildlife uses, and yet a few studies show that there is great value to the other less conventional uses which include local peoples' own values regarding wildlife or other such resources. Other writers such as Taylor (1990), Rihoy (1992), and Murphree (1991) have tended to over emphasize the importance of cash incentives and economic benefits as being the most critical for encouraging people to participate in conservation. This issue is important to the study because objective three of the study is to establish how critical these economic and cash benefits are as incentives for people's participation in the conservation of wildlife. In most cases, community values are neither known nor understood by those who plan these programmes.

Hopcraft (1990) hypothesizes that wildlife is an essential component of the rangelands ecosystem and thus wildlife loss is the root cause of land degradation. Hopcraft (1990) argues that the replacement of wildlife by cattle, sheep, and goats disrupted the symbiotic processes necessary for range health, and hence humans have replaced wildlife with domestic animals because the latter provide food and income and are therefore more valuable. If wild species proved economically rewarding, local communities and land owners would pay attention to wildlife management. He concludes this argument by saying that wildlife utilisation is the key to the proliferation and survival of wild animal species because this would create a value for

them in the eyes of local communities. Hopcraft (1990) emphasizes the economic values of wildlife, but does not address community wildlife values.

Hopcraft (1990) says that man, in an effort to protect the disappearing wild species, has made utilisation impossible by making it illegal for people to manage the wild lands. Preservationists do not want these wild animals to be touched. This has led land owners to eliminate wildlife in favour of domestic animals which they can utilise without interference from anyone. Hopcraft (1990) further explains that hunting and tourism alone are not providing sufficient incentives to local land owners and communities to ensure the survival of wildlife. He advocates a much broader wildlife utilisation strategy. Other writers such as Kiss (1990, 1992), Murindagomo (1990), Kamugisha and Stahl (1993), also agree that denying wildlife utilisation to local communities has devalued wild animals and created conflict between man and beast. Kenya's wildlife management since 1989 has been used as a model where wildlife based tourism incomes would pay for conservation without resorting to consumptive and other uses of wild animals. However, Western (1998) said that wildlife cannot pay its way if utilisation is confined to tourism. The Kenyan model has been viewed as a success all along and Western's message puts to an end a popular approach most favoured by the West and those who oppose consumptive utilisation of wildlife. Now that the Kenyan model has failed, the question is: who will pay the conservation bill because even in Kenya, donor support for wildlife conservation has been declining.

There is a growing recognition by many writers that the value of wildlife and wild lands lies in their utility. There is also recognition that the survival of wildlife lies in assessing and allowing the totality of those values to be affirmed (Hopcraft, 1990). Therefore preservation

or apportioning greater value to one set of values than others can only be counterproductive. Bonner (1993) suggests that animal welfare groups need to come to terms with the reality that valuing wildlife by those who live with it, must be recognised and respected.

Swanson (1992) also explained that present values of the wild land of the South cannot be maintained unless substantial and continuing sums of money are transferred to the developing countries from the developed world. He believes that the ultimate role of the concerned Westerner is to pay the bill and that what is needed is a method of payment that compensates developing countries so that wild lands are maintained. A similar argument is raised by Norton-Griffiths (1995), who shows how much revenue Kenya loses by keeping land under National Parks. He argues that if this land were put to alternative use, it would yield 3 to 4 times more revenue than from wildlife management. He agrees with Swanson that the West must provide money for conservation in countries like Kenya. Whichever way this is looked at Norton-Griffiths' argument is powerful, and those in the West who are serious about wildlife and wild lands conservation cannot ignore the fact that this land can be put to productive and profitable use. The ecocrats who are busy calculating and trying to balance human extraction/emission and natural regeneration should add this dynamic to their equation.

Swanson (1996) suggests that it does not matter if these payments arise from wildlife trade, tourism, safari hunting, or even television royalties, so long as there is an irrevocable and ongoing obligation to make them. There are many ecologists, preservationists, and indeed some economists who would disagree with Swanson. Swanson takes a financial/compensatory approach to the issue of conservation, but this proposal does not

answer the questions raised by Hasler (1996) on sustainable utilization nor on how the money from the West will solve natural resource management problems. It does not even address the issue of the value which wildlife has for local people seemingly it is thought that their views and interests do not really matter, as long as they receive money they will comply. This continued trivialisation of local people's values regarding their resources will inevitably present conservation with problems unless it is seriously addressed.

3.3 African Perspectives and CAMPFIRE

This section reviews those views of Africans and non-Africans who see Africa's wildlife as a resource that belongs to the people of the continent and who generally advocate that decisions about how this resource is to be utilised must be made by men and women across the continent, both at national and village levels. These views are critical for the study because they are directly opposite to those of globalisation and global commons proponents. It is within this tension that the CAMPFIRE programme in Zimbabwe is being evaluated. The CAMPFIRE programme is understood as an expression of the recognition that wildlife and other natural resources belong to the people in the villages and that it is those people who must plan the usage of the resources and how benefits from resources are to be shared. Other community-based resource management approaches too, emphasize the important role that must be played by those who own and who live with these resources.

The different writers bring varied experiences and views about why resources are degrading and what should be done about degradation. These perspectives are important because they analyse the empowerment processes of the African people and examine how to find solutions

to their problems, but they also address issues of justice and fairness for the poor, as well as examining how some international decisions impact on African people in villages. The various writers also differ on how wildlife should be utilised and managed, as well as on what sustainable utilisation means. Some of the major debates are about the elephant and the ban on the ivory trade, community management of wildlife versus protected areas, and state control, and issues of global commons. The review also examines wildlife management approaches that have been developed and implemented in the continent in the last ten years.

3.3.1 Natural resources and the environment

All over Africa, nations are beginning to realize that current destructive natural resource utilisation strategies are clearly unsustainable, and that there is a need to conserve the integrity of the natural resource base for present and future generations. But Africa is in the grip of an unprecedented crisis because African people have been excluded from the search for solutions to their own problems (Thiam, 1996). These problems are compounded by Africans' closeness to their natural environment, poverty, overcrowding, pollution, and soil degradation. Moyo (1991) gives an overview of some of the causes of environmental problems in Africa, and particularly in Zimbabwe. He argues that environmental degradation will remain or worsen if African countries deal with their debt crises by exporting environmental capital such as hardwoods, or by accelerating the use of land to grow cash crops for export, because this would displace subsistence cropping into less suitable marginal areas.

He claims that the major environmental question on the African continent is the distribution

of and access to natural resources. This issue is a problem because Africans depend on natural resources for sustenance, they use low technology and raw materials which leads to continued natural resource degradation, and the majority of people depend on land because of the dominance of the biomass-based economy. These views are echoed by other writers such as Harrison (1987), IUCN/ SADC (1994).

According to Moyo (1991) and O'Connors (1993) these natural resources are also exploited for commercial purposes, normally realising very little value and their contribution to economic growth remains small. The dependence on natural resources by the majority of the African people, the continent's need to earn foreign exchange, and service their foreign debts have consequences for food security, incomes, wages, political stability, and the environment (Moyo, 1991).

Trading partners in the West are concerned with the security of the supply of raw materials, and thus the political stability in countries where raw materials are sourced. According to Moyo (1991), lately some concern was being shown for the global environmental effects of natural resource exploitation. Paying debts, scarcity of investments, need to earn foreign currency, and growth of severe poverty forces African countries to trade in primary products which means increases in conflicts and more growth poverty in Africa (Moyo, 1991), (Swanson, 1996).

According to Hildyard (1993) and Moyo (1991) the Africans continue to be marginalised even when it comes to decisions about how their resources are to be utilised. In spite of the rhetoric about moving away from a preservationist focus towards sustainable development,

the environment debate remains a conservative exercise dominated by the sophistry of the West, based on environmental modelling, which does not take into account the African concerns. Moyo (1991) argues that this modelling deliberately evades the central issues of poverty. Instead it emphasises the development of instruments such as swapping debt for nature and conditionalities for loans such as national environmental plans which are supposed to assist Africa with its debt burden, stimulate development and protect the environment. These instruments have not stopped Africa's declining resources and increasing poverty. None of these measures have been able to improve the distribution of wealth or improve resource accessibility for the majority in Africa. Moyo (1991) in his argument suggests that while Africans may appear to be making decisions about what to do about their natural resources, in fact they are forced by poverty and debt obligations to exploit their resources in an unsustainable manner.

3.3.2 Conventional conservation approaches

Conventional approaches to wildlife conservation in Zimbabwe and elsewhere in Africa, have emphasized the creation of protected areas (ecological islands) and by so doing have alienated the people who should be at the forefront of wildlife protection (Makombe 1993). These approaches were and still are concerned with the preservation of ecology with little regard for the people who live in these areas. The failure of many conservation strategies can be attributed to an over-emphasis on law enforcement with very little regard for people's survival (Sibanda, 1995).

McCay (1987), Murindagomo (1990), Cumming (1990), Kiss (1990), CAMPFIRE (1990,

1991), Murphree (1991), Metclafe (1992), and Nyeki (1992), all agree on the folly of conventional conservation approaches, which they view as being responsible for most of the problems regarding wildlife conservation today. These writers emphasize that the folly of these strategies lay in the creation of National Parks which separated people and wildlife, and made wildlife the property of the state; a process that took away communal ownership and responsibility for wildlife management and conservation from local people and placed it in the hands of state authorities. These writers argue that this alienated people from wildlife and made them view wildlife as a nuisance and not as a resource any more, which created conflict between people and wildlife, a situation which had not existed hitherto. According to Bonner (1993), and Hasler (1996) many ordinary people still illegally hunt for food and sometimes get killed as poachers because they are still denied the right to legitimately benefit from the resource. But lack of legitimate access to wildlife also forced the local people to concentrate on livestock production and ownership, a process that has seen more and more wild lands converted into land for growing crops and raising livestock (Hopcraft, 1990).

According to Makombe (1993) these conservation approaches denied local people the right to utilise resources and while wildlife is a priceless resource, he argues that it can no longer survive as a valueless resource. He further says that conservation cannot ignore the needs of human beings, while development that ignores environmental limits is doomed. It is this new understanding that now sets the pace and framework for the management of Africa's wildlife. This point is particularly pertinent to this study because CAMPFIRE is a response to this new realisation that seeks to find relevant natural resource management approaches.

In response to the conventional approaches to wildlife management, Bonner (1993: 278) said

in concluding his book "If Africa's wildlife is to be saved, it will not be with celebrity appeals, or more fire arms for anti-poaching units or ivory bans. It will require radical policies and changes in attitudes. Westerners who contribute to conservation organization will have to understand and accept sustainable utilisation." Bonner sums up what many writers such as Kiss (1990), Cumming (1990), Murphree (1991, 1992), Sibanda and (1995, 1996), have said. Swanson (1992) has taken the debate even further by suggesting that the West will have to pay for the conservation of biodiversity in developing countries. Swanson (1996) argues that denial of resource use is not an option for the poor nations, they need to use their resources to meet the needs of their people. The views of these writers are at variance with the globalization movement that seeks to globally regulate the use of natural resources and this tension is at the centre of this research.

3.3.3 Declining wildlife numbers

The debate on the decline in wildlife numbers in Africa is extremely polarised, even among Africans themselves, because the causes of such decline are not always universally agreed upon, nor is there agreement upon the necessary steps needed to curb this decline. But the debate has also tended to centre around a few species like the elephant, the rhinoceros, the gorilla, and the so called majestic cats. The debate does not give a rounded picture of what is happening to wildlife in Africa, but rather, highlights the status of a few species whose statistics are known. This point is important to the study because the research deals with ordinary people in villages who want to utilise a whole range of wildlife resources and not just the favoured species, however, wildlife utilisation has become clouded by furore surrounding the flagship conservation species. Part of the polarisation of this debate has to

do with its origins in the West where African wildlife has not been dealt with holistically, but where some species are more favoured than others. The debate is further complicated because up until a few years ago the views of the African people in villages had never been sought, and today African elite try to represent the views of villagers from an extremely limited understanding of what really happens in the villages. This is particularly relevant to this research because the study aims at contributing exactly this knowledge to the debate.

The declining number of wild animals, especially the conservation flagship carriers like the elephant and rhino, continues to concern conservationists worldwide. There is a growing feeling that some species will become extinct, as revealed by the elephant debate, therefore many writers raise this as a major issue of concern. One identified cause is competing land uses, given the ever increasing population, more land taken up by crops, livestock and settlements (Nyeki, 1992). Another causal factor is said to be poaching, and Murphree (1991) for instance argues that the issue of declining numbers is a result of the fact that wildlife in communal areas is now seen to have 'open access' status because governments have failed to effectively manage these resources and hence have enabled illegal users to over-exploit the resources. Writers such as Cumming (1990), Kiss (1990), Murindagomo (1990) agree that wildlife numbers are declining. Their arguments, however, differ when it comes to the causes of this decline, their views about reasons for the decline differ according to species and locations in Africa, too. Other causes of wildlife decline have been identified as the alienation of people from animals, and the loss of value to wildlife because of lost accessibility and economic benefits from other land uses.

Major things that stand out in this debate are that; there is no comprehensive picture about

what is happening to the majority of Africa's wildlife species. The debate is therefore about very few species and the contribution of the debate to the overall wildlife management challenge in Africa is limited. While many contributors to this debate give an impression that the decline in wildlife numbers is a recent phenomenon, Loeffler (1998) shows that this process has been going on in Africa for at least a hundred years. Many writers agree that the rate of wildlife loss has accelerated, however, it must be noted that this conclusion is based only on those few species. We do not know the actual decline rates of other smaller, or so called less important animals, because no one has accurate figures about hares, impala, antelopes, and duikers for instance. There are no accurate figures even about some of the other larger ungulates, like the buffalo or giraffe. The value and impact of these 'lesser species' on rural people's lives is not known and yet the whole debate, even regarding globalization, only looks at those species that interest the developed world.

Loeffler (1998) claims that over the last 100 hundred years wildlife and wildlife habitats have been declining in Kenya and elsewhere in East Africa; he suggests that all the efforts that have been put in place to reverse that decline have failed. Loeffler says that even Meryvn Cowie, the man with the greatest foresight, who established National Parks in Kenya, merely slowed down the decline. Bonner (1993) makes a similar point when he says that as human population grows, so will wildlife decline. What Loeffler said about Kenya and East Africa, holds true for most of Africa. Loeffler (1998) dispels the myth that wildlife decline is a result of poaching, which only started recently. He clearly demonstrates that this is a process that has been going on for a long time, and that it will continue even if we eliminate poaching. He argued that poaching was just one of the contributing factors that may have accelerated wildlife decline, but that strategies must be developed to address the other root causes of

wildlife decline, such as population growth, land demand, and lack of alternative means of livelihood. Indeed an impression has been created by proponents of indigenous knowledge that traditional practices always protected natural resources, but we know that this notion is not true. Even under traditional management, wildlife decline took place, soils were degraded and forests were destroyed.

Loefler (1998) also brings to the fore why poaching will remain a problem. He says Richard Leakey, the famous one time director of Kenya Wildlife Services (KWS), used a paramilitary force and destroyed the ivory poachers, he saved the Kenyan elephants and the remaining rhino and boosted tourism. Loefler (1998 p.8) says "amid the global jubilation it was overlooked that many small men were killed or jailed and no big men got caught. Richard Leakey was not able to bring to book a single senior civil servant, a single officer of the uniformed forces, a single senior politician." He said because of this Kenya did not deal a deadly blow to the source of poaching which is the big men. It is big men (politicians, senior civil servants, officers of the uniformed forces, business people and all those in positions of power) in Africa, who plunder public resources and who steal communal property.

Loefler (1998) concludes that consumptive use of wildlife is necessary even if we know it will be difficult to control. He also concludes that Kenya Wildlife Services (KWS) alone cannot protect Kenya's wildlife, but the answer lies in conservationists, environmentalists, NGOs, and citizens being partners of KWS, and all playing a part, in monitoring resource utilisation, collecting snares, monitoring croppers, and auditing the licensing office. Loefler's conclusion echoes of many community-based wildlife management efforts across Africa. But these views go against those who believe that consumptive use of animals will lead to further decline in

wild animals numbers and will eventually lead to the extinction of most African wildlife.

The elephant however, demonstrates that African voices are not unanimous when it comes to the consumptive use of the elephant. Rotich (1997) said between 1960 and 1989, 90 per cent of Africa's elephants were killed by poachers to supply the world's demand for ivory. He further claims that before the trade ban on ivory, Africa was losing 70,000 elephants a year. It can be seen already just from Loeffler's position, and that of Rotich, that the debate about the elephant is extremely controversial. There are many in Southern Africa who have accused Rotich and others of having been bought by the West to front for the West during the CITES meetings. These facts and figures get thrown around and serve to confuse the ordinary wildlife user in African villages. Rotich, Leakey and others in East Africa were the proponents of the trade ban on ivory and they still support it. Their views and figures are greatly opposed by the proponents of CAMPFIRE in Southern Africa, who also oppose the trade ban on ivory and support the consumptive utilisation of the elephant. Tawengwa (1997) shows why for Zimbabwe, elephants must be consumptively utilised. He said Zimbabwe's elephant population then was 65,000 and the carrying capacity for the whole country for the species was only 35,000, he argued that the excess should be culled via a controlled management system that has worked for many years. Tawengwa (1997:13) concluded his argument about the benefits of CAMPFIRE to the rural people of Zimbabwe by quoting one villager from Dande, named Matshezhe, "Maybe the people who are presenting our case are not so clear enough, I can only imagine that these people you call [animal Rightists] lack information. We must educate them. Why should people who know little about our country and our culture, and even less about our problems, want to lecture us from the comforts of their First World environments about good management?" he asks, perplexed. " Do we do the

same to them? Of course not. And we don't want unsolicited advice either." To a very large extent that sums up the elephant/wildlife debate between the West and Africa and within Africa.

The elephant is used in many cases to demonstrate the decline in wildlife numbers because it is one those species whose numbers have been monitored by the West because of the special interests in this species. The West has also used this information to push and promote their own conservation perspectives and animal welfarism. According to Sugg and Kreuter (1994) figures on the elephant given by the Ivory Trade Review Group (ITRG) indicated that elephants had decreased from 1,343,340 in 1979 to 631,930 between 1979 and 1989. These declines per region over a 10 year period were six per cent in West Africa, 44 per cent in Central Africa, 77 per cent in East Africa and 25 per cent in Southern Africa. Sugg and Kreuter (1994) say these estimates were accepted as fact even though their reliability was questioned by eminent elephant experts at the time, such as David Cumming. Many doubt that Kenya's elephant population has increased from 18,000 in 1989 to 26,000 in 1994 as this totally outstrips the elephant's natural increase rates (Kreuter and Sugg, 1994).

Sugg and Kreuter (1994), Barbier (1990), Milner-Gulland and Mace (1991) argue that the decline of the African elephant during the 1980s was linked directly to the growth in ivory exports from Africa, of which 80 per cent were illegal (Kreuter and Sugg, 1994). They argue that it was illegal ivory that found its way to these markets, and therefore banning the ivory trade would only drive it underground, and into the black market. Rotich (1997) confirms these figures, but says that the trade ban on ivory is a conservation success because the world price of ivory has dropped, the international market for ivory has collapsed, and poaching in

East Africa has decreased, and while elephant numbers in Kenya have increased by 30 per cent in 10 years. Rotich (1997) tries to link a number of incidents where poaching had increased since the introduction of the trade ban to the anticipation by poachers of a possibility of a lifting of the ban. However, elephant experts like Cumming doubt these increase figures given the elephant's natural population increase of five per cent per year. The debates on wildlife decline, the trade ban on ivory, and the recovery stories regarding elephant populations are important to this study since they relate directly to the issues of consumptive utilisation of wildlife which is supported by CAMPFIRE, but also because elephant hunts contribute 90 per cent of the revenue from CAMPFIRE in the study area, and in Zimbabwe.

3.3.4 Man/beast conflict

The man/beast conflict is critical to this study because one of the major aims of CAMPFIRE is to change people's attitudes towards wildlife so that they can tolerate animals more and therefore conserve them. The man/beast conflict is seen by conservationists as one of the major reasons why local people do not support conservation, and why they actively participate in poaching or illegal hunting or assist poachers, because they regard wildlife as a nuisance. CAMPFIRE set out to reduce this conflict, to create positive attitudes towards wildlife among the local people, and to instill a sense of ownership of the resource. This in turn was to create a new relationship between people and wildlife, in which wild animals would then be viewed as a resource which has value and which must be conserved, and not as a pest to be destroyed. Objective one sought to transfer ownership, management, and utilisation of wildlife to local producers; it was hoped that this process would reduce the conflict between man and beast. Reviewing the literature of this debate and understanding the issues is crucial for this study.

Since the National Parks were created and local people were alienated from wild animals, and denied access to wildlife, while management and control of wildlife was transferred to state authorities, the relationship between man and beast deteriorated rapidly. Local communities viewed wild animals as pests which destroyed their crops, livestock, and maimed and killed people. This hostility was worsened by the fact that local people could do nothing about wildlife whenever their property was destroyed because the law protected animals and not people. To make things worse communities never got any compensation for loss of property. Generally, the West has not appreciated the impact that wildlife has had on local people's lives, especially when families have to go hungry because their crops have been destroyed by wild animals.

This antagonism or conflict manifests itself in many different ways and at different times in Africa. In Kenya, this conflict became apparent in 1994 when there was high tension between the Kenya Wildlife Services (KWS) and the communities who live with wildlife. "Kenya Wildlife Services would rather see a dead Moran (Maasai warrior) than a dead lion" (Kesoi 1994:8) " The Maasai are treated as a necessary evil" (Kesoi 1994:8). To illustrate his point, Kesoi continued to say "authorities want to expand Amboseli National Park so that elephants can have more space to roam. The Maasai do not want to be pushed to extinction because of wild animals." Mbugua (1994:9) echoes Kesoi's feelings and concludes that "never has the man-beast conflict been so vexed as have been the case in the past few months". Both statements came at a time when the KWS, under the leadership of Richard Leakey, was considered by the Western donors and conservationists to be one of the most successful conservation efforts in East Africa. When wildlife conservation was at its best, the man/beast conflict was at its worst, because the KWS' policing and control measures which finally

antagonised even those communities like the Maasai, Pokots and Samburus who have lived harmoniously with wildlife for centuries. The arrests and killing of ordinary people by the rangers could no longer be tolerated by these communities. The Maasai also felt that their own interests were not being considered while they suffered the most inconvenience from living amongst wild animals. Other communities in Kenya felt the same way, clearly demonstrating that the approach taken by officials was not in their favour.

Sibanda and Omwega (1996) state that conventional wildlife conservation has been based on the aesthetic and ecological values of the West, which mainly serve the interests of the international community. They argue that these international values are often in conflict with social and economic practices of local people. There is conflict between local needs and international interests, and when disputes arise, wildlife is often the victim. Writers such as Murphree (1991), Kiss (1990), and Cumming (1990) echo these views. Sibanda and Omwega (1996: 176) further argued that "The future of wildlife conservation in Africa clearly lies in acknowledging that sustainable conservation is intricately linked with sustainable use of this resource."

According to Kiss (1990), Makombe (1993), and Sibanda (1995,1996) local people need to view wildlife as a resource with mitigating features and stop seeing it as a nuisance. Those who live with wildlife must benefit from it and be responsible for it, it is hoped that this will reduce the conflict. Most writers are critical of some of the conventional conservation approaches which deny local people the right to utilise wildlife as a resource, thereby fuelling the man/beast conflict.

The debate and controversy about wildlife utilisation, conservation and animal welfare rights will continue, so will the decline of wildlife numbers and habitats until those who live with wildlife become the major decision makers of how wildlife is utilised (Bonner, 1993).

3.3.5 Ownership, proprietorship, custodianship and property rights

Many writers like Acheson (1987), Murphree (1990 1991), and Hasler (1996) argue that the management of any natural resource is heavily influenced by ownership, property rights, proprietorship or custodianship, because these issues define who can utilise the resource, how benefits are shared and the security of those rights. What they do not tell us is the advantages and disadvantages of each of these property rights, because these terms do not mean the same thing. In section four of this chapter this subject is dealt with in more detail. It is discussed here as well, because CAMPFIRE has as one of its objectives the transfer of the custodianship of natural resources from the state to the district councils and by extension to the wards and villages. The issue of transferring custodianship from the state to the district council is central to this study as it addresses one of the objectives of the study.

In Zimbabwe the law granted district councils 'appropriate authority', or the legal right to manage and utilise natural resources in their areas. Appropriate authority transfers the rights to manage and utilise the resources from the state to the district council, however, it does not transfer proprietorship or ownership. The 1975 Parks and Wildlife Act was enacted "to confer privileges on owners or occupiers of alienated land as custodians of wildlife" (Zimbabwe - 1975:5). It is this same law that was amended in 1982 to give appropriate authority to the district councils. The appropriate authority is analogous to the custodianship. It is clear that

the law never made any provisions for transferring ownership of resources in communal areas to the district councils or any other structure. However, appropriate authority has been interpreted in many different ways, as can be seen by what the various writers say. The majority of writers, Taylor (1990), Cumming (1990, 1991), Rihoy (1991), Murphree (1991) and Metcalfe (1992) for example, are concerned about the issue of proprietorship. They say that proprietorship is pivotal to long term sustainable community interests in wildlife management. These writers and others have interpreted the provisions of the law to mean that proprietorship or ownership of natural resources was transferred from the state to the district councils. This interpretation has resulted in confusion over what is being transferred to the district council, as most literature on CAMPFIRE tends to use such terms as custodianship, proprietorship, ownership, and property rights interchangeably. Many argue that the district councils are not devolving proprietorship to the lower levels, and yet the councils themselves do not have that proprietorship or ownership in the first place. Custodianship, in this case, means the right to manage and utilise a state resource, whereas ownership and proprietorship mean possession, and these cannot be transferred unless the law is changed from appropriate authority to ownership. This study therefore is interested in finding out if the provisions of the law are being implemented.

The ownership of resources is one of the most sticky issues which impact on wildlife management today and questions are often asked like: to whom does wildlife belong or to whom should it belong. Many writers believe that if the issue of ownership were sorted out, most of the present difficulties associated with its management would disappear. According to Simpson (1998) the debate on wildlife is about whether people are the custodians or the nemesis of East Africa's wildlife. He states that the then current KWS director David Western

(1998) believed that people are custodians of wildlife and that for wildlife to survive we need to win space for it outside protected areas. Western (1998) does not say who should own it if local people are the custodians, nor how local communities hold that custody. In general, this view by Western normally refers to wildlife outside National Parks, but in this new context he wants to extend the custodianship to wildlife in protected areas as well. This view is the cornerstone of Zimbabwe's CAMPFIRE programme and many supporters of community-based wildlife management would agree with Western. But it is of particular interest to this research because of the debate at district level about to whom and how benefits from the National Parks should be shared. Western, as quoted by Simpson (1998) believes that community conservation initiatives, sustained by ecotourism and the consumptive utilisation of wildlife are the way forward, which is a major departure for Kenya where the consumptive use of elephants and other species is still illegal. Simpson (1998) says that the custodianship of resources must be in the hands of local people, however, this is problematic because there are many parties who would want to own and control this resource and these range from the local communities themselves who live with wildlife, to national governments, and to international organisations like CITES.

3.3.6 Poverty and resource utilisation

Poverty is viewed by most writers as critical and therefore threatening to the use, management, and conservation of wildlife in Africa. They argue that any conservation effort or strategy that does not address poverty in this continent will fail. These writers like Murphree (1991) and Metcalfe (1992) explain that rural people will not be motivated to participate in any conservation unless they know that benefits will be coming to them and

they see these benefits as part of addressing that poverty.

Murphree (1991), Metcalfe (1992), CAMPFIRE (1991) and others make a strong argument of how denial of wildlife utilisation to local communities threatens any efforts to conserve wildlife because this practice has marginalised people and made them poorer. They argue that many rural people are poor and yet wildlife is available, but not accessible as a resource, a position which cannot be supported given the levels of poverty that threaten their lives. Traditional conservation approaches are blamed for this denial of resource use. Nyeki (1992) and Kiss (1990) also show how local people have been denied benefits from wildlife because they are not allowed to utilise it and yet they are expected to conserve it. The CAMPFIRE programme in Zimbabwe makes a very elaborate case of why wildlife must be restored to the local people as a resource so that it can alleviate poverty, raise people's standards of living and contribute to their development, Maveneke, (1992), Jansen, (1990), and Thomas, (1992). The CAMPFIRE philosophy is in fact based on this view; this view is also embraced by others like, Acheson (1987), McCay (1987), Townsend (1987) and Wilson (1987).

O'Connors (1993), however, sees Africa's as wildlife contributing very little to the economy of local people at present. Swanson (1996) argues that developing countries cannot be expected to deny their citizens the use of these resources, given the level of poverty in their countries. Makombe (1993) said that it is an irony that African people are poor and threatened with hunger amid these resources. Hasler (1996) shows how the Mvura people in the Zambezi valley of Zimbabwe, struggle to make a living collecting wild fruit, eating worms, but are unable to provide protein to their children from the abundant wildlife because the law denies them the right to use this resource. He shows how the poor are constantly harassed in this

CAMPFIRE project area by the law enforcement agents who come around at meal times to see if any one is eating or cooking meat. Hasler (1996) believes that this situation contradicts what CAMPFIRE is supposed to stand for and says these local people still have no access to wildlife, nor are they involved in deciding how wildlife should be utilised. This point is important to this research because one of the objectives of the study is to see how resources are owned and utilised under CAMPFIRE, as well as to find out how local institutions are making decisions, and to examine how effective and efficient they are in managing the resources.

3.3.7 CAMPFIRE in Zimbabwe

Wildlife management in Zimbabwe had a similar history to that of the rest of Africa, in which the conventional approach of creating protected areas was and still is the most important method of wildlife conservation (Murindagomo, 1990). Metcalfe (1992) says that fortunately the Department of National Parks and Wildlife is moving away from being a small elite organization to an organization that recognises people as important to development. It is beginning to see local participation as the link pin of wildlife conservation. This study and review, however, concentrates on community-based wildlife management because the thesis evaluates CAMPFIRE, a programme that was started as a response to some of the failures of conventional management approaches. Further, CAMPFIRE is supposed to address all the conventional management ills of the past and usher in a people-centred, efficient and effective management system, these objectives are interrogated by this research.

3.3.7.1 CAMPFIRE the turning point

Many writers regard the CAMPFIRE programme as the turning point in wildlife management and utilisation in the communal areas of Zimbabwe. They believe that the approach is revolutionary and has the potential to change the way common property natural resources are managed and utilised. Murphree (1991), Murindagomo (1991), and Metcalfe (1992) agree that the 1975 Parks and Wildlife Act was pivotal for conventional wildlife conservation in Zimbabwe. It first gave appropriate authority to private land owners and was later amended in 1982 to include district councils. Since then huge investments have gone into wildlife and even bigger profits have been realised. This proves that once wildlife was allowed to become a major economic activity and for people to benefit from it, the same people are prepared to invest in the resource and to guard it jealously. To support this point, Child (1996) shows how the numbers of ostrich, crocodiles, and other wildlife species have increased in Zimbabwe following game ranching. These issues go unnoticed by the international community because these species are not the favoured conservation flagship carriers. The international community cannot be selective about what is biodiversity and what is not, and it is a fallacy to only consider the flagship carriers when evaluating what is good conservation and what is not.

In summing up his views on the subject, Metcalfe (1992) says centralised governance is challenged by CAMPFIRE to link authority, management, benefits, and costs. The success of CAMPFIRE is based on its ability to address the needs of the local people, but it must also develop and enhance local institutions in order to strengthen local capacities while relying as much as possible on local resources. This view is fully endorsed by Uphoff (1986) and Murphree (1991).

When discussing the ban on ivory trade Zimbabwe's CAMPFIRE proponents: CASS, the Zimbabwe Trust, DNPWLM, and WWF argued strongly that the blanket ban would undermine the CAMPFIRE gains in Zimbabwe. In June 1993, 3,500 illiterate peasants from Northern Zimbabwe presented thumb prints to the American Ambassador in Harare in support of the CAMPFIRE Programme (Associated Press, 1993). In that article it was also shown that these peasants earned US \$8,000 per elephant hunted for trophies. A quota of 90 elephants were due for culling in 1993 which would have earned these peasants US \$720,000. By 1997 the price of sport hunting for a bull elephant was between US \$30,000 and 40,000. (DNPWLM 1997). These are handsome sums of money which cannot be dismissed, especially when one considers the poverty of rural people.

The government of Zimbabwe and the WWF animal counts have proved repeatedly that there is an over population of elephants in Zimbabwe and that 10,000 of these are in communal areas out of a total of 65,000 elephants (Tavengwa, 1997). The passionate debate in Zimbabwe is that the only way to save elephants is to make them valuable to local people and to allow these people to manage and to benefit from them, which will encourage them to protect the elephants. It is hoped that local communities will develop their own value for wildlife and will set up their own control systems for conserving wildlife. This point is dealt with at length by Rihoy (1991), Taylor (1990), and by Murphree (1991) who all claimed that this is already happening as a result of the programme. They all show how the communities in Omay, Dande, and Mahenye have set up their own game scouts to protect wildlife. They prove that community scouts are cheaper than the DNPWLM scouts and that they are more effective, as they live in the area. The whole community acts as scouts, by monitoring poachers, illegal hunters and by collecting snares. Until the people started to benefit from

wildlife they argue, this kind of community solidarity in protecting wildlife was not possible. Murphree (1991) takes this argument further and demonstrates that DNPWLM neither has the manpower nor the resources to police all the wildlife in communal areas. DNPWLM's inability to manage this resource which was theoretically controlled by them, led to 'open access' (Murphree, 1991). CAMPFIRE attempts to return management and control of wildlife to the local people, while also allowing them to benefit directly from the resource. It is hoped this will enable them to develop a communal resources rights regime which depends on community control. Most writers do not spell out, however, what the requirements are for establishing common property resource management regimes. The size and nature of producer units are not specified either, and it is not clear what a producer unit is and hence it is not clear exactly who should benefit from the resource. But CAMPFIRE is seen as providing solutions to many problems and healing most of the ills of the past, and above all CAMPFIRE is enabling thousands of communal people to earn an income and to benefit directly from wildlife.

3.3.7.3 CAMPFIRE: some practical problems

An impression is sometimes created by the proponents of CAMPFIRE that it is a perfect programme where everything works well. The supporters of the programme have overdressed the bride in an effort to sell CAMPFIRE to the donors and to other interested international partners. There are a few writers who have pointed out some of the difficulties and constraints that CAMPFIRE has experienced.

According to Murindagomo (1990), the difficulty which local people in Guruve had with

supporting CAMPFIRE was because of the restrictions on expanding crop lands and livestock numbers in these communal areas. Curtailing expansion of these represents an opportunity cost in terms of agricultural production, and people were not prepared to give up this kind of land to wildlife unless they knew what benefits they would get from making this sacrifice and whether these benefits would outweigh those from crops and domestic animals. But also given the interference by the international community on wildlife utilisation, local farmers may decide to concentrate on growing crops and keeping domestic animals, since the international community would not be interested in these. This point is indeed important for this study as it addresses local people's perceptions in the light of globalisation and global commons and the threats which these trends pose to the independence of villagers about how they utilise resources which are available to them.

CAMPFIRE still needs to make an economic analysis of wildlife as a land use as compared to other land uses in communal areas, if the programme is to be fully embraced. Several studies have been carried out in Zimbabwe by Cumming (1990, 1991) and Muir and Bojo (1994) comparing wildlife and cattle ranching in the commercial sector. There are some indications that in some areas and under certain circumstances wildlife can be more profitable than cattle, and other cases demonstrate that a combination of wildlife and cattle proves to offer the best land use. Given the investment that has gone into wildlife ranching, however, it is clear that the private sector is making good returns on their investment otherwise they would not put money into a venture that loses money. No such definite figures exist for communal areas, except for the CAMPFIRE studies which do not really prove the point. The CAMPFIRE figures do show that substantial sums of money are and can be earned from wildlife, but these figures do not show how this compares with other forms of land use. This

study examines this issue with a view to getting some indications as to the long term economic implications for this land use.

While CAMPFIRE is officially supported it does not replace protected areas as the major method of conserving wildlife but is viewed as being complementary to it. Policy has not yet defined what the relationship will be between the appropriate authority at the district level and the National Parks within the jurisdiction of the appropriate authority. National Parks are still state property and there is no indication that there are intentions to hand these over to the local authorities. The official position at the moment is just to continue with the status quo and not to respond to some of the pertinent debates and arguments raised by district councils.

3.4 Common Property Theories and Resource Management

It is not possible to successfully address issues of sustainable resource utilisation at the local level so long as the very nature of property and authority systems over natural resources are misunderstood in policy formulation. The CAMPFIRE programme treats wildlife as a common property resource, as do most of the writers on the subject, and this study has also analyzed the CAMPFIRE programme using common property theories as the basis. It is essential for this study to review what other scholars have said about property, property rights, and common property as a way of enlightening the analysis and the debate. It is necessary first to review property concepts in order to understand how common property relates to other forms of property and to examine how different property rights impact on natural resource management and utilisation. It is necessary to define the main types of property regimes over natural resources. The main aim of the review is to clarify the difference between common

property regimes and open access regimes with a view to challenging the misplaced burden of the tragedy of the commons onto common property.

3.4.1 The Tragedy of the Commons

Common property has often been misunderstood and treated as open access. It is this misconception which led Hardin (1968) to write his essay on the 'Tragedy of the Commons'. In 1968, Hardin wrote a famous essay in which he concluded that assets used in common will always suffer from the lack of effective management or control because they belong to nobody. Hardin's (1968) tragedy of the commons concluded that inevitably, these resources which are used in common will be subjected to the tragedy of the commons, resulting in overuse, degradation, and depletion because of the unregulated access to scarce resources.

Hardin's (1968) version of the tragedy of the commons argument combines Lloyd's image of the old English commons with marginal utility from economics. A herdsman puts his animals on a pasture that he uses in common with other herdsman. Even though there are signs that the condition of the pasture will worsen with additional stocking, it is rational for each herdsman to add more animals because he gains a full benefit from each additional animal while he shares the costs of overgrazing with other herdsman. The gains to each herdsman for adding an extra animal becomes a tragedy for all. Hardin concluded that, "Each man is locked into a system that compels him to increase his herd without limit - in a world that is limited... Freedom in a commons brings ruin for all" (Hardin 1968: 1244).

The tragedy of the commons is understood to mean that people are unlikely to restrain their

behaviour when the immediate benefits of their actions are their own, but the costs are passed onto society as a whole or onto some other specific group. Therefore, the problems of externalities are central to the commons dilemma. What Hardin failed to understand was that common property regimes like private property regimes depend on the ability to enforce the rights of exclusion. He did not appreciate that it is when management authority is lost that the property becomes an open access and that this could happen to any type of property.

3.4.2 Property Concepts

It is necessary at this stage to discuss briefly other forms of property so as to show the distinction between common property and open access, as well as to create a basic understanding about why common property is viewed as problematic while other forms of property are not considered as problematic. It is necessary to dispel the misconception that common property resources are always of an open access nature. Further, the section shows why other forms of property can also suffer from degradation.

A resource regime is a structure of rights and duties which characterise the relationship of individuals to one another with respect to a particular resource (Bromley and Cernea, 1989). Institutional arrangements are made to define property regimes over natural resources such as land, forests, range and water. The institutional arrangements, therefore, locate one individual vis-a-vis others, both within the group or outside the group. Bromley and Cernea (1989) argued that property provide a right to a benefit stream that is only as secure as the duty of all others to respect the conditions that protect that stream. Therefore, when one has a right, one has the expectation in both law and practice that ones claims will be respected by

those with the duty. When these rights are not respected and others can use that resource, then an 'open access' situation develops. When rights are not respected nor enforceable 'open access' will occur whether the resources are common or privately owned.

3.4.3 State property regimes

In a state property regime, ownership and control of property rests in the hands of the state (Bromley and Cernea, 1989), but individuals may use the resources only with the express permission of the state. Examples of state property regimes are, National Parks, National Reserves, and National Forests. In these cases the state might directly manage these resources through government agencies or they may be leased to groups or individuals for a specified period. In Zimbabwe, National Parks and National Forests are managed directly by the government. But communal lands are also state lands where peasant farmers have usufruct rights only. On state land the government grants **usufruct rights** only, to the occupiers of the land and **ownership rights to its produce, but not ownership of the resource.**

3.4.4 Private property regimes

Private property can be owned by an individual or a group. Under private ownership, the owners are free to do as they please with the assets. Private property means that there is the legally and socially sanctioned ability to exclude others, it allows the owner(s) to force others to go elsewhere (Bromley and Cernea, 1989). It is this exclusion that is enforceable by law that creates private property. Understanding exclusivity is fundamental to this study, because common property theories conclude that failure to exclude others leads to 'open access

regimes.'

Contrary to common belief, private property also suffers from degradation. This nullifies the argument that private property is best utilised and managed. Private property is not the answer to all ills. Historically, in Africa, it is known that the best lands were privatised and the marginal lands were left either as state land or common property or *res nullius*. If the resource base of those common property lands are poor, those who live on them cannot make them more productive. If these lands are not productive this does not mean that those who live on them have degraded them. In advancing this argument, Sibanda (1997) quoting Nyathi shows the falsehood of claiming that degradation of land and land-based resources is due to common property resource management.

3.4.5 Common property regimes

According to Bromley and Cernea (1989) common property represents private property for the group, since all others are excluded from use and decision making. The individuals on the common have 'rights and duties'. Common property has similarities with private property; namely the exclusion of non-owners because it is a corporate group property. The group size is known, group interests are protected with some endogenous authority system. Bromley and Cernea (1989) argue that common property ownership does not exclude individual use, for example, in most African land tenure systems, land is owned by the group, but the group leadership can allocate portions of that land to individuals or families for settlement, grazing, or cropland. A substantial amount of communal land is used by individuals and families as if it was private property.

The family can use that land without others intruding on it. For instance, in Zimbabwe's communal lands, families have 'free hold' to their homesteads and croplands. The cultivator holds usufruct rights only and is unable to alienate or transfer the ownership or the use of that land to another individual. While the above holds true in most cases in Africa, in Zimbabwe however, the individual can transfer that land to another member of the immediate family (The Land Commission, 1994). In normal common property ownerships the land reverts to the jurisdiction of the corporate ownership of the group when the user stops using it. But in Zimbabwe, croplands and homesteads do not revert to the common pool but are passed onto immediate family members. The reason for this is that in Zimbabwe communal land is state land, and is therefore strictly speaking not common property.

Those writers who support the tragedy of the commons create an impression that the only incentives of common property regimes is to pillage and plunder natural resources. This is not true and contradicts Hardin's (1968) tragedy of the commons. Property under group ownership is subject to accepted rules, which are open for all to see, and ensures group conformity to norms which serve as effective sanctions against antisocial behaviour. Individuals have rights, but they also have duties. Further, a common property regime has built into its structure, economic and non-economic incentives that encourage compliance to the established norms. Common property is not open access but private group ownership.

When authority breaks down for whatever reason, the management of resources cannot be exercised any longer and, property (common or private) degenerates into 'open access' which shows how resource degradation has nothing to do with common property, but is dependent on the authority needed to stop intrusion by non- owners.

3.4.6 Open access regimes

In open access, according to Bromley and Cernea (1989) there is no property because there are no property rights. In other words, everybody's access is everybody's property and everyone's property is nobody's property. As already shown earlier, open access results from the absence of a management authority system whose purpose was to introduce and enforce a set of norms of behaviour among participants with respect to natural resources. This is the process that was misunderstood by Hardin (1968) when he wrote his famous thesis in which he concluded that assets used in common will always suffer from degradation because they belong to nobody. It has already been established that common property is owned by the group. What Hardin described was 'open access' and not common property. The understanding of these concepts is critical to this study as this helps to explain what causes resource degradation and which property rights promote conservation.

3.4.7 Critical perspectives of tragedy of the commons

Hardin's (1968) model is abstract and simplified, but it is a justification of Western conceptions of property. The model underplays the cultural and political organisations by emphasizing the notion of marginal utility. This section explores the historical development of common property theories and attempts to explain the characteristics of common property with a view to understanding the social, economic, and cultural contexts of the behaviour of people who are involved in managing, utilising, and controlling common resources.

There are two positions that try to explain theories of common property resource

management. One body of ideas asserts that resources used in common will always suffer from a lack of effective management or control because they belong to nobody. It concludes that inevitably, these resources will be subjected to the 'tragedy of the commons', resulting in overuse, degradation, and depletion, (Hardin and Baden 1975). Hardin (1968) locates the source of the problem in 'common property' broadly understood to mean unregulated access to scarce resources. This is understood to mean that people are unlikely to restrain their own behaviour when the immediate benefits of their actions are their own, but the costs are passed on to society as a whole or some other specific group. The problem of 'externalities' are central to the commons dilemma. This view assumes that those who use resources in common cannot be left to decide how to use them, that use has to be controlled to avoid over-exploitation. It also assumes that all resources used in common are of an open access nature.

The second body of ideas asserts that, it is possible to collectively use and manage natural resources without necessarily degrading them. It has a positive understanding of common property, by concentrating on identifying those factors which enhance chances of successful collective action. They differentiate between common property and open access. But they also criticize the failure by the 'tragedy of the commons' theorists to recognise that common property is not always open access, that it assumes that users are selfish, unrestricted by social norms, and always trying to maximise short term benefits.

The tragedy of the commons theory has been heavily criticised as simplistic and unrealistic. According to Macpherson (1978) the meaning of property is continually changing and as the meaning of property changes there are disputes about what property is and what it should be. He argues that Hardin's theory failed to appreciate that property and property institutions

respond to political, economic, cultural, and ecological factors and that this process of change involves moral controversy over property what it is and what it should be. Macpherson (1978) says that property means a right to an enforceable claim, and that enforceability depends on a society's belief that it is a moral right. Macpherson (1978) argues that those resources which an individual had used his labour or his servant's labour to collect from the commons, he had appropriated to himself and these were no longer common property. He concludes his argument by quoting Locke saying, "Thus the grass my horse has bit; the Turfs my servant has cut: and the ore I have digg'd in any place where I have a right to them in common with others, become my property, without the assignation or consent of anybody. The labour that was mine, removing them out of that common state they were in, hath fixed my property in them" (Macpherson 1978:18).

3.4.8 Characteristics of Common Property

In contributing to the commons debate and criticising the tragedy of the commons, Blaikie and Brookfield (1987) describe a 'common' as a resource or facility which is distinguished by three characteristics:

- (a) it is subject to individual use but not individual possession
- (b) it has a number of users who have independent rights of use and
- (c) users constitute a collective and together have the right to exclude others who are not members of the collective.

They argued that the tragedy of the commons ignored these fundamental characteristics of

common property which clearly demonstrate that it is not open access. Blaikie and Brookfield (1987) continued to say that Common Property Resources are characterised by subtractability in use, that is each user is potentially able to subtract from the benefits accruing to other users. This implies that there are limits to the off take which any one user can make if the resource is to be sustained and used by others. The limits are what stops the tragedy of the commons from taking place. Another characteristic is that a CPR will effect excludability of the resource, that is the extent to which outsiders can be excluded. Excludability is important to theories of common property management because it is supposed to guarantee the owners of the resources that no one else can use them. The CAMPFIRE programme was built on this excludability concept. The other attribute of CPR is indivisibility, that is it cannot be divided so that each user can take their piece. Thus a common can be distinguished from a collective or pure public goods which are collectively consumed, but are not subject to exclusion of use outside the collective (Blaikie and Brookfield 1987).

Blaikie and Brookfield's (1987) three characteristics suggest that a degree of coordination between users is necessary to create rules of use and exclusion. This is done through institutions which perform the functions of defining and stabilising their expectations. Blaikie and Brookfield (1987) further argue that a common is collectively owned, but that does not mean that it is 'free for all' a fact which was not fully appreciated by Hardin. Its use is regulated by the group and the individual rights are subordinated to the interests of the group. The bundle of rights and its multiple claim rights is juxtaposed with excludability, this demonstrates that common property is not always managed through exclusion. Excludability is not always needed in the management of resources used in common.

Blaikie and Brookfield say that in a CPR, there are rules about how to share a common and how to deal with incompatible uses. Therefore, the basic issues are about decision-making arrangements. The supporters of the tragedy of the commons have tried to show that the decision-making rules will inherently breakdown and bring about the destruction of the CPR. There are many examples that demonstrate the inefficiency of common property arrangements and these are discussed later in this chapter. But Blaikie and Broockfield demonstrate that this 'free rider' solution does not exhaust other possible modes of rational behaviour. This view is supported by Bromley and Cernea (1989) who argue that Hardin's 'Tragedy of the commons' is not only socially and culturally simplistic, it is also historically false because it deflects analytical attention away from actual socio-organisational arrangements which are able to overcome resource degradation and make common property viable. Hardin's thesis assumes that the cause for resource degradation can be attributed to common property systems. It is clear, however, that resource degradation lies with the property structure, since resource degradation is also observable in private property.

McCay and Acheson (1987) say that while the Hardin model is powerful, it is an oversimplification of reality and does not take into account contextual factors, such as the presence or absence of rules about the use of the commons, or ways of monitoring and controlling behaviour of others in a commons situation. They argued that the assumption is that common property is always of the open access variety. They say that the 'tragedy of the commons' fails to recognize the social nature of property institutions even though Western law conceived property in social terms. McCay and Acheson raise another important issue where they say that wild fish and game are classic examples of open access resources because of the practical difficulties in claiming and enforcing exclusive property rights to them or to

their habitats. This point is relevant to this thesis. Acheson and Carrier (1987) however, do show that it is sometimes possible to develop strong notions of territorial rights which to an extent become a version of outright private ownership. McCay and Acheson (1987) explained that if the problem of over-utilisation lay with open access, then restricting access to a defined body of people who inhabit or lay claim to a particular territory should solve the problem. Territoriality is important to this study as it defines the boundaries of the common, however, because wildlife is a fugitive resource it is not easy to define this. Territoriality is also examined to see if it fits the producer units concept as expounded by CAMPFIRE. But it is essential to see how territoriality can be employed in the management of a fugitive resource.

According to Bromley and Cernea (1989) Hardin's thesis has led to false conceptions of resource degradation in developing countries, incorrectly attributing it to common property systems. They say that resource degradation in developing countries originates from the dissolution of local level arrangements which were responsible for resource control, use, and decision making about who would be included or excluded from using common property resources. Community-based institutions broke down because of the interference of powerful rulers, colonialists, and because of the rise of nation states. The dissolution of community-based institutions has also been fuelled by the socio-economic differentiation and the growing stratification process within communities.

Bromley and Cernea (1989) say that in order to understand common property it is essential first to understand that property is not an object such as land, but rather it is a right to a benefit stream that is only as secure as the duty of all others to respect the conditions that protect that stream. The issue of 'bundles of rights' first coined by Maine and as quoted by

Hasler (1996), considers that both the cultural and political dynamics of a particular social context need to be understood in order to understand property rights. The 'bundles of rights' demonstrates that it is possible for resources to be utilised and controlled at more than one level. The 'bundles of rights' notion makes it possible to include others who may not necessarily own the resource.

Birgegard (1993) says, however, that the tragedy of the commons has been proven flawed because there is empirical evidence showing that successful community management systems exist. He shows that in order to avoid the tragedy of the commons, management responsibility for natural resources should be devolved from government to the users of the resource. Birgegard (1993) in summing up his argument says that a range of factors have been identified as influencing the potential of community-based resource management. Most observers argue that material incentives must be considerable, predictable, and dependable to ensure participation and that the resource must be manageable in size, have clear boundaries, and that community-based organisations for common property management must be linked to the larger society. He raises concern about the long list of requirements for community-based resource management and wonders if these will not negatively affect the success of this approach.

The notion of global commons, while related to the 'bundles of rights' has been heavily contested by Sugg and Kreuter (1994) who argue that it is mischievous to treat elephants in Africa as a common heritage of humanity. They say that this conflicts with the principle of sovereignty. This notion would allow anyone from anywhere to claim control over any species of wildlife in any country. Sugg and Kreuter (1994) saw this notion as promoting open access,

a situation that would lead to conflict and rapid resource degradation.

Hasler (1996) takes this discussion further and says that the whole issue of exclusion and inclusion as supported by the common property theories is at variance with reality on the ground. He argues that while a community may exclude others from using the resource/wildlife, for instance in the Zambezi Valley in Zimbabwe, a decision by CITES may well give access to others who reside not only outside the community, but who reside outside the country. Hasler (1996) also demonstrates how safari operators and hunters who do not live in Chapoto can claim rights of access to wildlife in an area where the community considers itself to have excludability rights. He shows how exclusion and inclusion are only relative. Once a hunter comes to hunt and has been given that authority by the district council, the hunter gains access to that resource without the local people consenting to it. Hasler (1996) says that the concept of bundles of rights emphasizes inclusion and accommodation of access rights while common property theories emphasize exclusion. The bundles of rights or multi-jurisdictional access rights creates other problems which Hasler has not examined. However, the multi-jurisdictional access rights may be useful in analysing wildlife management and utilisation in Zimbabwe given that the resource is utilised and controlled at three different levels. This approach may well provide some answers as to how to share duties, obligations and benefits from wildlife amongst the various levels that seem to lay a legitimate claim to the wildlife resource.

The concept of bundles of rights attempts to explain the complexity of usufruct rights that occur in different cultural conceptions of tenure (Hasler, 1996). Bundles of rights refer to the manner in which jurisdiction concerning use, access, or ownership in land and land based

resources can be accommodated at different levels. In order to understand property rights, one needs to understand the cultural and political dynamics of a particular social context (Hasler, 1996). The bundles of rights concept accommodates multi-tiered and multi-jurisdictional claim rights at different levels. As an example, access rights to a resource can be claimed at the international level, national level, at the district, as well as at the village level. Bundles of rights is therefore more inclusive, while common property theories emphasize excludability.

According to Hasler (1996) the justificatory theories of earlier scholars (such as Locke, Bentham, Mill, Rousseau and Marx) belong in two camps; those who argued for state control of property and those who advocated for privatisation of property. The new theories and analysis of common property regimes suggest that there are rules about the use of common resources which may provide solutions to sustainability. Hasler (1996) asserts that these new theories are part of a broader anthropological goal to document and analyze cultural ecology, social organisation, decision making, cultural institutions, values, and beliefs. In that sense, therefore, common property is a social institution which is subject to a set of norms, values and beliefs which sanction individual behaviour: a position that is diametrically opposite to open access. It can be seen here that even among those who agree that common property is not open access, there are still some disagreements between those who support common property theories and emphasize excludability and those who take a more accommodating view and who support bundles of rights and multiple level access rights. There are yet two other groups, those that favour state ownership of resources, and others who believe that individual private ownership provides the best management system. It is this diversity of approaches and views that complicates property management.

3.4.9 Conservation and property relations in Zimbabwe

As already shown, the communal lands in Zimbabwe are state lands where peasant farmers have usufruct rights. The importance of this to the study is that CAMPFIRE was designed as a development strategy for these communal lands assuming that communal land was common property. An evaluation of CAMPFIRE is therefore, not possible without a full understanding of the land ownership, tenurial systems, and property rights which affect this land and the resources on it. The essence of this study was to examine whether communal lands are, in fact, common property resources or not. Further, views about the ownership of wildlife in communal lands were examined based on property theories, the bundles of rights theory and property relations in communal lands. Can theories of common property be used to develop an understanding of how wildlife is and should be managed in communal areas? Is the bundles of rights and multi-jurisdictional access rights more applicable to wildlife in Zimbabwe than are common property theories? How are these property rights impacted by globalisation? These are the questions the thesis has attempted to address.

In Zimbabwe communal lands are state lands held in trust by the President on behalf of the people of Zimbabwe. The people at the local level have usufruct rights and use this land as if they were a common property resource, except for the lands under settlements and croplands which are held as 'free hold' although without title (Land Commission, 1994). Presently, land allocation is in the hands of district councils because they have the legal or appropriate authority status over all resources in communal areas as per the District Councils Act 1982 and the 1982 amendment of the 1975 National Parks and Wildlife ACT. Therefore custodianship of all resources in communal areas is in the hands of the district councils. Of

course custodianship does not mean ownership. This essentially means that the authority of the district councils over resources is limited. However, there are other pockets of state land in district council areas such as National Parks, National Forests, as well as safari and hunting areas which are not under the jurisdiction of the district council. What appears to be a broad appropriate authority mandate to manage natural resources within the district council area begins to shrink when it comes to actual implementation. The jurisdiction of the district council is limited since it is not the owner of the resources in the district. This fact adds another dimension to the management and utilisation of these resources.

Traditional leaders such as chiefs, who before colonial rule, had powers to allocate land, no longer have such powers (Land Commission, 1994). Even during the colonial rule, chiefs had some measure of influence over land. Chiefs are only ex-officio members of the district council. There is tension between traditional resource management institutions and the modern democratic institutions that are now responsible for land allocation as demonstrated in the Land Commission report of 1994. The local people however still regard chiefs as custodians of land and of land-based resources (The Land Commission, 1994). Land and wildlife in communal areas are state property which are used by communities as common resources. These resources are really not common property, but rather 'limited access resources or pseudo commons' which are jointly managed by the state, district council, and the local people. This means that local communities cannot manage these resources as their own, they have the authority for exclusion, but this is sanctioned by the state. With limited powers to exclude others, people in communal lands cannot protect these resources in full. This situation affected Omay, the study area, in the early 1980s when immigrants from outside the district just moved into the area. But it also means that local communities cannot

make decisions about how the resources are utilised since the resource belongs to the state and management is shared. Later it will be shown how these property relations complicate natural resource management in communal lands. While the state can decide how these resources can be used, it needs the cooperation of the district council and the local communities to effectively implement that decision. If one of these partners does not cooperate many problems arise which can lead to serious degradation of the resource.

Lawry (1990) concludes that states can give group rights to state property, thereby creating a 'pseudo common property resource' which is co-managed. The thesis is therefore based on the understanding that wildlife in communal lands is a 'pseudo common property resource.' Other cases such as ADMADE and LIRD in Zambia, the Maasai Mara and Amboseli in Kenya and projects in Tanzania all show an interest in the co-management of common property through utilisation regimes (Hasler, 1996). He argues that these are co-managed arrangements of multi-jurisdictional wildlife with private, state, and community interests being exerted simultaneously. To a large extent, the Zimbabwean situation in Nyaminyami fits into Hasler's assessment.

3.4.10 Traditional institutions and conservation

Traditional institutions have over the years lost power to other parallel institutions that were created by the colonial regimes as well as by the independent states. The Land commission (1994) in Zimbabwe demonstrates how this loss of power and the creation of parallel modern institutions has impacted on natural resource utilisation and management in communal lands. The traditional institutions are examined here to gain an understanding of their potential

contribution to sustainable resource management. It is important to understand how these traditional institutions collaborate with modern institutions in the management of natural resources. Objective two aimed at establishing which institutions had been enhanced or established to manage wildlife under CAMPFIRE.

Marks (1976) as quoted by Hasler (1996) addresses another theoretical orientation that has significance for this study. This is the micro-level analysis which is featured in the writings of many cultural ecologists (Hasler, 1996). This approach suggests that traditional societies and in particular, hunters and gatherers have developed institutions and practices that allow them to achieve equilibrium in their environments. Hasler (1996) argues that apart from the difficulties of identifying what constitutes a traditional society in a changing world, it is difficult to establish with certainty this equilibrium. Sibanda (1997) also says that many writers who use this micro-level analysis tend to be nostalgic about traditional institutions and conservation approaches, without showing where these practices and indigenous knowledge still exists in a form, quantity and quality that can be tapped in order to contribute to modern conservation today.

Sibanda (1997) tries to address these inadequacies by showing how the breakdown of traditional institutions have affected traditional conservation approaches. He also shows that these traditional conservation equilibria are a product of a complex system which includes religion, beliefs, taboos, clan names system, the economic and political systems that govern resource ownership, utilisation and management. In his analysis, Sibanda (1997) concludes that what was applicable 50 to 100 years ago in Zimbabwe among the Tonga, Ndebele, and Manyika is not necessarily applicable anymore given the ever changing world and the

breakdown in passing on information through oral traditions.

Lawry (1990) as quoted by Hasler (1996) argues that common property regimes have broken down because of state interventions. This seems to echo the Zimbabwe situation in communal lands. Lawry (1990) says that these interventions reduced incentives for individuals to participate in such regimes, undercut the economic viability of common property institutions and reduced the political legitimacy of local management authorities. This study has examined CAMPFIRE in the light of Lawry's assertions.

According to Lawry (1990), in Africa, local authority is giving way to state authority and that traditional authority such as chiefs have lost legitimacy. This thesis has also examines what is happening in Nyaminyami given this theoretical assertion from Lawry. In Zimbabwe, under CAMPFIRE, the state has in fact given 'appropriate authority' to the district councils. This contradicts Lawry's generalisation and the new village assembly's bill (in theory) gives back powers to traditional institutions by giving them back authority to allocate land. The question however, is whether these provisions translate to meaningful decision making power by these local and traditional institutions. As Hasler (1996) has shown, some of these provisions are superseded by international decision-making processes.

3.4.11 Common property management

Community-based wildlife management approaches are influenced by common property theories and by the tragedy of the commons paradigm (Murombedzi, 1992; Hasler, 1996). This approach tries to engender the co-operation of local communities in wildlife

conservation through ensuring that a sufficient share of the benefits gained from wildlife management and utilisation accrue to communities (Barbier 1992, CAMPFIRE, 1986; Kiss, 1990, 1991; Murphree, 1990, 1991, 1992; Sibanda 1995a, 1995b, and 1997).

Barbier (1992) drawing from current experiences, summarises possible ways of achieving community based wildlife management:

- Revenue sharing with communities. Revenue from wildlife and related activities such as tourism, safari hunting commercial hunting is raised and shared between private sector, government and the communities.
- Employment or income generation through the development of rural programmes.
- Infrastructure investment in schools, roads, hospitals, clinics, water supplies.
- Direct utilisation of wild resources through reserving hunting quotas and licenses for local communities.

Barbier's approach places decision making and control outside the community, and allocates the community peripheral roles.

Birgegard (1993) says that increased ecological concerns, including the rapid loss of forest cover, have brought new life to an old and controversial debate on tenure and CPR. There are strong arguments against communal tenure systems in favour of individual private management systems. Some writers have developed a view that privately owned resources are better and more efficiently managed. Birgegard says, however, that research findings and

pilot development activities have questioned the privatisation argument because privately owned resources have been known to suffer degradation as well. Birgegard (1993) argues that CPR is often assessed through ideological glasses, with those strongly in favour of individualised solutions and private property shying away from community based solutions as being collective, and implicitly socialist. Those in favour of community-based management tend to idealise collective solutions as being inherently good. While most writers take note of these pros and cons, they do it in a somewhat selective manner and emphasis is put on what seems to support a predetermined position (Birgegard 1993).

Murphree (1991) tries to draw a very clear distinction between common resources - where there is open access and communal resources where there is control of use. He argues that many scholars are confused by this distinction and many of the so-called communal resources are not communal because, those communities do not have communal resource management regimes in place because the people do not have the powers of exclusion or inclusion. He uses the Zimbabwean communal areas as such an example, and argues that Zimbabwe's communal lands are state land where the people have a usufruct right only. The state, because of distance, has failed to effectively manage these resources and the communal lands now have the characteristics of an open access resource, and hence the resource degradation. There seems to be a confusion over terminology, where most writers say common property does not mean open access and open access is not property, but Murphree seems to suggest that common property is open access and communal property is not open access.

In his support for common property management, Swanson (1996) says that it is a fallacy to apportion blame for resource degradation to common property resources. He says that this

leaves a lot of unanswered questions and he poses a few:

- Commons are not routinely problematic and most of them operate efficiently. What then makes them problematic in certain situations?
- Why is it that some human societies can manage commons very well in some situations and not in others?
- Most literature tends to locate the basis for sound systems of common management on the recognition (of participants) and the exclusion (of non-participants). Why then do commons fail when there is exclusion?
- Why do some of these systems operate well when they are based on the same fundamental constituents as those that do not?

Swanson (1996) concludes that the root problem of the commons does not lie with human short-sightedness and opportunism, but with institutional failure. Hasler (1996) and Leonard (1987) offer another dimension to the reasons why poor people in many marginal rural areas and during crises inevitably degrade the environment a little more each day just to make ends meet. They argue that in these conditions resource degradation has nothing to do with form of ownership, but has to do with poverty.

As shown earlier, CAMPFIRE is one of these community-based wildlife schemes and it contains all the above components. In Zambia there are two popularly known community based wildlife management programmes, the Luangwa Integrated Resource Development Project (LIRD) and the Administrative Design for the Management of Game (ADMAGE); ADMAGE is strictly a wildlife utilisation programme in the lower Lupande hunting block of

the valley with 15 replications elsewhere in Zambia (Barbier, 1992). On the other hand LIRD is supposed to be a multi-sectoral programme for economic development covering South Luangwa National Park (Barbier, 1992). In addition to wildlife, it includes agriculture, forestry, fisheries, water resources and infrastructure. In practice, however, 60 per cent of the revenues are from wildlife (Barbier, 1992). In the LIRD 40 per cent of the revenues go to community projects, and 60 per cent to LIRD project management operating costs (Barbier, 1992).

In ADMAD, 35 per cent of revenues are disbursed to communities in the (GMA) Game Management Areas, 40 per cent to wildlife enforcement programme - game Scouts, 15 per cent to National Park Management and ten per cent to Zambia National Tourist Board. Employment is generated by the village game scouts programme. The approaches taken by ADMAD, LIRD and CAMPFIRE are similar, they emphasize the issue of benefits and do not deal so much with transferring the management of resources. These approaches beg the question 'what does community based management mean?'

According to Barbier (1992) both programmes claim success in conservation and reduction of poaching - especially elephant poaching. These programmes seek to:

- increase revenue from sustainable utilisation of wildlife resources,
- channel revenue and other benefits from wildlife exploitation to local communities,
- reduce conflicts between wildlife management and other land-use forms,
- reduce incentives for illegal use of wildlife and lower law enforcement costs.

Community-based resource management programmes have become popular and are supported internationally because it is hoped that they will solve the problems created by conventional approaches. Swanson (1992) believes that local communities are the best managers of their assets for themselves and for the global community and that there are clear roles for the 'outsiders', but ownership is not one of them. Hasler (1996) in summing up his views on this says that wildlife managers are realising that the conventional management methods are failing and are now searching for creative new approaches. One such creative way he says, is to let the people who live with wildlife and its problems manage it, and benefit from it, in the hope that this will enhance sustainability because both responsibility and benefits accrue to the local people. He says that the major problem is that the exact mechanisms by which local people are to benefit from the programme are seldom spelt out. The CAMPFIRE programme is a good example of a creative way of managing natural resources which are used in common.

3.5 Community Participation and Natural Resources Management

CAMPFIRE as a programme has placed people/communities at the centre of the development process and has made community participation one of the pillars of the programme. It states clearly that the success of CAMPFIRE will depend on the voluntary and full participation of local communities. CAMPFIRE locates the problem of natural resource degradation in the lack of community participation. This section of the thesis assesses community participation in natural resource management to establish if this is a critical factor for sustainable utilisation and management of resources. But it also assesses how community participation has impacted on the implementation of CAMPFIRE.

Community participation in wildlife conservation or in rural development projects is dealt with by a number of writers like Chambers (1986), Paul (1987), Silitshena (1989), and Dudley (1993) because it is now viewed as one of those critical factors that determine the success of projects and development programmes. The meaning of community participation is still difficult to define, although most writers now agree that it is key to the success of development projects. Paul (1987) describes community participation as a situation whereby people act in a group to influence the direction or outcome of development programmes that will affect them. This definition does not say what a 'community' is or how a 'group' is different from a 'community'. It also does not tell us about the different levels of participation in a community. It creates an impression that participation is uniform in any community or user interest groups.

Does community participation mean every single member of the community must be involved, or does it refer to people's representatives? When does everyone participate and when and why do representatives of the people participate? This study wanted to establish who participated in decision-making, planning, and management, as well as which decisions are made at each level and by whom. The study established that wildlife is managed, utilised, and controlled at three levels. It was essential for this research to establish which decisions are made at each level as this would clarify how resources are managed as well as clarify the role played by local institutions. But the study also needed to establish whether the management of natural resources had been transferred to local level producer units.

In most cases donors expect communities to participate through their elected representatives.

Silitshena (1989) says the dilemma, however, comes when these representatives become co-opted by central government or other powers, as has happened with district councils in Botswana and in Zimbabwe. When that happens, how are the people or the community participating? This issue is examined in Nyaminyami to determine how local people are participating and how their representatives are involved since this would tell us whether the transfer of management from the state to the local communities has taken place.

In trying to explain this problem of participation, Murindagomo (1990) says that in Dande, the council representatives (Council) wanted to control the distribution of benefits. The district council argued that the benefits from wildlife should be distributed to all the wards in the district because wildlife was a district resource, even if it is unevenly distributed. The people most affected by wildlife felt that only they should receive the dividend. Clearly here the representatives were in conflict with those who elected them. Murindagomo (1990) examines this question of participation through representatives further by offering this example in the same area where a wildlife committee was chosen by the whole community to represent the community when it came to sharing the benefits he tells us that this committee decided that adult single women would not receive the dividend, but that adult single men would receive the benefit. In this case how do single adult females participate in this community since they were involved in wildlife conservation and yet they were excluded from the benefit? This type of participation needs to be redefined. What does participation mean in situations like this, are single women not part of the community and how can they not participate in sharing the benefits when they were active in the conservation and management of wildlife (Murindagomo, 1990)?

Most participatory theory does not bring out the hierarchy of participation at different levels, nor does it look at who participates at the project planning and design stage, at the project implementation, management, and the benefits-sharing stage (Kiss 1991). This lack of clarity on the participation hierarchy is partly responsible for the exclusion of the adult single women in Dande. This issue of participation is linked to the failure of policy to recognise the importance of multi-jurisdictional access rights.

3.5.1 Participatory approaches

This section briefly outlines some participatory approaches and methods that have been developed since the 1970s to show why participation has been so elusive. The theoretical framework provides the tools for evaluating community participation in CAMPFIRE.

According to Dudley (1993) in the 1970s, community participation used to be the rallying cry of radicals that was going to deliver the voiceless poor from poverty, marginalisation, and oppression. More than twenty years later, participation has become obligatory in policy documents, programme documents, and project proposals to donors and implementing agencies. In the meantime, the poor have become poorer, and their numbers have increased exponentially while more participatory approaches and methodologies have been developed. Why has participation not succeeded, given its noble intentions?

Since the 1970s, 29 participatory approaches and methodologies have been developed (Chambers, 1998). Community participation has become the pet subject of NGOs, governments, donors, academics, development experts, churches and religious groups. In

some of these agencies, participation invokes justice and in others it has become a ritual that justifies their actions. Most of these groups agree, however, that success in development lies in people participating in the decision-making processes, planning, and implementation of projects (Silitshena, 1989). There is, however, still no consensus as to what community participation really is, as it is interpreted to mean different things to different interest groups.

Dudley (1993) says true participation is a threat to the powerful, to development experts, to NGOs and to all those who have vested interests. How then can those with vested interests be promoters of community participation and advocates of the poor? Community participation is about empowerment of people to manage their own development and destiny, and this threatens not just the powerful but all those with vested interests including the promoters of community participation. Participation means dis-empowerment of the powerful, and it means that power must be transferred from the powerful to the poor (Dudley, 1993). According to Dudley (1993) here in lies the paradox of participatory approaches and methods they do not have in-built empowerment processes.

Dudley says community participation has been used as both a political and physical tool by politicians, donors, and NGOs alike. It is an excellent way of bringing people together and a pragmatic way for governments to abrogate the responsibility to provide services and infrastructure by declaring that the people must do it for themselves under participatory development. For the NGOs and donors, community participation means that the local people will dig trenches, make bricks and bring sand and stone for development projects, it means providing free and value-free labour (Sibanda 1998). According to Sibanda (1998) very rarely does participation involve decision-making and planning by local people, nor does it usually

involve creative thinking and problem-solving by the poor, nor are affected communities invited to contribute ideas. CAMPFIRE on the other hand promotes community participation and makes it the centre of every decision, plan, and activity. Therefore, participation is critical in evaluating this programme.

The development of 29 participatory approaches and methodologies seems to suggest the failure of community participation because the people have not been empowered, nor allowed to decide their own destiny. But the 29 approaches and methodologies demonstrate the human desire to find a participatory approach for all situations and this has not happened. Preaching community participation has become a survival strategy for many NGOs and institutions whose business and responsibility is to advocate for it. In other words some of these NGOs are more concerned about talking about participation and less about it happening.

Governments and international agencies describe community participation as a method to accomplish physical tasks both more cost-effectively and with a greater chance of sustainability (Dudley, 1993). Governments in developing countries know that the development task is too big for them to address and therefore now regard community participation as an economic necessity. The three functions of community participation as goal, political tool, and physical tool are not incompatible, but these three categories are frequently confused. A public commitment to participation often conceals doubts as to why it might apply.

The fourth function of community participation is for development workers to persuade themselves that the activity in which they are involved is not paternalistic. According to

Chambers (1983), whatever changes to the rhetoric of community participation or community involvement, the issues are still about a stronger outsider seeking to change things for a weaker person. This finding by Chambers (1983) demonstrates the lack of transfer of power from those who have it, to those who need it to make decisions about their lives.

The failure of projects and the lack of development progress has humbled some development experts and philanthropists to recognize the importance of culture, indigenous knowledge, and indigenous knowledge systems (Sibanda, 1997). The emphasis has switched to focus on the activities of the villager as innovator and prime instigator of change and where outside researchers and aid workers are seen as enablers and resources to an indigenous process (Chambers, 1989). Some have argued that the intervener has no role to play, but those who believe in consciousness-raising like Paulo Freire (1972) have argued that the intervener has a role in helping the beneficiary to recognize the true nature of his or her circumstances. The question still stands, what is community participation? There is still no universally accepted definition of community participation. While a universal definition may not be important the concept ought to be broadly defined to create understanding amongst those who use it.

3.5.2 Participatory rural appraisal

PRA has been described as a family of approaches, methods, and behaviours that enable poor people to express and analyze the realities of their lives and conditions, and for people themselves to plan, monitor, and evaluate their actions. It is supposed to act as a catalyst for local people to decide what to do with their development process (Holland and Blackburn, 1998). Participatory rural appraisal has been added to the list and it is hoped that it will heal

all the other ills of previous approaches and failures (Holland and Blackburn, 1998). Its success is alleged to lie in the fact that the process is rooted in the communities themselves.

PRA is reviewed here to assesses how different it is from the other approaches and to see if it is applicable to CAMPFIRE as well as whether it can ensure effective community utilisation and management of natural resources by the local communities.

Chambers (1998) says that PRA is still about a powerful outsider who wants to change things for someone who is weaker. It is still an outsider-initiated process which solicits for the poor to be involved in their development. PRA is not endogenous, and it still uses the dominant conventional scientific development paradigm that views the conventional knowledge system as providing the answers. PRA does not allow for a genuine dialogue between the conventional Western knowledge system and indigenous knowledge system. When this dialogue takes place both indigenous knowledge and community participation will begin to mean something in the development process of the poor (Sibanda, 1998).

A new movement is growing that believes that development for the poor will begin only once the people are allowed to use their cosmovision to direct their own development. It is against this background that community participation in CAMPFIRE is examined and its impact assessed to see how it has been implemented and how this has contributed to an efficient wildlife management system. Further, it is to assess how participation helps communities to shape their own destiny when it is working against powerful lobbies like the one in favour of globalisation.

Community participation in wildlife management is advocated by CAMPFIRE but as shown by writers like Murindagomo (1990) Murphree(1990;1991), Metcalfe (1992), and others, community participation is relative. The CAMPFIRE programme gives it prominence, therefore, this study wants to understand how it operates in real life and how it impacts on the implementation of the programme. Community participation is used in this study as one of the performance indicators for CAMPFIRE success.

3.6 Conclusions

This literature review demonstrates the diversity of experiences, theories, and ideological persuasions of many writers. A few things, however, stand out; the poor believe that the international community and the powerful nations want to disempower them further by denying them the right to make decisions about how to utilise their natural resources. On the other hand a new brand of ecocrats believe that it is necessary to globally regulate the use of natural resources in order to balance human extraction/emission with the earth's capacity to regenerate. The promoters of global commons agree with the ecocrats because they want to make sure that everyone has access to and can enjoy those resources that are considered to be a heritage of humanity. But they also want to make sure that these global resources are not destroyed by those communities where they occur.

All believe that they want to develop approaches, strategies, and formulae that will bring about sustainable utilisation and management of natural resources. This polemical debate concerning the sustainable management of natural resources in developing countries seems to suggest that the various stakeholders are not listening to each other, a situation that is

bound to further negatively impact on these resources. The ecocrats and the developing countries where these resources exist have not yet worked out a formula that incorporates multi-jurisdictional access rights. Such a formula would have to incorporate obligations, duties, responsibilities, and rights at each level. But it must also achieve collective global equilibrium through local equilibria everywhere, where communities must utilise resources sustainably. The top-down approach of the ecocrats will fail just as other similar approaches have failed in the past.

There are obviously tensions between the local and global levels as to who should control these resources, further polarisation will not help the situation. A pragmatic solution must be found very soon. This review has provided some insights into the critical debates and issues that impact upon the management and utilisation of wildlife, but has also created a framework for analysing what is happening to CAMPFIRE.

CHAPTER FOUR

RESULTS OF HOUSEHOLD AND IN-DEPTH STUDIES

4.1 Introduction

Nyaminyami district is one of six districts in Mashonaland West Province. It is the least developed and has the lowest literacy rates. According to the 1992 census Nyaminyami had a population of 48,756 of which 27,717 were rural and 21,039 were urban. The district administration estimated that this population was about the same in 1997 following the eviction of immigrants in the late 1980s and early 1990s. These immigrants had moved into the district soon after independence in 1980. The two communal areas involved in the study are Omay and Makande communal lands. The Omay communal lands were under the chieftainships of Mola, Negande, Nebire, and Musambakaruma. Each chieftainship in Omay consists of two administrative wards, making a total of eight wards (see Table 2.4). The Makande area, formerly Kanyati, consists of two administrative wards. The total study area consisted of 10 wards (see Table 2.4).

The population of Makande and Omay is 22,624 or 82 per cent of the Nyaminyami district rural population (Table 4.1). Rural Nyaminyami has 5,996 households, and 4,562 of these are in the study area (Omay and Makande). The study area has 76 per cent of all the rural households in Nyaminyami. The population of Nyaminyami District is divided into rural and urban sub-sectors (Table 4.1). The 1992 census figures for the district are shown in (Table 4.1).

TABLE 4.1 Demography of Nyaminyami			
	Nyaminyami Rural	Kariba Urban	
Male	13583	11391	
Female	14134	9648	
TOTAL	27717	21039	
POPULATION : Surveyed Area			
	Population	Household	Average household size
Male	12058		
Female	10566		
TOTAL	22624	4535	4.9
The ten surveyed wards have 82 per cent of rural population in Nyaminyami			

The average family household size in the rural areas of Nyaminyami district is given as 4.6 and the total number of rural households as 5996. The average household size in the research area is slightly higher than the rural district average. The highest average household size in the district is in Makande where it is 6.0 and the lowest is Negande where it is 4.3.

The household questionnaire was administered to 224 heads of households. This is about five per cent of the rural households in the study area. A further 15 questionnaires were administered to key informants in the study area. Semi-structured interviews/discussions were also held with seven elderly people in the study area. In total, 246 households were included in the survey, which is 5.2 per cent of the rural households in the area.

4.2 The Household Survey

The overall objective of the study was to determine the contribution of CAMPFIRE to common property resource management. It was to further assess the effectiveness of CAMPFIRE as a natural resource management strategy as well as to establish its sustainability. The study developed seven objectives to meet the specific overall objective. The research design aimed at collecting data that would meet these objectives. It was considered that the needed data would be generated through the use of a number of survey instruments. Primary data was collected through structured household and key informant questionnaires and by obtaining information through semi-structured interviews and ethnographies. This section presents the data collected through the structured household questionnaires.

Respondents for the household survey came from Mola, Negande, Nebiri, Musambakaruma, and Makande. Descriptive data analysis was administered, some questionnaires had multiple answers and these had to be coded a second time and the data further analyzed. In three major cases the means and standard deviation were found: for income, the number of livestock owned, and the number of bags of crops harvested in the last season. Correlation was also looked at in some of the questions to test how some particular observations affected the others. However, the data on crop harvest and livestock ownership was not as accurate as had been anticipated and therefore the value of these tests were limited.

The questionnaire also contained a number of open-ended questions. These had to be manually analyzed and each answer from the respondent was written down and then similar

answers were grouped together and the analysis was based on this. Open ended questions yielded valuable information for this study and are considered critical to the results of the research.

4.2.1 Age by gender

Table 4.2 shows that the majority of respondents were in the age group, 16 - 30 years old which accounted for 57 per cent, followed by the 31 - 60 years age group with 32 per cent and the balance were more than 60 years old and accounted for 11 per cent. This corresponds to the age distribution reflected in the 1992 census figures (Census 1992). The community now has a predominantly young population and age distribution which is significant for the study as will be seen later in relation to indigenous knowledge and traditional practices.

TABLE 4.2 Respondents by Age		
Age Group	Numbers	%
16-30	127	57
31-60	73	32
60+	24	11
TOTAL	224	100

TABLE 4.3 Respondents by Sex		
Sex	No Respondents	%
Male	163	73
Female	61	27
TOTAL	224	100

Table 4.3 shows that 73 per cent of the respondents were male and 27 per cent were female. The survey had aimed at capturing a minimum of 25 per cent female respondents and so had succeeded. Since the Tonga are a matrilineal society, it was expected that the numbers of female respondents would have been higher. However, as explained earlier, males still dominate their marital families and males are regarded as the heads of the households.

4.2.2 Wildlife ownership

A total of 224 respondents were asked who owned wildlife in Nyaminyami at the present moment. Table 4.4 gives their responses, 83 per cent of them believe that the community owns wildlife in Nyaminyami today, another 12 per cent said wildlife is owned by the state, while three per cent said wildlife was owned by God. The balance of two per cent either did not know or did not answer the question.

TABLE 4.4 Wildlife Ownership		
Ownership	No of Respondents	%
Community	186	83
State	27	12
God	8	3
Don't Know	3	2

The chiefs were not seen to own wildlife. This confirms the historical information which shows that traditional rulers did not own resources but merely administered resources in accordance with the norms and decisions of the community. The local government structures:

district council, WARDCOs and VIDCOs were not seen to own wildlife either. These findings are significant because according to CAMPFIRE, the district council has "appropriate authority" over natural resources in the district. This point will be discussed further later.

The answers were, however, different when it was asked how wildlife was owned the under traditional system (Table 4.5). The following answers were given:

System		
Ownership	No	%
Community ownership	134	60.0
Owned by God	52	23.0
Owned by Chiefs	31	14.0
Do not Know	7	3.0

It is significant that under traditional management, ownership by the community responses fell from 83 per cent today to 60 per cent in the past while ownership by God rose sharply to 23 per cent from 3 per cent. In the historical section we have already shown that traditionally, the Tonga did not see natural resources as being owned by the community but by God. These answers show the lack of full understanding by the majority of the respondents as to how resources were traditionally owned. The majority of the respondents aged 16 - 30 had no experience with the traditional ownership system.

4.2.3 Responsibility for wildlife management

When asked about who has responsibility for the management and conservation of wildlife, 53 per cent said the district council, while 36 per cent identified the community, and 11 per cent mentioned others such as the state and WADCOs. These perceptions were shared equally among the four chieftainships in Omay, while there was a stronger showing for the state in Makande. As shown, Makande is a recently re-organised resettlement area where the government is more visible than in Omay, hence this perception.

4.3 Benefits From CAMPFIRE

According to the literature, CAMPFIRE is concerned with the decentralisation of the management of natural and wildlife resources from national level to community level. In agriculturally marginal areas, wildlife is seen by CAMPFIRE advocates as being the most ecologically sound, economically beneficial, and sustainable resource utilisation strategy.

One of the goals of the questionnaire was to establish what benefits people receive from the CAMPFIRE programme. The answers below in Tables 4.6 - 4.8 show that most respondents got more than one benefit. Table 4.6 shows that in Makande respondents were giving more than one answer for each category. It is not clear why they responded this way.

	Makande	Mola	Musamba	Nebiri	Negande	Total	%
Family	28	43	14	24	24	133	59
Community	9	30	10	8	9	66	30
Individuals	35	9	2	3	6	25	11

	Makande	Mola	Musamba	Nebiri	Negande	Total	%
Community Projects	20	56	16	15	13	120	54
No Community Projects	22	26	10	20	26	104	46
TOTAL	42	82	26	35	39	224	100

	Makande	Mola	Musamba	Nebiri	Negande	Total	%
Family	24	38	15	24	20	121	54
Community	18	44	11	11	19	103	46
TOTAL	42	82	26	35	39	224	100

The respondents indicated that they received cash in the form of both individual or household dividends, as well as a community dividend. Hunting takes place during the winter when the animals have moved closer to the remaining water source. Consequently Chief Mola's area is by far the largest beneficiary of CAMPFIRE because of its proximity to the lake (Figure 2.1). Community projects cited were schools, school books, clinics and medicines, and grinding mills. While this analysis shows the range of benefits that the people receive it does not tell us about the impact that CAMPFIRE has on the people's lives. Popular CAMPFIRE

literature shows that the success of CAMPFIRE is based on these direct benefits which act as incentives for local people to support the programme. It will be shown later how these benefits impact on community participation in wildlife management.

4.4 Decisions on Income Utilisation

The survey tried to establish who makes decisions about how income from CAMPFIRE/wildlife is used. A total of 56 per cent of the respondents saw the district council as being the major decision-maker on how income is utilised, another 26 per cent said it was the households, while 8 per cent identified VIDCOs/WADCOs as making decisions and the remaining 10 per cent were not sure. While the district decides how income is used it does not decide how wildlife is utilised.

	Makande	Mola	Musamba	Nebiri	Negande	Total	%
State	0	0	0	0	0	0	0
Provincial Council	0	0	0	0	0	0	0
District Council	21	40	16	24	20	121	54
WADCO	3	8	3	0	5	19	8
VIDCO	3	8	1	5	3	18	8
Households	15	20	4	6	11	56	25
Individuals	0	6	2	0	0	10	5
TOTAL	42	82	26	35	39	224	100

These perceptions reflect reality on the ground. The District Council receives all the revenue from CAMPFIRE and keeps 13 per cent for administration purposes, 12 per cent as a council levy and 75 per cent is divided among the wards according to how many and which animals were killed in which ward. At the ward level, decisions are made about how much income should be distributed as household dividends and how much should go to which community projects. If projects occur in a village, further decisions are made at that level.

According to the respondents, state and provincial councils do not feature in the decision-making process. In fact, the questionnaire shows that the provincial council does not feature at all on issues related to wildlife. This level of administration seems not to make any impact on the utilisation, management, and conservation of wildlife. It is questionable, therefore, whether the provincial administration can play a meaningful role.

When a question was asked about who should make decisions about income utilisation (Table 4.10) the picture changed dramatically. The majority of respondents 31 per cent said that the households should be the ones that make these decisions. Another 24 per cent said these decisions should be made by the community. There were, however, a number of other responses exceeding the sample size which indicates that decision-making on this issue is viewed as a shared responsibility. Table 4.10 presents the responses:

TABLE 4.10 Who should decide on income utilisation							
Category	Makande	Mola	Musamba	Nebiri	Negande	Total	%
Household	18	30	28	32	32	140	31
Community	14	44	20	14	16	108	24

District	6	20	22	24	10	82	18
Council							
Central	4	4	0	0	6	14	3
Government							
WADCO	8	18	10	6	2	44	10
VIDCO	8	24	6	16	4	58	13
Others		4				4	1
TOTAL	58	144	86	92	70	450	100

It is clear that respondents were giving more than one answer to this question because they wanted to demonstrate that the decisions about the utilisation of CAMPFIRE income were seen as a joint responsibility, with the household taking a leading position. The wide range of answers also indicates the desire of the respondents or the community to have as many individuals and institutions as possible participating in this exercise. In other words, the current decision making-process is seen as being inadequate. These results seem to contradict the Murphree's law which states that each level wants to control power and the use of resources from the level below it and that the levels below will always want to wrest power and control of resources from the level above them. These answers suggest that local people want to share control of resources with other levels. The heads of households could have said the decision-making should be made by themselves; the answers however reflect a willingness to share that responsibility. This point is further discussed later.

4.5 How Income is Distributed and by whom

Table 4.11 shows that the head of the household was seen as the major recipient of wildlife/CAMPFIRE income. But other levels, individuals, and institutions were also recognised for the incomes that they received.

Category	Makande	Mola	Musamba	Nebiri	Negande	Total	%
Head of Household	44	46	22	23	22	157	65
Any Adult	0	20	4	0	4	28	12
Household	0	0	4	4	14	22	9
Adult Men	0	2	0	2	4	8	3
Adult Women	0	2	0	2	4	8	3
Other	2	12	2	4	0	20	8
TOTAL	46	82	32	35	48	243	100

However when asked who should the income go to a different picture emerged (Table 4.12).

Category	Makande	Mola	Musamba	Nebiri	Negande	Total	%
Head of Household	18	56	14	25	22	135	49.5
Any Adult	12	14	6	12	6	50	18.8
Household	2	4	6	12	10	34	12.5
Adult men	0	2	0	0	0	2	0.07
Adult women	0	2	0	0	2	4	1.5
Father	2	6	0	4	0	12	4.4
Mother	8	2	2	2	4	18	6.6
Other	4	4	0	2	8	18	6.6
TOTAL	46	90	28	57	52	273	100

Percentage is worked from total number of answers.

It is not surprising that the head of the household was seen as the one who should receive dividends because the majority of those interviewed, were heads of households. It is, however, significant that the majority of male heads of households who were interviewed felt that the current situation was not fair. They wanted other people in the community to also receive dividends. Assuming that they answered truthfully, it would seem as if the heads of households wanted other people in the community to have a share of this income. This suggests that rural people in Nyaminyami may not necessarily want one group to be the only beneficiaries of these resources. This seems to confirm the Tonga cosmivision which emphasizes justice and fairness instead of maximisation of benefits by the individual. In their study, Reynolds and Cousins (1993) found the Tonga society to be egalitarian. Mathews (1976) found the nature of the Tonga valley subsistence ecology and their technical practices did not favour the development of any permanently institutionalised social inequality. These results reflect an element of the egalitarian nature of the Tonga people which is not normally captured in most literature that has examined CAMPFIRE.

4.6 Decisions on Wildlife Use and Problem Animals

The goal of the question was to find out who should decide how wildlife is utilised in Nyaminyami. According to the respondents, the majority, 75 per cent, believe that the district council is the institution that must make the decision about how wildlife is utilised (Table 4.13). Another nine per cent said that this responsibility belonged to central government, while 14 per cent were undecided about whose responsibility it should be. Clearly, the people of Nyaminyami do not agree with the present arrangements where central government is the one that decides how a district resource is utilised. The present situation negates the

'appropriate authority' given to the district council, as the council has custodianship over resources in communal lands, but no power to decide how those resources are used. The district council merely implements the decisions of the DNPWLM which represents central government.

4.6.1 Problem animals

Table 4.13 shows that the majority of those interviewed said crop destruction by wild animals was the biggest problem they faced, along with other property damage. All the survey areas, including Makande which does not have many wild animals, recorded problem animals as a major challenge to conservation.

Category	Makande	Mola	Musamba	Nebiri	Negande	Total	%
Crop Destruction	34	62	32	26	20	174	46
Destruction of Livestock	16	50	24	16	18	124	32
Destruction of Other property	0	18	18	10	8	54	14
No problems	2	0	0	0	0	2	0
Other Problems (eg attacking humans)	2	14	2	6	0	24	6
TOTAL	54	144	76	58	46	378	

Table 4.14 shows that poaching was not viewed by the household respondents in this survey as a major problem. Poaching was cited on a number of occasions in other contexts but the perpetrators were said to be people from Gokwe, a neighbouring district. The Tonga argued

that their own people would not kill animals for money because it is taboo for them to do that. But some Tonga elders confessed that given the economic pressures of today some young people have compromised, and do participate in some of these activities which would be taboo under traditional Tonga wildlife management. Further, 24 per cent thought that the WADCOs and VIDCOs should employ or increase the number of local scouts to deal with the problem of poaching. Another 15 per cent of the respondents thought this was a community responsibility. Interestingly, 44.7 per cent did not believe that poaching was a problem in Nyaminyami. Poaching may be an official problem, but it is not seen to be a real problem in Nyaminyami.

4.6.2 Poaching

Category	Makande	Mola	Musamba	Nebiri	Negande	Total
State	2	0	4	2	4	12
District Council	2	14	12	4	6	38
WADCO/VIDCO	10	18	12	10	4	54
Producer units	2	10	12	6	4	34
Community	2	8	4	0	4	18
Others	0	0	2	0	2	4
TOTAL	18	50	46	22	24	160

A summary of views obtained from comments by respondents indicates that the majority, 72 per cent, did not believe that the direct benefits they received were responsible for the decrease in poaching. These comments show that before CAMPFIRE was introduced local

people had nothing to do with wildlife management and conservation. The responsibility for these lay with the state, therefore there was no way of measuring the local people's response to conservation. These comments indicate that local communities place more importance to the fact that they have now been given responsibility for wildlife management than cash and material benefits. The decrease in poaching is a result of the positive feelings due to this recognition.

4.6.3 Source of conservation messages

The survey wanted to establish what channels of communication CAMPFIRE uses to bring conservation awareness to the people of Nyaminyami.

The information gathered in Table 4.15 shows that people receive their conservation messages from more than one source. Meetings are the major source of conservation messages and information. The local government structures, like the councillor and the WADCO/VIDCO, also play an important role in raising awareness about conservation. The radio plays a small part in providing conservation messages, since in Nyaminyami the observation and rapid rural appraisal found that there is a low ownership of radios.

Source	Makande	Mola	Musamba	Nebiri	Negande	Total
Meetings	22	54	26	34	32	168
Radio	12	18	18	8	8	64
Training	4	0	2	6	4	16
Pamphlets	0	4	2	2	0	8

WADCO	4	20	18	12	6	60
VIDCO	6	20	18	12	10	66
Councillor	12	26	20	18	14	90
Wildlife Committee	2	12	18	8	4	44
Other	0	2	0	6	0	8
TOTAL	62	156	122	106	78	524

4.6.4 Best institutions to manage wildlife

The respondents were also asked whom they thought should manage wildlife. Table 4.16 shows that the majority of the respondents said that central government should be responsible for wildlife management, followed by the district council and then the VIDCOs and the community. It is significant that the community would like to see the state taking more responsibility for wildlife management, and yet they want the district council to take a leading role in deciding how that same wildlife is utilised, with the community taking a leading role in deciding how income from wildlife is utilised. This seems to suggest that communities see wildlife management and utilisation as a shared responsibility.

Institution	Makande	Mola	Musamba	Nebiri	Negande	Total
District Council	10	10	8	10	16	54
WADCO	0	2	2	2	0	6
Wildlife Committee	0	4	0	6	2	12
State	24	40	22	35	14	135
Other	2	10	4	0	8	24
TOTAL	36	66	36	53	40	231
Not all the respondents answered this question, however, some gave more than one answer.						

Decision Maker	Makande	Mola	Musamba	Nebiri	Negande	Total	%
District Council	26	42	24	35	24	151	70
DNPWLM	8	10	4	10	10	42	20
WADCO	4	2	0	0	0	6	3
VIDCO	2	2	0	2	0	6	3
Communities	0	6	2	0	0	8	4
Producer units	0	0	0	0	0	0	0

In a comparison between whose responsibility it is to conserve and manage, and who decides how wildlife is used, the district council comes out strongly in both cases with 44 per cent. In the comparison between who should decide how wildlife is utilised under CAMPFIRE and whose responsibility it is to conserve and manage wildlife, 40 per cent of the respondents said it was the district council. The district council is perceived as having a major role in the management and conservation of wildlife.

4.6.5 Gender Analysis

The data from the structured household questionnaire was also gender segregated to determine if there were any significant differences between the way females and males perceived wildlife. In general the survey found that there were no major significant differences between how males and females viewed wildlife. There were a few exceptions, although these were considered to be minor. Only those questions which showed some differences are discussed here, since the overall picture has already been given in earlier sections.

In answering questions five and six there were no differences in the way males and females answered. As an example when respondents were asked who owned wildlife in Nyaminyami (question 6), 79 per cent of the male respondents identified the community and 78 per cent of the women respondents gave the same answer. However, when answering question number seven some small differences did emerge. In responding to the question which was, who was responsible for wildlife management, 54 per cent of the male respondents mentioned the district council, while 67 per cent of the females gave the same answer. As a percentage female respondents gave a higher rating than males in answering this question.

Some significant differences were noticed when the question on benefits was asked. Female respondents rated the benefits in the following way, 77 per cent mentioned meat, 64 per cent gave household dividends, and 50 per cent mentioned community projects. Males viewed the same benefits as important but rated them differently, 71 per cent said household dividends were the most important, followed by community projects with 64 per cent and meat ranking third with 52 per cent. This shows that when it came to benefits males and females put emphasis in different areas. The women were more concerned about food and benefits coming directly to the family, where as males put emphasis on household dividends and on community projects.

When answering question number 13 on who should decide how income from wildlife should be utilised, the following was observed: 67 per cent of the females mentioned the district council, 20 per cent said household, and 13 per cent each to WADCOs and VIDCOs. According to the male respondents 59 per cent identified district council, 29 per cent household, 10 per cent VIDCOs and 7 per cent WADCOs. While they identified the same

answers the emphasis was different. When asked how income should be shared 74 per cent of the female respondents favoured the household, and 32 per cent said community against the male 60 per cent for district council and 49 per cent for community. The respondents were giving more than one answer.

In answering the question who should decide how wildlife is utilised both females and males gave the district council a first rating. Small differences were observed: 90 per cent of the females identified the district council against the males 76 per cent for the same answer. On the rest of the questions there were no differences indicating that general perceptions about wildlife are the same on most issues. There were no significant differences either on the open ended questions.

In the methodology, it had been assumed that because Tonga society is matrilineal female respondents would view wildlife differently from males. It had been assumed that females in Tonga culture would have more decision-making power than would be the case in patrilineal societies. These responses show that there are no major differences between how males and females perceive wildlife. The only significant differences were that females placed more importance and value to food and family income while males placed more importance to community projects and to head of household incomes. Females favoured a reward system that created food and family security. While the Tonga society is matrilineal females did not display that they had more power in deciding how resources are utilised.

4.7 Open Ended Household Questions

The open ended questions were manually analyzed, each answer was recorded and this process was followed by classifying these answers into groups, to produce the tables below. Open-ended questions allowed the respondents to provide fuller, more wide-ranging answers with more depth of meaning. These questions captured more considered views of respondents and facilitated deeper analysis and a better understanding of the issues.

The concept of managing wildlife was not completely understood by the respondents (Table 4.18). The respondents associated management with domestic animals, wild animals were generally seen as free-ranging and therefore not managed by humans. According to Table 4.18 27 per cent of the respondents said wildlife was never managed by anyone. This shows that for these local communities 'wildlife management' is an alien concept and as far as they are concerned, animals belong to God although humans have a responsibility to care for and utilise them. The term management in relation to wildlife is not understood in Tonga culture. The Tonga do not see themselves as managers of nature, but as having a responsibility for tending the earth. The West sees humans as managers of nature, while the Tonga view humans as tending this garden. These differences are important, because if not properly understood they may lead to distortions of how one group interprets what the other is saying.

In general, therefore, there was a strong showing that animals were not managed by anyone and these answers were qualified by saying that 'wildlife was free and nobody managed it.' In Makande, Mola, Musambakaruma, and Negande 20 per cent of the respondents indicated that under traditional management hunting was done, but with conservation in mind (Table 4.18). The communities here reinforce the fact that resource/wildlife utilization was never prohibited, but that it was controlled.

A total of 11 per cent of the respondents in all the chieftainships did not know how wildlife was managed traditionally and this may be an indication that the concept of traditional wildlife management has not been passed onto younger generations. The majority of these respondents were generally below the age of 31 and so this may be a indication that there has been a breakdown in the oral traditions. Most of the information is no longer passed on from one generation to the next. Since Kariba dam was built, the Tonga no longer use traditional wildlife management practices and related indigenous knowledge because they had been denied access to wildlife for decades and there was neither place nor resources to practise these.

Responses	Makande	Mola	Musamba	Nebire	Negande	Total
Number of interviewees	42	82	26	25	39	224
Hunted with conservation in mind	7	26	3	0	2	38
Nobody managed animals	14	23	4	12	0	53
By Traditional leaders and people	5	0	4	8	6	23
Don't know	9	0	2	4	6	21
By white people	3	3	2	3	0	11
Animals lived by grace of God	3	5	0	1	0	9
Put in game reserves	3	10	1	1	2	17
N/A	3	5	0	1	0	9
Rules and Laws	0	0	0	1	2	3
Free to hunt/ no restriction	0	0	4	0	6	10
No control continued killing	0	0	0	0	12	12
By Community	0	3	1	0	2	6

No problem with animals	0	0	0	0	2	2
Always conflict with animals	0	3	1	0	0	4
Co-existence	0	0	1	1	0	2
Through Spirits/Totems	0	3	1	0	0	4
Chiefs	0	0	0	4	0	4
Power weapons never used	0	6	0	0	0	6
TOTAL	47	82	22	35	40	226

In Makande 21 per cent of the respondents did not know how wildlife was traditionally managed. This is not surprising because many of these resettled people come from areas where there is no wildlife. Negande also showed that wildlife was not as major a resource as in other areas. But 30 per cent of the respondents in Negande also said that traditionally there was no control on how wildlife was utilised and that animals were continuously killed.

The notion that nobody managed wildlife under traditional systems was strong in Makande with 33 per cent, Nebiri 34 per and Mola 24 per cent of the respondents saying no-one managed these animals. Either the terminology is not understood or the concept did not exist.

Adopting traditional practices and indigenous knowledge may not be easy if many people have never had practical experience with them. This is the danger of nostalgia for indigenous knowledge. Traditional leaders and communities played a role in wildlife management, but they did not play a major role. Tonga chieftaincy was always weak, and the control of natural resources lay in traditional customs, taboos, and to a certain extent the spiritual leaders.

As can be seen from Table 4.18, a number of respondents confused traditional management and conventional management. When asked about traditional management, 11 respondents said wildlife was managed by white people and another 17 said wildlife was put in game reserves. This shows confusion between traditional Tonga wildlife management and conventional management introduced by the colonial administration. The analysis shows this group was below the age of 31 and had no experience with traditional management, but knew only conventional management introduced by the colonial administration.

Responses	Makande	Mola	Musamba	Nebire	Negande
Number of interviewees	42	82	26	35	39
Conservation of natural resource, wildlife and environment	23	65	16	5	10
Sharing resources and benefits	10	0	0	0	2
Don't know	7	3	1	4	12
Sharing meat and money	2	8	1	6	3
Solutions to problem animals	0	0	0	0	2
Breeding animals and how they live	0	0	0	0	2
N/A	0	0	0	4	4
Kill animals to sell and give money to community	0	3	1	0	4
Development of natural resources	0	0	2	0	0
Programme for wild animals	0	0	1	0	0
Compensation for crops	0	3	2	3	0
Conservation of crops and selling animals	0	0	1	0	0
Animals forcibly taken away from people and killed	0	0	0	3	0
Protection of crops from animals	0	0	0	1	0

TABLE 4.19 As far as you understand, what is CAMPFIRE?					
Responses	Makande	Mola	Musamba	Nebire	Negande
Selling wildlife to white people	0	0	0	1	0
Protection of animals against poachers	0	0	0	5	0
Warns people against hunting	0	0	0	1	0
TOTAL	42	82	25	33	39

Determining local people's understanding of the CAMPFIRE programme's situation was crucial to the evaluation. The level of understanding of what CAMPFIRE is, varied a great deal from area to area (Table 4.19). The people of Mola had the best understanding, 82 per cent of all those interviewed understood that CAMPFIRE was about the peoples conservation of natural resources including wildlife, and that the benefits from those resources are to be shared among the people in the community. Later it will be shown that it is also a reflection of the fact that the people of Mola are by far the largest recipients of CAMPFIRE benefits, including cash dividends. This means that since they receive most of the benefits, they also understand what CAMPFIRE is better than those who do not get the same benefits.

In Negande 30 per cent of the respondents did not know what CAMPFIRE was. This is a very high percentage in area where CAMPFIRE has been implemented for ten years. As shown in Chapter Six Negande received the smallest share eight per cent of CAMPFIRE income between 1989 and 1994 as compared with Mola's 48.57 per cent for the same period. Another 25 per cent of the respondents had full knowledge of the programme, while 23 per cent had partial knowledge. These respondents understood the elements of the programme such as

sharing of money and meat, they misunderstood some components, citing killing and selling of animals to whites as important components of CAMPFIRE.

In Nebire, only 14 per cent of the respondents fully understood the CAMPFIRE programme, with another 17 per cent who had some knowledge CAMPFIRE. The perception of CAMPFIRE in Nebire is not very positive. The respondents gave answers such as 'selling wildlife to white people, animals forcibly taken away from people and killed, conservation of crops and selling animals.' The answers that indicate some understanding were 'compensation for crop losses and protection of animals against poachers.' The general picture is one of not fully understanding the programme. It was surprising that after 10 years the general level of understanding was still low in this area. The people of Nebire received only nine and half per cent of the total revenue generated by CAMPFIRE in the district between 1989 and 1994 District Council Records 1996 (Figure 6.1). In contrast, Mola received 48.57 per cent of the total CAMPFIRE income in the same period so there seems to be a direct relationship between the level of understanding of what CAMPFIRE stands for and the amount of income received by communities. This relationship makes sense because those who receive benefits must certainly be interested in knowing more about a beneficial programme.

In Musambakaruma, 61 per cent of respondents fully understood CAMPFIRE. Another 19 per cent had some knowledge of the programme, and often quoted important elements of it, such as wildlife conservation, crop protection, and sharing of benefits. There seems to be a genuine misinterpretation of CAMPFIRE by those who see it as being about killing or selling animals, this perception comes from CAMPFIRE's weaknesses, which emphasizes benefits

rather than conservation, and promotes hunting for sport.

In Makande, CAMPFIRE is well understood for an area that has little wildlife as demonstrated by the fact that 54 per cent of the respondents had a full understanding of the programme, while another 28 per cent had a reasonable understanding of CAMPFIRE. Only 18 per cent did not know about or understand CAMPFIRE. The 18 per cent came from villages which had no CAMPFIRE programme.

The data in Table 4.20 shows that CAMPFIRE is seen as providing resources for community development, that it supports community projects, provides money to people, teaches conservation and conserves wildlife for future generations, as well as helps to protect crops from wild animals. These are seen as obvious advantages by the majority of the respondents. There is, however, a very strong showing by those who feel that CAMPFIRE has no advantages and these perceptions came from Nebire with 34 per cent, Mola 15 per cent, Makande 16 per cent, Musambakaruma 15 per cent and Negande five per cent. There are still people in these communities who do not see CAMPFIRE as having any advantages, such people cannot support the programme.

Most likely these people have not benefited from the CAMPFIRE programme. This confirms some of the issues raised by elderly people who live alone and are not considered to be a household and therefore do not benefit from the programme.

TABLE 4.20 What is the advantage of CAMPFIRE if any?					
Responses	Makande	Mola	Musamba	Nebire	Negande
Number of interviewees	42	82	26	35	39
Benefits	5	0	0	1	0
community projects	7	5	1	0	3
preservation of wildlife	2	0	0	0	0
developing communities	9	36	1	1	4
conserve wildlife future	5	18	7	6	0
stops crop destruction	2	0	0	4	2
nothing	7	13	4	12	2
don't know	2	0	3	1	2
money is too little	1	0	0	0	0
money	2	5	4	5	10
buy meat	0	0	1	3	6
awareness animal conservation	0	0	2	0	4
taming wild animals	0	0	0	0	2
not applicable	0	0	1	0	2
sharing resources	0	0	1	0	2
compensation for crop destruction	0	3	1	0	0
building schools	0	0	0	1	0
advantage for powerful people	0	2	0	1	0
Total	42	82	26	35	39

The data in Table 4.21 shows that the community and the district council are viewed as the producers of wildlife in Nyaminyami. National Parks and the government are perceived as second in line as wildlife producers. But it became apparent that the concept of wildlife producers was not understood. The Tonga people do not see wildlife as being produced or even owned by humans, hence the answers given here may not reflect accurately the people's

understanding of these issues. The concept of producer communities is really an academic one having been coined by the promoters of CAMPFIRE.

Responses	Makande		Mola		Musamba		Nebire		Negande	
	No	%	No	%	No	%	No	%	No	%
Number of interviewees	42		82		26		35		39	
Community	12	29	26	32	8	31	7	20	2	5
District council	16	38	16	20	9	35	12	34	12	31
National parks	7	16	12	14	0	0	7	20	3	8
VIDCO	2	5	10	12	0	0	0	0	2	5
Don't know	5	12	0	0	0	0	1	3	0	0
Government	0	0	2	2	0	0	3	9	14	36
God	0	0	0	0	0	0	0	0	2	5
N/A	0	0	16	20	8	30	5	14	2	5
Game scouts	0	0	0	0	1	4	0	0	2	5
TOTAL	42	100	82	100	26	100	35	100	39	100

Table 4.21 shows that in chief Mola's area, the VIDCOs were considered to be wildlife producers. In Negande, government was viewed as the major wildlife producer with 36 per cent of the respondents identifying it. All the areas except Makande showed that the concept of producer unit was not applicable.

Responses	Makande		Mola		Musamba		Nebire		Negande	
	No	%	No	%	No	%	No	%	No	%
Number of interviewees	42		82		26		35		39	

Government most able, has personnel and money, experience	23	55	31	38	7	27	14	40	14	36
District council - closest to people, close to resources, right skills and funds	13	31	21	26	12	46	13	37	6	15
WADCO/VIDCO to own and control resource	3	7	18	22	3	11.5	7	20	6	15
Not applicable	3	7	0	0	3	11.5	0	0	2	5
State and District Council together	0	0	0	0	0	0	0	0	3	8
Community - directly affected	0	0	3	3	0	0	0	0	2	5
Not sure	0	0	0	0	0	0	0	0	2	5
Don't know	0	0	0	0	0	0	0	0	2	5
Provincial more power	0	0	9	11	1	4	1	3	0	0
TOTAL	42	100	82	100	26	100	35	100	37	100

In Table 4.22 the state was seen by the majority as the rightful authority to own National Parks, 35 per cent of all the respondents supported this view because the state was seen as having the power, the money, the personnel expertise and experience necessary to run the National Parks. However, another 26 per cent said that National Parks should be owned by the District Council, because these resources fell within the district council area and should therefore belong to the district residents. The district was seen as being close to the resource and the people, but also as possessing the right skills and the necessary funds to manage them. The issues of skills and funds were seen by the local people as critical to the effective management of National Parks. The local people understood clearly that while they may want to own this resource, nonetheless they did not have the capability to manage such a resource.

The people of Nyaminyami were very realistic about what they could own and gainfully manage, but they also understood that National Parks are not like anything that the traditional system ever managed.

Table 4.22 shows that another 15 per cent of the respondents felt that the National Parks should be owned and managed by the WADCOs/VIDCOs so that the people can directly own and control these resources. Those who wanted the district council, WADCO and VIDCO to own National Parks totalled 41 per cent of the total respondents. The communities are aware that much revenue is generated from National Parks' wildlife-based tourism. They understood that ownership would ensure control over the resource. Current arrangements do not allow the citizens of the district to benefit from this resource. The local people want to benefit from a resource that is in their district, they do not necessarily want to control it on their own.

Policy is not clear on how the income from a resource like National Parks should be shared at the national, district, ward, and village levels. All these levels participate in the conservation, management, and enhancement of the resource. The district council maintains many of the feeder roads that lead to the National Parks, whilst directly participating in the conservation of wildlife which spends a considerable amount of time on the land adjoining communal areas.

TABLE 4.23 What has CAMPFIRE done for you either as an individual, household, or community?							
Responses	Rank	Makande	Mola	Musamba	Nebire	Negande	
No. of interviewees		42	82	26	35	39	Total
N/A	8	5	0	0	3	2	10

TABLE 4.23 What has CAMPFIRE done for you either as an individual, household, or community?							
Responses	Rank	Makande	Mola	Musamba	Nebire	Negande	
Meat	3	7	16	9	4	14	50
Cattle dips		3	0	0	0	0	3
Grinding mill	7	7	0	0	4	0	11
School	5	12	0	1	4	0	17
Nothing	2	8	18	8	10	6	50
Money	4	8	18	2	7	12	47
Books for co-operative		3	0	0	0	0	3
Community projects	1	0	31	4	1	18	54
Employment		0	0	0	0	2	2
Compensation	6	0	3	2	7	0	12
Pegged fields		0	0	0	1	0	1
Fencing crop fields	9	0	0	0	4	0	4
Roads		0	0	0	1	0	1
Hospital		0	0	0	1	0	1
Warehouse	10	0	0	0	4	0	4
TOTAL		53	89	26	51	56	270

The responses to this question are very diverse as shown in Table 4.23, but the majority show that they have benefited directly from CAMPFIRE. Benefits range from cash to community projects such as schools, hospitals, shops and compensation for crop damage. There is, however, a strong 50 responses from those who feel that they have gained nothing from CAMPFIRE. Nebire leads in discontentment followed by Mola and Negande. While Mola generally receives the highest benefits from CAMPFIRE, there still seems to be a sizable group in Mola that do not get benefits. This is associated with the CAMPFIRE microcosmic view, which is the dominant CAMPFIRE paradigm in Nyaminyami. Even in Mola, the area

that receives the largest share of the benefits, present arrangements have denied some residents, especially the elderly, access to benefits from wildlife.

Table 4.24 shows that the answers to this question were varied, however, the DC, DNPWLM, WADCO, VIDCOs, and the community feature strongly in decision-making. The district council had the strongest showing with 68 respondents seeing it as the level that makes these decisions. Decision-making is shared by various levels and institutions and this confirms the point raised previously that wildlife is co-managed. Decisions are made by different levels, depending on the issue, but it is also clear that there is some consultation during the decision-making process. CAMPFIRE is not a community based resource management approach, but rather a strategy that creates conditions for co-management.

Responses	Rank	Makande	Mola	Musamba	Nebire	Negande	Total
No. of interviewees		42	82	26	35	39	
N/A	7	5	0	0	4	2	11
Don't know	2	7	11	0	3	21	42
DNPWLM, DC, WADCO/VIDCO, community		5	0	0	0	0	5
Community Council		5	0	0	0	0	5
Council, VIDCO, WADCO, Community	3	7	10	4	4	0	25
Council	1	5	29	16	16	2	68
Community	5	2	11	1	0	5	19
Imposed	4	7	5	0	3	7	27

TABLE 4.24 How are decisions made on wildlife utilization?							
Responses	Rank	Makande	Mola	Musamba	Nebire	Negande	
DNPWLM		0	0	1	5	2	8
Chief		0	0	0	0	2	2
VIDCO		0	0	1	0	0	1
VIDCO & Council		0	0	1	0	0	1
Wildlife committee		0	0	1	1	0	2
Through consultative process	8	0	0	0	10	0	10
Council and DNPWLM	6	0	18	0	0	0	18
TOTAL		42	82	25	46	41	236

There are sizeable groups which said that decisions are imposed without specifying who by and others who do not know how decisions are made. This survey revealed that the majority of those who do not know how decisions are made, were mostly the elderly or women. Women were generally less informed about public programmes and projects than men because males attend most of the meetings that deal with projects and public programmes.

Also VIDCO, WADCO, and wildlife committees do not feature strongly in making decisions as single entities. They are reflected as being involved in decision-making together with other institutions. This also answers some questions on the participatory nature of CAMPFIRE which are raised in Chapter One but are also of interest to objective three which deals with local institutions and participation. There is indeed participation by the community with 19 respondents identifying it, and a further 30 respondents who said that the community shared this decision making with the district council, WADCOs and VIDCOs. Therefore it can be said that CAMPFIRE is participatory at that level. However participation at different levels

is not clearly defined. There were 42 respondents who did not know how decisions were made about how wildlife was utilised.

Traditional institutions such as chiefs did not feature at all in decision making about how wildlife is utilised. Table 4.24 shows that chiefs, headmen, and the spirit mediums were not seen to be involved in decision-making under CAMPFIRE. This demonstrates the marginalisation of traditional institutions under the colonial administration and under the independent government.

When asked how indigenous traditional knowledge is used in CAMPFIRE, table 4.25 shows that a total of 110, or 49 per cent, said that traditional and indigenous knowledge from Nyaminyami is not utilised at all in the CAMPFIRE programme. This is highly significant especially because the programme claims to incorporate local people's knowledge of conservation in order to make it relevant to them.

Responses	Makande	Mola	Musamba	Nebire	Negande	Total
No. of interviewees	42	82	26	35	39	
Utilised totems	5	0	1	0	0	6
Utilised hunting/controlled hunting	5	0	3	1	0	9
Not utilised at all	21	54	9	16	10	110
Don't know	7	13	0	9	14	43
N/A	2	0	7	3	2	14
Big difference	2	0	0	0	0	2
Consultations at meetings/elders	0	0	0	4	3	7
Advice and rules	0	0	0	0	4	4

TABLE 4.25 How is traditional knowledge utilized in CAMPFIRE?						
Responses	Makande	Mola	Musamba	Nebire	Negande	
Chiefs control animals killed	0	0	2	0	3	5
Not sure	0	5	0	0	3	8
Does not benefit community	0	0	1	0	0	1
Traditions are used in conservation	0	0	3	0	0	3
Avoiding fire forests	0	0	0	1	0	1
Communal ownership of animals	0	0	0	1	0	1
Utilised in learning from the past	0	10	0	0	0	10
TOTAL	42	82	26	35	39	224

Another 43, or 19 per cent, of the respondents do not know whether or not indigenous knowledge is used in CAMPFIRE. If indeed CAMPFIRE had utilised indigenous knowledge most of this group should have been able to know, since it is their indigenous knowledge that would be reflected in the programme. These responses seem to suggest that not much indigenous knowledge is incorporated into the programme. In the CAMPFIRE literature many writers have suggested that one of the strengths of CAMPFIRE is that it is based on the use of indigenous knowledge and traditional practices. It is given as an approach that has adapted the traditional wildlife management system to present management needs.

A very insignificant six per cent said that indigenous knowledge was used by CAMPFIRE in controlled hunting as relates to three factors: the numbers of animals killed, hunting seasons, and in respect of totem animals. The issue of clan names and clan animals is however heavily contested by some of the evidence coming from the semi-structured interviews (described

later) where the majority of respondents believed that CAMPFIRE allows the killing of elephants, buffalo, sable and other totem animals. The elderly argued that CAMPFIRE does not encourage the killing of lions, leopards, or other so called majestic cats, not because of the spirituality or totems attached to these animals, but because they are considered majestic and threatened with extinction. CAMPFIRE has its own values for protecting animals which fit Western values, but which are not the same as those of local people.

Another 10 per cent of the respondents believed that CAMPFIRE has learned from past traditional conservation practices and now utilises some of that knowledge in the programme. Indeed there is evidence that CAMPFIRE has learned from some of those traditional practices as relates to calving seasons, movement of animals, and even hunting seasons. However these influences seem to be minimal and have not significantly shaped the programme.

While a certain amount of consultation takes place with communities and chiefs, it does not necessarily reflect an adoption of indigenous knowledge by CAMPFIRE. The results of this survey suggest that CAMPFIRE does not recognise indigenous knowledge as contributing significantly to natural resource management. While CAMPFIRE acknowledges these as important in its documentation, in practice very little has been implemented.

In table 4.26 a total of 139 or 62 per cent of the respondents identified wild animals and the destruction they caused to property as the single most important problem or challenge facing wildlife conservation in Nyaminyami today. The problem animals were seen by all the areas as the biggest challenge to conservation. Lack of fencing to separate animals from people's crops was seen as the second most pressing problem. Other problems that were identified

were poaching, shortage of manpower, and the stealing of fencing.

TABLE 4.26 Question 33: What is the greatest problem challenging/facing wildlife conservation in your area today?						
Responses	Makande	Mola	Musamba	Nebire	Negande	Total
No. of interviewees	42	82	26	35	39	
Problem animals/destruction	25	49	18	21	26	139
Nothing	2	0	0	0	2	4
poaching	2	5	0	0	2	9
White people allowed to hunt	2	0	0	1	0	3
Inadequate knowledge on conservation	2	0	0	0	0	2
Incompatible land uses	2	0	0	0	0	2
Embezzlement of funds	2	0	0	0	0	2
Problem with game reserve	2	0	0	0	0	2
Increase in population	0	0	0	0	2	2
Stealing of fences and solar panels	0	0	0	5	3	8
Poverty	0	3	0	0	2	5
No electricity on fence	0	0	2	0	2	4
No response to complaints	0	0	2	0	0	2
No peaceful coexistence	0	0	1	0	0	1
Harassment of locals as poachers	0	0	1	0	0	1
Shortage of manpower	0	8	1	0	0	9
Lack of separation between people and animals	0	0	0	7	0	7
Lack of fencing	0	16	0	0	0	16
TOTAL	39	81	26	35	39	220

Whatever financial or material benefits can be derived from wildlife/CAMPFIRE, do not take away the pain which farmers feel when their crops, property and lives are destroyed by wildlife and for which there can be no adequate compensation. Peaceful co-existence between wildlife and local communities will depend on the long term solution to this problem and not on whether or not wildlife generates income. Table 4.23 shows that in Nyaminyami, at present, wildlife does not generate enough money or benefits at the household level for wildlife to be considered as an alternative land use or economic activity to the growing of crops and rearing of domestic animals.

4.8 Key Informants

This section presents data from key informants who included councillors, chiefs, government officials at the district level, and district council employees. A total of 15 key informants were interviewed to solicit information that would contribute to objectives 1, 2 and 4 of the study. The major questions were on resource ownership, people's attitudes towards wildlife, and on the use of Tonga indigenous knowledge. But questions also covered issues of fishing and hunting licences, livestock ownership, and to establish if any areas had been converted to wildlife habitat from other land uses.

4.8.1 Summary responses

Tables 4.27 and 4.28 give a summary of the responses of key informants. The majority of those interviewed agreed that poaching and illegal fishing had decreased since the introduction of CAMPFIRE. There was also a 100 per cent agreement that licenses were

needed for hunting and fishing. The majority of the key informants said that land that had previously been settled by immigrants has now been reconverted to wildlife habitat. While there was a 100 per cent agreement that people in Nyaminyami support CAMPFIRE, 47 per cent said some people still carry out activities which undermine the programme.

The majority, 53 per cent said Tonga indigenous knowledge has been incorporated into CAMPFIRE, but 47 per cent believed that this had not been done. The areas of Tonga knowledge that were identified as having been incorporated were: the breeding of animal and fish species, hunting and fishing seasons, selecting species for hunts, and some of the spiritual and taboo beliefs. The responses on ownership of natural resources were very diverse, District Council was identified by 33 per cent as being the owner of natural resources, while 27 per cent identified the community and the state as resource owners. The greatest challenge to CAMPFIRE and wildlife management was seen as problem animals which destroy property and threaten human life. The District Council was viewed as the most appropriate institution to manage wildlife, followed by the community. The majority, 40 per cent, of respondents also identified the District Council as the institution that should manage National Parks in the area and another 27 per cent said these should be managed by WADCOs. 20 per cent thought that the National Parks should be co-managed by the state and the district council, while another 13 per cent felt that this should be the responsibility of the state.

Questions	Value label	Frequency	%
1. Has poaching and illegal hunting decreased?	YES	13	87
	NO	2	13
	Other	0	-

TABLE 4.27 Key Informants			
Questions	Value label	Frequency	%
2. Has illegal fishing decreased?	YES	8	53
	NO	3	20
	Other	4	27
3. Do people still hunt for food?	YES	4	27
	NO	8	53
	Other	3	20
4. Are hunting licences needed?	YES	15	100
	NO	0	-
	Other	0	-
5. Are fishing licences needed?	YES	15	100
	NO	0	-
	Other	0	-
6. How is fishing organised?	Individually	3	20
	Professionally	3	20
	Cooperatively	9	60
7. Do citizens arrest/report poachers?	YES	14	93
	NO	1	7
	Other	0	-
8. Have settlement areas been converted to wildlife habitat?	YES	12	80
	NO	3	20
	Other	0	-
9. Do Tonga own livestock?	YES	15	100
	NO	0	-
	Other	0	-
10. Do immigrants own livestock?	YES	12	80
	NO	2	13
	Other	1	7
11. Do local people support CAMPFIRE?	YES	15	100
	NO	0	-
	Other	0	-
12. Do local people undermine CAMPFIRE?	YES	8	53
	NO	7	47
	Other	0	-
13. Has Tonga knowledge been incorporated into CAMPFIRE?	YES	8	53
	NO	7	47

Questions	Value label	Frequency	%
	Other	0	-
14. Do local people monitor wildlife?	YES	6	40
	NO	9	60
	Other	0	-
15. Do local people attend CAMPFIRE meetings?	YES	14	93
	NO	1	7
	Other	0	-
16. Do local people illegally hunt or fish?	YES	2	13
	NO	13	87
	Other	0	-
17. Which areas of Tonga knowledge have been incorporated into CAMPFIRE:			
A Animal species breeding	YES	10	67
	NO	5	33
B Fish breeding	YES	10	67
	NO	5	33
C Hunting seasons	YES	13	87
	NO	2	13
Fishing seasons	YES	15	100
	NO	0	-
Selected species to be hunted	YES	8	53
	NO	7	47
Taboos and spirituality	YES	1	7
	NO	14	93

Ownership of Natural Resources		
Category	Frequency	%
Individual	0	-
Community	4	27
Common property	2	13
District	5	33
State	4	27
WADCO	0	-

TABLE 4.28 Natural resources, challenges & parks management		
Ownership of Natural Resources		
Category	Frequency	%
VIDCO	0	-
Greatest Challenge		
Problem animals	12	79
Lack of donor funds	1	7
Control by NGOs	1	7
Community management of money	1	7
Appropriate wildlife management institution		
District Council	8	53
Community	0	-
WADCO	0	-
VIDCO	2	13
Wildlife committee	1	7
Chief/Headman	4	27
Management of National Parks		
District Council	6	40
WADCO	4	27
Central Govt. and District Council	3	20
Central Government	2	13

In general, the pattern of responses by key informants was very similar to that of household respondents. Key informants were able to give information which was not provided by the household survey.

4.8.2 Controversy over benefits and problem animals

Two of the key informants, councillors Ncube and Ngwenya, gave a detailed explanation of why they felt that the present income distribution arrangements in Nyaminyami were neither fair nor just. The following is a summary of that special interview which was requested by

these councillors. Councillor Ngwenya was from chief Negande's area and is one of the longest serving councillors and has held that position since 1982. Councillor Ngwenya has retained this position for so long because he is well respected by the people for his honesty. Ncube, is a young councillor, elected in 1996 for the first time. He used to work in Bulawayo and has only recently returned to his home area and is generally viewed as educated, intelligent, and honest.

Councillors Ngwenya and Ncube were interviewed together in 1997 during the main survey. They explained that in Nyaminyami during the summer months, from November to March wildlife normally roams about further inland in the Negande and the Nebire areas. This is because during this time the whole area has water and plenty of food for the animals. This is also the period when the communities grow their crops such as maize, millet, sorghum, and cotton. Large ungulates like the elephant and buffalo eat people's crops in Negande and Nebire during this time. The councillors argued that in fact these two species have developed a taste for these crops especially maize and cotton. These communities suffer major crop, damages during this period.

The process of dealing with problem animals is very complex as explained by councillor Ncube, "When elephants or buffalo visit someone's field and eat crops, the affected family sends word to their councillor to report that animals are eating their crops and are not responding to local methods of chasing animals. These methods involve beating tins drums and making noises. The councillors send one of the 'home guards' (game scouts employed by the villages) to the district council offices in Siakobvu to report. The council employees then send a radio message to Kariba town where the district National Parks Officer is based. The

district National Parks Officer in turn reports to the Provincial Officer by telephone and it is this officer who then decides what must be done. The provincial officer either sends one of his rangers to come and deal with the problem animals or sends one of the professional hunters who may be interested in trophy. This process takes at least two weeks before any one arrives on site and by that time no crops are left, and the animals have moved on" Ncube (1997).

The councillors claimed that on many occasions, even if the hunters come when the animals are still feeding on crops, the hunter may decide that the problem animal is not good enough for a trophy. The hunter will then just chase the animals by shooting in the air. Ngwenya claimed that in a majority of cases by the time the hunters come, the animals have long moved somewhere else, even out of the ward. Ngwenya (1997), said "an agricultural extension officer is supposed to come and assess the damage and give value of the damaged crop or property. But no one comes, if we are lucky, maybe someone comes after a month and everything is either dry by then or the field is now over grown with weeds and a value of Zimbabwe dollars 20 or 50 is given. Even that compensation may never come."

These councillors claimed that as a result, either no compensation or very little was paid. (I examined the council books on compensation and this point was confirmed.) Further, if the National Park rangers come and shoot the problem animal, the amount of money realised is small, because the higher prices come from sport hunters. This situation is further complicated by the fact that the hunting season which only starts in May or June of every year and lasts until the end of October. Ncube and Ngwenya admit that this is the best hunting season, but for the people of Nebiri and Negande this timing becomes their disadvantage. By

May all the small streams and pools of rain water have dried up, the large ungulates then move closer to the only remaining water source Lake Kariba. Ncube said "come the hunting season all the animals have moved closer to the lake and the people of Mola then reap everything because animals will be hunted and killed on their territory and only they become the wildlife producers. A false impression is given that the people of Mola produce all these animals and that they are better conservationists than other communities in Omay. But we too have contributed to the survival of these animals and we have suffered their inconvenience for five to six months every year" (Ncube, 1997).

Ngwenya continued "policy makers and programme managers do not want to deal with this issue. When we say the way CAMPFIRE shares benefits is neither fair nor just, they say we are just jealous of the people of Mola." I saw many animals in March and April, both in Negande and Nebire and I was called on many occasions to come and witness the efforts of local people in trying to chase elephants and buffalo from crops. I also witnessed crop damage by wildlife and listened to this debate from the very beginning of CAMPFIRE in Omay.

The explanation given by these two councillors was confirmed by chief Musambakaruma who said his area does not suffer much from elephants and buffalo but he knew that the people of Nebire and Negande were unfairly treated because most of their crops were destroyed by wild animals. This point was raised by many other people during informal discussions and interviews with me and the research assistants. Some people from the Mola area, including chief Mola junior, confirmed that the people of Negande and Nebire do suffer from wildlife inconvenience during the summer months.

The microcosmic application of CAMPFIRE seems unable to resolve problems as expressed by these two councillors. These findings show that sticking rigidly to the present benefits sharing scheme in Nyaminyami may become counter-productive and negatively impact on wildlife conservation.

4.9 Insights From the Elderly

A total of seven elderly people were interviewed, five from Omay and two from Makande. These semi-structured interviews and ethnographies were carried out from on an average of three meetings with each informant. But more visits and encounters with the same interviewees were made during this period. I spent many hours before this main survey listening to some of these people's life stories. The discussions were semi-structured, and the informants were allowed to provide as much information on the areas that they felt they were most competent and knowledgeable in, but also on those issues they considered important for their community. Most of the information was not sensitive in nature since it dealt with historical issues and CAMPFIRE issues which were all viewed to be within the legal provisions of wildlife management. Therefore for the greater part of the discussions the informants felt free and were able to answer truthfully about the past.

The information provided by one source was always checked against other informants when discussions were held with them, but also areas of disagreement were revisited during subsequent meetings. A certain level of trust was built over the period when those discussions were held. There were limitations, however, to these discussions because the informants were either reluctant or unwilling to discuss issues of hunting by locals. Since hunting is illegal

such a discussion could not be held with a stranger. I had known most of these people before but such a subject could not be discussed freely with me as I was still considered an outsider. Those interviewed maintained that there is no illegal hunting by local people, but as shown earlier in this chapter, key informants said there was illegal hunting. The subject of hunting by local people was therefore discussed in general terms.

4.9.1 The role of traditional wildlife management today

The following is a summary of the major views of the elderly people in Omay who believed that the Tonga traditional wildlife management approaches were no longer applicable today. It should also be noted that the information in this section has been synthesized, interpreted, and summarises people's life stories and their perceptions. The interviewed people gave the following reasons for their position:

i) Wildlife values have changed and the traditional wildlife management system worked only given a certain value system and level of human and physical development. The Tonga wildlife value system has been eroded by decades of denial of resource use and the alienation of people from wildlife. Many of the present Tonga people have never practised those traditional management approaches. A gap therefore exists between knowing about this indigenous knowledge and traditional practices, and the ability to apply such knowledge.

ii) The concept of need, or satisfying only the immediate need is no longer applicable because the Tonga now have to compete with other ethnic groups for survival in a world of ever shrinking resources. The Tonga world has changed, elements of greed are already visible,

but wildlife is also used to satisfy a commercial appetite, and sporting needs and aesthetics values which are different from the Tonga traditional ones.

iii) CAMPFIRE has introduced new wildlife values to the Tonga people. While the Tonga find these values alien many of the young people are adopting them in order to survive.

iv) There is land pressure due to growing human and animal populations, competing land uses, poorly defined ownership and access rights which lead to conflict between people and animals and between local communities and authorities.

v) Modernisation looks down upon belief systems such as spirituality, taboos and traditional practices, a situation that further marginalises indigenous peoples like the Tonga, making it more difficult for their residual knowledge to contribute to natural resource management.

vi) There are few people who have this traditional knowledge, expertise and experience who can translate them into practical conservation and management programmes. The world has changed and continues to change and the Tonga practices and ideas cannot be superimposed on this new dynamic order. Most of the traditional practices and beliefs are no longer practised by anyone and remain in words only. Therefore, traditional practices and indigenous knowledge cannot be applied in this situation where conventional science and the dominant development paradigm do not recognise that these have anything to contribute. As far as conventional science is concerned issues of spirituality are not scientific, and beliefs

and taboos are primitive and therefore have nothing to contribute to ecology or wildlife conservation.

4.9.2 Traditional resource management

The following is a synopsis of non-contentious issues:

According to the respondents there was 'privatised utilisation' of land within the commons in the Tonga traditional management system. All land was communally owned and administered by the chief and the council of elders. All fields and homesteads, however, were treated as private property. The individual had exclusive user rights to croplands and settlements. However, these exclusive rights did not mean that the person owned the land, because land could never be owned by an individual. The chief did not allocate land but approved the site selected for a home or for fields guided by decisions of the community on where these could be established. In other words, the community would decide and demarcate in advance areas for settlements, crop fields, and grazing. Those croplands could be passed on to someone else even if there was no title deed. People had the right to use this land as if it were private property. This finding, however, differs with the situation described by Reynolds and Cousins (1993) who suggest an 'open access' situation existed under traditional Tonga tenurial system. This might be due to the differences between the lower, middle, and upper river Tonga referred to by Mathews (1978). Mathews (1978) found that there were cultural differences between the Tonga of upper, middle and lower Zambezi. He argues that in these areas Tonga society was more hierarchical in the upper Zambezi than it was in the lower Zambezi. He suggests that some of the conclusions reached by Colson (1971) were

superficial. Elizabeth Colson is considered an authority on the Tonga history and has written extensively on the Tonga in Zambia. This study was carried out in the lower part of the Zambezi which had weaker and less formal chieftainships until the invasion of the Rozwi (see Chapter One). The influence of the Rozwi dynasty discussed in Chapter One may well explain why these findings are different from the studies carried out by Reynolds and Cousins (1993).

Hunting was primarily for food, medicinal reasons and for spiritual and worship purposes and no hunting permits were needed from the chief or from the community. But everyone had to observe hunting norms, the hunting season, respect the protected areas and species, and account for what they had killed through a public accountability system of bringing meat from certain parts of the animal as proof. The Chief received and consumed such meat as a measure of public accountability, but also to invoke good will from the ancestral spirits.

The taboo system was another control measure. For example, it was taboo to go out and hunt and kill an animal before the meat from the previous hunt was finished and anyone who did not comply with this cultural norm would lose their children and livestock to wild animals. In the late 1980s, a famous lion 'Maswaseyi' terrorised the people of Omay eating goats and children. It attacked its victims soon after sunset hence the name 'maswaseyi' (how did you spend the day). This was seen as the ancestral spirits punishing those who had not complied with cultural norms. Maswaseyi was finally shot and killed by the DNPWLM after months of havoc. Traditionally, however, animals were protected primarily because it was understood that particular species were vulnerable and would become extinct unless measures were taken to safeguard them. The Tonga conservation ethic did not encourage species to become extinct because they understood each animal species to have a specific purpose and use. Extinction

spelled doom for some clans and therefore everything was done to prevent it from happening.

The system also ensured that if a big animal was killed it was shared with neighbours. This reduced the pressure on everyone to hunt all the time, and ensured the availability of some resources for the future. Meat preservation methods also made sure that people did not hunt continuously. Today one of the major complaints is that hunting for ancestral and spiritual purposes is no longer allowed and the Tonga find it difficult to understand this, especially when sport hunting is done by foreigners. The respondents said wildlife has its new owners and the local people have no say about how it is managed. If the local people were involved in making these decisions the hunting for ancestral/spiritual reasons would be accommodated. The real conflict in the Tonga mind is CAMPFIRE's banning of hunting for meat and for spiritual purposes, while it justifies of sport hunting, which they claim displeases God.

4.9.3 Attitudes and perceptions of local people about wildlife

The study established that the reason the Tonga support wildlife conservation is not only because of the CAMPFIRE incentives, but their own culture and their own conservation ethic which does not allow wanton extermination of wild animals. There is a convergence of views between the Tonga philosophy and CAMPFIRE about the folly of exterminating wildlife. They felt that God is not pleased with the wide- scale killing of animals which are not for food or medicine, and the Tonga support CAMPFIRE because it partly promotes what they (Tonga) believe in. CAMPFIRE, however, has not utilised Tonga indigenous knowledge nor incorporated their traditional practices into wildlife management.

The Tonga defended their views strongly against problem animals that destroy crops, livestock, and threaten humans. All the people who were interviewed in this session emphasized the fact that the Tonga were not hostile to wildlife, but rather were unhappy with the way problem animals are handled under CAMPFIRE. They also said that under traditional management wild animals did not attack humans as they now do, because there was more land and there was always distance between humans and wild animals. The Shona groups in Makande expressed similar views on the way problem animals are handled. The Tonga philosophy believes in control of problem animals, but not a wholesale extermination of wildlife. Those interviewed believed that the Tonga cosmovision sees animals as part of the human world and that in general there was harmony because of the mutual respect between humans and animals. But also animals were made to fear human beings if humans kept their respect for animals.

The motivation for supporting CAMPFIRE in Makande derives from the perceived financial and material benefits that are likely to come from wildlife. While Shona culture does not allow for wanton extermination of wildlife either, there are differences between the way the Tonga and the Shona managed wildlife traditionally. The Shona regarded wildlife as a common resource, subject to strict cultural control. The hunting seasons were arranged and controlled by the headmen and chiefs. Hunting was done after consultations with the spirit medium. Therefore, in the Shona tradition and culture, the traditional leadership (chiefs) and headmen had more control of resource utilisation than under Tonga management.

CAMPFIRE is supported both in Omay and Makande because it conserves wildlife, but it is not considered a solution to the human/beast conflict. The local people's support for

CAMPFIRE should not be interpreted to mean that CAMPFIRE has solved the issue of problem animals and the destruction that they cause. The DNPWLM still makes decisions about how problem wildlife is dealt with, which means that the power to control problem animals lies outside the community, and its traditional institutions, and outside of the WADCOs, VIDCOs, and the district council.

4.10 Case Studies

A number of ethnographies were done to provide more information on the Tonga traditional resource management system. These life stories illustrate the strength of Tonga spirituality, their taboo system, and their religion as well as their impact on natural resource use. They also show how a combination of beliefs and local wisdom created the Tonga conservation ethic. The following are summaries of some of the ethnographies.

4.10.1 Case Study 1:

Mr Kambiri Dweza Born 4/4/1921

Upland Tonga - Never displaced by Kariba

Wildlife utilisation and conservation under the Tonga

The informant was a 76 year old man whom I had known for six years. The first meeting lasted about three hours and was held over lunch time and the discussion was relaxed since Mr. Dweza had chosen this time so he was able to talk freely to me as he had done many times before. For Mr Dweza it was important that he share a meal with me because in his

Tonga culture relationships are cemented when people eat together. This is significant in that the interviewee wanted to take his time and not rush over issues, a very good sign for the quality of the information that was provided. I visited Mr Dweza two more times for further discussions, clarifications and verifications. I also gave Dweza a ride twice to CAMPFIRE meetings that were held during that period and I was able to discuss issues with him informally during and after the meetings.

After preliminaries and discussion about the season's crops, the informant was asked to describe how wildlife was utilised under Tonga traditional management. The following is a summary of those discussions:

"Wild animals never used to be a problem to us until the Kariba dam was built because the Tonga respected wild animals and animals were made to respect and fear human beings. There was a lot of land and the animals lived in the Zambezi Valley and up the escarpment. Animals kept to their territory and we stayed on our land, but once the dam was built the valley was flooded and then the valley wild animals and the Tonga were all moved up the escarpment where we lived. We then had to share the limited land with animals and the valley Tonga and that is where the human/beast conflict comes from. We have continued to share this land up to this day, animal and human populations have grown. Animals now infringe on human settlements and croplands, a situation that never arose in the past, but people have also settled in areas that were traditionally wildlife habitat. The land has shrunk because the Tonga people who were in the valley moved up the escarpment also and are now settled in Mola and Musambakaruma. There are more people and more animals on the escarpment, but

the land has not increased. The conflict was inevitable and the animals will lose. Traditionally our elders taught us to respect wild animals and many species such as the eland (mofu) pangolin, rhino, elephant etc were protected. These animals were protected but they also did not live close to humans. Anyone who trespassed or killed these protected animals would be punished by the community and made to pay in livestock. The chiefs had power to control wildlife utilisation and enforce conservation practices. But the white man came and took away the chief's powers, but he also took away wild animals from us. Now animals have their new owners, we have nothing to do with animals now. Wildlife just destroys our crops and livestock. Those who say humans have been encroaching on wildlife territory ignore these facts that I have told you. Here in Omay people and animals share land that has been reduced by the dam and compete for the remaining resources..." (Dweza 1997)

When asked if the Tonga traditional wildlife management system could work today, Mr. Dweza said,

"I don't believe the old system can work because now people have become greedy. Even Tonga people have become greedy because the resources are few and we see outsiders using those resources which we should be using. They no longer have the same values that supported the old system, they now believe that animals must die, but many of our children do not even know what that traditional management system was. How then can they keep these animals? How can the local people conserve these animals when the same animals destroy our crops and we are left with nothing to eat. In the olden days, animals were not used to people, so when people beat drums and

made noise, these animals would run away and we would not see them for years because they had a place to run away to. But today animals are not afraid of human beings, so even if we try and chase them, they don't go away. Sometimes when we try and chase them away they attack us. Animals no longer have as much land to run away to as before, but they have also developed a taste for crops especially cotton and maize are loved by elephants and buffalo. The chief and Siakatongo (spirit medium) have no role any more and they cannot protect anyone.

“People used to hunt and bring the meat and dry it, so that it could be used for a long time. This method of preserving meat made sure that people did not hunt all the time. But our religion and ancestral spirits also did not allow us to hunt if there was still meat in the home. For example if a snare was used to trap an animal, that snare would be put in the same house where the meat was. That snare or spear or bow and arrow could never be used again until the meat was finished in the home. Once the meat was finished then these tools could be used again. If someone went to hunt when there was still meat in their home, God would punish them, their goats or children would be eaten by lions. How can you talk about traditional management under these changed conditions?

“Tradition also demanded that if a hunter killed a big animal he must share the meat with his neighbours. When someone caught and killed an eland or any big animal, he was required to take certain parts of that animal to the chief. The chief would eat that meat and that way prevent the bad things that would happen to the person who had killed a protected animal. In this way the chief also kept track of the numbers of

protected animals that were killed. The practice also made sure that people just did not kill protected animals, a protected animal was only killed by mistake, not intentionally.”

"In Tonga traditional society no permits were needed from the chief for anyone to go hunting, because the controls were in place, understood and accepted by everyone. Also hunting was never done during calving season for most species which is October to April. Hunting was done only as a necessity for food and medicinal purposes and this generally involved smaller animals such as impala, antelopes, hares and duikers.

But there were those who were possessed by ancestral spirits and who therefore needed to kill certain animals including the protected ones. These people were known by the community and permission for them to hunt and kill protected animals would be sought from the chief and Siakatongo. Once the animal was killed some specific meat would be given to the chief so that the hunter would get a blessing and the ancestral spirits would not trouble him or her. This was very important for our people, but today this ancestral worship is no longer allowed and those who are possessed are considered mad and die because they can no longer appease the ancestral spirits. But CAMPFIRE allows white people to hunt and kill animals, so we ask why is sport hunting by white people good for conservation and hunting by the Tonga for spiritual purposes bad for conservation?

In normal circumstances a lion could never attack a human being because God made animals to fear people. But occasionally the lion did attack and the family would beat

drums to drive the animal away. If the lion did not go away or came back, the community would organise and kill that specific animal. The chief would be told and a ceremony held to protect the community, goats would be killed and a feast organized for all the people of that village as part of the cleansing ceremony which would be performed by Siakatongo."

What Mr Dweza said was repeated by many who were interviewed and who confirmed that this was how the Tonga managed and utilized wildlife.

"Today under CAMPFIRE the white man comes to kill animals for fun and we the Tonga are asked to protect these animals, so we ask the meaning of all this. Even God cannot be happy with this kind of killing and we thought CAMPFIRE was supposed to stop the senseless killing of wild animals by poachers. But CAMPFIRE invites hunters to come and kill these animals. What kind of protection is this? The Tonga have no say about how wildlife is utilised today and we have asked the authorities to give permission to those who must hunt for spiritual reasons, who are possessed by ancestral spirits, but all these requests have been turned down. Is it that our cause is smaller than that of the sport hunters or is it because the white man must also appease his own spirits by coming here to pay so that he can kill animals? To us this is all very confusing and looks like just another trick of denying the Tonga the right to hunt for meat. But again the CAMPFIRE officials have never asked us what we want or how we would want to utilise and manage wildlife. They tell the world that these are our ideas and that CAMPFIRE in Omay is doing what the Tonga want. I ask you my son have you ever asked the Tonga what they want?"

The foregoing corroborated story suggests that the Tonga did have an effective wildlife management and sustainable utilisation system in place which was appropriate at that time. What Mr Dweza demonstrates is that this system does not exist any more. It broke down with the advent of colonisation, Kariba, and modern conservation approaches. The knowledge about traditional wildlife utilisation and management now exists mainly in theory and among very few elderly people. It is romantic nostalgia to think that this system could easily be revived. Indeed this system cannot be revived unless the entire Tonga cosmivision is also revived because picking out a few pieces of indigenous knowledge and traditional practices does not constitute a way of life. Some of this indigenous knowledge and traditional practices need to be investigated in order to determine their contribution to sustainable utilisation of natural resources. A deeper understanding of the Tonga cosmivision and some these issues is needed before a decision can be made about their usefulness. Today's natural resource planners and managers can only learn from the Tonga and other indigenous peoples if they allow a genuine dialogue between the Western conventional science and the indigenous knowledge systems.

CAMPFIRE is sending conflicting messages to local people. One message is the importance of protecting and conserving wildlife, by stopping ruthless poachers from exterminating animals. This message is well understood and supported by the people, because their own belief system conserves wild animals. The second message, according to Dweza gives preferential treatment to foreigners, because they have money. The foreigners are allowed to kill animals but local people are not allowed to do the same. As shown by Dweza this confuses local people because what they see as the end result of any form of hunting are dead animals. Dweza asked how one form of killing can be justified and another not justified

especially when both are controlled. The fundamental issue here is that for the Tonga who have always practised controlled hunting, it does not make sense why their own controlled hunting cannot be allowed, while the controlled hunting of professional hunters is given the authorities' blessing. Dweza shows how lack of consultation, and lack of participation in decision-making as well as the non-acknowledgement and non-adoption of Tonga indigenous knowledge has led to this paradox.

4.10.2 Case Study Number 2:

Mushayatumbu, born 1896 and Bangandi, born 1911

Displaced from the Valley when Kariba was built.



Plate 4.1 Mushayatumbu and Bangandi

This information was provided by two women, a mother Mushayatumbu and her daughter Bangandi who were interviewed together when they insisted that this is what they wanted. Mushayatumbu had her first child when she was 15 years old according to her national identification card and that of her daughter Bangandi (Plate 4.1). Their ages are estimates based on events as told by oral historians. During the interview Mushayatumbu demonstrated her seniority by her confidence and knowledge, but also maintained the mother-daughter relationship. Mushayatumbu displayed a strong personality even at this advanced age. She often stopped answering, mocked or laughed at the interviewer for his ignorance or asking questions she considered irrelevant or naive. She was assertive and visibly proud of her people and their culture. Bangandi was shy and reserved but answered questions and sometimes referred them to her mother.

The two women were very clear that wild animals belong to God and that all natural resources belong to God, but human beings are allowed to utilise these resources to support their livelihoods. Human beings have a primary responsibility for caring for the earth, its resources, and the environment. The use of resources is secondary to the responsibility of tending the earth. Conservation and utilisation are different sides of the same coin one cannot be done without the other. According to Mushayatumbu, God is never pleased by any wide-scale destruction of natural resources, including the extermination of wildlife. These women argued that the Tonga can never support sport hunting because this displeases God. Mushayatumbu had this to say:

"God put human beings on this earth so that we can tend this garden, but looking after this garden includes using the fruit of the earth and resources. Using resources does

not mean destroying, it means conserving those resources so that we can continue to celebrate life tomorrow. For us, the Tonga, we have to use these resources in a way that guarantees that our children can also celebrate life. We hear a lot about people who say the Tonga will exterminate wild animals, to us that is foolishness, how can the Tonga do that when we have protected these animals all along. For us, the Tonga, when I die and become the 'shade' (ancestral spirit) I will continue to protect my family, how can I protect them if I do not leave behind resources for them to celebrate life with?"

When asked what Tonga life was like in the olden days, Mushayatumbu had this to say:

"Before the Kariba dam was built we were self sufficient in food production. But we were the same people as those who live on the northern bank (a reference to the Tonga in Zambia). We used to cross the Zambezi with dugout canoes to see our relatives there. My people were the masters of the river, we knew where to cross, when to cross and we even used to trick our enemies and let them be swept away by the water. Today we do not even know if our relatives are still alive, we cannot go because the white man created the sea between us (a reference to lake Kariba which is 40 Kilometres wide at its widest point). When Kariba was built we were already here and we saw 'amakiwa' (white people) coming and we wondered what they wanted. Amakiwa had left the Tonga alone and we were quite happy to continue with our lives until they came and destabilised our lives and today old women like ourselves who have no husbands any more, have nothing to eat. This land does not produce food, I lost good land in the valley which had been passed on to me by my mother. Now you tell me who flooded those soils where we used to grow crops all year, it was not the

Tonga people who destroyed the valley and yet we get blamed for everything."

When asked about the legend of Nyaminyami the women gave this explanation: "Nyaminyami was a great Muzimu who controlled the flow of the Zambezi river and the life of the Tonga people. But we were also told that Nyaminyami was a water animal or a fish, we really do not know. But men are the ones who used to go to the river (Zambezi) to cut meat from Nyaminyami and bring it home. All we know is that our fathers and our husbands brought the meat. Nyaminyami was a highly guarded secret by men and women never saw Nyaminyami. But we know that from time to time Nyaminyami would show a part of its body and men would go and cut the meat. Nyaminyami also brought the floods and left good soil behind for us to grow crops, and those soils remained moist until the next flood." They speculated about why the animal/fish could not be seen any more, but they thought that maybe there is now too much water. They directed me to Mr Mapfunde whom they said should know more about Nyaminyami.

When asked about how wildlife was managed and utilised Mushayatumbu said, "what we know is that animals never used to eat our crops. We used to grow crops on the Zambezi flood plains, but during low flows we also used to grow crops on the river banks and river bed. (This practice is still very prevalent today on rivers like the Munyati and others.) But animals never destroyed our crops." The explanation given by the two women was that there were fewer animals and fewer people then than there are today. But there is also a belief that the Tonga ancestral spirits controlled wildlife and created harmony between wild animals and people. Animals kept to their territory while humans also did very little to interfere with animals. They concluded, however, that the best people to ask about wild animals were men.

Mushayatumbu and Bangandi revealed that to their knowledge the chiefs were always men, although Tonga society is matrilineal. Chiefs in the Tonga traditional system did not rule but were administrators of their peoples' decisions. The chiefs were helped by the council of elders in executing these duties. The council of elders was composed of both women and men. Women were in the council of elders to ensure fairness and would ululate if the discussions and decisions were seen to be fair. They would also indicate their disapproval if the discussion or decision was going against the popular feelings of women. The chief and men always listened to the women when discussing important issues that affected people's lives. They could not make decisions without the full participation of women, and men always respected women because lineage is traced through the mother and according to Mushayatumbu motherhood had to be listened to. She explained that a woman is not just a mother but a spring of life, so men must respect the source of life.

According to Bangandi the Tonga were self sufficient in food production and grew sorghum, millet, sweet potatoes, beans, and other crops. The Tonga never practised shifting cultivation or the slash and burn methods, but they did not stump their fields either. This point is confirmed by Reynolds and Cousin (1993) and Mathews (1976). The Tonga had two types of fields, those on the flood plains of the Zambezi and those which were on higher ground which were only cultivated during the rainy season. The Tonga did not stump their fields they cut trees and grew their crops. Mushayatumbu argued that this allowed old fields to regenerate into new forests, after they were left fallow where as stumping and slash and burn destroyed trees forever. Tonga agriculture discouraged tree destruction, but encouraged tree control. When confronted by the suggestion that maybe their tools were inferior, Mushayatumbu denied this vigorously saying fire was long available and they could have used it to burn down

trees like the other ethnic groups who used slash and burn as a method of opening up fields. She also said that the Tonga already had iron tools before she was born.



Plate 4.2 Goats: Tonga Economic Mainstay

Mushayatumbu and Bangandi said the Tonga always kept domestic animals like goats, and sheep. They got their milk and meat from goats and sheep also provided meat. They argued that their goats and sheep never died from diseases (Plate 4.2). This is a point confirmed by Sibanda (1984) on the resistance of the Zambezi Valley indigenous goats to trypanomaosis. The women argued that some of the varieties that have been brought from outside die from sleeping sickness. These exotic breeds weaken Tonga breeds argued Mushayatumbu. She also saw wildlife as preventing the Tonga from being self-sufficient in food production, but also acknowledged that soils on the escarpment are poorer than the Zambezi flood plains.

"Marriage is important to us because life is based on marriage, because children are born from these unions allowing for life to continue. Bride price must be paid by the man who wants to marry a woman and must be paid in goats and sheep. Anyone who got married built his own home, the newlyweds did not live with their parents because marriage is a sign of maturity and the desire to become independent and father or mother your own children." It is also interesting that the men pay bride price (lobola) in this matrilineal society. "Any man who wanted to get married, but who did not have the bride price, would come and build his home next to his parents in law. He would be allowed to marry but would work in his in-law's fields, hunt for them and collect fruit for them as part of the bride price. This could last a lifetime if he was not able to pay all his bride price. Even today this practice still takes place and we the Tonga know that this is good for family bonding. However only the last daughter is not allowed to leave her parents home and the man who marries the youngest daughter must come and live in his wife's home. He does not pay bride price because he is expected, together with his wife, to look after his wife's parents in old age. The man who marries the youngest daughter comes to reside with her. This also means that it is the youngest daughter who inherits most of her mother's estate. The husband can never disinherit or take over land or other property which she receives from her parents or other lineage members."

The Tonga marriage system guaranteed security for the old. Only those who did not have a daughter would suffer. But marriage also determines the settlement patterns and subsequently resource utilisation. A close look at settlement patterns, demonstrate the influence of lineage on human settlements. This process is different from the one described by Hasler (1996) in

Chapoto where bride service becomes a very strong control on human settlement patterns. Under the Tonga system, the settlement pattern is only controlled by the youngest daughter because in other cases once the man finished paying the bride price he would be allowed to move if he wished and establish his home at a place of his choice.

4.10.3 Case Study 3:

Mathews Mapfunde; born 1927

The legend of Nyaminyami and the role of spirit medium in wildlife management.

Most resource management and utilisation strategies among the many ethnic groups in Zimbabwe are part of a complex spiritual, taboo, and belief system. Mr Mapfunde was asked about two important issues: the legend of Nyaminyami and the role of the spirit medium in the management of wildlife and natural resources. The following is a summary of that discussion.



Plate 4.3 Mapfunde: Expert on the Legend of Nyaminyami

Plate 4.3 Mapfunde: Expert on the Legend of Nyaminyami

"In Tonga culture there are many levels of ancestral spirits who are responsible for different things. Leza is God and he does not deal with people on a day to day basis. Below God are shades and ancestral spirits who protect people, who cause rain or drought or bumper crop. These are called winds because they do not stay in any specific place, but there other spirits who manifest themselves in animals or trees or live in a river. These are called Muzimu and Nyaminyami was one such Muzimu who lived in the Zambezi river and controlled the flow of the river and thus he controlled Tonga life. The old people told us that Nyaminyami was a huge animal that had the head of a snake and the body of a fish. It is also often referred to as the River God (Muzimu). Nyaminyami was responsible for round the year flow of the Zambezi river.

"Nyaminyami only revealed itself to the men and only on certain times of the year and only in certain places. It was not seen everywhere, but the time when it would reveal itself was known, so the old men would go to the appointed places to see Nyaminyami. No one ever saw its head, so the head of a snake are all stories. The great river snake would show only its back and the old men were allowed to cut meat from this animal to take home to the families. Each man was allowed to cut as much as meat as he could carry. He was not allowed to bring helpers to carry meat and if anyone did that all his meat would rot before he got home.

"This was called 'Njeka wa cheka' which means you cut as much as you need and

leave the rest. The understanding was that you could never finish the meat of Nyaminyami. Once all the men had cut as much meat as they could carry, Nyaminyami would disappear and reveal itself in another place and the men of that area would do the same. This process was repeated year after year and Nyaminyami had the ability to regenerate the flesh cut off by men and would always reveal itself in a wholesome state as if it had never been touched. These are not just stories Nyaminyami was real and it belonged to a particular era."

Mapfunde explained that while Nyaminyami really did exist it also demonstrated the Tonga resource utilisation philosophy. "The Tonga used resources as per need, the Tonga philosophy was guided by need not greed and one only had to take out of nature what they needed for that time. If nature was not over exploited it allowed natural regeneration to take place and therefore ensuring a constant supply of resources to meet human needs and allowing the environment to remain in a wholesome state. But today, human beings are too greedy" explained Mapfunde, " people take more than they need and stockpile resources and in the process over exploit resources denying nature the opportunity to repair and cleanse the environment. But they also deny others access to the same resources because what is stockpiled is no longer accessible to others for the common good." In a simple way Mapfunde explained what Macpherson (1987) said about how the use of labour converted a common resource to private property.

Mr. Mapfunde was challenged over this Tonga resource utilisation strategy on whether or not cutting as much as one could carry was not also limited by both the cutting technology and the food preservation and storage technologies or that it did not necessarily demonstrate

conservation. Mr. Mapfunde was convinced that the technologies had nothing to do with it, because the Tonga were known to preserve meat by drying it and then preserving it with honey. Such meat would be preserved for between five to ten years, and would be used only during severe droughts. (I saw and tested many samples of such preserved meat). But he also continued to support his view that the Nyaminyami legend was a way of teaching people not to stockpile resources and to demonstrate that if resources are used according to needs nature has a way of replenishing itself. He argued that had human beings not interfered with the Zambezi river the sustainable agricultural system that the Tonga had established would have been still viable today. Mapfunde explained in a very simple way how local equilibrium was ensured under the Tonga resource management system. The Tonga tried to balance extraction/emissions and natural regeneration at local levels, that is (equilibria everywhere) and that system guaranteed equilibrium in the valley.

When asked about what happened to Nyaminyami the following was the story told by Mr. Mapfunde:

"The White man decided to block the Zambezi river. We the Tonga thought this was impossible and Nyaminyami Muzimu mukulu would never let the mortals do that to him or his river. The white man belittled what the Tonga told him and he moved in with caterpillars and started to smash the trees down, destroyed forests and built a wall over the Zambezi. I was a man and I saw this with my own eyes. I already had a wife and children.

"The old people told us that the wife of Nyaminyami was downstream of the Kariba dam wall and Nyaminyami wanted to visit her. The dam wall was broken by

Nyaminyami but the white man would not stop, and the wall was washed away three times. At that point the white man started talking to our chiefs and the spirit medium so that they could ask our Muzimu to allow them to build this dam. The old people say that the chiefs and the spirit medium finally pleaded with Nyaminyami and the other ancestral spirits to allow the white man to build this wall. A major ceremony was held to appease Nyaminyami and the ancestors; money, tobacco, and alcohol were poured into the Zambezi river, red and black cloth were taken to the Siakatongo. Only after this major intervention by the Tonga traditional and spiritual leadership did the Kariba dam wall survive up to date.

"Nyaminyami now quietly sleeps and never comes out again. The wife is down stream of the wall and we hear she is also trapped in Cahora Basa in Mozambique."

The legend of Nyaminyami is still told with a lot of passion and vividness today and some Tonga elders believe that Nyaminyami will revenge sooner or later because the big Muzimu will not sleep forever. Many of the ills that affect the Tonga today are explained through this story as many believe the chiefs made a mistake by allowing Kariba to be built, because by trapping Nyaminyami the white man managed to trap the spirit of the Tonga people. They argue that the Tonga are now trapped in this cycle of poverty and underdevelopment because Nyaminyami is trapped. But they also demonstrate how the Tonga lifestyle has changed for the worse, evidenced by increasing poverty, fewer rights, less land all because the chiefs allowed Kariba to be built. The spirit of the Tonga people is now trapped with Nyaminyami at the bottom of Lake Kariba.

Mr. Mapfunde is considered an enlightened man in his community, he can read and write and owns a number of shops at Peter's store in Musambakaruma, another one at Siakobvu and one other in Makande. He even owns a number of vehicles. He also spoke openly about the exploitation that had been meted out to his people. But also holds controversial views on wildlife management and about CAMPFIRE.

Asked about wildlife utilisation and conservation he had the following to say:

"The Tonga believe that animals belong to God and that their destruction in large numbers for purposes other than food would greatly displease God. The eland as an example is sacred to the Tonga and it was never killed by anyone. If it was caught in a snare and killed then the chief and the spirit medium would have to intercede to the ancestral spirit on behalf of the people for their wrong doing. But even the lion could not kill an eland (mofu), if it did, even the lion would wait for (Chapungu) the eagle to first remove the eyes and tear the animal open before the lion could eat the meat. Chapungu could do that because he is part of the spiritual birds that were also protect by Tonga tradition. All these creatures were seen as manifestations of the ancestral spirits and were therefore revered.

"The elephant was equally protected and if it was ever killed certain parts were given to the chief to eat so as to intercede for the people to avoid bad things happening to those who killed and ate the animal. Even Haka/Inkakha (pangolin) was never eaten by ordinary people. If anyone ate the pangolin his children and goats would be eaten by lions. If a pangolin was seen, which was very rare, it was taken to the chief. But today nobody respects any of our taboos, game scouts or hunters shoot and kill an

elephant and everyone goes to collect meat.

"In Tonga culture hunting was not prohibited but controlled by spirituality, religion, and a taboo system. No trapping or hunting was allowed during the rainy season November to April. One of the fundamental things that happened under Tonga resource management was that the spirit medium had control over wild animals, issues of land and therefore prevented damage to crops or destruction of property. The spirit medium had power over wild animals because he/she represented the ancestral spirit. The chief had no power over animals or natural resources. Animals only became a problem when the ancestral spirits wanted to punish the human beings for wrong doing. But the spirit medium no longer has power over wild animals because the chief and the spirit medium are no longer custodians of wildlife. Wildlife now belongs to the government therefore it is not possible any more to practice Tonga resource management when the traditional and spiritual leadership are no longer involved."

Mr. Mapfunde believes that traditional practices and associated management system have totally broken down. He argues that while there are still many who tell stories about the past and its ways of managing resources, none of them have sufficient knowledge or practical experience in doing these things. He stresses that, to make things worse those who have some knowledge are getting fewer and fewer. "Our dignity and identity are long lost, our language is fast disappearing, even concepts of resource management which were part of Tonga people are not even understood by the Tonga today". He believes, however, that there are some things that should be learnt from the past which can be used in the conservation of wildlife

and other resources today. He believes that among these, the most important is for all human beings to understand that their primary responsibility here on earth is to care for the resources, to tend the earth, and to protect the environment, this will ensure the continued availability of natural resources for all generations and allow the continued celebration of life.

4.11 Conclusion

The foregoing evidence shows that most of the Tonga conservation ethic, indigenous knowledge, cultural and traditional practices relating to resource utilisation are guided by spirituality and a Tonga cosmovision. Unfortunately, there is no generally accepted theory that can explain or which helps us to understand the Tonga holistic approach or their laws of the spiritual world. Conventional science excludes spirituality and spiritual growth. Programmes like CAMPFIRE face great difficulties in developing a real understanding of the spiritual dimension of indigenous cosmovisions. In conventional programmes, including CAMPFIRE, there is very little interaction between the spiritual world and the human and material world. This is one of the major reasons why CAMPFIRE has not been able to incorporate indigenous knowledge and traditional practices into its conservation approach. CAMPFIRE, which is driven by conventional science, seems to have no capacity to deal with the spiritual dimension of natural resource management and conservation.

CHAPTER FIVE

NATIONAL INFORMANTS: GOVERNMENT AND NGO OFFICIALS

5.1 Introduction

When CAMPFIRE began in 1988, a partnership developed between the government of Zimbabwe, three leading NGOs, and the University of Zimbabwe. This partnership, also known as the collaborative group, defined each agency's responsibilities and defined the general agreement that local communities must participate in the management of wildlife as well as earn benefits from this resource. The collaborative group agreed that the management of wildlife should be devolved to the ward and village levels and that benefits would go only to those who suffer directly from wildlife inconvenience. This approach to benefits sharing as shown in Chapter One later became known as the microcosmic interpretation of CAMPFIRE.

The collaborative group defined the responsibilities of each of the participating organisations as follows:

- The Centre for Applied Social Science at the University of Zimbabwe would be responsible for carrying out socio-economic research, baseline monitoring of CAMPFIRE, and liaising with the Zimbabwe Trust and World Wide Fund for Nature (two of the three NGOs).
- The World Wide Fund For Nature would carry out the planning of research on the ecology and reproduction of wildlife.

- The Zimbabwe Trust would focus on implementation issues and provide support on institutional development and capacity building for local people.
- The International Conservation Union would collaborate with the programme as well as disseminate information.
- The Department of National Parks and Wildlife Management would be responsible for establishing the criteria that would inform the setting of hunting quotas, as well as methods for dealing with problem animals and they would provide advice to the district councils on matters related to wildlife management and utilisation.

Ten years after the start of CAMPFIRE, the number of stakeholders has increased; more government ministries have joined, more NGOs are now interested, and more donors are funding the programme. The interpretation of CAMPFIRE by the enlarged stakeholder group has changed it, given new ideas brought in by the new comers. The original group has learnt a number of things from implementing the programme over the years and these experiences have influenced their current views. The NGOs have stuck with the initial microcosmic view of CAMPFIRE which said benefits should go only to those who suffer directly from wildlife. Government now supports the macrocosmic view which sees wildlife as a district commons and says the CAMPFIRE benefits should be distributed more widely.

The major debate is about who should own and control wildlife resources, who should receive benefits from wildlife, how far down should decision-making power be devolved. The NGOs see government as now trying to centralise CAMPFIRE by retaining power at the National and District Council levels and by insisting that distribution of benefits is the responsibility

of the appropriate authority. NGOs argue that government's view that benefits from CAMPFIRE should be more widely distributed because these are district commons distorts the programme as initially negotiated. The government, on the other hand, views NGOs as promoting devolution beyond the district council and insisting on the microcosmic view because of their secret agendas for fund-raising but also because they do not want to deal with strong institutions. The government argued that the NGOs want to remain in the business of providing support to communities, but without being interested in the plight of the people. This according to government, the NGOs can only do if they work with weak institutions whose capacity can never be developed far enough to take over the management of CAMPFIRE.

As indicated in Chapter One the Ministry of Environment, Tourism and Mining has the responsibility to ensure a healthy environment through regulating resource utilisation, planning, co-ordination, law enforcement as well as promoting sustainable resource utilisation and tourism. While this ministry is at the centre of natural resources and environment, it is, however, not responsible for land, this lies with the Ministry of Lands and Agriculture. This arrangement complicates things because the Ministry of Environment has responsibility for land-based resources and yet it does not control the primary resource. The situation is made even more difficult by the fact that local authorities which are responsible for administering land and the resources on it, report to the Ministry of Local Government, Rural, and Urban Development. Thus many overlaps exist among these ministries and sometimes these turn into rivalries. The Ministry of the Environment is a junior ministry, which, therefore finds itself constrained when it tries to regulate the use of resources that are on land which it has no jurisdiction over. It is essential to understand these relationships and power struggles

because they have a direct bearing on how the CAMPFIRE programme and wildlife are managed.

Interviews were held with the major role players of CAMPFIRE and natural resource management in Zimbabwe. Key policy makers in the Ministries of Environment and Tourism, Local Government Urban Rural Development and Ministry of Agriculture and Lands were interviewed to discuss legislation, various policies relating to the utilisation, management, and conservation of wildlife in Zimbabwe, and how wildlife is managed under CAMPFIRE. Key officials from the Zimbabwe Trust, World Wide Fund for Nature, the International Conservation Union and the University of Zimbabwe were also interviewed to solicit their views and contributions to policy formation. The study also tried to understand the reasons for the polarisation that has developed between the government and NGOs, because of the implications this has for CAMPFIRE. In addition, it was necessary to understand how CAMPFIRE resolves the conflicts that emanate from managing a resource where there are multi-jurisdictional access rights without enabling legislation, policy, or clear guidelines. It was imperative to establish if CAMPFIRE was sustainable and if national policies promoted sustainable use of natural resources. Finally, it was important to specifically determine what legislation transferred natural resources from the state to the district council, given the many interpretations of that law.

The following sections 5.2 and 5.3 present a summary of the views of government and NGO key players. Section 5.2 deals with relevant policies and legislations that impact on wildlife and natural resource management. It provides the government and NGO understanding of these policies and legislation and how they are applied. This section further shows how

conflict between government and the NGOs has developed as a result of the different interpretations of policy and legislation. But it also demonstrates the deficiencies of policy which leads to these multiple interpretations. Section 5.3 covers programme issues of the sustainability of CAMPFIRE, distribution of benefits, donor funding, and incentives for conservation. It also deals with the issues of capacity-building and how the lack of capacity has impacted programme implementation.

The key players whose views are covered in this chapter were each interviewed only once during 1996, (See Reference List) gives a list of the schedule of interviews. Each interview is referenced once at the beginning of the discussions. The name of the interviewees are then used through out the text without quoting the years again.

5.2 Policy and Legislation

This section deals with views and interpretations of legislation and policies by the officials of NGOs and the government. It shows how these interpretations have affected CAMPFIRE and wildlife management. Some of the reasons for the polarisation between government and the NGOs are explained through these misunderstandings. The section also demonstrates how the various interest groups either try and influence policy formation to support their positions or how policy may be deliberately misinterpreted to achieve the same group interests.

5.2.1 The NGOs' views

Two World Wide Fund for Nature (WWF) officials were interviewed; Taylor, an ecologist,

and Bond, an economist, who have been practically involved with CAMPFIRE for many years. Both had done research and evaluated the programme at different stages of its development. They have spent a considerable amount of time looking at CAMPFIRE in Nyaminyami. Because of this, they were considered to be knowledgeable and that they possessed specialised information about CAMPFIRE which would shed some light on this programme. The two officials also served as a sounding board for some of the information already collected on the subject. They were presented with the information in question form so as to find out what their views were on those issues.

These two officials were interviewed together. During their interview Bond and Taylor (1996) were invited to share their experiences and views about CAMPFIRE and wildlife management. According to their analysis the 1975 National Parks Act and its subsequent amendment of 1982 was generally viewed as progressive by landholders and the district councils because it allowed for a broad range of wildlife utilisation including consumptive use. This legislation gave appropriate authority to the private land owners and commercial farmers in 1975 and subsequently to the district councils in 1982. Appropriate authority gives private land owners the right to manage and to fully utilise and benefit from wildlife on their lands. In addition, the amendment gives power to the district councils to manage and utilise wildlife in communal areas for the benefit of their citizens. Bond and Taylor supported their argument by showing positive developments that have resulted from this legislation. The following is a summary of their arguments during the 1996 interview:

(a) The 1975 National Parks Act has allowed the utilisation of wildlife as a resource and therefore has enhanced its value which has promoted conservation.

(b) The Act has allowed for the institutional evolution of authority and enhanced empowerment of communities.

(c) Legislation and CAMPFIRE have not gone far enough in their devolutionary processes and presently there is stagnation because legislation only gives "appropriate authority" for natural resources to district councils and does not transfer ownership of the resources to the district councils or to the people themselves.

Bond and Taylor believed that this stagnation was a result of the following factors:

- There is an unwillingness on the part of political institutions, such as district councils, to part with power (perceived or real).
- Bureaucracy is slow which makes current arrangements unresponsive to problems and to the needs of the people.

Ward level devolution of appropriate authority, as stated by the 1992 collaborative group agreement, has not happened because:

- district councils do not find it in their interest to lose appropriate authority or to share it with another level. Bond and Taylor argued that this is critical because wildlife is the only major financial base for district councils. By their estimates, district councils earn as much as 60-80 per cent of their total income from wildlife.
- Nyaminyami, according to Bond and Taylor earned 100 per cent of its revenue

from wildlife. In this particular case, the District Council cannot be expected to voluntarily give up this central resource which gives them power. This is commonly known as the Murphree's law about devolution. Murphree's law states that policies of devolution typically produce a tendency to preserve authority and its benefits at each level. The level above always wants to retain the control of power and resources and therefore does not want to allow the levels below to share that power. The levels below will always try and wrest power and control of resources from levels above so as to extend their authority. Murphree (1990:17) concluded that "...access to wildlife revenues by councils is a powerful disincentive to the further devolution of proprietorship to ward levels."

- Policy aims at full development and full devolution, however, its practical implementation on the ground is different, because the politics of power and money can distort policy intentions.

The politics involved have not allowed the devolution of power to the lower levels of local government. The central government and NGOs hold differing viewpoints on devolution. Central government sees devolution as transferring power, governance, collection of taxes, provision of services, and infrastructure to the local authority. Devolution is seen as going down to the district council level and the Ward Development Committees (WADCOs) and Village Development Committees (VIDCOs) are seen only as mechanisms that support the appropriate authority to govern. The NGOs see devolution as transferring decision-making, ownership and control of natural resources, and management of the development process to the wards and villages. Bond and Taylor claimed that the devolution as modelled by the

NGOs is threatening to central government because government would, in effect, lose some control.

According to Bond and Taylor, the situation is further complicated by the fact that WADCOS and VIDCOS were established under the Prime Minister's directive of 1984 and not by an Act of Parliament like district councils. Consequently, these institutions (WADCO and VIDCO) are generally viewed by rural people and others as being a product of the ruling party. The ruling party, the Zimbabwe African National Union Patriotic Front (ZANU PF) established WADCOS and VIDCOS using the party structures which the party had developed during the liberation struggle. Therefore they are seen as 'party organs' or political institutions and not as development or economic institutions. Bond and Taylor asserted, however, that some of these institutions have been able to manage resources effectively regardless of their origins.

Bond and Taylor stated that land is either state or privately owned. Resources on state land are owned by the state, but their management and utilisation are shared at many levels. Changing land ownership in communal areas from the present state ownership where farmers have usufruct rights only, to individual title was viewed by the government as potentially explosive because it could create a large class of landless people who would not be absorbed in urban areas nor in the employment sector. "We believe that land in communal areas should be owned, not by individuals, but by groups. Government officials argue that if land were privately owned in communal areas there would not be enough land for everyone. This argument presupposes individual titles to land and the sub-division of the communal lands. Government has not examined group ownership, a situation that would lead to 'common property regimes.' This has narrowed down the options and possibilities for finding viable and long term solutions to the issues of land" (Bond and Taylor 1996 interview).

These WWF officials argued in favour of present government policy that promotes and allows various forms of wildlife utilisation which include tourism, eco-tourism, sport hunting, as well as hunting for meat. This approach treats wildlife as a resource whose value is determined by its market utility. Bond and Taylor said the Zimbabwean government had demonstrated how elephant, crocodile, and ostrich populations have increased exponentially because of their utility and their economic contributions to individual and national economies.

They saw no conflict between consumptive and non-consumptive uses of wildlife and conservation. They argued that internationally, especially in the West there is not a real concern about the sustainable use of wildlife, but rather the main concern is for animal welfare and animal rights. Bond and Taylor argued that those who want to impose their views about animal welfare and animal rights are those who do not live with wildlife and cannot see wildlife as a resource and do not know about the poverty of the people who do live with it. The government of Zimbabwe, on the other hand, is concerned about the sustainability of wildlife utilisation.

In summing up this particular discussion, Bond and Taylor (1996) cautioned about generalising about CAMPFIRE being uniform because it varies nationally, inter-district and intra-district. What is CAMPFIRE? Is it 12, 16, or 26 districts or is it 100,000 people or is it 1.5 million hectares of land. CAMPFIRE is all these and more, but it has also taken on a dynamic of its own and is often viewed as an innovative rural development strategy. It is important, however, to keep a focus on the fact that CAMPFIRE is first and foremost a concept, a method of planning and managing natural resources, and not a blueprint and must be interpreted as necessary and adapted to suit local conditions. Bond and Taylor saw the

basic principles as:

- placing management responsibility in the hands of the local people,
- allowing local people to decide how the resource is utilised,
- letting local people benefit directly from the resource, and
- ensuring the sustainable utilisation of natural resources.

5.2.2 Government's views

The interviewee, Mr Moyo, was then a permanent secretary in the Ministry of Environment, Tourism, and Natural Resources. He had, however, been deputy secretary and permanent secretary in the Ministry of Local Government, Rural and Urban Development for more than ten years before coming to this Ministry. Moyo was in fact the architect of the local governance system in Zimbabwe and was therefore an extremely knowledgeable person on policy as it relates to land, local governance, natural resources, and environment. His unique knowledge and experience placed him in a position to respond not only to issues of policy as it relates to natural resources and the environment, but also on issues of local governance and the power relations of the districts in relation to the central government. Further, Moyo, a proponent of the macrocosmic interpretation of CAMPFIRE when he was in the Ministry of Local Government, was now confronted with the microcosmic CAMPFIRE programme document as drawn and implemented by the ministry that he was now heading.

Moyo's views on policy were supported by his counterparts in the Ministries of Local Government, Urban and Rural Development, and of Lands and Agriculture. Moyo's

information therefore represents the government position, as confirmed by Mr Chiwewe (permanent secretary), Ministry of Local Government, Makombe - director DNPWLM, and Tsvakwi - undersecretary for the Ministry of Lands. According to Moyo (1996) government policy on wildlife utilisation clearly wants to derive economic benefits from all natural resources, wildlife included. Government strongly believes that if communities derive benefits, then they will conserve those resources. In advancing the government position Moyo argued that wildlife cannot be privately owned because it is a fugitive resource which needs to free range. It should be allowed to free range so that once it crosses one border it cannot be brought back. He, however, conceded that his argument was weakened by the fact that some private land owners have fenced animals in and are not allowing free range in the true sense. Even in National Parks some areas are fenced which confines the animals. Only animals in communal areas truly free range.

The 1975 Wildlife Act is viewed by Moyo and the Ministry of Environment and Tourism as being too liberal, allowing private farmers utilisation of wildlife without state quotas. He explained that there were dangers of over-exploitation of this resource by greedy land owners. "The weakness with our laws are that they emphasise utilisation and not management, but they are also open ended and are subject to abuse." He said that some thought was being given as to how private utilisation could be curtailed.

"CAMPFIRE continues to be interpreted differently even by government policy makers. This has something to do with how the programme was developed, emanating from an environment ministry which is not considered to be at the centre of land ownership, resource management, or management of local authorities. CAMPFIRE

is so popular outside this country, it is so misunderstood inside Zimbabwe, and it is so unpopular in some areas at the local level."

He believes that most of the distortions are caused by there being too many parties who are interested in controlling or benefitting from wildlife. The various interest groups deliberately interpret CAMPFIRE, giving it a slant that would benefit them most. The point made by Moyo is critical to this study because no real in-depth analysis of CAMPFIRE has ever been done and as shown earlier in Chapter Three, most literature tends to glorify CAMPFIRE, looking only at its strengths. Moyo argued that CAMPFIRE has been treated as a sacred cow especially outside Zimbabwe and by its internal promoters and that is why it is popular outside Zimbabwe and misunderstood inside the country.

Moyo argued that CAMPFIRE is misunderstood within Zimbabwe and he provided evidence that shows the confusion at the local level about what CAMPFIRE is, as well as among policy makers. He said, "a question must be asked, what is CAMPFIRE? Because many have assumed that this is clear. This confusion is a result of either the absence of, or lack of, an integrated systematic as well as holistic policy on natural resource management. But the confusion is further aggravated by disjointed pieces of legislation because there is no comprehensive environmental law that harmonizes the utilisation needs on the one hand and conservation imperatives on the other."

He further suggested that in giving 'appropriate authority' to the district councils, the law recognized that the district councils did not own the resources; councils cannot exercise ownership, but are given the legal mandate and obligations for management and conservation

as well as a stream of benefits which include earning an income, meat, and other benefits from the resource. He said central government relied on local authorities to manage the resources because it is the district councils who actually have the *loci standi*. The 1982 amendment of the National Parks and Wildlife Act gave the 'appropriate authority', that is the legal authority to manage natural resources in communal areas, to the district councils. It is this legal authority that Moyo refers to as the *loci standi*. Moyo (1996) explained that the government of Zimbabwe realised the limitations of the present ownership and management system, and is now moving in the direction of village ownership of resources. In this new system, each village would have delineated land and the resources on it, so that the group can be assigned ownership. This process he said is moving closer to 'exclusive group utilisation' which would change the current 'usufruct rights' to a 'common property regime'.

The delineation of villages may prove difficult, however, since the present villages do not coincide with the traditional villages. This arbitrary delineation of villages would leave resources belonging to one village in another. Moyo (1996) agreed that current village delineation was arbitrary, he explained, however, that administrative wards do not straddle any kraal head or chieftaincy and when delineating for village assemblies it would be possible to do the same through a consultative process. Moyo was responsible for the delineation of administrative wards in the early 1980s and is therefore very familiar with issues of delineation and the consultative process that took place then since he was the lead person. He thought, however, that the costs of delineating these villages differently from their current identity may prove prohibitive and that the people may become fatigued from a process that continuously changes administrative units and systems.

The permanent secretary in the Ministry of Local Government was also interviewed to learn his views on CAMPFIRE and his interpretations of existing legislation and policy. He was in agreement with Moyo on most of the issues but provided some additional information. Mr Chiwewe (1996) said that there never was any intention to devolve appropriate authority further than the district council to the wards and villages. He argued that appropriate authority cannot be devolved to levels that have no *loci standi* in the governance system. District councils can delegate some management functions to those levels but appropriate authority would always remain with them he explained. When confronted with the fact that the CAMPFIRE document explicitly mentions this devolution of power to lower levels, Chiwewe said that was what the collaborative group wanted, a position that was being pushed by the NGOs, and yet there was no legal provision for doing that.

He saw the coming of new legislation on village assemblies, however, as the process that would finally devolve power beyond the district council, because the provisions of the law would create villages which would consist of 20 households each. Land in each village would be delineated and the various land uses would also be drawn up, and land would be owned by the village. Land would be held in trust by the village head, grazing would be communal, but land in fields and settlement areas would be individually owned. This is relevant and important to this study because it will alter the ownership of resources and has an impact on CAMPFIRE.

Chiwewe saw the debate on the microcosmic view of CAMPFIRE as the creation of individuals in the DNPWLM who had specific interests and agendas and who left the DNPWLM soon after they wrote the document to join the NGOs which are involved with

CAMPFIRE. Chiwewe argued that most of the confusion about CAMPFIRE results from the fact that the programme was hijacked by the NGOs. He blamed the collaborative group for creating this confusion but insisted that this would not continue as the group has no executive authority.

According to Chiwewe, the NGOs wanted to set up parallel administrative and resource management structures to those already established by the government. He believed that the NGOs wanted to circumvent the structures set up by law because they want to work with weak institutions which they can easily manipulate when working with the communities. Chiwewe was categorical that the Government would not allow this to happen and that the power to manage natural resources would remain with the legitimate institutions.

Mr Makombe the director of the DNPWLM, was also interviewed to learn how the department worked with CAMPFIRE and the district councils. He said the department sets hunting quotas in communal areas working with the district council in doing so. He conceded, however, that the district councils were not happy with his department because the councils would prefer higher quotas than were being allocated to them. Makombe saw part of the pressure for increased quotas as coming from the hunters and safari operators who offer the councils lucrative business deals. The department also helps district councils with advice on pricing wild animals.

Makombe viewed the opinions expressed by O'Connors about wildlife contributing very little to African economies as misleading. He argued that wildlife in Zimbabwe was contributing substantially to the national economy from hunting and safaris, tourism and subsidiary

industries, because these activities are wildlife based. He also pointed out that rural people and district councils earn very handsome revenues from the CAMPFIRE programme and felt that these revenues will grow, as councils lease their land to lodge developers and as they begin to charge tourists who come to view game in communal areas. Makombe demonstrated that wildlife in Zimbabwe paid its way and paid for conservation. He expressed concern over the ban on the ivory trade and its effect on incomes that are earned by the country.

An interview with Tsvakwi (1996), an under secretary in the Ministry of Lands revealed that there was a good working relationship between that ministry and the Ministry of Local Government. She explained that the Ministry of Lands was responsible for developing land policies, however, the administration of the communal areas was done by the Ministry of Local Government. She said land in communal areas will never be given individual title, the usufruct rights will always remain and explained that when the new village assembly law comes into effect, certificates of land ownership will be issued to the villages and these will be held by the village heads.

She further explained that currently people on resettlement land hold leaseholds, but following the recommendations of the Land Commission (1994), title deeds will eventually be given to these farmers. She recognised conflict in the way wildlife is treated under CAMPFIRE as compared to other natural resources. But she thought that the new legislation would resolve many of these conflicts. The government was already negotiating with financial institutions about guarantees for loans by communal farmers since they have no collateral. Tsvakwi said that communal farmers, will not be allowed by law, to use that land as collateral, even when they have land ownership at the village level. She said allowing this

land to be used as collateral would be a quick way of these farmers losing their land to financial institutions when they failed to repay the loans. She believed in 1996 that these laws were being enacted to provide maximum security to farmers, but also to protect them from unscrupulous business people.

5.3 Issues of Sustainability, Incomes and Benefits

The fifth objective of the study was to determine CAMPFIRE's sustainability as a programme and its effectiveness as a common property resource management strategy. Popular CAMPFIRE literature does not define what constitutes the sustainability of resource use and what constitutes sustainability of CAMPFIRE as a programme. The third objective was to establish whether cash and material benefits from CAMPFIRE were critical incentives for local communities to participate in conservation of wildlife.

5.3.1 NGOs Views

Bond and Taylor (1996) explained that most of the income earned by district councils came from wildlife in those districts, where CAMPFIRE operates and that most of the revenue comes from sport hunting. I confirmed the revenue figures from the Nyaminyami district council records (Table 6.1 and Figures 6.1 and 6.2). They explained that as much as 60 - 90 per cent of that sport hunting income derives from elephant hunts. They said that up to 1996 the CAMPFIRE revenue was basically dependent on a single species and referred to the figures from Nyaminyami to demonstrate this fact. Bond (1996) said:

"indeed the arguments and the controversy at the CITES meeting in Harare, Zimbabwe which will discuss the temporary and limited lifting of the ban on ivory trade for some Southern Africa States will be based on this reality. The arguments will be that if the Southern African states are not allowed to sell their stockpiles of ivory then the CAMPFIRE programme would collapse because this would deny the communities the income from the elephant and hence remove the incentives for conservation by farmers in communal areas."

This point about CAMPFIRE being dependent on a single species is important to the study because it shows CAMPFIRE's vulnerability and is dealt with in detail later.

Bond and Taylor said the viability and sustainability of CAMPFIRE based on a single species and on wildlife alone was highly debatable. They said sustainability was also based on sport hunting which is vulnerable to international pressure and changes in the overseas-controlled market place. Bond and Taylor believed that the ban on ivory trade has taken away all the revenue from the legal ivory trade. (These interviews were held before the CITES meeting in Harare in 1997.) Obviously things have changed following the limited ivory trade agreements reached in Harare. The question about the sustainability of CAMPFIRE, however, still remains since these agreements do not change CAMPFIRE's dependency on wildlife and on a single species.

Bond and Taylor argued that animal rights and welfare groups' position on sport hunting threatens the sustainability of CAMPFIRE as these pressure groups are predominantly from the West and the wealthy sport hunters are also from there. This pressure from the animal

welfare groups will drastically reduce sport hunting, especially that of the elephant, because feelings about that species are the most sensitive, and often stir up highly emotional viewpoints.

Another argument they made was that some Western governments want to ban the import of wildlife trophies and this, will certainly reduce sport hunting. The down side is that tourism and ecotourism will, in the short term, not be able to compensate for this loss of revenue to communal farmers. The strength of CAMPFIRE is that revenues from sport hunting are paid directly to the district council which then distributes money to the households or fund community projects. Much as the revenue from tourism is wildlife based it is earned by the tourism industry who pay taxes to the state. These taxes do not come to the district, and therefore local people do not benefit from this revenue. Another point they raised was that they doubted that tourism outside National Parks would pick up enough to provide an alternative source of income, because district councils were very stretched for resources and would not be able to invest in the development of hotels and lodges which would meet the standards of a sophisticated international clientele. Leasing land to private developers, however, would not generate substantial incomes either. Until now, the much spoken about joint ventures between district councils and the private sector had not materialized either.

In their submission, Bond and Taylor also pointed out that the distribution of household incomes differed from district to district, but in general, only 50 percent of the wards in Zimbabwe's CAMPFIRE districts have received incomes from the programme. Only 30 percent of the households in those CAMPFIRE wards have received cash benefits. Those benefiting from CAMPFIRE are a minority and they wondered whether conservation and

utilisation of a fugitive resource like wildlife can be sustainable if only a minority are participating and benefiting. Further, the picture is reversed once you get into wildlife rich wards like Masoka and Mahenye where cash incomes have been distributed to 100 per cent of the households in those wards. In their argument Bond and Taylor demonstrated that there are no universal performance or success indicators for CAMPFIRE and warned that conclusions drawn from a study of this nature would not be universally applicable to all districts or wards. They agreed, however, that the sustainability issue seems to transcend all CAMPFIRE districts and wards regardless of the numbers of wildlife in those areas or the income so realised.

Bond and Taylor Quoted studies that had been carried out which compare commercial cattle and wildlife ranching in natural regions four and five. Using data from these ranches they argued that in 90 per cent of the CAMPFIRE wards wildlife would be more profitable than cattle provided that those wards were rich in wildlife. They acknowledged that even in commercial ranches some of the wildlife activities were only marginally profitable, while others were very profitable. They believe that in Masoka, Mahenye, and Omay wildlife would be more profitable than cattle, while areas like Beitbridge and Tsholotsho would be marginal for wildlife as a land use option. Bond and Taylor conceded that they could not prove that wildlife ranching in communal areas would produce comparable income figures as those made by commercial ranching. In commercial ranches the proceeds from wildlife go to a single land-owner, in communal areas the same amount would have to be shared among thousands, and this would drastically reduce the take-home income by each household. According to Bond and Taylor in 1993 Zimbabwe earned a total of US\$14 million from sport hunting alone without considering the downstream effects. This was a substantial contribution

to the national economy and a large portion of this money was earned either as district levies, cash dividends, or community projects. By 1996 Zimbabwe was attracting in excess of 1 million tourists a year and the major attraction was wildlife. Tourism grew by 15 per cent in 1995/1996 and it was expected to get better in 1997/98. In fact tourism is the fastest growing economic activity in the country.

Measuring the contribution of wildlife to the local economies is not easy but Bond and Taylor concluded that one of the indicators is the household earnings. They believed that the amounts earned by households are substantial given the fact that these farmers would earn nothing since they are not formally employed.

Bond and Taylor claimed that wildlife numbers have increased in Nyaminyami over the last 25 years and supported their argument by using the WWF wildlife counts. The belief is that most of that increase is attributable to CAMPFIRE which has encouraged local people to participate in wildlife conservation because of the benefits derived from this resource. They argued that wildlife numbers have increased in spite of habitat loss.

Bond and Taylor (1996) believed that the consumptive utilisation of wildlife in communal areas is ecologically sustainable if the CAMPFIRE harvesting formula is used. In addition, they said that the present multiple wildlife utilisation strategies promoted by CAMPFIRE are economically sustainable, and demonstrated that hunting, using the quotas has been sustained in Nyaminyami over a period of 20 years. Bond said that this proves that wildlife can be harvested without depletion or degradation, therefore it can be concluded that wildlife is both ecologically and economically sustainable under CAMPFIRE. This could well be the case as

traditional practices similarly demonstrated this sustainability once a balance was achieved between off-take and natural regeneration. The sustainability of CAMPFIRE as a programme is still debatable, however, given the preceding arguments of programme sustainability based on a single species.

These two WWF officials advanced further arguments that CAMPFIRE is also improving the human capacity to manage resources. This increase in capacity is at the national, district, and local levels. Capacity at national level has also been increased given the many institutions that are now involved in the management of this resource. Nonetheless, questions can be raised as to the degree of capacitation that has taken place and whether local communities and district councils have attained the capacity to manage these resources without outside help. But Bond and Taylor argued that capacity building takes a long time and conceded that as of 1996, local level management capacity did not yet exist. Local institutions did not have capacity either and therefore critical decisions such as deciding how the resources are utilised, setting of quotas, and dealing with problem animals should still be in the hands of central government. It can then be concluded that there is limited capacity building.

5.3.2 Chinoyi (Zimbabwe Trust)

The Zimbabwe Trust is one of the NGOs that is involved with the implementation of CAMPFIRE. It is one of the founder organisations of CAMPFIRE and has participated since the very beginning. Zimbabwe Trust is charged with institutional development, training, capacity building, and in assisting the district council, WADCOs, VIDCOs, and the local people in implementing and managing CAMPFIRE. It set out to support CAMPFIRE by

promoting and strengthening institutions at the ward and village levels so that communities are equipped to utilise natural resources on a sustainable basis and to manage the revenues derived from such activities. Zimbabwe Trust's primary strategy is therefore to promote the sustainable management and utilisation of natural resources by producer communities. To that end the Zimbabwe Trust established its Institutional Development Unit (IDU) which is the unit for which Mr Chinoyi the interviewee works. Mr Chinoyi is a senior member of the organisation who has worked on the CAMPFIRE programme since its inception. He was involved with CAMPFIRE in Nyaminyami from the time the project was established and remained there for more than six years. Because of this he has practical experience and knowledge on CAMPFIRE and Nyaminyami. At the time of the interview in September 1996, Chinoyi had only very recently moved from Nyaminyami to the Trust's head quarters in Harare.

In dealing with the issue of sustainable benefits generated by CAMPFIRE Chinoyi reviewed a number the benefits from the programme. He explained in detail how the Nyama (meat) project, one of the benefits of CAMPFIRE, was established and how it was run. The objective of this interview was to establish how institutions worked at the ward and village levels and how ordinary people participated in the management of the resource and in sharing the benefits. According to Chinoyi the important issue of local people hunting was discussed at length with the district council, ward, and village levels. The local people wanted to hunt for food and for spiritual reasons, and the idea of giving hunting permits to local people similar to the ones given for fishing was discussed at length, he summed up the practical difficulties:

- If permits were given to local people it would be virtually impossible to

monitor the numbers of animals that each permit holder would kill in an open system where wildlife is not fenced.

- No effective mechanism could be found on how to control the hunting and the numbers of animals killed.
- It would be difficult to relate off take to wildlife numbers and the productivity of animals in a situation where there were multiple users of the resource.

Chinoyi said following this exhaustive discussion, a decision was made to go for organised hunting. This meant contracting professional hunters or companies to come and hunt a fixed number of certain animals species, like the impala, so that the community could have access to meat. In this case the quotas for organised hunting would be set by the game guards (employees of the DNPWLM). The services of a professional hunter are bought sometime in February and under the guidance of game guards the hunters are allowed to hunt a given quota of impala which is the most common animal killed by this programme. The hunter is allowed to kill a certain number of animals for himself as a commercial venture and the difference between the hunter's agreed off take and the allocated quota is what goes to the community as their share of the meat which is distributed free or sold at cost price.

According to Chinoyi this is a compromise situation. It is not ideal nor is it a permanent solution. He argued that ways must be found of enabling more community-based or traditional hunting practices to be used. He said most local people resent the fact that some foreigners can enjoy hunting in Nyaminyami while the local people are not allowed to do so. He pointed out that local people are denied an activity which the rich enjoy only because they have money which the local people do not have. It is therefore not true in all cases to say that

local people view these so-called benefits as incentives for conservation. He argued that how can these be incentives when the local people only accept them because they have no choice?

Chinoyi believed that while CAMPFIRE is making progress it nonetheless does not cater for some of the very basic expectations of the local communities. For example, involving local people in the setting up of the hunting quotas would increase project ownership and it should be possible to give community or village permits where bow and arrow hunting could be organised. This could be organised as local competitions during the hunting season or could be extended to those who are possessed by the hunting spirits. The meat could be shared by the owners of the permit at the village or community level. Chinoyi said this could introduce a local version of professional hunting as well as allow local people to participate in more professional hunting. Local people would enjoy hunting and in accordance with their ancestral spiritual values.

According to Chinoyi, two measures were afoot in connection with fishing which respond to the needs of the local people. Community fishing grounds were being established for those communities which lived along the lake Kariba shoreline and permits for people who fish for food and commercially were provided at a reasonable cost. This enabled many local people to participate in the activity. He said, however, this activity is still controlled by DNPWLM - Fisheries who monitor as well as enforce the conditions of the permits. As explained in Chapter One this offered limited access to the people of Gatshegatshe only, since for other communities there is still the ten kilometre wildlife corridor between the lake and the villages. This approach, he said was working, as evidenced by the reduction in the incidence of poaching and illegal fishing in Gatshegatshe.

Chinoyi (1996) listed a number of things he saw as major weaknesses of CAMPFIRE:

- CAMPFIRE has treated wildlife as if it comprises the totality of natural resources;
- CAMPFIRE has been hijacked by various interest groups, NGOs, the government, donors and even the CAMPFIRE Association leadership. These vested interests have paralysed the programme and do not serve the interests of the local people;
- because of these limitations the programme is therefore unable to rehabilitate the total landscape as originally planned.

Chinoyi also saw some challenges for the Zimbabwe Trust, as one of the leading organisation working with CAMPFIRE. The following is a summary of those challenges:

- It should provide an emancipatory role - dealing with issues of justice, such as the land tenure issues as proposed by the Land Commission.
- It should participate in democratising development.
- It should enable the Democratising of local and traditional institutions.

He explained that there is a perception among some government and NGO officials of viewing traditional institutions as dictatorial. In contrast to this, he argued that traditional institutions are not dictatorial but that individuals can be dictatorial even in a democracy. He said that there was a tendency to equate the chief with the institution, which is a fallacy because the chieftaincy and the elected council of elders are the institution. Traditional

institutions have a mixture of the monarch and the elected. He argued that it was therefore inaccurate to make a blanket conclusion that traditional institutions are dictatorial.

5.3.4 CAMPFIRE Associations: Maveneke

Maveneke, director CAMPFIRE Associations of Zimbabwe was considered one of the key people to be interviewed for this study because of his involvement with the implementation of the second CAMPFIRE project in the Guruve district. As national director of CAMPFIRE Associations he also had an overview of CAMPFIRE countrywide. He was asked to explain conflicts between government and the NGOs over the microcosmic and macrocosmic interpretations of the programme and why it had taken so long for these disagreements to emerge over what seems a very fundamental issue.

Maveneke (1996) said the microcosmic interpretation of CAMPFIRE was not a solution for all time, but one that was suitable for Zimbabwe's situation at this point in time. He argued that development cannot start everywhere at the same time, "...I am a great believer of starting somewhere and with something small and letting it grow. The microcosmic application of CAMPFIRE allows certain developments to take place in those wards that are rich in wildlife. The income from wildlife can support a certain level of development in the wards, because at that level this is a substantial amount of money. But the moment you spread it over 15 wards or the whole district it becomes too thin and cannot achieve anything."

He did not view the present application of CAMPFIRE as unfair or unjust, insisting that while wildlife was a fugitive resource it also occurred in higher numbers in some locations than in

others. This, he argued, meant that certain communities suffered more from wildlife than others, which is why those who bear the brunt of wildlife interactions should receive most of the benefits. He went on to explain that the various groups of NGOs and government officials were deliberately misinterpreting the microcosmic application of CAMPFIRE to suit their own interests and agendas. The microcosmic application of the programme did not mean that other communities in the district do not benefit from wildlife, but rather that those wildlife rich wards should get more. He said, " the district councils have the right and the power to increase their taxation/levies on CAMPFIRE up to a maximum of 40 per cent of the income earned by the programme. They can then use this money to provide infrastructure and services to the rest of the communities in the district, thereby ensuring that all benefit from this resource. I believe this is the route the district councils should take, some districts understand this, but many are not yet taking full advantage of the provisions of the appropriate authority. It is the councils' prerogative to do so, but we should not re-centralise CAMPFIRE management, the people will never accept it. Certain individuals in government are making their own interpretation of policy to suit their preferences."

On the issue of the incorporation of indigenous knowledge and traditional practices Maveneke argued that it cannot be said that this has not happened in every situation. He insisted that incorporation varied from district to district, and there were those communities where it had been done more successfully than in others. He thought that success in the use of indigenous knowledge had nothing to do with CAMPFIRE policy, but had to do with individual communities and their ability to make sure that the programme reflected their views and wishes. Maveneke agreed, however, that the programme has theoretically promoted the use of indigenous knowledge but has not practically done so.

Maveneke believed that donor funding was absolutely essential at this stage of the programme development, arguing that money was needed for training, co-ordination and networking, all of which, he claimed, could not yet be funded from internal CAMPFIRE resources. He did not think that the funding was too much, but said certain NGOs were taking advantage of this money and keeping themselves in business and not adequately addressing the needs of communities. He insisted that CAMPFIRE as a concept is sound and that the programme is sustainable. Some investment is necessary from outside before the programme can become self-sustaining. At the local level CAMPFIRE was already sustainable, but outside resources were needed to fund the networking and co-ordinating activities of the associations. He believed that without outside funding most of the current networking and sharing of experiences and information would not be possible.

5.3.5 Ministry of Environment, Tourism and Mining: Moyo

The issues raised in the interview with Moyo were on sustainability of CAMPFIRE, income and other benefits. Moyo asserted that the microcosmic view of CAMPFIRE is not sustainable at the district level, let alone at the national level. He argued that wildlife was a resource being drawn from a common pool of natural resources and that therefore the common good should be the goal. He insisted that there is a hierarchy of needs from the village up to the national level, all of which must be satisfied by the revenue derived from this resource.

Moyo saw the programme document as being defective in its insistence of a microcosmic interpretation and blamed the NGOs for introducing the concept of household dividends, their

insistence on sharing benefits only to a few and the abandonment of the common good. The main argument was that if the microcosmic view of CAMPFIRE is to be fully implemented, as advocated for by the NGOs, then huge resources and incomes will be shared by a few individuals in one village. Using this approach, general infrastructure and services such as roads, schools, health facilities would remain non-existent for everyone. A village could even use this money to develop a road which leads nowhere. Moyo used the example of Masoka in Guruve which is normally quoted as a success story by many writers. He said "Masoka is an oasis in this huge desert of underdevelopment and poverty and thus an example of a small community that was getting a huge revenue from CAMPFIRE but cannot provide nor maintain infrastructure and services." Moyo believed that given the present strategy and implementation, CAMPFIRE was not sustainable and cited the following reasons:

a) What is being done about wildlife cannot be applied to any other resource because other resources do not generate money like wildlife does. CAMPFIRE as currently implemented cannot effectively manage resources in communal areas. Other indigenous resources cannot be treated like wildlife. As an example, if those who have their land on the river frontage were to exclude others from benefitting from the water there would be chaos. Even if the wildlife component is economically and ecologically sound, the sustainability of CAMPFIRE cannot be measured by using just of one resource. Wildlife cannot be used to determine the success of the whole programme because it is just one of the resources involved.

b) There is too much money poured into the programme from outside and this is killing the local initiatives and the whole concept of it being a self-supporting programme.

The local people neither control nor manage the use of donor funds and that money serves the agenda of NGOs and not the needs of the local people. The need for such donor funding is very questionable because CAMPFIRE was supposed to be a self-supporting, grassroots, rural development strategy.

c) The original concept of CAMPFIRE was that it was a home-grown rural development strategy that was supposed to raise money by utilising local natural resources and the money from it was to finance development and conservation. The introduction of outside funds means that the original aims are totally abandoned or lost. The programme is now externally driven by the NGOs, donors, and the CAMPFIRE Association.

d) Large sums of money are devoted to developing small areas and promoting a single resource. These small areas cannot kickstart the development engine in rural areas, nor can a single resource finance development or ensure sustainable resource utilisation. This approach to resource utilisation and development is not sustainable and wildlife cannot be sustainably managed if land, forests, grasslands, and water are not sustainably managed, because wildlife is dependent on all these other resources. Sustainable natural resource management cannot be measured by looking at only one resource.

e) There is no comprehensive district resource utilisation strategy which must include wildlife, and there is a lack of strategy that recognizes that wildlife cannot exist nor be planned in isolation of land/soil, water, and forests. Wildlife cannot exist unless all these other resources are utilised in a balanced and sustainable manner.

f) CAMPFIRE has been hijacked by former officials of National Parks who saw an opportunity for wildlife utilisation outside the National Parks which was falling into the hands of the African leadership and they quickly set up or joined NGOs in order to access funds from donors. Given their expertise which they brought from the DNPWLM these officers gained donor confidence and respect and the donor funds were provided to fund the NGO visions and not those of the local communities. (If one examines the leadership and technical staff of these NGOs involved with CAMPFIRE Moyo's point is confirmed.)

g) NGOs have become self-perpetuating by promoting CAMPFIRE. The idea is not so much to ensure sustainable utilisation of wildlife, but rather to ensure perpetual dependence by local communities on NGO expertise and hence justify donor support for CAMPFIRE and therefore continued NGO involvement.

Moyo further argued that the NGOs have developed the community capacity only to the level that the NGOs want and not to the level where communities can become independent. This community capacity level is the NGO survival level, which does not threaten the demand for NGO assistance. "Once the communities can manage on their own, the NGOs would not be needed and they would be out of business. The NGOs and the wildlife experts in them are not in a hurry to work themselves out of a job."

5.4 Conclusions

In discussing with Mayo and others it became clear that the whole issue of benefits and income from wildlife is affected by the lack of an integrated, systematic, and holistic policy.

Sectoral legislations, sectoral policies and sectoral strategies cause confusion in the utilisation and management of natural resources. This lack of clarity has negatively impacted on CAMPFIRE as a development strategy. While CAMPFIRE as a concept is indeed progressive, its implementation has been hampered by lack of policy and legal measures that should have resolved the various contradictions. Zimbabwe lacks a comprehensive environmental and natural resources legislation that can supersede the various sectoral provisions and hence harmonise natural resources utilisation and management. Zimbabwe lacks legitimate and acceptable local institutions that can manage and control natural resource utilisation at the local level. The conflict and mistrust between government and the participating NGOs as well as the several interpretations of what CAMPFIRE means has further on impacted the programme.

Capacity building and institutional development were the pillars of CAMPFIRE but little progress has been made in this area because NGOs have not yet developed the local institutions to manage the resources on their own. Instead NGOs seem set for a long term involvement in the programme. Further, the sustainability of CAMPFIRE is questionable given all the various arguments about it being based on one resource and one species, being donor and NGO driven as well as its abandonment of its original objectives. The objectives of this study were based on those original programme objectives.

CHAPTER SIX

DISCUSSION

6.1 Introduction

The CAMPFIRE concept was developed as a response to the many failures of conventional wildlife management strategies, which emphasized the creation of National Parks, law enforcement, the protection and preservation of ecology with little regard for the people who inhabited those areas. This process tended to alienate local people who should have been on the forefront of wildlife conservation. CAMPFIRE, on the other hand, acknowledges that wildlife is a resource which must be used for the benefit of communities. It also advocates for the custodianship of resources including wildlife, and for the control and management of these resources to be given to the people who live with them. It seeks to place the responsibility for management and conservation of wildlife in the hands of the communities.

The discussion in this chapter covers issues that relate to and impact on CAMPFIRE and wildlife management at the local, national, continental, and international levels. Many of the findings have significance for CAMPFIRE and wildlife management in Nyaminyami and Zimbabwe, some are relevant to Africa as a whole, while others impact on, or are impacted on by debates and decisions that are made at the international level. These issues are discussed to establish the contribution of CAMPFIRE to sustainable natural resource management and to establish its effectiveness as a common property management strategy. The discussion also explores CAMPFIRE's contribution to international debates on globalisation and the notion of the global commons. In addition it looks at what contribution

local peoples' knowledge is making to wildlife management.

6.2 Discussions based on study objectives

This section discusses the study objectives with a view to ascertaining how they have been met by the results of the research. The overall objective of this study was to evaluate the contribution of CAMPFIRE to common property management, its effectiveness as a resource management strategy, and its sustainability. Common property management therefore remains at the centre of the discussions in this section. Each objective is discussed separately using the results of the research. These individual discussions are then related to the overall objective.

There are three major issues that are cross-cutting and overlap all the seven objectives of the study. These issues are; legislative and policy failure, multi-jurisdictional access rights, co-management and some of CAMPFIRE's weaknesses. These are discussed in detail after the individual objectives have been discussed, since they form the core of the findings of this research, but also because they provide a framework for analysing the other findings as well as because they respond to the main objective of the study. In discussing the individual objectives mention will be made of the cross-cutting issues which will subsequently be discussed in detail.

6.2.1 Transfer custodianship, utilisation, and management

Objective one of this study was to establish if the custodianship of wildlife, its utilisation and management had been transferred from the state to the lowest producer units and to assess

how this transfer was impacting on people's attitudes towards wildlife. This transfer was viewed by the programme as critical and was expected to positively impact people's attitudes towards wildlife by placing responsibility for management, conservation, and benefits sharing in the hands of the local people.

It has been established that wildlife ownership has not been transferred from the state to the lowest local producer units. Firstly, it was never the intention of the state to transfer ownership of the resources to any of the local government structures. Further, producer units do not really exist at the local level, they remain a convenient tool for planners and academics in the justification of the microcosmic implementation of the programme. The study has shown that management and jurisdiction over the utilisation of wildlife has partly been transferred from the state to the district councils and in turn some management responsibilities have been delegated to the WADCOs, VIDCOs and communities. The non-transfer of ownership to producer levels does not seem to have affected the effective management of wildlife.

The study shows that CAMPFIRE has positively impacted on local people's attitudes towards wildlife, many now see it as a resource because of the cash and material benefits. Conservation awareness has been raised by the programme and many have a good understanding of why wildlife should be conserved. The survey also demonstrated that some support the programme because they have been recognised and given responsibility to participate in the management of wildlife. Some negative views and conflicts still exist, however, because of problem animals and the damage they cause to property. The study also proved that many comply with the requirement of the programme not because their attitudes

have changed, but because they are afraid of the law and do not want to be on the wrong side of the authorities.

Details of some of the supporting evidence are discussed in the following sub-section.

6.2.1.1 Wildlife custodianship

The appropriate authority status given to district councils under CAMPFIRE transfers to the local authorities the power to manage natural resources under their jurisdiction for the benefit of their citizens. Appropriate authority does not transfer ownership or proprietorship from the state to the councils. However most of the CAMPFIRE literature refers to the transfer of ownership or proprietorship of natural resources as if this was the intention of the programme. This is a view which was, and is being pushed by the NGOs and some academics which is not provided for under the legal and policy provisions. The study proved that it was never the intention of the government to transfer proprietorship of natural resources to the district councils as provided for by the appropriate authority.

Transferring custodianship of natural resources from the state to the producer units would mean the district council giving up some of that appropriate authority to a lower level, be it a WADCO, VIDCO or whatever other institution that may be viewed as the producer of the resource. This transfer would mean devolution of power and appropriate authority beyond the district council level. This is what the NGOs envisioned would happen, as shown in the results of the study and this is also contained in the CAMPFIRE document as prepared by DNPWLM. But other government officials as demonstrated by Moyo, Chiwewe, and Tsvaki

did not see it that way. The NGOs argued that the district council and government are not implementing the spirit of CAMPFIRE whose intention is to transfer ownership of resources to local people. On the other hand, government officials argued that the intention, as stated by law, was to give custodianship to rural district councils which are peoples' institutions, democratically elected by them to represent local communities. The government position is that rural district councils can delegate the management of those resources to any of the local institutions in fulfilment of the spirit of the programme, but without legally transferring appropriate authority to those lower levels. Maveneke and government officials argued that district councils have the power to delegate this management to lower levels and no one can challenge them.

As stated in Chapter Four, Bond and Taylor (1996) thought that there was a policy distortion because devolution beyond the district did not happen. When closely examining the powers of the district council it is equally difficult to see how such devolution would take place without any legal provisions to ensure that it happened. The CAMPFIRE document expected that such devolution of power would take place in good faith. In fact what Bond and Taylor call policy, were rather statements of intent which are contained in the CAMPFIRE concept document, which is not a government policy document. Institutional power-sharing does not happen as an accident nor as a gesture of good will, but must be supported by legal instruments or formal agreements that ensure implementation. No such policy or legal provisions exist which would guarantee that this devolution or transfer of power will happen. But above all the district council cannot transfer proprietorship of resources to WADCOs and VIDCOs when the district council does not own those resources.

The NGOs, as represented by WWF, Zimbabwe Trust, CASS of the University of Zimbabwe and IUCN see the failure of devolution as a potentially crippling shortfall. The government of Zimbabwe, as represented by the Ministries of Environment and Tourism, Lands and Agriculture and Local Government Urban and Rural Development, however, do not see any conflict in this. Central government regards the local authority as the appropriate authority (Moyo, 1996). There is conflict between the perceptions of NGOs who are implementing CAMPFIRE and the government which formulates policy.

NGOs (Bond and Taylor, 1996) believe that without devolution CAMPFIRE will not develop properly. This view is shared by others such as Murphree (1995) and Metcalfe (1996). On the other hand, government officials (Moyo 1996 and Chiwewe 1996) believe that this devolution beyond the district council would spell doom for a very good programme. Moyo and Chiwewe's views also contradict the CAMPFIRE document and the spirit of it as spelled out by the DNPWLM which promoted devolution to lower levels. When CAMPFIRE was developed, the document said it would be implemented in a spirit of co-operation in recognition of the fact that the Ministry of Environment could not do it alone. Other resources are centrally managed, unlike wildlife the management of which has been decentralised. This further demonstrates that CAMPFIRE was developed without the corresponding policy, a situation that makes wildlife appear like a favoured child. According to Moyo and Chiwewe, however, there never was a policy intention to transfer appropriate authority to any level lower than the district council. As far as they are concerned the issue of devolution was the desire of the DNPWM and the NGOs, but a position that was never policy. Indeed there is no policy that supports the devolution of appropriate authority to lower levels.

The WADCOS and VIDCOS do not have a *loci standi* and even the Land Commission (1994) concluded that WADCOS and VIDCOS are not capable of managing natural resources, and yet the Prime Minister's directive of 1984 set them up as development institutions. There is once more conflict between the Prime Minister's directive, which is a policy statement, and legal provisions that set up the district councils, and which were established by an Act of Parliament. The WADCOS and VIDCOS do not have a legal standing and therefore according to Moyo and Chiwewe, appropriate authority cannot be devolved to them or to any other such structure without changing the law.

The Land Commission recommended the reversing of this policy by giving the control of natural resources back to traditional institutions. Policy is indeed at crossroads because while appropriate authority brings the management of wildlife down to the district level, other resources such as land, forests, minerals, and water are still centrally managed as. Policy therefore presents inconsistencies where:

- Water still belongs to the state and it is the state that gives water rights and not local authorities.
- Timber/forests are still controlled by colonial legislation with its exploitation being guided by central government (The Forestry Commission), and the district council plays a peripheral role of deciding who gets the permits for logging indigenous forests, but not how the resource is utilised.
- Wildlife is owned by the state, and major decisions are made by central government, while management has been given to local authorities and delegated to local communities.

This study found that the NGOs and those who are advocating for transferring the proprietorship of natural resources to local level producer units have not proved that such a transfer is critical for the efficient management of the resources. Their argument is based on common property theories which view 'excludability rights' as a critical factor in ensuring efficient and effective management of common property resources. This argument tends to ignore other forms of managing resources that are used in common, but are not necessarily common property. The establishment of a common property regime is often used as the centre of common property management. However, the study established that co-management is just as efficient, provided that duties, obligations, and benefit streams are well defined for each level.

The questionnaire asked heads of households to say who owned wildlife in communal areas as a way of establishing their understanding of the subject. The respondents perceived the community as the major owner of wildlife, but the district council was seen as having the major responsibility for managing and conserving wildlife. Interestingly, the district council did not feature at all under wildlife ownership. When analysing just these two variables, ownership and management, there seems to be a perception that the district council works for the people. Indeed the district council is an arm of the community. This also reinforces the issue raised earlier that wildlife is a shared responsibility at various levels. It is interesting, however, to note that ownership of the resource does not necessarily mean that the owners are the ones who have a management responsibility. As far as the communities in Nyaminyami were concerned, one level can own wildlife, while the management and conservation can happen at another level. The Tonga do not share the notion that ownership and management necessarily belong to one level, as advocated for by community-based resource management

approaches, or as some NGOs would like to see happen.

While the NGOs argued very strongly for ownership of the resources to be transferred from the state to the local producer units, there is no evidence anywhere to suggest that ownership by the local people would necessarily guarantee efficient and effective management. Resource degradation would occur under any form of ownership. What is at stake therefore is not ownership, nor the ability to exclude others, but the ability to define duties, obligations, and benefit streams for each level under multi-jurisdictional access rights. Trying to totally exclude other users from benefiting from a fugitive resource is neither sound nor sustainable.

6.2.1.2 Decisions about Wildlife utilisation

One of the aims of the CAMPFIRE programme is to transfer decision-making powers about wildlife utilisation to the lowest producer units. The programme states that when people make decisions about what to do with their resources and how to utilise them, then they will be motivated enough to care, conserve, and utilise them in a sustainable manner. Objective one attempts to determine if this has happened or not.

The results of the research show that ownership of resources and decision-making are still being made by Central Government. The DNPWLM decides how wildlife is utilised in communal areas by setting quotas and deciding when the actual hunts can take place. It makes critical decisions on which, and how, problem animals are dealt with, in communal areas. All of the management and control mechanisms are still with central government. This indicates that national policy makers still have no faith in local government structures or other local

institutions in being able to make the 'right decisions' or in establishing the 'right controls' or in being able to 'effectively manage natural resources.' Therefore, it can be concluded that 'appropriate authority' is a fuss and a fallacy, because no meaningful powers are vested in the local authority. The district council has no full authority to manage natural resources that are within the appropriate authority area or in its jurisdiction. In many respects that is why NGOs believe that transferring ownership to the local levels would ensure that local people participate in decision- making.

Many of the decisions that are made by the district council are still sanctioned by some arm of central government. The study proved that in fact appropriate authority is indeed 'very limited authority.' This means that the powers of WADCOs, VIDCOs, wildlife committees and those of individuals are even more limited. No meaningful devolution has taken place yet in relation to the management and utilisation of natural resources. This means that the practice is not at all consistent with official documentation, because CAMPFIRE has not transferred decision-making power to the district council about how wildlife should be utilised. CAMPFIRE has transferred the powers to decide what to do with revenue from wildlife to the district council, and in turn, the district council has mandated the ward councillor and the people of the ward to decide how the revenue is utilised. These institutions seem to be doing a good job of what has been delegated to them. The crux of the matter is not so much in transferring ownership of the resources to the local level, but giving decision-making power to each of the levels to perform whatever duties they are expected to do. It should be noted that until 1975, private land owners could not utilise their wildlife resources and yet they owned the land but not the resource on it. It is possible for local communities to have authority to manage and utilise a resource efficiently without necessarily owning it, provided

there are enabling legislations and policies.

What then does resource utilisation mean in these extremely restricted conditions? How can people fully participate in the utilisation of natural resources when they cannot make decisions about how those natural resources are utilised? It has been shown that appropriate authority has been devolved to the districts, but not to the local levels. It is difficult to see how devolution of power works in a situation where the local authority does not have enough authority. As shown earlier, the levies from CAMPFIRE are the only sources of revenue that the local authority collects. It can be concluded that the current legislation and policy do not devolve meaningful power from the centre to the districts, nor from the district to WADCOs and VIDCOs. Present local government structures, legislation, and policies serve to centralise and control the periphery rather than devolve power.

6.2.1.3 Resource Management

Since the 1950s, protected areas have expanded rapidly, particularly in developing countries. The establishment of protected areas in developing countries has placed the heaviest burden on local communities, which has proved to be a disincentive to effective conservation. As demonstrated by evidence from Nyaminyami, members of local communities complain that their interests and values are often not considered and exclusive preference is given to wildlife protection. The story of 'Operation Noah' told by the Tonga people shows how deep rooted this resentment is. This perception has resulted in hostile attitudes towards wildlife, which have fuelled conflict between local communities and conservation authorities. CAMPFIRE was developed to address these conflicts by transferring the responsibility for managing

wildlife to the local people. The responsibility for managing natural resources was given to the district councils through legislation, which gave appropriate authority to this level.

Appropriate authority is supposed to transfer responsibility for natural resource management from the state to the district councils. The district councils can delegate that managerial responsibilities to levels below them. Objective one of this study sought to establish if management of wildlife had been transferred to the producer communities. The survey showed that there was a tendency by NGOs participating in CAMPFIRE to see resource management as belonging to one level - the producer units or wildlife committees, and for government to view management of natural resources as a responsibility only of the district council because of its *loci standi*. There does not seem to be openness from the government and the NGOs to the possibility of the resources being managed at various levels, even policy does not make adequate provisions for this possibility. In practice, however, that is what is happening, resources are being utilised and managed at different levels. Lack of legal and policy provisions to streamline this management is what causes problems and leads to conflict.

According to the responses given by heads of households, the local community currently has very little responsibility for managing wildlife and other resources, and yet the programme is about the people managing their resources. The NGOs tend to see this lack of community participation in resource management as a result of non ownership of the resource at the local level. A closer look at this problem suggests that it is rather, a lack of clearly defined powers. The role of the local community at present is mainly to report trespassers and poachers, to do game scouting, to search for snares, and in reporting the presence of problem animals, as well

as deciding what to do with the money that they earn from the programme. Presently these structures and the local people have basic managerial responsibilities for wildlife, and they perform these well, but major management issues are dealt with at other levels. The district council has some responsibility for managing resources and is consulted by the DNPWLM when quotas are decided.

The information perpetuated by NGOs that they have built and enhanced capacity of local people to manage natural resources, seems to be misleading as evidence from the survey points to the contrary. No communities, after ten years, have developed the capacity to manage all aspects of these resources. Reports from NGOs indicate that communities are nowhere near being able to manage on their own, and that the communities and their local institutions still need the assistance of NGOs. The respondents to the household survey also indicated that no capacity at the local level has been developed for local people to manage on their own. This is not surprising since the local people and their institutions are not involved in deciding how natural resources are used and at best only participate in the implementation of the plans drawn by government and NGOs officials. Given the disputes between the government and the NGOs on what constitutes local natural resource management institutions, it is not surprising either that no institutional capacity building has been done. It is an impossible task for the NGOs to build capacity in a situation where there is no general agreement about which institutions to work with. The CAMPFIRE document, however, which was the basis for starting this programme clearly identified Village Development Committees and Ward Development Committees as the institutions through which the administration of the programme would be done, and yet NGOs insist on establishing other institutions. In as much as the CAMPFIRE programme claims to be a capacity building

operation with local communities directing action, ultimately, it is a top-down process with origins in central government.

It can be concluded here that wildlife management has not been transferred to producer units, but some management responsibilities have been transferred to the local people at the village level, via the VIDCO and WADCO by the district council.

6.2.2 Local Institutions and community participation

Objective two is to determine how local institutions have been developed and how they facilitate the efficient and effective management of CAMPFIRE. Further, it is to determine the impact of current local institutions on community participation.

There is a growing consensus on the need to allow local communities to own and manage their natural resources for their own benefit. It is still debatable, however, which institutions and management systems will ensure sustainable utilisation of resources (Sibanda, 1996). It is necessary to outline the powers of such institutions, their legal authority, and their moral responsibility given their task of managing resources on behalf of their peers (Sibanda, 1996).

It is essential to understand the role and functions of institutions in resource management and how these impact on property rights. People's participation in resource management is very much a function of the local institutions. These institutions have the power to facilitate or hinder effective participation. Institutions at different levels of the resource management hierarchy can also compete for power and control as stated in Muphree's Law (1991).

The CAMPFIRE programme made community participation one of its major pillars and put people at the centre of the management process of natural resources. Objectives two and three address the issue of participation, institutions, and incentives. This section examines how institutions facilitate or hinder community participation. Institutions were discussed in Chapter Four by examining the views of households, as well as by examining how these institutions operate. In Chapter Five the views of government and NGO officials were also discussed. In section 6.2.2.1, the CAMPFIRE local institutions, district council, WADCO, VIDCO, Wildlife Committees, and Natural Resources Committees have also been discussed.

The study has shown that district councils, Ward Development Committees, and Village Development Committees are all well established local government structures which are seen by local people and the NGOs as political structures which are not able to manage development. This thesis has shown that these institutions can manage natural resources if responsibility is properly delegated to them under a legal or policy provision. The government and NGOs recognise that these institutions have performed well when given tasks to do. The limitations were seen as emanating from the fact that the district council has limited power and authority, hence it can only delegate very little of that power to the lower levels. The study has also demonstrated that little meaningful capacity building has taken place to enhance the effective management capability of local institutions. These institutions remain weak because of the conflict between government and NGOs about which structures should manage natural resources at the village level. It is concluded here that what is needed is not new institutions, but properly defined power, authority and responsibilities for the existing structures. Further, it is necessary to build capacity within these local organisations. Detailed discussions that support these conclusions follow.

6.2.2.1 Institutions and resource management

The CAMPFIRE programme identified from the outset the importance of institutions in resource management, and the collaborative group agreed that the Zimbabwe Trust would assist the programme by developing the capacity of local institutions to manage natural resources. The understanding was that there were already some institutions, but they were weak and needed their capacities to be enhanced. In other cases it would also be necessary to develop some new institutions if there were none that could do the job. The government was to create an enabling environment that would assist the NGOs with this task by making sure that the Zimbabwe Trust had access to the district councils and the other local government structures. But the government was also supposed to develop policies that would facilitate the efficient implementation of the programme.

The district council was an existing organisation which had the legal authority to manage natural resources on behalf of its citizens. The district council consists of democratically elected councillors, one from each administrative wards of which chiefs are ex-officio members. At the ward level there is the Ward Development Committee which were established by the 1984 Prime Minister's directive. The councillors at the ward level chair the WADCO proceedings. The WADCO is composed of village chairpersons of Village Development Committees who are representatives elected at the village level under the provisions of the directive. But WADCO also includes designated persons like sub chiefs or sabhuku. The VIDCO is composed of elected, appointed and designated individuals like kraal heads and has special representation from women and the youth. These are the institutions whose capacities were supposed to be developed so that they could manage natural resources.

But later, decisions were also made to establish wildlife management committees to serve as sub committees of the WADCOs and VIDCOs, and these were later called natural resource committees. The NGOs strongly favoured the establishment of these committees often claiming that these were needed to manage natural resources because they argued that the local government structures were political structures rather than development institutions.

It is essential to understand the issue of local institutions because the current conflict between the NGOs and the government emanates from these different perceptions. The constraints that have been experienced also have their roots in this misunderstanding. Zimbabwe Trust's aim was to promote local institutions to manage the CAMPFIRE programme.

The parallel institutions such as Wildlife Committees or Natural Resources Committees which the NGOs tried to promote could not take off because these committees were to be sub-committees of either the WADCO or the VIDCO. These committees never have had power to do anything since they derived their power from powerless mother bodies. It is not surprising that after 10 years, these institutions remain extremely weak. Further, it is not surprising that the NGOs feel that it will take a long time to empower local institutions to manage these natural resources. WADCOs and VIDCOs have no meaningful work to do insofar as management of natural resources is concerned. Their roles and functions are to receive and distribute proceeds from CAMPFIRE as delegated by the district council. The NGOs are involved in a futile exercise of trying to empower institutions in a situation where there are no provisions for such power and where government clearly says appropriate authority can never be delegated to them because they have no legal standing. Given the present arrangements NGOs are guaranteed a continued role because they will never be able

to empower these institutions. That is why the government argues that NGOs have been given the mandate and resources to build capacity of local institutions but are failing to deliver because they (NGOs) want to develop parallel structures instead of dealing with legitimate ones. The government and the NGOs must resolve first which structures will manage natural resources. The irony is that neither side seems willing or able to resolve this impasse.

The Land Commission (1994) also concluded that WADCOs and VIDCOs are incapable of managing anything developmental. Hence its recommendation to transfer land allocation and management of natural resources back to the traditional institutions. This recommendation was made by the rural people themselves and also casts doubts on the ability of the district councils to allocate land and manage natural resources, a position that not only undermines these local governance structures, but threatens their future existence. The Land Commission found that rural people viewed the traditional institutions of the chief, headman, and kraal head as being more socially acceptable to manage natural resources than WADCOs and VIDCOs. This brings to question the legitimacy of these institutions as development entities or as administrative structures. The fundamental issue, however, seems to be that WADCOs and VIDCOs have never had their mandates, roles, and functions properly defined by law, a situation that has perpetuated their weakness. The Land Commission did not address this particular issue and yet it is central to question of what these institutions are capable of doing. In any case it is unfair for anyone to have expected these institutions to deliver when they have never had a legitimate mandate. It is concluded that there is nothing wrong with the institutions per se, but with the lack of legitimate power.

The question, however, is whether these traditional institutions have the capacity and

capability to manage land and the resources on it, as well as the development process that goes with the utilisation of natural resources. These traditional institutions have been marginalised and emasculated by both the colonial and independence administrations because they created alternative centres of power, a situation which left traditional institutions with frivolous and ceremonial functions only. Can these traditional institutions rise to the occasion if the authority to manage natural resources is transferred to them? What will it take to create the needed management and planning competence? It seems as if the non performance of WADCOs and VIDCOs which are not their fault has caused local people to reject them. This nostalgia about traditional institutions seems to have been embraced by the Land Commission without a thorough analysis. In Omay it was demonstrated that Tonga chieftaincy has always been weak, it is doubtful that in the situation described here these institutions will be able to take on these responsibility. Further, the study has shown that most of the traditional management knowledge, skills, and practices are no longer available in a usable manner since most people have no practical experience. It was shown that traditional institutions have not practised these functions for a long time, because these functions had been taken away from them by the colonial and the independence administrations. This may yet lead to another complication. Simply changing of institutions, without the enabling legislation, powers, and capacity building will not solve the problem either. The social acceptability of institutions alone does not guarantee performance.

The wildlife committees which had been established in Nyaminyami were quickly dismantled because there were seen as competing with the WADCOs. Bond and Taylor (1996) say these committees were seen as threatening WADCOs purely because of the CAMPFIRE money which these committees controlled. Bond and Taylor claimed that these committees even

threatened the district council which saw itself losing control of its role as the 'appropriate authority.' An analysis of all these institutions shows that the proliferation of structures was a result of poor analysis on the part of the government and the NGOs at the inception of CAMPFIRE. The NGOs are still insisting on the establishment of these institutions without showing what their added value would be.

Bond and Taylor (1996) support the Ward Wildlife Committees and say these institutions were successful in managing wildlife. They argued that the success of these committees was due to the fact that they had financial resources. This argument is weak because it does not tell us whether these committees had any special skills. They claimed that institutions without resources cannot function, except in a political situation. They believe that the district councils are paralysed because of their inability to raise revenue from rural taxes. If the critical issue is money, then any institution can do the job, provided they have the resources. We argue here that institutional capacity is more than having money, it is rather about the ability to manage.

Moyo and Chiwewe said the 'appropriate authority' lies with the district council to manage natural resources, any other structures which have no 'loci standi' are not necessary, and serve to confuse the local people. Setting up parallel structures under the guise of supporting peoples' participation is totally unjustified they said. There seems to exist very strong rivalry between NGOs and the government over CAMPFIRE and its implementation. The growing differences between government and the NGOs no doubt negatively impact on CAMPFIRE and on wildlife management. Government officials seem to have a point in saying that the establishment of another layer of committees would certainly serve no purpose. There are

already too many administrative and development structures and institutions in rural areas, adding another layer would not solve the problem, but merely compound it. NGOs are yet to prove the point that adding this layer would ensure a more efficient management of the natural resources.

6.2.2.2 Institutions and participation

If the development of CAMPFIRE had been guided by the local people's cosmovision, the issue of participation would not even arise. The concept of participation is in itself an admission that someone else made the decisions and the plans and participation is a way of trying to legitimatise those top down decisions and plans by calling for stakeholder or community participation. The information from ethnographies shows that even CAMPFIRE uses this top down approach. Participation is in effect a denial of the owners of development to make crucial decisions for themselves. Participation as it stands today encourages local communities to participate in what the outsiders have decided and planned. As Chambers (1986) says participation is about a strong person wanting to change things for some one weaker. We argue here that participation should be about weak people making decisions that change their lives. The respondents to this survey demonstrated the point made by Chambers.

There was also a general agreement between Moyo (1996), Chinoyi (1996), Taylor and Bond (1996) that WADCOs and VIDCOs have never really worked well as development institutions. But Bond, Taylor and Chinoyi further argued that promoting the CAMPFIRE Committees was a recognition by the NGOs and the communities that WADCOs and VIDCOs could not lead development. But Bond and Taylor, during the interview conceded

that some of the WADCOS and VIDCOs had done a good job. There is an element of vacillation here as the NGOs seemingly do not want to be on the same side as the government and vice versa.

This brings into question the entire CAMPFIRE philosophy which is supposed to be participatory and which is meant to transfer power to local communities to manage resources. If the people's democratically elected institutions are not involved in the major decisions of how resources are utilised it cannot be said that the people are being empowered to manage these resources. The CAMPFIRE intentions are clear, however, implementation does not measure up. This centralisation of decision-making in the hands of central government does not promote meaningful participation. In practice, participation is not really central to CAMPFIRE, but is grafted onto it like in most development projects.

These local institutions could not participate in any meaningful management of natural resources because they did not have that mandate. How then could communities meaningfully participate in CAMPFIRE when their local institutions have no power to make any important decisions? The present power structures at national and district levels do not really allow local institutions to participate in development. These arrangements do not allow the NGOs to enhance the capacity of local institutions, nor to empower them to manage the resources.

6.2.2.3 Capacity building and institutions

Objective two sought to determine how local institutions have been developed and how they facilitate efficient and effective management of natural resources. Bond and Taylor said that

institutional development support and capacity building are closely linked. In order for the institutions to function, support or an enabling environment from central government is needed. Weaknesses of the present set up with CAMPFIRE and institutions were identified by Bond and Taylor as:

a) the lack of institutional capacity to manage wildlife and financial resources resulting from non clarity as to which institutions are supposed to manage wildlife. Further, the local institutions still do not have the capacity to manage.

b) the lack of local capacity to plan and manage natural resources, where there is institutional capacity it is easy to develop and build management capacity.

They argued that too much energy is devoted to conflicts about which institutions are to manage, but no meaningful work is going into resolving or developing the needed institutions.

This analysis by Bond and Taylor is interesting because both the government and the NGOs know that the issue of institutions has not been resolved and it confirms Moyo's assertion earlier that NGOs are not in a hurry to work themselves out of a job. But the government has not tried to solve the problem either by creating an enabling environment, instead it is busy accusing NGOs. Bond and Taylor insisted that this process will take many years and agreed that no capacity building or empowerment has taken place. This was confirmed by Chinoyi. They said that empowerment of local people will come from the government via progressive legislation and policies. On the other hand, the government argued that both mandate and donor resources have been given to the NGOs to empower the communities through capacity

building, but their failure to deliver was because they had agendas that are different from what local people want. These arguments have had very negative consequences on CAMPFIRE. But it seems as if the two parties cannot extricate themselves from this futile exercise of blaming each other.

The fundamental question to ask is, do the NGOs and the government know what type of institutions are needed to manage natural resources? The second question to ask is, do the NGOs and the government understand that present power relations between central government and the local governance structures do not allow for full participation of local institutions in managing the resources? Furthermore is there an agreement between NGOs and the government on what empowerment means and are NGOs part of this non-empowerment of local institutions?

The NGOs argued that communities need resource management and development institutions and these must be different from the local government structures which are primarily political institutions. The NGOs believe that these institutions must have the capacity to manage natural resources and the development process as well as liberate local people from the stranglehold of government and the party. Government and the party are viewed as negatively impacting on development. Local government structures are viewed as denying local communities the control needed to participate in natural resource management. Central government sees this as manipulation by the NGOs and views only the local government structures as legitimate. This analysis did not find any evidence of NGOs' genuine efforts to empower local people to manage the development process themselves.

CAMPFIRE planners have analysed what is needed technically to run this programme and the technical and scientific issues are clear. They have not, however, analysed what managerial and administrative skills and capacities are needed by the local institutions at various levels to effectively manage natural resources (Sibanda, 1996). But also to be defined is how resources can be managed under multi-jurisdictional access rights. In order to propel CAMPFIRE into the future, more comprehensive policy is needed.

6.2.3 Sharing of Benefits

Popular CAMPFIRE literature places emphasis on direct benefits from the programme to the local communities. Writers like Murphree (1990, 1991) and Rihoy (1991) say there is a direct link between benefits and people's participation in the conservation of wildlife. People will not participate in conservation if they do not receive benefits. Objective three of the study set out to determine the role of cash and other material benefits as incentives for community participation in wildlife conservation. These incentives included cash dividends to the households, community projects, meat, and employment.

It is difficult to conclude with any certainty that cash and material benefits are critical for people to participate in wildlife management. The evaluation did establish that local people receive cash and other benefits in those wards which have wildlife. Local people value community projects that are funded by proceeds from CAMPFIRE. Cash incentives at the household level, however, were found to be small and to have little impact on peoples' participation in wildlife management, except in chief Mola's area. But communities also participate in the programme because this is government sanctioned and they do not want to

be on the wrong side of the law. The Tonga people do not believe in the extermination of wild animals, and in this case their beliefs and the CAMPFIRE objectives are the same. Therefore the incentives for participating in wildlife management are many. While cash dividends are important and contribute to people's willingness to conserve wildlife, there was no evidence from the study that these are critical factors for participation.

It can be concluded that benefits are important for people's participation in wildlife conservation, but these incentives are not the only ones. The role of cash incentives has been overplayed by the proponents of CAMPFIRE. It was also established that CAMPFIRE would receive more support from the local people if their own values with regard to wildlife were included and respected, which has been limited in the past.

The following sub-section provides a detailed discussion to support these conclusions.

6.2.3.1 Cash dividends, who benefits

Popular CAMPFIRE literature creates an impression that everyone who lives in a ward with wildlife receives substantial benefits and income which cannot be earned from any other source in communal areas. The literature does not show the discrepancy between wards that earn an income and the others which do not or get very little (Table 6.1 and Figures 6.1 and 6.2). The literature does not show that even in wards that have wildlife not everybody receives these benefits. The results of the survey demonstrated this and many of the ethnographies show that the elderly do not benefit from the programme. The majority of those who were interviewed mentioned a number of benefits from CAMPFIRE and these included cash,

community projects and meat. There were many others, however, who did not earn any income from CAMPFIRE and who did not see the benefits of this programme. As a matter of fact, the majority of respondents indicated that the revenue of CAMPFIRE at the household level was negligible. The amount of household dividends are too small to make any real and meaningful impact. This finding runs contrary to what writers like Taylor (1990), Mupfrees (1991), Maveneke (1992) and others have tried to show where they say that these household dividends are substantial and therefore critical for people to participate in the conservation of the resource. They argued that given the opportunity cost in a rural areas, these dividends are substantial even if they are small. This study did not find this to be accurate in Nyaminyami as respondents clearly shown that household dividends are negligible and produced evidence of income from other sources which were more significant to them.

The community participation in wildlife conservation is built around the incentives concept which is justified through benefits from CAMPFIRE. Respondents, however, agreed that at the community level CAMPFIRE income has an impact and most people supported it because of these community benefits. This assertion by respondents also supports the proponents of the macrocosmic view who insist that household dividends are undermining the programme and do not have any impact and that benefits should be at community level. Some respondents in chief Mola's, however, area did indicate that for them household income was substantial and were against any suggestion of abolishing it. But there were other areas like Negande and Nebire which were totally opposed to the distribution system as it stands.

The over emphasis of cash incentives has distorted the conservation message. The conservation aspect of CAMPFIRE is lost and what seems to stand out is the selling or killing

of animals and the sharing of money. This suggests three things either: I) the messages about conservation are not getting through to the people, or ii) the decision-making process marginalises local people and hence they really do not understand the central role of conservation which creates this misconception, or iii) direct benefits and incentives have been over marketed and now overshadow the sustainable utilisation objective. There are always dangers of opportunistic marketing strategies but they tend to distort the situation. CAMPFIRE seems to have succeeded in undermining itself locally by over-emphasizing cash and other benefits as the pillars of the programme rather than conservation and sustainable utilisation.

Moyo's persuasive argument on the microcosmic interpretation is that this revenue should be used to provide infrastructure. There is a counter-argument that questions whether the provision of infrastructure such as roads, schools, and clinics should come from the CAMPFIRE revenues of these marginalised district councils, whereas the same infrastructure and services in other well to do districts are provided for by the central government.

The findings of this survey contradict earlier findings by Taylor (1993) and others who claim that local people's attitudes have changed positively towards wildlife as a result of the benefits people get from wildlife. Indeed, the panacea, created by popular literature, is not supported by these findings.

TABLE 6.1 Distribution of Revenue per Ward from 1989 to 1994								
WARDS		Gatshegatshe	Makande	Makande	Musamba	Musamba	Nebire	TOTAL
		1	2 (A)	3 (B)	4 (B)	5 (A)	6 (B)	
Population		1 536	1 125	3 995	3 381	2 331	1 073	13 441
Households		396	419	902	734	546	240	3 237
1989	Dividend (\$)	16 500	16 500	16 500	16 500	16 500	16 500	99 000
	P A C	-	-	-	-	-	-	-
	Other Income	-	-	-	-	-	-	-
1990	Dividend (\$)	8 083	8 083	8 083	8 083	8 083	8 083	48 498
	P A C	-	-	-	-	-	-	-
	Other Income	-	-	-	-	-	-	-
1991	Dividend (\$)	17 000	17 000	17 000	17 000	17 000	17 000	102 000
	P A C	-	-	-	-	-	-	-
	Other Income	-	-	-	-	-	-	-
1992	Dividend (\$)	34 832	-	144 669	59 182	16 439	9 864	264 986
	P A C	-	-	-	-	-	-	-
	Other Income	-	-	-	-	-	-	-
1993	Dividend (\$)	57 661	-	98 467	245 708	-	24 617	426 453
	P A C	-	-	13 020	9 263	15 454	-	37 737
	Other Income	-	-	1 176	4 260	-	108	5 544
1994	Dividend (\$)	84 022	-	815 445	260 080	16 150	23 200	1 198 897
	P A C	-	-	2 743	-	40 000	40 000	82 743
	Other Income	-	-	-	-	-	4 740	4 740
TOTALS		218 098	41 583	1 117 103	620 076	129 626	144 112	2 270 598

TABLE 6.1 Continued (Distribution of Revenue per Ward from 1989 to 1994)

WARDS		Nebire	Negande	Negande	Mola	Mola	Chalala	TOTAL
		7 (A)	8 (B)	9 (A)	10 (B)	11 (B)	12	
Population		1 038	2 541	1 513	1 447	2 261	3 144	10 644
Households		190	469	281	248	404	521	2113
1989	Dividend (\$)	16 500	16 500	16 500	16 500	16 500	16 500	99 000
	P A C	-	-	-	-	-	-	-
	Other Income	-	-	-	-	-	-	-
1990	Dividend (\$)	8 083	8 083	8 083	8 083	8 083	8 083	48 498
	P A C	-	-	-	-	-	-	-
	Other Income	-	-	-	-	-	-	-
1991	Dividend (\$)	17 000	17 000	17 000	17 000	17 000	17 000	102 000
	P A C	-	-	-	-	-	-	-
	Other Income	-	-	-	-	-	-	-
1992	Dividend (\$)	29 591	29 591	9 864	29 591	34 832	34 832	168 301
	P A C	21 220	22 361	-	22 361	-	-	57 194
	Other Income	-	-	-	-	-	-	-
1993	Dividend (\$)	24 617	34 463	19 693	14 770	57 661	57 661	208 865
	P A C	-	-	38 571	-	-	-	38 571
	Other Income	-	-	941	-	-	-	941
1994	Dividend (\$)	138 190	80 118	72 425	118 105	24 415	24 415	457 668
	P A C	28 000	-	-	-	30 000	-	58 000
	Other Income	47 931	-	-	-	9 217	-	57 148
TOTALS		331 132	208 116	183 077	226 410	197 708	158 491	1 304 934

According to Jansen (1990) an annual household dividend of Z\$99 Z\$44 quoted by Taylor (1993) were seen as sufficient incentives for these rural people because they would otherwise not even earn this amount. The results of this study show that the people in Nyaminyami did not consider these amounts as sufficient incentives for their participation in wildlife conservation. An impression is often created that CAMPFIRE provides income to rural people which they could never earn from any other rural activities. Further, the supporters of this notion say that this income and other material benefits totally outweigh any inconvenience from wildlife. They argue that CAMPFIRE provides the largest alternative income in rural areas. This is indeed a fallacy, since farmers are still bitter about wild animals, but further, farmers regard wildlife/CAMPFIRE income as comprising an insignificant percentage of family income. According to the survey farmers insist that this income at the family level is really negligible. Given the figures of household dividends from Taylor and Jansen it is clear why farmers say that this income is insignificant. CAMPFIRE is not the largest earner of income in rural areas such as Nyaminyami as people derive their income from other activities like growing crops such as cotton and keeping small livestock like goats and sheep. The average price for one goat in Omay was Z\$100.00 in 1997 which is more than the average annual household dividend. There is no doubt that CAMPFIRE brings benefits to the people of Omay, but it is a gross exaggeration to suggest that it earns rural households their largest revenue.

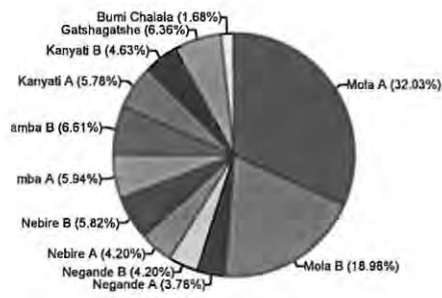


Figure 6.1 Income Distribution

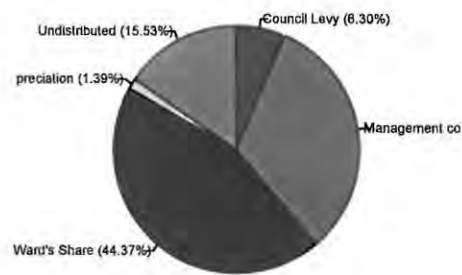


Figure 6.2 Income Utilization

CAMPFIRE and other community-based wildlife management approaches have created an impression that rural people are hostile towards wildlife because they bear the cost of 'living with wildlife' without obtaining any significant benefit from it (Kiss, 1990). This statement creates an impression that if people benefited from these animals, this would cancel the cost of living with wild animals and therefore solve the issue of 'problem' animals. CAMPFIRE is yet to prove what level of benefits would cancel out the cost of the problem of animals, present income levels and benefits do not solve the problem of animals.

The people do not see these benefits as being equal to or more than the cost of living with the animals. In their argument, Matzke and Nabane (1990) said that there is a direct correlation between conservation and benefits derived from wildlife by communities. This research did not find such a correlation to exist, but found instead that conservation of wildlife in Nyaminyami occurs in spite of these benefits. Most writers on CAMPFIRE have underestimated the power of coercion by the state and officials on rural people which makes them tolerate a programme like CAMPFIRE. Respondent after respondent mentioned the

issue of not wanting to be seen as poachers. The issue of benefits and incentives have been overstated in the programme, and a realistic assessment of the impacts of these is necessary.

The benefits surely create incentives, but all credit cannot be apportioned to benefits. There is also no doubt that local people need a fair share of benefits from wildlife (Sibanda & Omwega, 1996), however, care must be taken not to over value these benefits. Arguing that cash and material benefits are responsible for wildlife conservation is to deny that local people have their own values regarding wildlife. These values are major contributors to the local people's conservation efforts. Conservation awareness and benefits do create some incentives but a balanced assessment of the impact of various influences and values on conservation is essential.

6.2.4 Indigenous Knowledge and Traditional Practices

The CAMPFIRE programme states clearly in its documentation that the use of local indigenous knowledge and traditional practices in managing natural resources is paramount to its particular strategy. The programme philosophy says that people will only effectively participate in the management and conservation of natural resources if their knowledge and traditional practices are incorporated into the new strategy. Objective four of the study set out to establish if Tonga indigenous knowledge and traditional practices had been incorporated into the management of wildlife in Nyaminyami and to examine how this was impacting on sustainable natural resource utilisation.

It is important to assess indigenous knowledge and the ability of the community to use

indigenous knowledge in resource management. Many people, including advocates of indigenous knowledge remain nostalgic about this subject, but out of touch with the reality of its applicability. In traditional Tonga society, God owned the resources, while tradition is always dynamic the community has never been seen as owning natural resources under Tonga culture. Nonetheless, people had a primary responsibility to care for the earth and to look after its resources. Older people still hold to this nostalgia of yester years as shown from the in-depth discussions, however, younger people who are influenced by current developments and who have no experience with the past but are influenced by conventional science want to control and own natural resources. They have been influenced by Western concepts of democracy, private ownership, and equity issues. As a result, they place very little value on their indigenous knowledge and practices as they do not see the immediate value of these. Their answers reflect a mixture of reality and desire for how things should be by the respondents.

Some indigenous knowledge and traditional practices have been incorporated into CAMPFIRE, but this has happened only in a minority of situations. The intention for CAMPFIRE to do this is clearly stated in the programme documentation, however, most of the indigenous knowledge and traditional practices only exists in theory as shown by the results of the survey. These have not been practised by most of the present generation, nor can they be translated into action. Most of the people are no longer fully grounded in these traditions and therefore are ill equipped to use them. It is concluded that indigenous knowledge has been treated as nostalgic romanticism and CAMPFIRE has no capacity to internalise these concepts, ideas, and practices, in addition many of the Tonga people no longer have sufficient residual practical knowledge needed to contribute to the programme

in this capacity.

6.2.4.1 Indigenous knowledge, nostalgia or reality?

This study revealed the following issues about what is happening to the indigenous knowledge and traditional practices of the Tonga people. Tonga indigenous knowledge has not been incorporated into CAMPFIRE programme in a majority of cases for the following reasons:

i) In most cases, especially amongst the middle-aged and young people in other words people aged 15 - 50 indigenous knowledge only exists in theory, people can speak about it, but they do not have any practical experience with it nor a full understanding of what it is able to deliver. The majority honestly do not know what indigenous knowledge can produce for them and what benefits it could have for them, because they have not experienced it.

ii) Most of the people, including the older ones, have been alienated from wildlife practices since colonial days and have used neither the traditional knowledge nor practices because they have never had access to these resources and therefore are not in a position to translate these into practice. They are not in position to contribute much to the incorporation of this knowledge to CAMPFIRE since they do not know how it works.

iii) Indigenous knowledge has been treated with nostalgia and romanticism as if they exist independently of the people's cosmovision. Indigenous knowledge cannot be translated into practice without grounding it in people's cosmovision. Indigenous knowledge constitutes

a small part of the people's perception of life. CAMPFIRE has not taken time to understand people's cosmivision to be able to see where indigenous knowledge fits in. CAMPFIRE is still a product of the dominant development paradigm which has no room for indigenous knowledge systems and issues of spirituality which constitute major pillars of Tonga cosmivision.

iv) Conventional science and the dominant development paradigm have never understood or seldom tried to understand spirituality and the supernatural powers. Conventional science dismisses issues of spirituality as superstition and therefore does not examine these in any detail. CAMPFIRE is supposedly directed by this knowledge system, but how then could the programme incorporate that which it does not understand nor accept as reality?

v) Many local people now treat their own culture, knowledge, and traditions as inferior to the Western knowledge system, and hence are not in a position to take their own knowledge and traditions any further than to talk about them. They are busy trying to modernise and have very little room for indigenous knowledge which they believe cannot give them any added advantage in the demands and competition of life in today's world.

vi) The Western knowledge system has always treated the African knowledge system as inferior, and has seldom allowed a genuine dialogue between systems to take place. The Western knowledge system yard stick has been used to judge indigenous knowledge, spirituality, taboos and has concluded that these were primitive, superstitious, and guided by the powers of darkness. CAMPFIRE is inadequately prepared to handle these issues because

it is guided by conventional science which does not give room to spirituality and spiritual growth.

vii) There is also nostalgia about indigenous knowledge from a few Western enthusiasts who have not studied this in any detail. In the first place indigenous knowledge does not constitute a whole knowledge system and yet it has been treated as if is a whole system. Secondly, the interpretation of indigenous knowledge is done outside the people's cosmovision. Finally, these enthusiasts have concluded that indigenous knowledge has answers to all our problems if it is given a chance.

viii) Indigenous cosmologies and traditional practices have not always prevented over-exploitation of soils, overgrazing, deforestation, pollution, and environmental exploitation nor have they addressed issues of equity. The Tonga stream bank and river bed cultivation were not always environmentally friendly nor were some of their hunting practices, which ended up killing certain animals unintentionally. Therefore environmental degradation is not a new phenomenon in Africa, as some writers would have us believe, nor can indigenous knowledge and traditional practices solve all environmental problems.

6.2.5 Sustainability of CAMPFIRE and Wildlife

Objective five attempts to establish the effectiveness of CAMPFIRE as a natural resource management strategy, its sustainability, and that of wildlife utilisation under the programme. CAMPFIRE promotes the full utilisation of wildlife including tourism, ecotourism, sport hunting, and safaris. Consumptive use of wildlife, however, is heavily contested by animal

welfare lobby groups and preservationists and others mainly from the West. These groups believe that animals have a right to live, and that their survival must not be linked to what humans think and want. The problem with this debate is that usually it refers only to a few animals such as the elephant, rhino and the gorilla which are of interest to the West. The debate around the welfare of only a limited number of animals, much as it is presented as if it includes all animals. Even with their good intentions, the views of the animal welfare lobbyists makes wildlife very vulnerable, because the reality is that wildlife is competing for the same land as human beings. If human beings do not find a way of co-existing with animals, then the animals will lose that battle. Moreover, the largest proportion of the world's wildlife resources today are in developing countries. In these countries the majority of the people are poor and underdeveloped, and therefore would like to use wildlife for their own development, or convert wildlife habitats to some other uses that would be more economically beneficial to them. It is not a practical proposition to tell these people not to use these resources, given the level of poverty that threatens their very existence. Even without the consumptive utilisation of the elephant, rhino, and so forth, wild animals will continue to decline because if communities cannot benefit from them, they will convert the wildlife habitat to more beneficial uses. The West and the animal welfare groups will not be able to stop these local people from doing this, it is thus futile to argue in the way these groups do.

CAMPFIRE was developed as a natural resource management approach that would ensure the sustainable utilisation of water, forests, soils, wildlife, and grazing. It was meant to be used in the management of other resources, not just wildlife, and its success and its sustainability were based on the totality of resources. Today, however, this approach has been used in the management of just wildlife. It should be explained here that part of the reason

why CAMPFIRE has only embraced wildlife is because the concept was developed as a response to the failures of conventional wildlife management approaches. The realisation that wildlife is dependent on other resources for its survival prompted the planners to try and make the programme comprehensive covering these other resources. Unfortunately, CAMPFIRE has not been able to shake off the original motivation of managing wildlife resources.

CAMPFIRE is a sound strategy for resources used in common. It can be concluded that the experience from CAMPFIRE is contributing to the body of knowledge on: common property resource management and resources used in common which are not common property. It has demonstrated how pseudo-commons can be managed in a sustainable manner in the absence of both group ownership and excludability. CAMPFIRE contributes specifically to the bundles of rights theory by showing that in multi-jurisdictional access rights, group ownership of the resource is not critical, but defining duties, obligations, and benefit streams for each level is more critical.

Given its multi-jurisdictional access rights approach it can be concluded that CAMPFIRE is potentially an effective strategy for natural resource management because it places responsibility for management, conservation, and benefits-sharing in the hands of the democratically elected District Council and the local people. It also accommodates the government and the NGOs participating in this collective responsibility. The strategy is however, constrained by a lack of policy and legal provisions which provide for more structured power sharing in the management of natural resources.

The study established that CAMPFIRE is not sustainable for as long as it remains dependent

on just wildlife utilisation, whose major activity is elephant sport hunting. Conservation based cash and material benefits incentive packages alone are not sustainable.

6.2.5.1 CAMPFIRE: grassroots development strategy or sacred cow?

CAMPFIRE's effectiveness as a natural resource management strategy is limited and greatly impacted on by some of the weaknesses of programme implementation. The programme is not a grassroots rural development strategy, but one that is planned and managed by many stakeholders. It is not self-sufficient and has moderate success in distributing benefits from wildlife. This approach has not been used in the management of other natural resources. Hence even if it were successful in the utilisation and management of wildlife, this cannot be interpreted to mean it is effective in the management of other natural resources. One of the major weaknesses of CAMPFIRE is that it has not been tested on the management of most of the other resources, and wildlife is not representative of the other natural resources. But CAMPFIRE has also abandoned one of its major principles of being a home-grown strategy that was supposed to be self financing to one that is heavily donor-funded.

6.2.5.2 CAMPFIRE: sustainability and the Western lobby

It was demonstrated in Chapter Five that 90 per cent of the present CAMPFIRE income comes from the hunting of the elephant. The findings, discussions, and literature review indicate that the Western wildlife lobby groups and animal welfare groups will greatly impact on CAMPFIRE because of their opposition to the sport hunting of the elephant. Many in the West do not want to see elephants consumptively utilised or killed, however sustainable that

utilisation may be, but the elephant is also regarded by the international community as a heritage of humanity. The influence of such groups even if they distort the truth, threatens the sustainability of CAMPFIRE.

It was demonstrated in the literature review how a number of NGOs distorted facts and gave inaccurate information to the public when discussing the limited exemption on the ivory trade ban for a few countries in Southern Africa. A number of factors seem to threaten CAMPFIRE and wildlife sustainability. As already stated, the implementation of CAMPFIRE is based on wildlife. Its sustainability cannot be guaranteed from such an application of the concept because 90 per cent of the revenue that is shared from the programme is generated from hunting one species, the elephant. CAMPFIRE cannot be sustained by one activity, namely the hunting of the elephant. Further, the international pressure from CITES, and animal welfare groups in the Western world is already having an effect on the programme as demonstrated by the ban on the ivory trade and how that is threatening CAMPFIRE. Animal welfare groups are opposed to the sport hunting of the elephant and are putting pressure on their governments to ban their citizens from participating in the sport.

The global commons debate and the globalisation trends and processes are already working towards taking decision making power away from local people and placing that power in the hands of global "ecocrats" and planners. The whole essence of CAMPFIRE is that wildlife is viewed as common property where the local people who live with wild animals can exclude others and benefit directly from the resource. If excludability is waived by global commons and access to these resources is granted to people who are even outside the country, then the management of wildlife as it exists now will collapse. Given all these threats CAMPFIRE is

neither viable nor sustainable without modifications. While wildlife utilisation may be ecologically and economically sustainable, the pressures described above will, however, cripple the programme because hunting will either be severely reduced or eliminated altogether. In these circumstances neither CAMPFIRE nor wildlife utilisation will be sustainable based on present approaches.

Another important point that is often misunderstood in the West is that even if CAMPFIRE collapsed, and the world market for ivory also collapsed this is not a guarantee that the elephant will survive. The argument often advanced by CAMPFIRE proponents is that if local people fail to get benefits from wildlife, they will simply convert wildlife habitat to more beneficial uses. In that event the wildlife will still be wiped out. Merely opposing hunting in itself is not a solution that will save wildlife; a formula must be found of which will save wildlife, but also enable the people in developing countries to develop economically.

CAMPFIRE proponents have already demonstrated why wildlife cannot be sustained unless consumptive uses are also permitted. The one time lucrative tourism industry in Kenya tried to demonstrate that wildlife conservation could be financed from this form of utilisation alone. But today, doubts are being raised about the sustainability of wildlife utilisation based just on tourism. Sibanda (1995b) showed that in Kenya while wildlife-based tourism earned huge sums of money, very little of that revenue ever found its way to the local communities and gate takings were not adequate to cover the conservation costs. Zimbabwe is not an exception and CAMPFIRE will not be sustained if these communities affected do not receive direct benefits from it, especially if full utilisation is not allowed. Most of the tourism money is earned by the tourist industry, who do not even invest anything in wildlife conservation

except via the payment of taxes. There is no guarantee that large sums of money will always be earned from tourism. Referring to Kenya, Western (1998) says even the donors have had to acknowledge that financial sustainability of wildlife conservation based on tourism alone is not achievable. This is a sobering reality for those who are engaged in wildlife conservation, but raises the question, if wildlife is to be saved who will pay the conservation bill? Swanson (1992) believes the West will have to pay developing countries for conserving their biodiversity. But he offers no formula of how this can be done. What is clear though is that conservation cannot be financed by developing countries, nor can the people be denied the use of their resources.

O'Connor (1993) argues that wildlife contributes very little to the alleviation of poverty in Africa. Sibanda (1995) also argues that the cash incentives from CAMPFIRE are too small to act as major incentives for the conservation of wildlife. Given these arguments, how then can CAMPFIRE be sustainable, based on a single species and on sport hunting? Other benefits such as meat, have very little impact on people's lives because this kind of benefit occurs on a few occasions and its impact as an incentive is negligible. It was stated in Chapter Four how cash at the household level was considered to be too little to provide any meaningful incentives. If the cash dividends incentives theory holds, it is difficult to see how CAMPFIRE can be sustainable in these conditions where incomes from wildlife are too small to act as major incentives and in a situation where they may dwindle even further.

Community projects, however, do provide meaningful incentives for conservation, but this revenue is threatened by what happens to the elephant internationally. Cash incentives have been over-valued by some writers as shown earlier, however, Birgegard's (1993) point that

a totality of benefits is what would sustain a programme like CAMPFIRE is worth looking at.

It is safe to conclude that given the above discussion, CAMPFIRE and wildlife utilisation in Nyaminyami and Zimbabwe are not sustainable. Wildlife utilisation will have to be re-examined and planned together with other resources, in an integrated manner. CAMPFIRE's success will very much depend on including other resources, utilising more than just the elephant, and diversifying activities that earn income.

6.2.6 Policy and legislation

Objective six wanted to establish whether CAMPFIRE, in the absence of enabling legislation could resolve major issues and conflicts relating to ownership and control of resources. The discussion in section 6.2.1 shows that even an effective programme cannot resolve legal and policy issues, and that the lack of policy can cripple what is otherwise an excellent natural resources management strategy. The study has shown that there is conflict among government ministries, between government and the NGOs, and between the district council and WADCOs and VIDCOs. All these conflicts are due to poor policies and the lack of enabling legislation. The study has shown that these problems cannot be resolved by a programme, but that they need comprehensive environmental legislation and policies.

Present legislation and policy do not provide a framework for the way in which resources like wildlife can be properly managed at multiple levels and how benefits can be equitably distributed. Even the bundles of rights approaches and multiple access rights cannot resolve

these conflicts in the absence of enabling legislation and policy.

A detailed discussion is covered in section 6.3.1. of this chapter which deals with cross-cutting issues.

6.2.7 Wildlife: Common Property or State Property?

Objective number seven of the thesis addresses the need to establish whether CAMPFIRE is contributing to common property management. This comes from the hypothesis made by the study and by many CAMPFIRE writers that wildlife is a common property resource and common property theories can be used in analysing it.

According to the theory popularised by Hardin (1968), all resources owned and utilised in common will inevitably suffer from over exploitation and degradation. Scholars from many disciplines, ranging from economics, biology, and anthropology have explored the dilemma of the commons and debated possible solutions. This thesis has tried to show that wildlife under CAMPFIRE is a state pseudo common property. The contribution of CAMPFIRE to common property management is examined here. The thesis has already noted that common property theories are limited in their applicability to CAMPFIRE because of their emphasis on excludability and the need to create a common property regime. Wildlife in Zimbabwe is not a common property resource, but a pseudo-commons which is utilised and managed at three levels. The theories of the bundles of rights were found to be the more relevant tools of analysis because they accommodate multiple access rights. In this case CAMPFIRE therefore makes a contribution to the theories of bundles of rights. But bundles of rights are also

concerned with trying to explain the management of common property. It follows that CAMPFIRE contributes to common property management.

6.2.7.1 Community based management

Most proponents and supporters of CAMPFIRE believe that it is a community-based resource management strategy (Murindagomo, 1990; Murphree, 1991; Murombedzi, 1992; and Bond and Taylor, 1996). They say that while it is not yet a common property, both the intention and the process are geared towards the attainment of a community management strategy. They believe that a common property resource management regime is already in the making, as communities are already managing other resources which are not wildlife. In their view common property resource regime institutions are yet to develop. It is, however, difficult to see how common property regimes can develop when the resources are not community owned as stated earlier. The Village Assemblies bill which has now been passed by Parliament, may well usher in that development. This study has established that wildlife in communal areas is used in common, but that it is not a common property resource.

It is concluded that the strength of CAMPFIRE as a programme does not lie with its ability to exclude others, but rather in its ability to accommodate multiple access rights. CAMPFIRE proves that it is possible to effectively and efficiently manage a natural resource which is used in common and yet it is not a common property. But it also demonstrates that a common property regime is not a prerequisite for the efficient management of resources used in common.

6.3 Crosscutting Issues

A summary of cross-cutting issues is given in this section which are considered important for the findings of this study. These issues are legislative and policy failure, multiple access rights/co-management, and CAMPFIRE problems. These issues overlap with all of the seven objectives.

6.3.1 Lack of Policy, Legal instruments and Guidelines

The study hypothesized that a conflict exists between the national, district, and local levels with regard to who should own wildlife and how its benefits are to be shared. The conflict is due to a lack of policy, legal instruments, and guidelines on how to manage a resource that is utilised and controlled at three different levels. The hypothesis also suggested that programmes like CAMPFIRE, however, well intentioned, cannot resolve such conflicts. The study pursued this objective by examining how policy and legal provisions addressed issues of multi-jurisdictional management of resource. But it was also found that issues of legislation and policy impacted on the programme in its totality. This sub-section provides a broad framework and understanding of how critical legislation and policy are to the development and implementation of CAMPFIRE.

6.3.1.1 Policy and legal framework

The various relevant legislations were discussed in Chapter One and it was shown how they impacted on CAMPFIRE, wildlife management, and on other resources. An examination of

the development and implementation of CAMPFIRE reveals that no corresponding policy framework was developed beyond the concept paper of 1986 and the guidelines of 1991. Indeed no legal instruments were developed to assist in the implementation of this programme beyond the 1975 Wildlife Act, and its subsequent amendment in 1982. The amendment of the National Parks and Wildlife Act in 1982 merely gave management responsibility and utility of natural resources to district councils. While the legislation enabled district councils to manage these resources on behalf of their citizens and for their benefit it did not define how responsibility would be shared by these different levels since the resources remained state property. It also did not define how co-management would take place without the various levels trying to wrest power from each other. As stated earlier it was assumed that district councils would devolve power to the WADCOs and VIDCOs without examining in detail what power was being devolved from the state to the districts councils.

What should have been an innovative approach to natural resource management has been paralysed by lack of policy and guiding legislation. It can be argued that there is policy failure as well as programme failure. There is unwillingness on the part of other ministries to assist the Ministry of Environment and Tourism to effectively implement this programme as demonstrated by the microcosmic and macrocosmic interpretations of CAMPFIRE. Further, the Ministry of Environment and Tourism and the Department of National Parks and Wildlife Management which developed CAMPFIRE do not always agree on what CAMPFIRE means. The Ministry sometimes undermines the department, further curtailing its ability to support CAMPFIRE. This happens because either there is no policy or there is no clarity in policy which enables officials to interpret policy differently to suit their own interests.

It should be understood that resource degradation is the consequence of an absence of management. It is a function of the state to provide or authorise such management over state resources. Policy failure is a result of state incompetence to provide institutions required for the management of a particular resource (Swanson 1996). Insofar as CAMPFIRE is concerned, the state has failed to provide the policy, management and institutions required to manage natural resources. This thesis, has provided evidence that points to policy failure.

Existing policy is defective in defining clearly the duties, obligations, and benefit streams at the state, district, and community levels. Each of these levels has some duties, obligations, and benefit streams related to the management and utilisation of wildlife. It is not clear for instance how central government and the district council share the responsibilities and benefits of managing wildlife in National Parks which are within district council areas. Without such clarity, conflict will always exist between different levels.

The thesis has shown that lack of institutional analysis and clarity in policy has resulted in mistrust and suspicion between the NGOs and the government. This programme was initially a joint effort between the two now quarrelling parties. Lack of policy leads to confusion that makes each party feel as if they are about to lose control. The debate has been trivialised by the lack of an in depth policy analysis. Government and the NGOs must accept that the issues are not about NGO or government control, but about finding a workable formula that facilitates effective and efficient management of resources. The focus of the discussions must shift from allocating blame to each other, to looking at formulating an enabling policy. The parties must understand that no amount criticism of each other will solve the problem.

6.3.1.2 Conflicts

Different kinds of conflicts are discussed here. The study has shown that conflicts exist at many levels: at national level among the ministries, at district council level between the district council and the WADCOs and VIDCOs and at the local levels between modern structures and traditional institutions. CAMPFIRE was developed to minimise conflicts between the authorities and local people over the illegal utilisation of wildlife. The programme planners believed that local people would stop illegal hunting, and stop being hostile to wild animals if the management, utilisation and benefits from wildlife were all transferred to the local people. The results of the study show that conflicts have not been eliminated.

These conflicts manifest themselves in the following ways:

i) Natural resources including wildlife in communal areas are still owned by the state, and major decisions about how they are to be utilised are made by state institutions like the DNPWLM. This runs counter to the democratisation and devolution processes which were ushered in by independence. This causes conflicts between the centre and the periphery.

ii) There is tension between DNPWLM and the district councils when setting hunting quotas, the councils are not happy with the decisions made by the department. The same department makes decisions and takes action whenever there are problem animals. The district council's role is reduced to reporting and implementing decisions made by the department. The director of DNPWLM and the councillors confirmed this conflict between

the council and the department.

iii) There are national parks which are within the district council jurisdictional area, but these are managed by DNPWLM. As shown in Table 4.22 the district councils would want to manage and control these, so that they can earn revenue from tourism and hence increase council resources. District councils regard these National Parks as district resources and are supported by the local communities for this view. The local people also see these a potential source of income to the communities. The state however sees them as national resources which must be centrally managed for the good of the nation as a whole. Many respondents, 36 per cent said the state should own National Parks, another 26 per cent wanted the district to own the National Parks. But the majority wanted to share benefits from the National Parks without necessarily claiming ownership of the resources.

iv) Government and NGO officials agreed that wildlife is treated differently from other natural resources and that some decentralisation of its management is taking place while other resources like water, minerals, and forests are still centralised. The differences in the way these resources are managed causes conflict. But wildlife is seen as a 'favoured child' especially by other ministries and communities who do not deal with it or have no access to it.

v) District councils decide and control revenue from CAMPFIRE and do not want to share this responsibility with lower governance structures. District councils see this as the only power they have over the issue of resources and they are, therefore bound to guard their position jealously. This creates conflict with lower levels of local government who also want

to participate in decision-making.

vi) The thesis has provided evidence to show that local communities perceive these resources as belonging to them and believe that they are the ones who should be making decisions about how they should be used. The communities are not happy with present arrangements and this causes conflict as seen from the findings.

vii) The conflict between the government and the NGOs over the microcosmic and macrocosmic interpretations, the establishment of wildlife committees, and the transfer of proprietorship to local institutions are all reflections of lack of policy and clear guidelines which leads to conflict.

viii) There is also conflict between the Ministry of Environment and Tourism and other ministries. As shown earlier, for a long time the Ministry of Environment supported the microcosmic view, while the Ministry of Local Government openly supported the macrocosmic view and the two were engaged in an open debate on the subject. Lately, there are differences between the Ministry of Environment and the DNPWLM on the microcosmic and macrocosmic interpretations. The department has stuck to the microcosmic view while the ministry has moved on to the other side. All these conflicts are due to a lack of clear policy, a point conceded by both sides.

ix) Conflicts also exist at the local levels between those communities who benefit from CAMPFIRE and those who do not. As shown earlier traditional institutions feel cheated even under CAMPFIRE because they are not involved in deciding how natural resources are

utilised.

As can be seen, CAMPFIRE cannot resolve these issues, instead it has become entangled in a web of outdated and conflicting legislation and policies which do not create harmony in the management of natural resources. CAMPFIRE is negatively impacted on by this lack of policy and will not be able to deliver as expected until these issues are resolved. The work of the NGOs is also paralysed for the same reasons. Conflict among government ministries would be greatly reduced if policy was clearer.

Even where legislation is clear like in the case of the 1982 amendment of the National Parks and Wildlife Act, which gives custodianship of wildlife and other natural resources to the district council, confusion still exists because policy was not developed to enable the smooth implementation of the programme. This lack of policy has left many, including NGOs and academics to interpret the law as giving proprietorship of the resources to the district council. Government and the NGOs have had ten years of learning in implementing CAMPFIRE, they should use this wealth of knowledge to improve the implementation of CAMPFIRE. But they should also make decisions that will impact on wildlife management positively as well as assist in the management of other resources.

6.3.2 Multi-level access rights/co-management

Wildlife in the communal areas of Zimbabwe has been treated and analysed by other scholars as a common property resource. Proponents of CAMPFIRE, NGOs, and some scholars also believe that wildlife in communal areas will never be effectively and efficiently managed

unless ownership is transferred to the local communities (Murphree 1990,1991; Metcalfe, 1992; Bond and Taylor and others.) They also believe that a common property resource regime must develop before management can be effective. Wildlife in Zimbabwe is not owned by the communities nor by the district councils, therefore, it is not a common property resource, but rather a state owned resource whose management is shared and whose utilisation and benefits are also shared at many levels. The evidence from Nyaminyami suggests that wildlife management under CAMPFIRE is not a community-based management system, but a joint management system.

By treating wildlife as a common property resource CAMPFIRE has emphasised excludability. Common property theories lay much emphasis on the ability of the group which owns the resource to be able to exclude others from using the resource. The CAMPFIRE microcosmic view was developed from the premise that the resource is owned by a specific and defined group who must benefit directly from it and must exclude others. The results of this research in Nyaminyami demonstrate that in practice, the microcosmic application of CAMPFIRE is not really attainable given the realities of ownership and management. The insistence by the proponents of CAMPFIRE that benefits should only accrue to those who suffer direct inconvenience from wildlife is not only out of step with reality it is also against the wishes and perceptions of the local people.

The 'bundles of rights' theory, however, seems to define better what is happening to wildlife ownership and management in Zimbabwe. 'Bundles of rights' attempts to describe the complex rights of usufruct that occur in different cultural conceptions of tenure. 'Bundles of rights' refer to the manner in which multiple jurisdictions concerning use, access, or

ownership in land and resources can be accommodated (Hasler, 1996). It simply means that others may have rights to use a resource that is held or owned by someone else. Multi-jurisdictional access rights promote the notion that it is possible to effectively manage resources which are used in common, but which are not common property. These resources can be co-managed and the various parties can each maintain their duties and obligations as well as enjoy their benefits. Wildlife in Zimbabwe is managed this way at present, and whatever problems that are experienced have little to do with ownership or excludability rights.

The study has shown that wildlife is owned by the state, but managed, utilised, and controlled at national, district, and community levels. While legislation has made provisions for it to be managed at national and district levels, policy has not created a benefit stream ratio that factors in local communities. Policy needs to articulate how wildlife is managed at these different levels without creating conflict.

The microcosmic and macrocosmic interpretations of CAMPFIRE have impacted on the distribution of benefits to local people as shown above. It is argued that wildlife, like any other natural resource occurs in specific localities and therefore remains a village resource, a ward resource, a district resource, and may be declared a national resource. **The real issue is not the microcosmic or macrocosmic interpretation, but rather the need to have a clear policy or strategy that defines the stream of benefits for each level and that determines what the obligations and duties of each level are.** Further, a resource may be fugitive like wildlife and therefore move about and affect more than just the community where it is found at the time of harvest, as was demonstrated in the case of Nebire and

Negande in relation to Mola. Applying the microcosmic view of CAMPFIRE in this case is neither just nor fair. Policy must make provisions for a more flexible application of this concept which allows justice to be seen and to be done. Policy must define streams of benefits and obligations for various levels which are affected by the resource.

6.3.2.1 Economic producer, units what are they?

The CAMPFIRE planners in their quest for a clear definition that would enable them to implement the microcosmic view of CAMPFIRE coined the term 'producer units.' The producer unit concept, therefore, arises from the proponents of the microcosmic view who wanted to define, with precision, those people who suffered directly from wildlife inconvenience so that only those people could share benefits from wildlife use. The CAMPFIRE document did not define producer units but rather producer communities. Producer communities were described as those communities who live with this resource, and incur the 'costs' of living with it. Ideally the size of these producer communities was said to be between 100 and 200 households. Even with their quest for precision, proponents of producer units have never been able to define them adequately, and this has created problems when trying to establish if transfer to these producer units had taken place. The limitations of this approach is that these producer units do not fit into any of the administrative structures on the ground, they are neither the villages as delineated by government which have 100 households, nor the traditional villages as understood by the local people. The research found that in real life, such economic producer units do not exist, as the Tonga do not even consider themselves as producers of wildlife. The village concept, as advanced by the government, has not taken off in Nyaminyami. This study concludes that practically speaking, communities

in Nyaminyami do not believe in this concept, it is viewed as an academic and abstract concept which does not make a difference to the management and conservation of wildlife.

This study looked at the traditional villages as understood by the local people as the units for resource management. Activities and ceremonies in the village are organised according to the organic village which is based on clans, social, cultural, and ancestral relationships. The study recognised VIDCOs, WADCOs, and the district council as administrative structures which are used in the distribution of wildlife income but which do not determine social organisation. This thesis recognizes the potential of these structures as development institutions.

From the confusion of definition about producer units it is clear that CAMPFIRE developed certain concepts and terminologies that are not readily understood by the local people and therefore bring no meaning or utility to their everyday lives. Consequently, there is real no value added in trying to establish producer units in this situation except as an intellectual exercise. These concepts remain as interesting intellectual debates, but do not in anyway tell us what is happening in the field, nor do they add value to wildlife management and conservation. It is possible that producer units may be better defined and implemented in other districts such as Masoka village in Guruve. Masoka, which is a replanned village, in this case fits the government definition of a village and was used as a producer unit. Moyo (1996) noted that the village concept as expounded by government does not operate properly in most districts in the country. He said that the delineation of villages was arbitrary. This reinforces the argument being made here that externally initiated structures do not add value to natural resource management. Further, the creation of structures without full consultation with local people can work against those institutions. The mere creation of institutions does not solve

the problems of resource utilisation as has been demonstrated by this study.

The difficulty of delineating producer units is also a function of the difference between government-conceived villages and traditional villages as understood by the community. As far as the local people are concerned, the village as a development structure or economic unit does not exist. What exists is an organic, functional village which has different boundaries than those proclaimed by government, and whose function is more to do with people's relationship to one another, and to their clans, the shades, and their social life.

6.3.2.2 Common property and the fallacy of producer units

It is essential to understand that not all resources which are used in common are common property. State-owned resources are used in common, but are not common property and hence a true common property resource regime cannot develop in those situations. CAMPFIRE has tried to introduce alien notions to the existing management and utilisation systems of wildlife. A common property resource regime would define territory (the extent of the common property) as relating to the group that owns that common resource. This would not be a producer unit either, as it would only define territory. It is misleading to take state property, which district councils have custodianship over, and treat it as if it was owned at the local level and hence suggest that there are producer units or producer communities. The fact that people share land with wildlife and are entitled to use it, does not make them producers of that wildlife.

Local communities may have excludability rights even if the resource does not belong to

them, for as long as the state gives them those rights, as demonstrated by the communal tenurial system. Communal farmers share the use and control of these resources with others who are granted similar or even different rights such as safari operators, hunters, and others. The district council is not a producer either, but a manager of the resource. The concept of producer as it relates to natural resources is really a far-fetched notion which only serves to confuse issues. Indeed those who have water rights do not claim to be producers of that water, why should those who have access rights to wildlife be seen as producers of that resource. It is more appropriate to talk about communities with access rights rather than producer communities. CAMPFIRE proponents have relied too much on common property theories and are obsessed with wanting to create a common where one does not exist.

6.3.2.3 CAMPFIRE: wildlife as the totality of resources

One of the major weaknesses of CAMPFIRE is that wildlife is being planned and managed apart from other district resources, and yet it cannot exist without land/soil, water, and forests. Wildlife has been treated as if it was the totality of the indigenous resources in communal areas. There are a number of reasons for that. Firstly CAMPFIRE was developed by the DNPWLM, which is part of the Ministry of Environment and Tourism, which has jurisdiction over wildlife, and not the other natural resources. Much as CAMPFIRE was adopted as a grassroots rural development strategy, it has continued to be viewed as the DNPWLM's baby hence its narrow implementation in the field. Most writers tend to refer to CAMPFIRE as a wildlife management strategy and not as a strategy for the management of indigenous resources. Secondly, the Ministry of Environment and Tourism is a junior ministry and does not command much influence, therefore spearheading the implementation of this programme

from this ministry is difficult and the more powerful ministries like the Ministry of Local Government can afford to ignore it. Thirdly, the international community has an interest in wildlife and consequently donor support has been given to this sector and not to the other indigenous resources. Locally, revenue can be earned from wildlife utilisation much more easily than any other indigenous resource in communal areas because of its market price which is externally determined. District councils and local people therefore quickly adopted the wildlife management strategy because they could earn revenue in a short time. But the CAMPFIRE proponents also focussed on wildlife more than on other resources, as result wildlife has come to represent all the other resources and here in lies CAMPFIRE's downfall. Parallel management structures are being set up and supported by donor funding just to manage this one resource. Wildlife utilisation under CAMPFIRE is not sustainable outside the larger picture of the rest of the district's resources. The programme continues, oblivious of these real threats to it, because some of the stakeholders do not want to examine its weaknesses. In fact, the quest by most CAMPFIRE supporters is to present it as a perfect programme and this is likely eventually to become its undoing.

Wildlife management is not sustainable under CAMPFIRE, outside of the broad framework of the sustainable management of all the other natural resources. What is needed is an integrated natural resource management strategy at the district level. The intentions were to make CAMPFIRE such a strategy, however, its implementation shows that wildlife has been treated as if it was the totality of the natural resources in Zimbabwe's communal areas. Because of this, neither CAMPFIRE nor wildlife are sustainable under these conditions. Wildlife harvesting methods under CAMPFIRE are ecologically and financially sound, but this does not make wildlife utilisation sustainable.

6.3.3 CAMPFIRE: some critical perspectives

A concerted effort by the government of Zimbabwe, NGOs, donors, and many supporters of CAMPFIRE has been made to present the programme as a flawless undertaking. Evidence of this can be found in the many government, NGO, and donor official documents and reports, as well as in academic papers. This approach serves the interests of all the parties even if they may disagree among themselves. This front has worked well up to now, but it may well become the downfall of CAMPFIRE. This study has established that the proponents of CAMPFIRE, NGOs and donors are not comfortable with the programme being analysed or its weaknesses being exposed. In many ways CAMPFIRE has become the sacred cow of wildlife conservation.

The study has also shown that wildlife management is heavily impacted on by decisions taken at the international level, such the trade ban on ivory, the trend towards globalisation, and the notion of global commons. All these developments and decisions reduce the power of local communities and national states to make decisions about how to utilise their resources. This is creating tension and antagonisms which negatively impact on wildlife management. These developments seem to be working against efforts of democratisation and self-determination.

CAMPFIRE is generally presented as a flawless programme and an innovative approach to sustainable natural resource management by most of the writers. When dealing with the donors both the government and NGO officials present only the positive side of CAMPFIRE. In public the collaborative group presents a united position, but in private the group disagrees heavily. This study found that there were many weaknesses regarding the CAMPFIRE

programme which the collaborative group is not prepared to discuss in public nor does it easily accept criticism. The various parties accept criticism only if it is directed at their adversaries. The following is a resume of some of the weaknesses and issues which need immediate attention if CAMPFIRE is continue into the future.

i) NGOs are afraid of losing donor funding if weaknesses of this programme are publicly discussed and therefore tend to take a defensive position, but also paint an overly positive image of CAMPFIRE. This study has established that in private, however, many of the officials admit that there are weaknesses as revealed by the interviews with government and NGO officials.

ii) While the collaborative group disagrees among themselves on many issues, they do not, however, accept that this strategy, which has become world famous, has weaknesses. They close ranks whenever a critical analysis of CAMPFIRE is done. An impression is being created that the world should not know about CAMPFIRE's weaknesses, but should only hear the good things. In general the group tended to alluded to those weaknesses where the parties blame each other, but which were viewed as not threatening funding.

iii) Donors too need something successful to which they can give their money to, and account to those who provide the funds by demonstrating the success of the programme they are funding. While CAMPFIRE receives substantial amounts of money from the donors, it was not possible to get an accurate picture of how much money is involved. This information is closely guarded by the recipients. As shown by Moyo (1996), most of this money does not fund the needs of communities but finances the agendas of NGOs and does not necessarily

enhance wildlife management. CAMPFIRE has lost its original goal of being a grassroots rural development strategy that was supposed to generate and distribute benefits to communities to being one that is a major recipient of donor money.

iv) CAMPFIRE has become an international beggar and is now donor and NGO-driven, and according to Moyo is over funded, the money finances NGO agendas, and not community needs. Many of the NGOs are now self-perpetuating as shown by the findings of this study. Donor funding might be better spent if it was given to local communities for their efforts in conserving wildlife and they could use these funds to finance their own development as suggested by Swanson (1996).

v) NGOs have developed capacities of local institutions only up to the level that ensures a continued role for NGOs. Many of the NGOs confess to the fact that after ten years the capacity of the local institutions and communities has not been developed. The NGOs also demonstrate why the services of NGOs will be needed for a long time to come. These NGOs are not in a hurry to work themselves out of jobs by developing the capacity of local institutions too fast.

vi) The government has not been able to develop complementary policies to create an enabling environment so that CAMPFIRE can be implemented successfully. Instead of attending to the task at hand, many officials devote energy to blaming and criticising NGOs.

v) Further, government ministries have been bogged down by the debate on the microcosmic and macrocosmic views instead of finding a way forward by developing

legislation and policies that would eliminate these contradictions.

If CAMPFIRE is to achieve its objectives as originally set out and meet future challenges of managing natural resources in a sustainable manner, then the current internal debates must be taken as the new challenges which will propel the programme to new heights. The present approach of the stakeholders fighting in private, failing to address the problems which have arisen and being unresponsive to constructive criticism will certainly negatively impact on CAMPFIRE. Solutions to CAMPFIRE's problems and weaknesses will not come from blaming each other, but from sitting down together and mapping a way forward. The time for serious dialogue and the need to create synergies is now.

CAMPFIRE's planners, supporters, and donors need to address the new threats to the programme that are coming from the international community in the name of globalisation and of wanting to treat some natural resources as human heritages. While there is need for collective action in the management of natural resources, there is also a need for the poor to make decisions about how to utilise the resources, which are available to them and to let their development be guided by their own cosmovisions. This new threat to the poor must be tackled with all vigour; failure to work with the poor and to address poverty will lead to the further decline of many natural resources which are found in the developing world, because the rich will not be able to stop the poor from using their resources. The "ecocrats" want to manage and control the world resources from a globally point of view. The world does not need more control but more knowledge and if the poor everywhere had the means of livelihood and the knowledge to sustainably utilise their natural resources, local equilibria would be reached which would translate into a global equilibrium. This global equilibrium

would be reached provided the rich nations also maintained their local equilibria by introducing sustainable consumptive patterns in their parts of the world. If local equilibria were maintained everywhere in terms of resource utilisation/emissions and natural regeneration, then the global commons of air, water, and others would not suffer depletion. This can be achieved without the global control models of the "ecocrats" and the notion of 'think globally and act locally' would yield results. Then programmes like CAMPFIRE and the Tonga people of the Zambezi valley would truly become part of a global economy where they too make decisions.

6.4 Understanding CAMPFIRE, some unexpected results

This study has found out some things about CAMPFIRE which are considered important in understanding the programme but which were originally not being sought. These issues are discussed here in order to shed more light on the programme.

6.4.1 Misconceptions about CAMPFIRE

It has been shown that knowledge about CAMPFIRE varies from one place to another and that there are several misconceptions about what the objectives of the programme are. The study shows that chief Mola's area has the best understanding of the programme in Nyaminyami. Some of the earlier claims that CAMPFIRE is well understood in Nyaminyami cannot be supported by these results. Officials and some writers have claimed that CAMPFIRE is well understood and that people participate voluntarily. These claims also create an impression that people in Nyaminyami fully participate in the conservation and

management of wildlife. The results of this study, however, show that there are many who do not understand what CAMPFIRE is. It is therefore doubtful that such people can voluntarily participate fully in the programme if they do not understand it. There are also those who perceive CAMPFIRE as a programme that kills and sells animals to white people. This view was prevalent in the study area. Such people do not appreciate the conservation efforts of the programme nor the sustainable utilisation objective. What comes out in this notion is that the programme is about selling animals and this misconception certainly undermines the programme. The fact that the CAMPFIRE message is misunderstood tells us that the programme is not a grassroots development strategy as claimed by popular literature. The programme is neither inspired nor influenced much by the Tonga cosmovision, and does not incorporate in any significant way the local knowledge and practices of the Tonga either, but rather reflects the interests of the West and African elites, and relies on the dominant development and conservation paradigm. This paradigm has made CAMPFIRE acceptable to the local people by offering these direct benefits and by funding NGOs to work with the communities.

While on paper CAMPFIRE is clear about what it is and what it does, these issues are certainly not so obvious for those who live with the wildlife. In their minds there are conflicts between what the programme preaches and what happens on the ground. Indeed it is difficult to tell a subsistence farmer who has very little to eat in the way of protein, not to hunt for meat, but explain to him that hunting by professional hunters is in the interest of the same farmer who has accepted CAMPFIRE's conservation of wildlife and spends energy himself conserving that wildlife. How can a professional hunter be seen to protect or enhance the interests of a farmer in Omay? CAMPFIRE's proponents have exaggerated the impact of the

direct benefits package and failed to show the ordinary citizen in Nyaminyami how sport hunting supports conservation, as well as how the local people's conservation efforts are rewarded by sport hunting. Maximisation of profits and benefits for the individual or community is a simplification of the 'economic man' as created by the planners. In reality, people have other values that are neither material, cash, nor economic, such as spiritual fulfilment. These values cannot be measured in economic terms. While CAMPFIRE/wildlife generates income for communities, this does not satisfy the non-economic aspects of people's lives, such as religious worship, traditional ceremonies and spiritual, physical and mental healing. For the Tonga people, development, is more than the acquisition of money and material things, hence equating money with development, as Murphree (1991) does, is misleading.

CAMPFIRE needs to contextualise its selling and hunting messages and needs to increase its focus on environmental awareness and providing conservation information. What must be fully clarified is the concept of controlled hunting by professionals and how this enhances the resource and the people's benefits and also be able to explain why communities cannot hunt for food or even for spiritual purposes. CAMPFIRE must come to terms with the fact that the direct financial and material benefits are not responding to the total needs of the people insofar as wildlife utilisation is concerned. The impression created by the CAMPFIRE popular literature that these direct benefits are the major incentives for local people's participation in conservation is erroneous. Tonga values go beyond their desire for money and meat, and includes their desire for dignity; they are a people who want to be in control of their destiny and want to be treated as responsible citizens. Under the Tonga cosmovision, wildlife has medicinal value but wildlife also controls rain, bountiful harvests, controls droughts and

is used to interpret all sorts of phenomena.

The Tonga do not want their knowledge about wildlife to disappear, nor their traditional practices, customs, and wisdom. They want these to contribute to their own development and to that of others. Therefore CAMPFIRE's money, meat, and other material benefits do not fully satisfy the Tonga celebration of life and are too simplistic to explain the complexity of their lives. The incorporation of their knowledge will require first an understanding of what knowledge is still usable, but it will also require research to reconstruct some of it. But above all Tonga knowledge will need to be recognised and respected more readily for the people to begin to feel that their knowledge and practices are worth more than just being curious case studies for researchers. The Tonga will have re-evaluate their traditional knowledge so that they can see how it could be used to benefit them. Further, the Tonga will have to see where this knowledge fits into the larger scheme of things and how it will help them in this competitive world.

6.4.2 Microcosmic view: the benefits sharing of fugitive resources

In Nyaminyami, CAMPFIRE's microcosmic application causes many problems for the local people because the Tonga believe everyone must benefit from this God-given resource. CAMPFIRE has forced even the Tonga and other local peoples to begin to support the microcosmic view and to abandon their life concepts. For instance, it is to the advantage of the people of Mola to support the microcosmic view because it means sharing the benefits among fewer numbers, and this means that the few get more. As shown earlier, the people of Mola benefit from wildlife that spends most of its time in other areas. The people of Mola

benefit more because wildlife happens to die there not because they are better managers of wildlife or that they are the only ones who suffer from having to live with wild animals. They have learnt new values which is to maximise benefits. Their own values for wildlife and access to God-given resources are slowly being eroded and other values are starting to become more important to them.

Wildlife is a fugitive resource and spends part of its time inside the National Parks and partly in communal areas. Therefore conservation of this resource is shared by the communities surrounding the parks and National Parks management. Local people gain very little for their efforts in conserving this wildlife that is viewed and treated as a national resource. This situation may well create disincentives for local people. The future of CAMPFIRE and its sustainability will depend on the programme's ability to resolve policy and programme constraints and allow multiple access rights to all those that are affected.

The debate rages on, however, over this issue of microcosmic revenue distribution and how to share benefits from a fugitive resource. The Negande and Nebire communities claim that during the rainy seasons, animals are further inland and destroy crops in Negande and Nebire. There is no hunting during the rainy season, this activity only starts in May. They argued that if the hunters are invited to deal with the problem animals, those animals may not meet the trophy requirements of the hunters. The hunters merely shoot in the air to drive the animals away temporarily. This means that these communities do not get revenue since animals are not killed in their area.

The animals are in the hinterland during this period because water and food are available

everywhere. In April and May, most of the water sources begin to dry up in the hinterland. Large game like the elephant, buffalo, and others, then move towards the lake in the Mola area. When the hunting season starts, these animals are concentrated in Mola near the lake because of their water needs and the biomass is in a better condition near the lake at this time of the year than it is further inland. Therefore more animals are killed in Mola than anywhere else in Nyaminyami not because the people of Mola conserve wildlife better, but because natural conditions favour them. Policy makers and programme managers do not want to deal with this situation and they regard the people of Negande and Nebire as being jealous about what the people of Mola are getting. This situation creates a false image of the people of Mola as if they are better conservationist than other communities. This also discourages the other inland communities who conserve wildlife, but end up getting very little or nothing. The microcosmic view complicates the issue of wildlife conservation and the reward system associated with it. Policy will certainly have to change sufficiently to address these issues. Given the growing negative feelings among the people of Negande and Nebire if this issue is not resolved amicably, CAMPFIRE and wildlife may suffer serious damage. This problem has been raised in other districts including Guruve, Tsholotsho, Bulilimangwe and Beit Bridge. It is not confined just to Nyaminyami, it is problem that needs to be addressed nationally. **There is a need to address the issue of multi-level duties, obligations, and benefits sharing.**

The DNPWLM confirmed that wildlife behaves and moves as described by the people of Negande and Nebire. This is also confirmed by key informants such as councillors. This movement of animals conforms with natural phenomena. Those who lose crops must also get benefits. In situations like this, the microcosmic view will work against good conservation,

contrary to the arguments used by the proponents who insist on its implementation without any flexibility. Attitudes such as these will only serve to destroy the strong aspects of CAMPFIRE in the long run.

The CAMPFIRE programme is not responsive to the following realities:

(i) The prime price for an elephant or buffalo and other trophy animals is only realisable if and when sport and trophy hunters are involved. Killing these animals under any other circumstances and arrangements will not realise the prime price for as long as the monetary value of wildlife continues to be determined by the external market.

(ii) If the National Parks shoots problem animals, the prime prize is not realised, therefore those farmers whose crops are destroyed can only share a smaller amount. There is therefore a need to create a balance between the control of problem animals and the maximisation of income from wildlife. It is time to explore the development of a new paradigm for natural resource utilisation.

(iii) In order to realise prime prices shooting/killing problem animals is very much discouraged since this occurs outside the hunting season. This results in a situation where those communities whose crops are destroyed do not get any money because the animals are either not killed or if killed fetch very little. But it also means that the rogue animals are not necessarily the ones that get killed when the hunting season starts. Finally, those who do not suffer most from the nuisance of wildlife in Omay collect everything because animals happen to have moved to their area when the hunting season starts.

(iv) Indeed this distribution works totally against CAMPFIRE's own revered principles of rewarding those who suffer directly from living with wildlife. The direct sufferers in Negande and Nebire do not get the rewards. This turns the microcosmic view upside down and suggests that its inflexibility will become CAMPFIRE's downfall. A more flexible formula is needed to resolve some of these constraints.

This issue has not been addressed either by the government officials, the NGOs or the many academics who have examined CAMPFIRE. In Omay this particular issue, just on its own, could kill CAMPFIRE. Therefore the microcosmic view while legitimate, is greatly affected by practicalities on the ground to which CAMPFIRE cannot continue to turn a blind eye to. But other benefit distribution formulae are possible if the multi-jurisdictional access rights are adopted.

6.4.3 Appropriate authority and central government

There is controversy at the district and ward levels about how revenue from tourism which is earned from National Parks which are within district council areas should be distributed. The larger political issue is about why the state, which has given appropriate authority to district councils to manage all natural resources in the district, still retains ownership and management of National Parks which are within a district council area. Policy is also not clear on what constitutes a national resource, when that resource occurs at the district, Ward or village level, **what should be the obligations and benefit streams be for each level?** Policy is also not clear on how such resources ought to be managed and how benefits can be shared at the different levels. It is morally unacceptable not to share with the local people a resource

which occurs in their village, but is declared a national resource, the same is true when adjacent villages are excluded from the resource and yet others outside the country are given access to the same resource. The state is treating wildlife at the district and ward levels as national commons a notion that is similar to global commons, and if it is not acceptable at the global level it should not be allowed at the national level. The people in Nyaminyami are not too concerned about ownership of the resource, but would like to have access to it and to share benefits from it with other stakeholders.

6.4.5 CAMPFIRE some positive elements

This evaluation also found that there were a number of positive things that had emerged from the implementation of CAMPFIRE:

- a concept and not a blue print has been developed in Africa that has the potential of introducing sustainable utilisation of natural resources, an African solution to an African problem. This concept has potential for use in other continents;
- experiences from CAMPFIRE are contributing to the body of knowledge on common property management, co-management, and on sustainable natural resource utilisation;
- CAMPFIRE makes it possible for local people to directly benefit from wildlife as they co-manage this resource with others;
- the programme has raised conservation awareness and issues of sustainability in Zimbabwe and this is spreading to other countries in the region and many

are learning from the Zimbabwean experience;

- the concept has the potential to grow if it accepts objective and constructive criticism and address the weaknesses that currently negatively impact on CAMPFIRE implementation.

6.5 Conclusion

The overall objective of this thesis was to establish CAMPFIRE's contribution to common property resource management, its effectiveness as a resource management strategy and its sustainability. This thesis has provided evidence that shows that not all resources used in common are common property resources. Resources used in common include common property, but also state property where there are multiple access rights and usufruct rights. It has been demonstrated that a common property regime is not critical for the effective and efficient management of resources used in common.

The thesis has demonstrated CAMPFIRE's contribution to common property resource management by showing how wildlife, a pseudo-commons, is managed and utilised through multi-jurisdictional access rights without the need for a common property regime or for excludability rights. The thesis also proved that CAMPFIRE has the potential to become an effective management strategy, but that presently, this is hampered by the lack of enabling legislation and policy. It has also been demonstrated that CAMPFIRE is not sustainable, given its present narrow application. If the broader CAMPFIRE concept, however, was implemented and the benefits sharing formula modified, then the programme would have a greater chance of being sustainable.

CHAPTER SEVEN

CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

This study has established that CAMPFIRE is making a valuable contribution to common property management and to the management of resources used in common. The strategy is not as effective as spelt out in the popular literature but it does have potential as a sustainable natural resource management approach which could be applied more widely. In addition, the study has established that in Zimbabwe, wildlife is not a common property resource, but rather a state owned, pseudo-common property resource which is co-managed, controlled, and utilised at three levels, national, district, and community. CAMPFIRE is not sustainable if it remains dependent on just wildlife and elephant sport hunting which currently earns 90 per cent of its revenue. But the thesis has shown how entangled CAMPFIRE, as a strategy, has become in the wildlife debate because of implementing a programme based on the utilisation of wildlife alone. The debate on wildlife has been distorted by an emphasis on a few wildlife species which are considered to be the conservation flagship carriers. These few species have been treated as if they are the totality of wildlife. Presently, CAMPFIRE's weakest point is that a strategy that was meant to manage all indigenous natural resources was first narrowed to wildlife, then to a few species, and finally it has become a programme which seems only to be about harvesting the elephant. It was also demonstrated how international decisions and globalisation are impacting on decisions about wildlife utilisation that are being made in villages across Africa. This chapter therefore sets out to draw conclusions on the objectives of the study outlined in Chapter One.

7.2 Conclusions on Major Debates

Wildlife is a resource that generates considerable interest at the local, national, and international levels. Governments are interested in it, so are NGOs, donors, and international organisations. As a result, debates exist in search of how wildlife resources can be managed and how as many people as possible can gain access to them. This section summarises major conclusions on these debates, based on the findings of the study.

i) There is conflict between the political democratisation process, which is sponsored by the West, that is processes such as: local participation, empowerment and self-determination on the one hand and the trend towards globalisation as well as the notion of global commons on the other. Globalisation and the notion of global commons threaten CAMPFIRE directly as do other community-based resource management approaches, because they revoke and undermine local people's excludability rights, take away the decision making power from the local people and put it in the hands of a new group of ecocrats. Globalisation does not provide for multi-jurisdictional access rights but rather puts control in the hands of a few experts. It is concluded that the poor people who own most of the remaining wildlife regard these measures as yet another extension of domination of the poor by the West. These two notions fuel fresh polarisation and threaten wildlife conservation.

ii) There is the issue of who should pay for conserving the African wildlife and other biodiversity which is being managed by poor developing countries. How will these poor nations bring about economic development to their people if they can not utilise their resources or if utilisation is controlled by the developed world? It is concluded here that the

poor will continue to utilise their resources regardless of globalisation and the desire by rich nations to manage world resources from a global point of view. Conflict between the West and developed nations will continue. The rich nations will only be able to participate in the management of these natural resources if they find strategies for addressing poverty and compensating the poor nations for conserving their biodiversity. In the absence of such a formula the rapid loss of the world's biodiversity will continue.

iii) The conflict between the microcosmic and the macrocosmic debate is threatening to disrupt CAMPFIRE, both because of the NGO/government conflict as well as because the dissatisfaction at the local level by those who feel cheated. It is concluded that a more flexible distribution formula must be found which will enable all those who suffer from wildlife to benefit from it. A combination of enabling legislation, enlightened policy and defined multi-jurisdictional access rights would eliminate this conflict.

CAMPFIRE has become embroiled in the wildlife debate and the micro and macro debates are a manifestation of the wildlife arguments which would not necessarily come up when dealing with other resources which are not fugitive, such as forests, grazing, and water. By dealing only with one resource CAMPFIRE has introduced conflicts which do not need to exist.

iv) The study established that ownership of the resource by the group is not the most critical issue in the management and conservation of resources that are used in common. What is critical is to let the bundle of rights operate and to clearly define the obligations, duties, and benefit streams for each level.

v) It was established that the producer units are academic concepts which do not translate into anything meaningful at the village level. The term was coined by the planners to define economic units, which would make it easy to manage and distribute benefits from wildlife as defined by the microcosmic view. Producer units have never been adequately defined, they do not exist at the local level, therefore they add no value to the effective management of the programme.

vi) A very significant proportion of the population in Nyaminyami have very serious misconceptions about CAMPFIRE. These people see CAMPFIRE as being about selling animals to white people or killing animals and selling them to white people. These misconceptions are a result of the programme's over-emphasis on cash and material benefits and underplaying environmental and conservation education and information. Further, promoting sport hunting by foreigners and denying locals access to hunting without adequately explaining why one form of hunting is promoted while another is denied, however ecologically sustainable and economically viable it will always have the potential for misunderstanding. The over-emphasis of cash and material benefits as critical incentives for local people's participation has distorted and weakened the conservation messages. It is concluded that this problem affects CAMPFIRE as a whole and not just Nyaminyami.

7.3 Recommendations

Recommendations are not made for all major findings, but only a few are offered here which are considered to be part of the contribution of this study to the whole CAMPFIRE debate and to the body of knowledge on common property management.

i) The government of Zimbabwe must seriously consider reviewing current environmental and natural resources legislation with the view to identifying weaknesses and contradictions. More comprehensive and integrated legislation must be drawn up which will eliminate contradictions arising from sectoral laws, and create harmony and clarity on how natural resources are to be utilised. The legislation must make adequate provisions for multi-jurisdictional access rights so that it becomes clear at each level what obligations, duties, and benefit streams exist. Legislation should also make provisions for the establishment or confirmation of appropriate institutions to manage natural resources, as well as define ownership and property rights.

ii) Policies must be developed that provide a framework on how natural resources are to be utilised and managed at the district and village levels. Current policies on water, wildlife, forests, and CAMPFIRE are sectoral and cause confusion since the management of wildlife is decentralised while the management of these other resources is centralised. These policies tend to treat each resource as if it were independent of the others. Policies should emphasise the interdependence of these resources and there is a need to produce a comprehensive, integrated district plan for the management and utilisation of natural resources. Policy must address the issue which emerge from microcosmic and macrocosmic views, and define a more flexible system that underplays excludability and emphasises multi-jurisdictional access rights.

iii) A pragmatic approach to indigenous knowledge and traditional practices must be adopted. Further research is needed to cover more districts, ethnic groups and peoples' cosmovisions to ascertain the quantity, quality, and nature of residual indigenous knowledge

and how much of that knowledge is still or can be incorporated into present day natural resource management approaches. But it is also important to establish which of the local people's cosmologies specifically protect the environment or promote sustainable resource management. Once a comprehensive understanding of these issues becomes available, then decisions can be made about how and where synergies can be created by using indigenous knowledge systems along with the scientific paradigm.

iv) Proponents of globalisation and planners of global resource management need to reconcile and find a formula for the management of global resources without taking away decision-making power and responsibility for natural resource management from nation states and local communities. A balance must be maintained between international collective responsibility for the environment and the rights of local people to utilise and manage their own resources. Globalisation must mean attaining local resource use equilibria everywhere and adopting sustainable consumption patterns which would lead to a global equilibrium. The emphasis must be on building capacity at community level to achieve sustainable resource use at the local level instead of trying to control resource use worldwide. Further, if collective responsibility is to take place then a formula must be found to finance the conservation of wildlife and other biodiversity.

v) At national, district, and local levels CAMPFIRE must involve people more in the planning processes in order to eliminate misconceptions. A broad spectrum of values must be drawn from which will include local people's concerns and interests which could form a new incentives benefit package for conservation.

vi) CAMPFIRE cannot continue to be treated as a sacred cow in order to save the interests of a small elite group. Its success will depend on its proponents and supporters being open and responsive to constructive criticism. But proponents of CAMPFIRE must support serious and objective research and avoid expecting just songs of praise from uncritical research.

7.4 Conclusion

This thesis has examined CAMPFIRE as an innovative natural resource management strategy. The CAMPFIRE concept is very sound, however the implementation of the programme has met with limited success as detailed in the results of this research. CAMPFIRE, as an approach to natural resource management, however, has the potential for initiating sustainable natural resource utilisation and may well provide some answers for the conservation of biological diversity. The thesis has also demonstrated CAMPFIRE's contribution to the management of resources used in common. It has shown that wildlife in Zimbabwe is not a common property resource, but that it has characteristics of a common property resource. It concluded that wildlife is a pseudo-commons which is co-managed by the state, district council, and the community. The thesis established that for a resource used in common, it is not critical for that resource to be owned by a specific group for it to be effectively and efficiently managed. Common property theories tend to emphasise group ownership of the resource as the most critical factor that ensures efficient management of resources used in common. This emphasises the importance of well defined duties, obligations, and benefit streams in multi-jurisdictional access rights as the better approach to the management of resources used in common.

The thesis has established that CAMPFIRE is not a grassroots development strategy as stated in most literature, nor is it a panacea that will heal all the ills of resource degradation in Zimbabwe. CAMPFIRE will not usher in rural development or eliminate rural poverty. But it can make a contribution to the sustainable utilisation of natural resources and hence promote the economic development of communities.

It has been demonstrated why CAMPFIRE cannot be sustainable if it is based just on wildlife. The successes of CAMPFIRE are shown in Guruve, Mahenye, and Nyaminyami because of the abundance of wildlife in those areas, but these are very localised cases and their impact will always remain limited. The future and success of CAMPFIRE will depend on the ability of central government, donors, NGOs, district councils, and the communities in bringing on board all other indigenous natural resources and by producing and implementing an integrated natural resource utilisation plan.

Finally, the study has revealed that CAMPFIRE has become embroiled in the heated international wildlife debates. It is therefore necessary to separate CAMPFIRE as a strategy from the emotions of wildlife, and then to analyse how these debates impact on CAMPFIRE implementation. The strategy needs to be understood separately from the overbearing wildlife debates because the CAMPFIRE approach is not only about wild animals but rather about natural resources.

APPENDIX ONE

MAY AND MAKANDE COMMUNAL AREAS

PART ONE

Household Questionnaire

1. Name of interviewee.....

2. Sex (i) Male (ii) female

3. Age

(i) below 15 (ii) 16-30 (iii) 31-60 (iv) above 60

4. WARD.....VILLAGE.....

5.(a) Who owns wildlife Nyaminyami today

(i) The state

(ii) Provincial Council

(iii) District Council

(iv) WADCO

(v) VIDCO

(vi) Chief

(vii) Community

(viii) Individuals

(b) Who should own wildlife?

(i) The state

(ii) Provincial Council

(iii) District Council

(iv) WADCO

(v) VIDCO

(vi) Chief

(vii) Community

6. Traditionally who owned/managed wildlife

(i) King

(ii) Chief

(iii) Community

(iv) Individual

7. In your view whose responsibility is it to conserve and manage wildlife in Omay in today.

(i) Provincial Council

(ii) District Council

(iii) District Administration

(iv) WADCO

(v) VIDCO

(vi) Wildlife Committees

(vii) Individuals

(viii) Natural resources committees

Why.....

8. Have you ever heard of CAMPFIRE

(i) YES

(ii) NO

9. As far as you understand what is CAMPFIRE

.....
.....

10. Does your family/community benefit from CAMPFIRE

(i) YES

(ii) NO

11. If Yes to (10) above How?

(i) Family receives household dividend.

(ii) Community receives money

(iii) Community Projects

(iv) Meat

(b) What is the advantage of CAMPFIRE

.....
.....

12. In your view who should decide how income from wildlife is utilised

- (i) Government
- (ii) Provincial Council
- (iii) District Council
- (iv) WADCO
- (v) VIDCO
- (vi) Producer Individuals/Households

(b) Why do you say so?.....

13.(a) How should wildlife income be shared. Who should receive the in order priority

- (i) Government
- (ii) District Council
- (iii) WADCO
- (iv) VIDCO
- (v) Producer Communities
- (vi) Households

(b) How is wildlife income distributed today in ?

- (i) Households
- (ii) Heads of households
- (iii) Adult Men
- (iv) Any Adult
- (v) Adult Women

(c) Are you happy with this distribution?

(I)YES

(ii)NO

14. Should dividends go to:

(i) Households

(ii) Head of households

(iii) Father

(iv) Mother

(v) Individuals Adults

(vi) Men

(vii) Women

Why do you say so?

.....

.....

15. Who decides how wildlife is used

(i) State/Government

(ii) District Council

(iii) WADCO

(iv) VIDCO

(v) Producer Members

In your view who are wildlife producers

- (i) State
- (ii) Province
- (iii) District Council
- (iv) WADCO
- (v) VIDCO
- (vi) Individual members

16. What problems do you get from wildlife.

- (i) Destruction of Crops
- (ii) Destruction of livestock
- (iii) Destruction of other property
- (iv) No problems

17. Have any of your relatives or friends been killed by wildlife.

- (i) YES
- (ii) NO

18.(a) Have you ever received any compensation either for loss of property or loss of relatives life

- (i) YES
- (ii) NO

(b) Did you think that was

(i) Good

(ii) Fair

(iii) Unsatisfactory

(c) Why do you say so.

.....
.....

(d) Should compensation be paid

(i) YES

(ii) NO

(e) If yes by whom.

(i) VIDCO

(ii) WADCO

(iii) District Council

(iv) Central government

19 .(a) Is poaching a problem. YES NO

(b) If YES what do you think should be done about it

(i) State should police wildlife management

(ii) District Council should police

- (iii) WADCO and VIDCO should have game scouts
- (iv) Producer Communities should have their own scouts.

20. What conservation information messages have you received.

- Radio messages
- Training
- Meetings
- Pamphlets
- WADCO
- VIDCO
- Councillor
- Wildlife Committees

21. National Parks and Reserves

(a) Do you think National Parks & reserves are necessary

- (i) YES
- (ii) NO

(b) Who should National Parks belong to

- (i) State/ Provincial Council
- (ii) Province
- (iii) District Council
- (iv) WADCO/VIDCO

Why?.....
.....

(c) Are National Parks a problem to you?

(i) YES

(ii) NO

If YES what are the problems

.....

22. Do you own any livestock

(i) YES

(ii) NO

How many

(i) Cattle =

(ii) Donkey =

(iii) Goats =

(iv) Sheep =

(v) Chickens =

(c) If no would you like to own livestock.

(i) YES

(ii) No

23. (a) In your own view should Omay be left as predominantly a (i) wildlife area or should

livestock be introduced in large numbers.

(i) Wildlife area.

(ii) Livestock and other agricultural activities.

(b) Do you support the CAMPFIRE programme or not?

(i) Yes

(ii) No

Why

24. What crops do you grow? How much did you have last season?

(i) Maize = bags iv Millet = bags

(ii) Sorghum = bags

(iii) Vegetables = bags

25. Rank Family income sources in order of importance and say how much

	88	89	90	91	92	93	94	95
(i) Wildlife	\$							
(ii) Crops	\$							
(iii) Livestock	\$							
(iv) Tourism	\$							
(v) Sport Hunting	\$							
(vi) Any combination	\$							
(vii) None of the above.								

26. CAMPFIRE allows outsiders to hunt for sport but not allow local people to hunt for meat.

How do you feel about that

- (b) support Sport hunting if we can earn income from it.
- (c) understand why this is done
- (d) would want to hunt for food

27. Under CAMPFIRE who decides how wildlife is utilised?

- (i) DNPWLM
- (ii) District Council
- (iii) WADCO
- (iv) VIDCO
- (v) Communities
- (vi) Producer Units

28. Do you think people can make a livelihood from wildlife without livestock?

- (i) Yes
- (ii) No

29. Are chiefs involved in CAMPFIRE

- (i) YES
- (ii) NO

30. What is the greatest problem or challenge confronting Wildlife management and conversation in your area today?

- (i) Lack of donor funds
- (ii) Lack of government funds
- (iii) Lack of knowledge and information
- (iv) Management skills
- (v) Lack of ownership

31. In your view what is the best institution that should manage wildlife.

- (i) The District Council
- (ii) The WADCO
- (iii) The VIDCO
- (iv) Wildlife committees
- (v) The State . (DNPWLM)
- (vi) Other (specify)

APPENDIX TWO

QUESTIONS For OFFICIALS and KEY INFORMANTS.

Changes in People attitudes towards Wildlife as a result of CAMPFIRE.

Introduction

One of the things that this study would like to find out is whether people's attitudes towards Wildlife in Nyaminyami have changed following the introduction of CAMPFIRE. If attitudes have changed are these changes positive or negative to Wildlife conversation. Can the changes if any be attributed to CAMPFIRE in whole or in part.

The following are some of the possible indications that you might have observed. Please give as complete information as possible.

FACTUAL INFORMATION.

General Information on Wildlife.

1. (a) Has poaching and illegal hunting decreased in Nyaminyami between 1988 and 1996?
[1] Yes
[2] No

- (b) Has illegal fishing decreased?
- [1] Yes
 - [2] No
2. (a) Do the local people still hunt for food?
- [1] Yes
 - [2] No
- (b) Do local people still fish for food?
- [1] Yes
 - [2] No
- (c) How is hunting organised?
- [1] Individually
 - [2] Community
 - [3] Professional hunters
 - [4] Other (specify)
- (d) Is a license needed for hunting?
- [1] Yes
 - [2] No
- (e) How is fishing organised?
- [1] Individually

- [2] Community
- [3] Co operative
- [4] Professional/commercial

(f) Is a fishing license needed?

[1] Yes

[2] No

4. (a) Do citizens arrests or report poachers or illegal hunting?

[1] Yes

[2] No

(b) Provide figures per area if available

[1] citizens arrest

[2] citizen reports of poachers/illegal hunters

[3] citizen reports of slaughtered wild animals.

(c) Any other action taken by local people in dealing with offenders

[1]

[2]

[3]

5. (a) Have any traditional Wildlife areas been converted to other land uses?

[1] Yes

[2] No

(b) If yes give the following details:

[1] Name of wildlife area converted to other use.

(c) Type of new land use

[1] cropping

[2] grazing

[3] settlements

[4] other (specify)

Immigrants and Domestic Animals.

6. (a) Do Tonga people own livestock?

[1] Yes

[2] No

(b) Do immigrants own livestock?

[1] Yes

[2] No

(c) Who owns more livestock per household?

[1] Tonga

[2] Immigrants

CAMPFIRE.

7. (a) Do local people support the CAMPFIRE efforts?

[1] Yes

[2] No

(b) Do local people actively participate in any of the following?

[1] Monitoring wildlife

[2] Monitoring poachers/illegal hunters

[3] Attend wildlife meetings

[4] Other (specify)

8. (a) Is there evidence that some people in Nyaminyami do not support CAMPFIRE?

[1] Yes

[2] No

(b) Do local people engage in activities that undermine CAMPFIRE?

[1] Poach wildlife

[2] Poach fish

[3] Hunt illegally

[4] Fish illegally

[5] Assist wildlife poachers

[6] Assist fishing poachers

[7] Other (specify)

9. The Tonga are known to have lived harmoniously with wildlife.

(a) Has the Tonga knowledge on wildlife been incorporated into the CAMPFIRE programme?

[1] Yes

[2] No

(b) Which areas of knowledge have been incorporated?

[1] Wildlife species breeding

[2] Fish species breeding

[3] Hunting seasons

[4] Fishing seasons

[5] Selected species to be hunted by season

[6] Selected species to be fished by season

[7] Taboo system

[8] Clan names system

10. Who owns natural resources under CAMPFIRE in Nyaminyami?

[1] individual ownership

[2] community ownership

[3] common property

[4] district council

[5] state

[6] WADCO

[7] VIDCO

[8] other (specify)

11. Which of the government policies, decisions and activities demonstrate government commitment to CAMPFIRE and to sustainable wildlife utilisation?

(a) Policies

.....

.....

.....

(b) Decisions

.....

.....

.....

(c) Activities

.....

.....

.....

OPINION QUESTIONS.

12. (a) In your view is CAMPFIRE a success or a failure?

[1] Success

[2] Failure

(b) Give reasons and examples to support your answer

.....

.....

.....

13. What do you view as the greatest problem/challenge confronting wildlife management and conservation in Nyaminyami today?

[1] poaching

[2] illegal hunting

[3] illegal fishing

[4] community management of wildlife

[5] community management of money (donor money and revenue)

[6] lack of donor funding

[7] too much donor funding

[8] government control

[9] control by non governmental organisations

14. As an official what do you regard/consider to be your most important duty as regards wildlife/CAMPFIRE?

.....

.....

.....

15. What in your view is the most appropriate wildlife management institution that can ensure sustainability of wildlife utilisation.

[1] district council

[2] WADCOs

[3] VIDCOs

[4] wildlife committee

[5] natural resources committee

[6] chief/headman

[7] other (specify)

16. (a) Who should manage Matuzviadona National Park

[1] state (department of national parks and wildlife management)

[2] Provincial Council

[3] District Council

(b) Why?

.....

.....

(c) How should the benefits from Matuzviadona national park be shared and utilised?

[1] All proceeds to go central government

[2] All proceeds to go the Province

[3] All proceeds to go to the district council

[4] To be shared between central government and the province

[5] To be shared between province and district council

[6] To be shared between central government and district council

[7] To be shared among central, provincial and district

[8] To be shared between district and WADCOS and VIDCOS

APPENDIX THREE

IN-DEPTH DISCUSSIONS: LEAD QUESTIONS WITH 12 ELDERS (60 years and above.)

6 People to be interviewed in Omay Communal land (minimum 2 women)

3 People to be interviewed in Gatshegatshe (minimum 1 woman) 3 People to be interviewed in Kanyati (minimum 1 woman).

1. Certain species were protected by local community bye laws and norms eg in the Ndebele and Shona cultures species such as pangolin,porcupine,leopards,python etc were protected. Please give the following details.

(a) 5 examples of animals protected under Tonga community wildlife management and conversation system.

(b) How were they protected and why.

(c) Are these species still protected or not. If the answer is yes, how are they protected. If the answer is no why are they no longer protected.

(d) Can the traditional protection system be incorporated into CAMPFIRE.

(e) In traditional Tonga wildlife management system who controlled the rights of access to these species.

(f) describe the Tonga traditional property rights

2. Hunting, hunting rights and hunting season.

(a) How was hunting, fishing organised and implemented in Tonga or Shona traditional society.

(b) How were hunting or fishing rights obtained.

(c) Give some details of which animals were hunted during which season and why? Is this still practised? Why?

(d) What were the fishing seasons and which types of fish were caught during each season and why?

3. Did the colonial administration affect or impact the tradition management system.

(b) How did it impact on this traditional management system.

(c) Does the traditional management system still exist.

(d) Who in your community still has knowledge of traditional conversation

(e) Do you still have some one who is the custodian of natural resources. Who?

