

THE IMPACT OF INSTITUTIONS OF GOVERNANCE ON COMMUNITIES' LIVELIHOODS AND SUSTAINABLE CONSERVATION IN THE GREAT LIMPOPO TRANSFRONTIER PARK (GLTP): THE STUDY OF MAKULEKE AND SENGWE COMMUNITIES

By

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DECLARATION

I, Darlington Muzeza, student number 210227028, of Cape Peninsula University of Technology, hereby declare that this study for a Doctoral Degree (Environmental Health) in the Department of Environmental and Occupational studies, Faculty of Applied Sciences, is wholly my own account of research work. Reference of other work that reinforced this thesis have been acknowledged. This document has not been submitted for a qualification at any other academic institution for assessment besides the Cape Peninsula University of Technology, Cape Town in the Republic of South Africa.

Date: September 2013 Signature:..

ABSTRACT

Southern Africa region is experiencing a multiplicity of transfrontier conservation projects, which simply put in its metaphorical name 'Peace Parks'. The rapid growth of transfrontier conservation areas present the fulfilment of a vision of a 'boundless' and 'borderless' Southern Africa, straddling geo-political boundaries of once colonially imposed cartography of sovereign statism. The ecological amalgamation of these vast conservation areas are underpinned by various social, political, ecological and economic fundamentals envisioned by governments in the Southern African Development Community (SADC) region together with conservation partners to transform the life of people and enhance sustainable management of natural resources. The Great Limpopo Transfrontier Park (GLTP) that involves Mozambique, South Africa and Zimbabwe, was born out of this vision. Equally so, from its conceptualisation, the GLTP sought to achieve sustainable biodiversity and ecosystem conservation, promote economic growth, support rural development, be a building block for peace and regional economic integration. The planners also criticized inappropriate geo-political boundaries imposed by colonialism, which historically separated biospheres and the people of identical culture. The artificiality of boundaries, therefore, obstructed cultural links of communities and restricted wildlife migration as well. This affected natural dispersion of fugitive wildlife. Thus, the GLTP's ambitious conservation plan address these issues. In so doing, the GLTP governance architecture as it stands today produced multi-level governance institutions whose approaches were found in this study to be at variance with local people's livelihood expectations and conservation processes. It is in this view that this research sought to examine the impact of governance institutions on communities' livelihoods and sustainable conservation of natural resources in the GLTP. Using various methods of empirical research such as interviews, household questionnaires, focus group discussions (including using the Schutte Scale), field observations and secondary data analysis, the researcher found that the current GLTP institutional configurations and its resource governance philosophy are at variance with local natural resource governance processes, and contradict local resource needs. Thus, there is inherent mistrust and conflict over skewed natural resource benefits. Most of them benefits accrue to government entities and the private companies that invested in tourism. Furthermore, it was found that the GLTP administrative governance architecture from the onset, presented complex competing environmental interests among conservation stakeholders against those of communities. The GLTP resource governance as it stands, is conspicuously not inclusive with the local communities playing a minimal role to leverage on the abundant natural resource for to support local livelihoods. One thing that came out clearly from the research is that they are not included to participate in conservation of the GLTP natural resources. This study therefore argues that there is potential to jeopardize prospects

for the GLTP to achieve its objectives of sustainable conservation, promoting rural development and reduction of rural poverty. Empirically, it was also confirmed that the GLTP is at cross-purpose with the expectations of the communities. Local participation in sustainable conservation is consequentially subdued and weak. Perhaps, if the lofty aims of the GLTP are to be achieved, this study noted that the local people prefer the natural resources governance, conservation decision-making processes and conservation stakeholder relationships to be fair and acceptable to a cross-section of stakeholders. This includes ascertaining broad participation of the local people in conservation and environmental decision-making as crucial ingredients in guaranteeing local livelihoods and motivating communities to support conservation initiatives through use of wildlife proceeds for the development of communities. In addition, a concern was raised that powerful state agencies and conservation organisations are at the fore in defining institutional processes and resource governance systems with no regard to the local institutions. Thus, the envisaged win-win situation in conservation to transform rural communities is far from being realised. The GLTP governance structure forecloses the local people from participation. Consequently, local conservation morale and collaboration has adversely diminished, with overt preponderance of multi-level institutional processes over local processes in terms of natural resource management. This has tended to marginalise local institutions and prevent the local people from complementing conservation efforts. Manifestly, there is deep-seated livelihood insecurity, local environmental conservation marginalisation. This led the study to question the sustainability of the GLTP considering its exclusionary governance approach when dealing with communities.

Another major concern is that planning of eco-tourism projects are paternalistically government led processes and exclusively private sector driven than being community oriented. Concerns arise that the much-lauded and publicized promise of eco-tourism benefits to the communities, have not materialised in the last ten years since the GLTP establishment in 2002. This has led local communities to question the GLTP's economic benefits and impact on their lives. Instead of working with communities as equal stakeholders, the GLTP governance architecture has isolated them from playing an effective collaborative role in conservation and reaping of benefits.

It was observed that the attendant GLTP governance trajectories reflect a narrow web of contesting conservation interests at variance with communities' expectations. The heavy-handed administrative role of multi-level institutions and that of conservation agencies, have therefore, not fostered synergies for local residents' participation in the management of natural resources. The elusiveness of the GLTP governance therefore puts it far from ensuring that

the local people are part of conservation processes, hence falling short of capturing local contributions and local buy-in. Such governance injunctions complicate guaranteeing equal opportunity of resource access and equity, and it is less enabling for communities to hold together, cooperate and collaborate in conservation. Perhaps, an ideal situation would be to have a resource governance system that prevents the 'tragedy of the commons' and at the same time preventing the 'tragedy of the local common man'. In this regard, this research made proposal in chapter 8, suggesting a synergised governance, decision-making and an a cocktail of an amalgam economic framework that can be adopted to solve the problems identified. These frameworks enable local people's resource rights to be realised and the fusion of local expectations for conservation sustainability. This study aimed at examining the GLTP governance process impact on Makuleke and Sengwe communities in terms of their livelihoods, local participation in natural resource conservation and participation in natural resource decision-making process in the governance of the GLTP.

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DEDICATION

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ABBREVIATIONS AND ACRONYMS

SANP South African National Park	CAMPFIRE CASS CBD CBNRM CEO CESVI CGP CIRAD CITES CRDC DA DEAT EMA GLTFCA GLTFCA GLTP GNP GPP IUCN JMB JMC KfW KNP MCPA MDF MDF MDF MDF MDF MDF MDF MDF MDF MDF	Communal Areas Management Programme for Indigenous Resources Centre for Applies Social Science Convention on Biological Diversity Community-Based Natural Resources Management Chief Executive Officer Cooperazione e Sviluppo (Coperation and Development) Community to Government Partnership Centre for International Research on Agronomy and Development Convention on International Trade in Endangered Species Chiredzi Rural District Council District Administrator Department of Environmental Affairs and Tourism Environmental Management Agency Great Limpopo Transfrontier Conservation Area Great Limpopo Transfrontier Park Gonarezhou National Park Government to Private Partnership World Conservation Union Joint Management Board Joint Management Board Joint Management Boark Kruger National Park Makuleke Community Property Association Makuleke Development Forum Millennium Development Goals Makuleke Development Trust Memorandum of Understanding New Partnership for Africa Development Non-Governmental Organisations Peace Parks Foundation Rural District Council Southern African Development Community Sengwe Communal Lands Southern Alliance for Indigenous Resources
	SAFIRE SANP	Southern Alliance for Indigenous Resources

SANParks	South African National Parks
TBCAs	Transboundary Conservation Areas
TBNRM	Transboundary Natural Resources Management
TBPA	Transboundary Protected Area
TFCAs	Transfrontier Conservation Areas
TFPs	Transfrontier Parks
TMC	Trilateral Ministerial Committee
UN	United Nations
USA	United States of America
USAID	United States Agency for International Development
VIDCO	Village Development Committee
WADCO	Ward Development Committee
WWF	World Wildlife Fund
ZIMOZA	Zimbabwe-Mozambique-Zambia
ZIMParks	Zimbabwe National Parks
ZIMSTATS	Zimbabwe Statistics
ZPWMA	Zimbabwe Parks and Wildlife Management Authority

CHAPTER ONE

1.1 Introduction

"All a Transfrontier Park means is that the authorities responsible for the areas in which the primary focus is wildlife conservation, and which border each other across international boundaries, formally agree to manage those areas as one integrated unit according to a streamlined management plan. These authorities also undertake to remove all human barriers within the Transfrontier Park so that animals can roam freely" (Spierenburg et al., 2008:90, citing SANParks/PPF, 2003).

The emergence of transfrontier conservation in Southern Africa ushered multi-level natural resource governance complexities characterized by 'scales of marginality' (Ramutsindela, 2007: 105). This optimization derives from its regional scale and multinational scales guintessentially marginalizing rural communities from participating in natural resource governance and management. For this reason, the GLTP's subsequent dismal failure to deliver benefits to communities that are located in and adjacent to this important Transfrontier Conservation Park (TFCAs/TFP) initiative, can be attributed to lack of local communities' participation in the conservation governance matrix. As such, the rural communities are not able to contribute to transboundary biodiversity conservation in the GLTP. Ultimately, this affects the rural folk in that they fail to meet their livelihood interests and they cannot fully take part in biodiversity and ecosystems conservation and management as a collective at the local level. Quintessentially, the GLTP had offered extraordinary opportunities initially, but along the way, the project found itself stuck in exclusionary governance processes, which at worst is detested locally. To a larger extent, the notion of resource governance in the Great Limpopo Transfrontier Park (GLTP) or its metaphor, the 'Peace Parks' (PP), clearly puts emphasis on a top-down multi-level governance system that promotes a return to "fortress conservation" of the colonial times. Thus, it tends to frustrate communities, with colonial memories still lingering in their minds, thereby projecting the GLTP as not responsive to the post-colonial community needs. Empirically, the governance processes of the GLTP is designed in such a way that it shows fundamental movement away from community participatory approaches in conservation development, planning and implementation pursued during late 1980s (Hulme and Adams, 2001:10). The early 1980s concept is described as "Wildlife Management for the People" (DeGeorges and Reilly, 2009:752) ensured that nothing in terms of wildlife benefits got to the people since the processes then, were predominantly state controlled from conservation planning, development, implementation and benefits accrued to government with little or none getting to the rural communities. Thus, the link between wildlife and the local people on whose land wildlife lived, remains contested to date and generally weak when it came to supporting local communities in terms of benefiting from wildlife proceeds (DeGeorges and Reilly, 2009:752). Dressler and Buscher (2007), Buscher (2008; 2009; 2010; 2011) highlight contexts in understanding numerous ways in which TFCAs/TFP were born and the problems that have equally complicated this type of conservation. They argue that global neo-liberalism, which is broadly understood as the integration of market logics into natural resource management and utilization, are the driving philosophical foundations of TFCAs/TFPs in this discourse. These authors put forward that TFCAs/TFP represent considerably less localized forms of institutional processes in terms of governance and benefits sharing. Ramutsindela's (2007) extensive research in ecology of Southern Africa showed that residents in TFCAs/TFP or 'Peace Parks' (PP), have little or no role to play in contributing to the construction of regional scales especially governance of mega parks.

More essentially, the conservation agencies and stakeholders' have elevated the GLTP resource governance processes to higher levels that has put conservation away from the older locally oriented Community Based Natural Resource Management (CBNRM) that offered an integrative interface in mainstreaming communities in co-governance regimes of natural resources, which could potentially be replicated in Peace Parks. This would indemnify advancement of local livelihoods. In addition, it will have the obvious effect of enabling participatory conservation of natural resources by communities than the current governance processes where the architecture prefers market logics driven by neo-liberal political ecology (Dressler and Buscher, 2007). Consequently, the reality of Peace Parks (PP) in Southern Africa overtly lack involvement of local communities in governance configuration, and this shows the novelty of state-centric nature of transfrontier conservation as currently formulated, with considerable implications on communities' livelihoods and sustainable conservation.

Perhaps one important observation made in this study is that the current governance process puts enormous pressure on user communities and subsequently affects local people's motivation to conserve natural resources. There is a popular assertion that human population and the attended pursuit of livelihood activities ordinarily pose inherent threats to natural resources in adjoining conservation areas. While this argument is valid, it is not a strong basis to institute separation of humans from conservation zones. This is more important when it comes to the attempt in the GLTP to separate natural resources from communities, a move that fails to realize that the communities depend on natural resources for their livelihood. The communities directly or indirectly benefit from natural resources. The challenge is how to balance local livelihoods and management of ecological resources in such a way there are positive outcomes on natural resources to achieve sustainable conservation. The GLTP governance regime, which is argued in this study to be far removed from the local processes, has not recognised the connectivity between communities and the attendant dependency of those communities on natural resources, and pursue rather a protectionist approach that is exclusionary to the extent that it is undermining local people's livelihood aspirations and conservation. Questions therefore abound that the sustainability of conservation would be a challenge going forward. In that transfrontier conservation turn, not only has the evolving conservation governance being questioned but its response to a broad array of impacts on communities are critically affecting communities, hence they are important areas to look at. Emerging concerns in the GLTP questions transfrontier park governance in its current form, and if it is juxtaposed with community livelihoods and local conservation interests, clearly shows some missing links. Considered by many analysts to be outmoded system in contemporary development discourse, the multi-layered and centralized GLTP natural resource governance structures, are characterized by internationalization and great import of external expert-driven and governmental bureaucracies. At times, beyond this antiquity, exclusionary biodiversity governance in the way they interface with communities practically have in many circumstances, undermined local processes in resource governance and community collaboration is indeed minimum (Child, 2004:22). While communities in the GLTP Treaty are lauded as key stakeholders and primary beneficiaries of the initiative, this has not been translated in reality to benefit the local people. Manifestly, there are contestations around community needs in terms of resource governance and enhancement of their livelihoods through access, ownership and the exercise of usufructs over natural resources by communities in ecological relations. The concept of ecological relations conceivably imply those relationships between organisms in an ecosystem, including human beings or communities that live in it and depend on it for their livelihoods. It is argued in this study that all organisms in such an ecosystem or environment, are connected and they there is with each other, which depends on one another. Each population therefore, interacts with one another in a complex web of relations, and ecological relationships therefore, help better to describe how population of organisms are connected in an interdependent manner.

Participation of communities in the GLTP is noted in this research as largely constrained with farreaching impact on local livelihoods and affects how people get motivated to conserve natural resources. The complexity of natural resource governance in the GLTP, thus remain a difficult terrain. This study sought to interrogate and understand the hotly contested subject of natural resource governance, its implications on livelihoods, sustainable conservation, effect on local participation in natural resource management processes and conservation interrelationships. Conservation interrelationships taken from this study context, define those relationships that exist between people and biodiversity specie richness and ecosystem function, which relationships are used to understand the degree of mutual coexistence of humans with biodiversity (Chapin et al. 1997, 1998; Tilman 1997; Edwards and Abivardi 1998). The conservation interrelationships further help to appreciate how communities interested in maintaining the ecosystem functionality in relation to each component (such as land, clean air, clean water, soil fertility), sometimes called ecosystem services (Daily, 1997), use them in a manner that does not compromise its capacity to continue supplying more for their livelihood. Maintenance of these functions also and use furthermore facilitate inter alia, environmental and biodiversity balance. In order for a functional interrelationships between ecosystem and biodiversity as the foundations, there has to be sound resource governance, sustainable use and conservation of biodiversity.

1.1 Organization of chapters

The chapters start with the GLTP background, the aim and objectives to give the reader sufficient foundation and understanding of the issues. Chapters 2 and 3 deal with transfrontier conservation philosophical issues, examined the rationale behind the GLTP and its ideological imperatives. This discussion is juxtaposed with resource governance trajectories from the perspective of how the local processes operate in order to comprehend if the manner in which they function provides room for local communities to participate in resource governance and management of natural resources. The study further identified key policy, institutional puzzles and theoretical challenges in transfrontier conservation discourses. Chapter 2 in particular, explores transfrontier conservation, the geographical spread of TFCAs and their attendant effects on communities inhabiting the vast adjoined territories.

Chapter 3 pursues the issue of resource governance manifestations through examining contentious matters that relate to resource rights, how these inter-link with local people's claims, which culminate in a discussion of the Spiral Dynamics "the Theory that Explains Everything" by Professor Don Beck (1999). These theoretical considerations conceivably helped the researcher to understand current environmental actors' actions, resource governance behaviour and various conservation stakeholders' interfaces with regard to determining institutional creation at different resource governance levels. This discussion leads the reader to a brief cross-examination of

'governance' as a concept applied to specific to natural resource governance dynamics. Chapter 4 and 5 tackle methodological issues. These chapters elucidate contexts of the case study communities. They also looks at the justification for the selection of Makuleke and Sengwe communities, research setting, the rationale for adopting a mixed research approach and data gathering processes that were followed during the study. The interdisciplinary nature of the study would inadvertently mean some of the problems would easily be understood from synthesising different and complex concepts. Again, these problems are highlighted and given prominence in discussion as to how they can be overcome. Chapter 6 and 7 become the climax of the study that focus on concurrent presentation, analysis and discuss of the findings in line with the mixed research process that the researcher used. The idea of combining presentation of findings with analysis and discussion at the same time was deliberately mooted to ensure coherent and logical flow of issues so that the reader can at easy follow the arguments as they addressed in the discussions. This also means that results are presented and critiqued drawing of course, from empirical and scholarly data that buttress arguments articulated. Table 1.1 gives a summary of the critical issues that one expects from each chapter as follows:

Table 1.1	Summary	y of chapters
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Chapter overview	Summary of issues covered
Chapter 1 : Introduction; overview; organization of chapters study background; study aim and objectives; study questions; hypothesis, the research problem, significance of the study, study geographical definitions and socio-ecological history of communities.	This contextualizes the study aim and objectives, the problem and its background, the research questions, the hypothesis and the relevance of the study.
Chapter 2: Literature review: Transfrontier conservation concepts, ideological imperatives and risk scenarios analysis.	Transfrontier conservation theoretical underpinnings, concepts and links with the current GLTP processes
Chapter 3: Literature review: Natural resource rights theories; Spiral Dynamics and implications on communities, livelihoods and conservation.	Examine theoretical issues and their implications on transfrontier communities' resource rights and conservation.
Chapter 4: Case study approach justification, research setting, contextual issues and stakeholders analysis.	Study justification and context.
Chapter 5: Methodological frameworks, rationality and research techniques that were used in the study.	The mixed research approach adopted and data collection methodologies.
Chapters 6: Makuleke community presentation of findings analysis and discussion.	Concurrent presentation of findings, analysis and discussion.
Chapters 7: Sengwe community presentation of findings analysis and discussion.	Concurrent presentation of findings, analysis and discussion.
Chapter 8: Strategic recommendations, decision-making and co-governance frameworks and conclusions.	Recommendations, suggestions and conclusions.

Chapter 8 provides three landmark suggestions, particularly proposed decision-making, amalgam of integration of different livelihood activities with natural resource based processed and a hybridsynergistic transfrontier natural resource co-governance framework. This section, going forward, is the most critical part of the thesis where the researcher has attempted to provide some strategic recommendations and implementable frameworks that can be applied in the GLTP governance processes with to address issues of impact on livelihoods and resource governance. It notes overall critical observations derived from the findings of the two case study communities and proffer strategic policy recommendations in a manner that is practical, rather than being theoretical in its approach. It is imperative to mention that from the onset, the study blended pedagogic discourses, with practical issues on the GLTP resource governance complexities, which gives readers strong understanding of issues in relation to communities' livelihoods, conservation and participation. Through identifying critical practical governance issues, weaknesses and the ideas in the discussions mechanism that can improve transfrontier biodiversity and ecosystems management in the SADC region are explored broadly.

1.2 The study Background

The creation of Great Limpopo Transfrontier Conservation Area (GLTFCA) was on the drawing board since early 1990s. Chances to establish a Transfrontier Conservation Area (TFCA) gathered momentum when apartheid was abolished in South Africa in 1994 and when the civil war had ended in Mozambigue (Vines, 1991:26 and Koch, 1998:82). Two months after Nelson Mandela's release from prison in 1990, the late South African business mogul, Dr Antony Rupert, the founder of Peace Parks Foundation (PPF), (one of the main promoters of and fundraiser for TFCAs in the Southern Africa) discussed the issue of creating a transfrontier conservation area with Mozambican former President, Joaquim Chissano. The discussions focused on co-operation in the field of nature conservation (www.peaceparks.org). Munthali and Soto (2001:8) postulated that negotiations about the establishment of the Great Limpopo Transfrontier Conservation Area (GLTFCA) started in earnest in 1998 when an interim International Technical Committee (ITC) was established. This consisted of government officials from Mozambique, South Africa and Zimbabwe. Munthali and Soto (2001:9) further put forward that the interim ITC initially envisaged that the Great Limpopo conservation project would be a vast conservation area. This would include the Kruger National Park of South Africa, Gonarezhou National Park of Zimbabwe, Banhine and Zinave National Parks and Coutada Sixteen (a wildlife utilisation area) of Mozambigue in addition to a number of communities in Zimbabwe, Mozambique and South Africa as integral part of the project. The initial idea was for the Great Limpopo Transfrontier Conservation Area to be implemented in an integrated manner that allows for multiple land-uses, which would benefit local communities immensely as well as benefiting the private sector tourism operators in the business of tourism through establishing conservation and eco-tourism enterprises (Spierenburg et al., 2008:88). This implied that the local people ordinarily would be equal stakeholders. Their participation in resource governance and management of natural resources would be recognised since the strategy was to make the GLTP an integrated, inclusive and multiple land use project, blending conservation and rural development objectives, which would leverage on the abundant natural resources for the transformation to shape up.

The contention in this process is that what ensued thereafter was a "Transfrontier Park" (TFP) as opposed to a Transfrontier Conservation Area (TFCA). The TFP departed from the initial plan in which it was anticipated that the project would have played a role in ensuring benefit streams accrue directly to the local people in a big way and their participation in the governance of natural resources was going to be guaranteed as part of the broader TFCA resource management strategy. Quintessentially, the establishment of a single 'Peace Park' (PP) or TFP in the Limpopo area implied a fundamental shift with numerous contradictions and ecological contestations (Vines 1991:26; Koch 1998:82).

The International Technical Committee (ITC) that was set up remained an important working group. It operated under strict supervision from the Ministerial Committee (MC) made up of bureaucrats from ministries of natural resources, environment and tourism of the three countries. They worked under a trilateral arrangement in developing drafts that were implemented for the TFCA. Accordingly, the ITC was given one year to develop the drafts. However, it repeatedly asked for more time to consult all the stakeholders that included local communities that would be affected by the project (Spierenburg et al., 2008:88). The MC turned down the requests (Spierenburg et al., 2008:89), opting for the speedy implementation of the plan of the project resolutions. Close and tight supervision from the Ministerial Committee, coupled with lack of time, had a negative effect on the possibilities of addressing co-governance and co-management issues in the GLTP governance. The final outcome was supposed to include affected communities in the GLTP governance matrix for local voices to be heard in the GLTP process (Munthali and Soto, 2001:9). As will be revealed, there was and still there is dissonance about the GLTP governance because communities were left out in the consultative processes. The communities also have a minimal role to play. The common understanding is that the "Peace Parks" or TFP have to promote peace among nations as one of its anchor objective. That 'peace' the GLTP is supposed to promote, as this study would argue, is problematic if it does build conservation 'peace' with the

communities found in and adjacent to the adjoining areas forming the GLTP. The exclusion of the local people as key role players, with perhaps the strongest environmental affiliation and closest to the natural resources in the GLTP, this may prove to be an obstacle to achieving respectable transfrontier conservation goals, particularly using natural resources to address rural poverty and enhancing sustainable natural resource conservation based on the local knowledge systems.

This observation points to the real and potential problematic areas among government conservation agencies, conservationists and development agencies on one hand, and local communities on the other hand. This contested arena of natural resource accessibility, control, user rights and benefit streams, requires stakeholders to apply their minds when it comes to determining how livelihoods can be attained, and at the same time realise conservation objectives Sentiments from households view the GLTP in its current governance form as governmentally more benevolent but not less harmful to the rural communities. rights because in many instances, the way the GLTP is governed entrenches eternal expropriation of resource. Furthermore, restrictions on access to natural resources by the local people are a cause of concern. There is a concern that localised internal displacements may happen due to the proposed boundary for Sengwe Corridor. Displacements and forced removals that occurred during the colonial periods when protected areas were expanded in creating national parks such as the case of the Makuleke community in 1969 (Steenkamp and Urh, 2000:126) and Sengwe people having also been evicted between 1962-1975 (Wolmer, 2003:15; Ferreira, 2004:307). From this perspective, there are concerns that the GLTP risks inclining towards earlier restrictive form of conservation on local participation in the governance of resources and curtailed benefits to the local people by nationalization of resources through resource centralization or 'transnationalization,' in the interest of two or more states (Zips and Zips-Mairitsch, 2007:40). The speed at which the GLTP project was fast tracked resulted in overlooking of the local communities in terms of safeguarding their interest, supposedly attainable through what one analyst referred to as "multiple land-use". In that regard, the implementation of the GLTP disregarded respecting local resource rights, which would have enabled local communities to reap benefits from the Great Limpopo Transfrontier Conservation Area starting from its inception (Spierenburg et al., 2008:88). It is important to indicate that the 'park' concept and its principles in transfrontier conservation programmes are so apparent across Southern African region. The governance trajectories from an institutional perspective, pose challenges when reconciling community natural resource needs to offset poverty. The overall assessment gives an impression that the current set up of the GLTP governance does not endear communities to be active participation in conservation, but does so to government agencies and conservation organisations. This undermines local people's quest to

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collaborate in conservation, which consequently have negative effects on the achievement of sustainable conservation of natural resources.

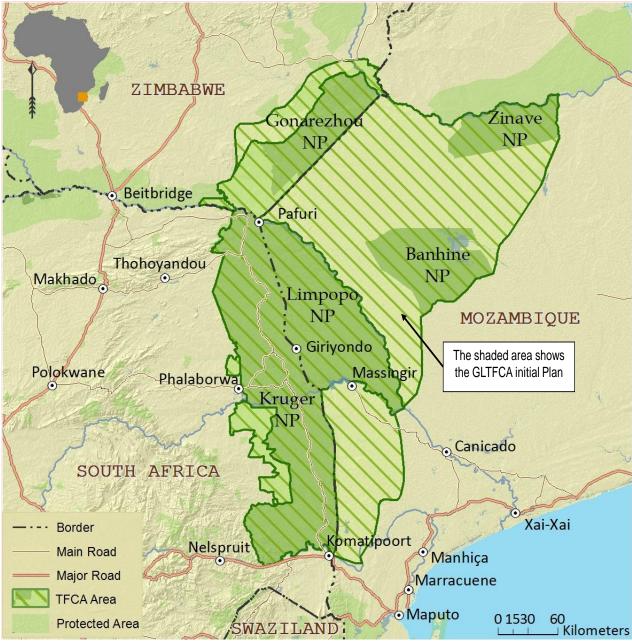
1.3.1 The historical context and development of the GLTP

The GLTP historical development date back to 1938 when a Portuguese ecologist Gomes de Sousa proposed that the Mozambican colonial administration negotiate with the neighbouring states to establish a transfrontier park (Braak, 2002). Accordingly, Ramutsindela (2002) put forward that the South African Defence Force (SADF) later endorsed this proposal. However, the proposal was rejected due to political factors and conflict of interest over land on both sides of the international boundaries. In Zimbabwe, for example, concerns arose from the interest exhibited by the SADF, an interest that caused discomfort in terms of management of environmental problems. From that time, the concept evolved for approximately six decades but this time for a different purpose of promoting peace using conservation as the stepping-stone. Conservationists have long fostered the peace parks idea. In May 1990, the late Dr Rupert, then the President of the World Wide Fund for Nature (WWF) in South Africa, met the Mozambican president Joaquim Chissano to discuss the possibility of a permanent link between some of the protected areas in southern Mozambique and adjacent areas in South Africa and Zimbabwe. Dr Rupert, also described by many authors as 'the doyen of the Afrikaner business community', went all the way to launch the Peace Parks Foundation (PPF).

The aim of the PPF as it currently stands is "to facilitate the establishment of the TFCAs in the SADC supporting sustainable economic development, the conservation of biodiversity, and regional peace and stability" (Van Riet, 2002:3). This generated new conservation enthusiasm supported by growing biodiversity policies. It furthermore excited the private sector's interest in biodiversity conservation and the need to use natural resources to address poverty among communities. These expectations did however lead to the revival of the proposal in 1990 by Anton Rupert (Ramutsindela, 2002).

In the end, Heads of State and government signed the GLTP treaty on 9 December 2002. These included Mozambique, South Africa and Zimbabwe. The Great Limpopo Transfrontier Park (GLTP), which spans an area of 35, 383 square kilometres, covers areas inhabited by communities. The initial plan was to establish a Transfrontier Conservation Area (TFCA) as already alluded. This would encompass Kruger National Park (South Africa), Gonarezhou National Park (Zimbabwe) and Limpopo National Park (Mozambique), and some communal areas, game

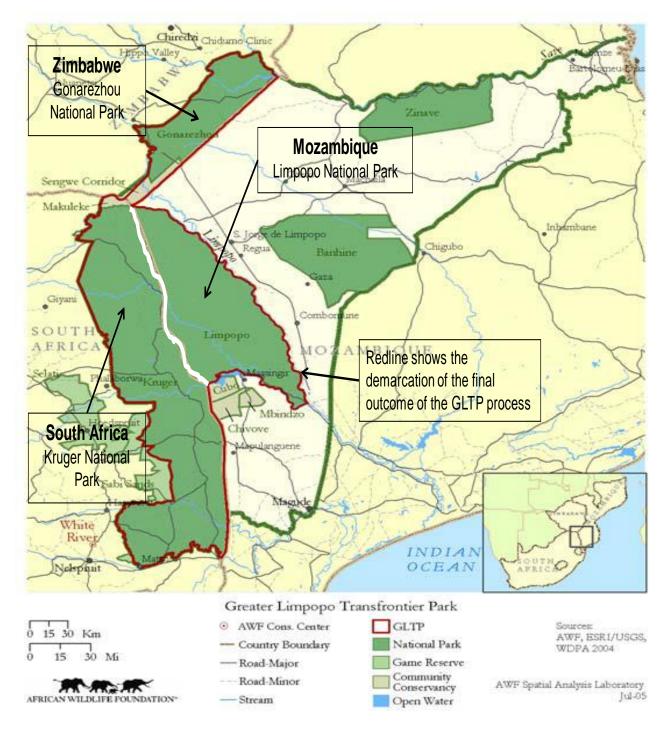
reserves and some private conservation areas as integrated multiple land-use zone (Soto, 2007:5). Figure 1.1 shows the demarcations of the initial plan to establish the GLTFCAs. However, the outcome of the process was the Great Limpopo Transfrontier Park (GLTP).



Source: http://www.peaceparks.org/images/pictures/grgybppbiqcwayfb4eaaa0b87d2e4.jpg Figure 1.2 The initial GLTFCAs plan

The final planning and zoning of the GLTP is shown in Figure 1.2, and it fundamentally departed from the initial plan that would have enabled local communities to have a stronger voice in resource governance, management and advancing their livelihoods. The current GLTP demarcations insidiously contradicts the initial development plan that was rooted in uplifting the lives of communities living in and adjacent to the GLTP in South Africa, Zimbabwe as well as

Mozambique as encapsulated in the GLTP Treaty. At the end, the three countries (Mozambique, South African and Zimbabwe) established what is known as the GLTP as opposed to the GLTFCAs. The decision to have a GLTP meant that a much narrower land size than initially planned as shown in Figure 1.3.



Source: Adapted and modified from the Peace Parks Foundation (www.peaceparks.org) Figure 1.3 The final Great Limpopo Transfrontier Park boundary demarcation Looking at Figure 1.2 and Figure 1.3, there are glaring differences. Figure 1.1 shows vast shaded area of the GLTFCAs, which was the original plan. Figure 1.1 also implied incorporating communities, conservancies and private game reserves in Mozambique, South Africa and Zimbabwe, in addition to the three countries' national parks (Limpopo, Kruger and Gonarezhou National Parks). Hence, the land-use options would have been mixed-use/multiple-use that obviously would accommodate local livelihoods activities and biodiversity conservation happening side by side. The local people would have had more say in terms of natural resource governance because of a strong community institutional system and cooperation that can be achieved locally.

1.4 The GLTP context and contradictions

From its conceptualization and design as shown above, the GLTP project was informed by neoliberal protectionist principles. Duffy (2006:99) postulated that this advocates for a market oriented resource management system generally regarded to be an effective tool for ecosystems conservation, hence the tendency for a 'park' and the emphasis on eco-tourism development is manifestly evident across transboundary conservation. Thus, from the beginning, there was a strong shift from the original plan, which saw focus shifting from the communities and subsequent reversion to the old park model of conservation. The planners envisaged optimal economic benefits from natural resources through non-consumptive resource use without compromising the resources for posterity to future generations. Buscher (2009:2) cited Duffy (1997); Wolmer (2003); Draper et al., (2004); Schoon (2005); Amerom and Buscher, (2005); Duffy, (2006); Ramutsindela, (2007); Dressler and Buscher, (2008) put forward that while researches done on transfrontier conservation have increased in the last decade, there has been little attempt to build an overall critical cross-examination of the rise, conceptualization and implementation of transfrontier conservation. Ideally, one other aspect that is amiss in this Peace Parks discourse is to unpack the effects of governance regimes obtaining in the region and their attendant livelihoods and conservation consequences on communities in and adjacent to the transfrontier projects. The contradictions and struggles these new governance processes unleash in relation to local communities have remained unexplored. Duffy, (2006:99), Buscher and Dietz (2005:1;2) concur that the GLTP creation progressed with a fundamental shift in its earlier political ecology manifestations from being community oriented to be characterised by new modes of politics that furthered and entrenched a more established neo-liberal form of natural resource management. This included insistence on opening up the resources to forces of corporate eco-tourism investments, commercialisation and commoditization of natural resource exploitation that were emphasised and placed in the hands of the private sector in perceived progress of sustainable

and profitable non-consumptive use (Spierenburg et al., 2006:80). From this vantage point, there was lack of consideration of local people's livelihood needs, let alone grassroots participation in decision-making processes pertaining to natural resources in their immediacy in relation to the GLTP. The programmes and policies being implemented, have substantial measure of altering local people's natural resource claims on an array of things including participation in the governance of resources, deriving maximum livelihood benefits and custodial ownership underpin local motivation to continue supporting biodiversity resource conservation based partly on local practices. The Community Based Natural Resources Management (CBNRM) is a clear example that historically underpinned local collaboration and motivated the local people to actively participate in conservation.

Due to these contradictions and struggles, there are rapidly increasing tensions in transfrontier natural resource conservation programmes in general and differences exist among institutions (actors) engaged in the management of natural resources with respect to how they have to deal with affected communities (Buscher and Dietz, 2005:1;2; Mamimine and Mandivengerei, 2001:1;11; Wolmer, 2003,1;4). Communities' claim resource stewardship and would want to have access to and control over natural resources in their environment to support their livelihoods. On the other hand, state agencies work closely with conservation organisations and are concerned about "unsustainable" community utilization of the same resources (Wolmer, 2003:1;3;4).

This becomes academically reinvigorating when conservation-community development debates combine with insights and trends in neo-liberal environmental market consideration especially commoditisation and privatisation of the commons under the pressure from neo-liberal conservation models, which show preponderance of multi-level institutions of natural resource governance over local communities (Sigh and Houtum, 2002:256). In many cases, inequitable distribution of benefits and elite resource capture escalates structural conflicts pitting governing institutions against local traditions, value systems and institutional processes struggling to play their part in conservation. To that extent, Ruckstuhl (2009) postulated that this could be mitigated by pluralistic and democratic approval process that takes cognizant of local communities and their practices. Ideally, despite all the criticisms about local communities not having sufficient scientific knowledge, it is fascinating and more compelling to acknowledge that local people have vast knowledge about their habitat, especially given their long history of co-existence and dependence on the natural environment. As such, their ownership and access to resources is critical, leading Harmon (2006:208) to argue that local people's empowerment is important and should be incorporated into transboundary park conservation, development and management. This literally

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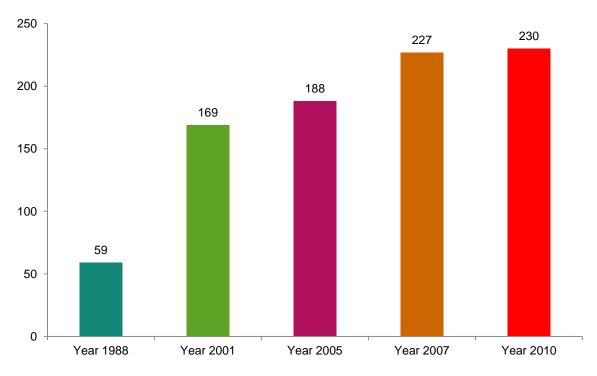
implies inclusion in the governance processes, enhance livelihoods locally and advance conservation as well.

In a highly publicised and most quoted conservation literature, Garret Hardin's 1968 'Tragedy of the Commons' theory has progressed in the conservation discourses has been misinterpreted in relation to community-biodiversity relations. Hardin's theory argues that resources are likely to be over-exploited. According to Hardin (1968), this process results from resource-users acting in a very individualistic manner, culminating in what Hardin (1968) called 'unsustainable use' as each individual endeavours to maximize personal economic benefits without minding about the cost of regeneration of those natural resources. This theory further cautions continued over-exploitation results in extinction of the 'commons' hence the need to privatise it and strengthen private ownership. Premised on this understanding, transfrontier conservation policies in the SADC region are therefore, guided by neo-liberal market principles that advocate for the privatization and commoditisation (to individuals and tourism companies) of natural resources. This also includes state control of natural resources even where rural communities legitimately make claims of ownership, and they want to exercise and enjoy environmental benefits. It is argued in this research that heavy-handed state control and exclusionary tendencies obtaining in the GLTP governance processes, mirror a manipulated 'tragedy of the commons' and conspiracy against local people's claims and resource ownership systems.

The implementation of the GLTP given depletion of resource around the world, took an 'all size fits all' strategy thereby defying local scientific knowledge of the communities in terms of their historical and contemporary conservation knowledge systems relating to biodiversity and ecosystems management. It is known that Sengwe and Makulele communities have local ownership systems of natural resources, which they traditionally hold and conservation of natural resources are regulated using local cultures and practices. Buscher and Dietz (2005:1) buttress this point when they observe that conservation-community development discourse in Southern Africa in the 1980s and early 1990s emphasized the importance of local people as integral part of natural resources conservation processes. Resultantly, great success was achieved during that period (Buscher and Dietz, 2005:1). This led not only to meaningful beneficiary participation of the local people in environmental governance, but deriving of monetary benefits from wildlife and other resources by the communities. In that regard, the relationship between communities and wildlife was cordial and beneficial. This was a sound compromise in resource governance. By ensuring good ecological relations between community and nature, this strengthened local ownership, motivated local conservation and subsequently helped in meeting sustainable conservation

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objectives. The change in global natural resources governance and management styles, particularly with respect to the GLTP in Southern Africa, has not been immune to global influences. It is apparent that transfrontier park conservation programmes in the SADC region have rapidly increased and the communities being affected are increasing as well. Figure 1.1 gives the growing number of transfrontier/transboundary conservation areas since 1988 until 2010, indicating how rapidly they have become important globally in terms of contributing towards biodiversity conservation.



Source: Adapted with own modification from Schoon (2008:4); Buscher and Schoon (2009:33) Figure 1.1 Incremental global numbers of Transfrontier/Transboundary Protected Areas

Drawing from the global Transfrontier/Transboundary Protected Areas (TBPA) above and bringing it closer to Southern Africa, the existing Transfrontier Conservation Areas (TFCAs) or TBPA in the SADC region cover many globally acclaimed national parks. They also include game reserves, hunting safari areas and conservancies occurring contiguously to each other mostly within intervening land with a number of areas under communal tenure (Cumming, 2004: 1). Others have put forward that the terrestrial coverage is estimated to be over 120 million hectares planned for 'Peace Parks' (Osofsky et al., 2009:90; Cunning, 2004:1) in the region. Existing TFPs are numbered 22, covering about 460,000 miles or 1,200, 000 km², just a shy of the area of Texas, California and New York combined (Osofsky et al., 2009:90).

A reality check in this study established that communities' integration in TFCA, particularly the GLTP, has been fizzling out and the conservation debate regarding community participation in natural resource governance and management equally polarized. As such, criticism against communities, their traditional systems of resource conservation and the dismal performance of Community Based Natural Resource Management, have become a characteristic for central government intervention in conservation even though the reasons are not justified (Sigh and Houtum, 2002:257). Schoon (undated:10) notes that unfortunately the local population are often not consulted and their conservation processes are frequently at odds with plans of governments and other outsiders, conservation NGOs in which case, community benefits are not guaranteed. From a livelihood perspective, many residents in Makuleke and Sengwe earn their living by working on the land for subsistence livelihoods such as crop farming, harvesting forest products and livestock production. Work on poverty alleviation and environmental linkages, point to the importance of understanding both community livelihoods and institutions embedded in sitespecific social and political relations, which cannot be ignored in this process. This study found that resource governance unfolding in the GLTP crowds out local institutions from facilitating local people in terms of having access rights, use-rights, ownership of natural resources and local community participation in the management of natural resources has equally diminished since its establishment in 2002.

Going forward, it is argued in this study that neo-liberal conservation protectionism has put much of the emphasis on the 'return to fortress conservation' or what King and Cutshall (1994:2) referred to as "hard-edge," in which humans have no place and must completely be separated from nature. In this regard, a dichotomous approach that overlooks interdependences of the environment and humans fundamentally ignores that reality of previous successes of CBNRM, especially the CAMPFIRE programme in Zimbabwe where communities demonstrated their ability to govern and manage natural resources sustainably. Ideally, the ascendancy of transfrontier programmes has substantially substituted participatory community based natural resource conservation (Buscher and Dietz, 2005:1). In this view, other authors have suggested that the strategies employed in transfrontier conservation concepts, policies and programmes need to be revisited (Adams and Hulme 2001:22, Brockington, 2002:18; Cernea and Schmidt-Soltau, 2006) so that communities are not prevented from enhancing their livelihoods for poverty alleviation. To this end, the study was persuaded to postulate that the strong sense of urgency involved in neo-protectionist turn amongst conservation practitioners is being reciprocated by an equally strong academic and development call from Community-Based Natural Resources Management (CBNRM) advocates, insisting on the return to 'communities' and facilitate their participation in resource governance.

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This will ensure that they benefit from their resources. Failure to compromise between community resource needs on one hand, and conservation objectives on the other hand, has the potential to strain contested natural resource choices and claims that can undermine transfrontier conservation strategies being implemented.

Mamimine and Mandivengerei (2001:1;11) suggest that the potential of institutions to promote divergent and ambiguous policy values and practices across protected conservation areas tends to affect the local people. This in turn, leads to environmental/natural resource governance that favours the 'sustained' polarisation of priorities. Bebbington (1996:52) wrote in support of communities' rights and stated that local people are being sidelined in nature governance, hence confusing the distinction between access and the conservation of resources because access to resource by the local people is the most important element in human-environment relations. The relations, are locally mediated and in so doing determine local community's motivation to build sustainable poverty alleviation. Putting it in his words, he argues:

"Indeed access to other actors is conceptually prior to access to material resources in the determination of livelihood strategies, for such relationships become sine qua non mechanisms through which resources are distributed and claimed, and through which the broader social, political and market logics governing the control, use and transformation of resources are either reproduced or changed" (Bebbington, 1999:56).

Based on this argument, institutions of natural resource governance as functional entities at various levels do two things; either enable or disenable local people from exercising their usufructs over natural resources in their areas. With this in mind, balancing multi-level institutional natural resource interests and the interest of those communities living adjacent to conservation areas become paramount, particularly in enhancing livelihood expectations of the rural people. Recognition of local resource needs is essential in informing prospects for successful collaborative conservation of environmental resources, especially when communities' inalienable rights over resources as equal stakeholders are guaranteed. Adopting a top-down exclusionary approach to transfrontier resource governance like the current situation in the GLTP, may not be as sustainable as imagined, and does not guarantee successful ecosystem conservation (Harmon and David, 2006:209;210).

Additionally, Robin (2002) postulated that governance models should not be superimposed on communities as a "homogeneous best practices" but must evolve through social processes and safeguard communitarian interests while ensuring sustainable utilization of environmental resources. Moreover, for this to happen, the roles of various social carriers, including local communities, become important (Marsh, 2002). In this context, the operations of governance institutions become important centrepieces through which rural development and enhancement of livelihood strategies and conservation of natural resources can be attained. If communities realize benefits derived from natural resources and their natural resource rights guaranteed, it becomes logical that they equally reciprocate in a motivated manner to conserve natural resources.

1.5 Juxtaposing the GLTP and SADC development objectives

Whereas the advocacy on transfrontier conservation programmes in the SADC region has long been well promoted and publicized by a number of organisations chief among them is the Peace Parks Foundation. However, criticism of such organisations is growing in relation to addressing some key conservation and community demands (IUCN, 2002; Munthali and Metcalfe, 2003; Wolmer, 2003). One unfortunate and much puzzling issue in the discourse is the confusion over governance of these transfrontier projects that apparently exclude the local people/communities in and adjacent to them. In particular, the GLTP is conspicuous by its lack of community involvement in its governance structures. In general, transfrontier conservation or its metaphor 'Peace Parks' and the GLTP, have a wide range of objectives as cited by Metcalfe (2005:2) that include:

SADC conservation objectives		GLTP conservation objectives	
•	The conservation of biodiversity, ecosystem	•	To stimulate sub-regional economic
	services, natural and cultural values across		development through tourism
	boundaries;		development (GLTP Treaty Article 4, d
			and e);
•	The promotion of landscape-level ecosystems		
	management;	•	Promote alliances in the management of
			biological natural resources by
•	The building of peace and laying the		encouraging social, economic and
	foundations for collaboration (trust,		partnerships of stakeholders including
	reconciliation and cooperation);		the private sector, local communities and
			non-governmental organisations (GLTP
			Treaty, Article 4b);

- Increasing the benefits of conservation to communities on either sides of the borders of each participation country in the transfrontier/transboundary conservation projects;
- Leverage on transfrontier projects for economic development (largely through tourism development) to local and national economies;
- To facilitate cross border control of problems such as fire, pests, poaching, pollution and smuggling.
- Promote, harmonize, enforce legal instruments, share information for sustainable wildlife use and promote conservation through establishing transfrontier conservation zones (SADC Protocol on Wildlife, Article 4, a, b, d and f; GLTP Treaty Article 4, f) and;
- Facilitate regional capacity building for wildlife management and facilitate community-based natural resources management practices for management of wildlife resources (SADC Protocol on Wildlife, Article 4, e and g).

Looking at these broad perspectives of objectives, it is evident that the mandate is enormous and has a strong bearing at the sub-regional and inter-state levels. As a result, the Southern African Development Community (SADC) administrators and planners view contiguous protected areas as a means to accomplish a range of goals for purposes of regional integration. The contiguous biodiversity, ecosystems and political ecology therefore become part of environmental diplomacy in inter-state relations. This gives transfrontier parks and conservation areas alike the much-needed high respect to the extent that most developmental projects become premised on state relations and driven governmentally. Consequently, since the planning process involves state institutions and international organisations as cooperating partners, communities have found it difficult to get involved. Thus, they are at the periphery of the GLTP governance and decision-making processes. Taking it from this perspective, this research assumed that the SADC Protocol on Wildlife and Law Enforcement (1999) and the GLTP Treaty (2002) carry with them substantive extra-territorial objectives encapsulated in the GLTP Treaty of 9 December 2002 to reinforce sub-regional integration rather than being oriented in the communities.

It is imperative to highlight that generally, transfrontier or transboundary conservation projects in Southern Africa are promoted as pillars supporting regional integration. It is conceivable that the potential success of transfrontier parks is seen as depending on specific socio-political and ecological considerations that the participating countries see as key to attain more cooperation and achieving regional integration. What is paradoxical is that the GLTP Treaty (Article 4b) recognises communities, which gives the basis for the communities to make certain claims in terms of involvement in natural resource governance, and by acknowledging also the fact that these resources underpin their livelihood interests, it makes a lot of sense to them as shall be discussed in this thesis. The manner communities would enhance their livelihood and participate in the governance of the resources in the new GLTP dispensation, unfortunately is not clearly defined. This is the missing link in the whole GLTP governance process and has neither been addressed nor explored thoroughly, yet transfrontier projects are increasing in the region. How the GLTP multi-level governance structures facilitate benefits to the local people remain elusive, despite media publicity that there will be a galore of eco-tourism benefits to the ordinary people. Evidence from research shall demonstrate, very little empowering benefits are being realised. The transformative economic impacts on Makuleke and Sengwe communities are remain guestionable between officials giving a positive impressions, while local communities have a different view about the negligible benefits coming to them especially when the study looked at it from the perspective of livelihood enhancement among people in and adjacent to the GLTP. The GLTP advocates across literature present a promising picture of the concept, while the consequences on local communities in terms of local livelihoods, conservation collaboration and local participation are murky. The study conceives that the GLTP governance framework potentially aggravates environmental conflict between state agencies and conservation organisations on one hand and the communities on the other. The involvement of a number of state institutions, national policies and bureaucratic dominance as this study will establish, suggest strongly that inclination towards a 'Park' in the GLTP invokes a return to 'fortress conservation' (Buscher, 2005:4) as a model for management of natural resources. This ideally implies minimal role by the local people in the governance and management of the GLTP. Furthermore, wherever communities are mentioned in respect of the GLTP, the benefit-sharing arrangements are undefined even between the private partners and communities. In the majority of cases, state agencies are involved rather than the communities.

Quite clearly, there is a contradiction coming out obviously from the previous CBNRM, which defined benefit streams and institutional frameworks in which the local people would participate in natural resource governance and management. Taking it from this line of thought, Buscher (2005:4) in his study of TFCAs postulated that the dominant narrative of community-based conservation has not been taken advantage of in the planning of TFCAs. Buscher (2005:4) further argued that its problems have contributed to creating clearer 'enabling' macro-conceptual governance framework complications in tackling issues and challenges that the environment-

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development nexus currently faces. In reality, the avoidance on CBNRM institutional systems as the anchor pillar for possible definition of benefits sharing and integration of the local people for co-governance arrangements is skewed functionally in favour of state agencies and private operators rather than communities. Coupled with the lack of involvement, Makuleke and Sengwe communities are evidently not realising the proceeds as promised that benefits would accrue from tourism investment in their areas as integral part of the GLTP tourism development. Resultantly, growing anxiety, mistrust and local people despair arising from exclusion from participation in the GLTP governance, is likely to undermine sustainable biodiversity and ecosystems conservation if there is no local buy-in. Consequently, this engenders natural resource governance conflict due to variance of interests. It is for this reason that there is a potential risk of growing impatience from the local communities with a high sense of livelihood insecurity arising from the fact that the GLTP administrators are reluctant to welcome in their structures, communities to also co-govern and comanage the GLTP. It is prognosticated in this study that this is a potential recipe for failure of the GLTP conservation. There are contested claims, which if not handled properly, may lead to undermining conservation. This range from demands communities make, which revolve around their needs to promote their empowerment and safeguarding local livelihoods. However, the debate seems to be won on the basis of state ownership, with co-governance or co-management with the communities facing resistance right across most transboundary conservation projects (Brown and Kothari, 2002).

It is noted in conservation literature with regards to Peace Parks that community empowerment is a critical component for livelihoods purposes and manifest in several forms from protecting community user rights and their participation in the governance of those resources. It also entails access to wildlife resources and benefits in which communities can be positioned to enter into partnerships with protected area authorities, the private sector eco-tourism investors. This becomes a way in which communities can also be motivated to collaborate in landscape, biodiversity and ecosystems conservation, which is a strong potential foundation for achieving sustainable conservation (Metcalfe, 1995).

Good examples have been cited that demonstrate that in some "new world" states like Canada and Australia, governments have since accepted the justice of the local people's claims and supported some form of co-management arrangements between the state and the community for instance, Metcalfe (2005) cites Australia's Kakadu National Park (cited also from Hill and Press, 1994). In Zimbabwe, South Africa and Mozambique that are involved in the GLTP, generally these countries have been inclined to maintain state control, departing from all the CBNRM

processes that offered an opportunity for co-management that would enable communities participate in the GLTP process. More often than not, the states conceive co-management that comes with co-governance of natural resources with the community as being antiquated, because the current scenario favours state partnership with the private sector rather than being community oriented. On the overall, Metcalfe (2005) put forward that that partnership with the community, the state and the private sector, if it is done properly it will have positive implications on the stakeholders, who will ordinarily create equitable foundation for sustainable development, cooperation and should ideally, precede a collaborative partnership between the state, the community and the private sector.

1.6 Research Aim and Objectives

The aim of the research is to achieve an understanding of the impact of the GLTP governance regime on communities' local livelihoods, sustainable conservation and participation of people in the management of natural resources in the GLTP. A number of sub-objectives were developed to help attain this research aim as follows.

1.6.1 Specific research objectives

- 1. To empirically examine livelihood practices in Makuleke and Sengwe communities.
- To examine community natural resource rights in order to understand how these affect access to environmental goods and services in support of local livelihoods in relation to stakeholders' competing conservation interests.
- 3. To examine the impact of multi-level resource governance on participatory natural resource planning and decision-making processes in Makuleke and Sengwe communities.
- To examine governance institutional operational trajectories in the GLTP and understand how they 'enable' or 'disenable' communities to realise sustainable natural resource conservation and management.
- 5. To analyse and suggest a possible environmental decision-making framework and a natural resource co-governance framework for the GLTP.
- 6. To analyse the proposed GLTP boundaries with a view to understand find local people's preferences in relation to their security and their livelihood support.

The study drew upon a diversity of views from conservation institutions, organisations, conservation planners and government entities including park officials dealing with transfrontier conservation and tourism experts. As previously mentioned, it was imperative to appreciate the ability of the local communities to cope with and adapt to new changes in the GLTP governance process in order to find a way of enhancing local livelihood practices, and at the same time, exploit opportunities provided for by transfrontier conservation to improve conservation. In this view, the impact on communities is looked from a socio-economic, conservation, political ecology and participatory resource governance point of view to stimulate transfrontier conservation governance debate and analyse opportunities for future research around the discourse that will retrospect and introspect on the strategic direction that transfrontier conservation projects in Southern Africa will have to take. This can be achieved through an effective research and analysis on the understanding of conservation stakeholders' interrelationships in the GLTP.

1.7 Research questions

In order to achieve the research objectives, the following fundamental question guided this study: How are local communities affected by the GLTP governance in terms of resource rights, accessibility, utilization, ownership and ultimately local conservation of transfrontier biodiversity and ecosystems in the GLTP? The complexity of the GLTP governance and institutional operational trajectories at different scales of marginality, led this study to assert that the unfolding resource governance in the GLTP, is informed by a neo-liberal social-ecological market logic and perspectives that are exclusionary of the local normative value systems and local institutional process, which underpin sustainability of conservation in practical terms. In dealing with this question and perspectives, some key questions guided the study with the intent to better understand and identify complexities, theoretically discuss socio-ecological realities of transfrontier conservation philosophical foundations in the SADC region, resource ownership theories and ultimately, identify weaknesses that affect this noble idea in conservation. This information was then used to suggest a hybrid synergistic transfrontier co-governance framework, and to suggest strategic recommendations for policy changes based on concerns that came out of the findings regarding stakeholders' expectations in the GLTP, particularly the two case study communities of Makuleke and Sengwe. The questions that guided the study included the quest to understand:

1. How communities' livelihood expectations and local resource conservation can be made compatible with the new GLTP governance regime to have a win-win situation?

- 2. How can the GLTP transform itself in a more synergizing way to be inclusive in its dealings with the communities that will help to meet the resource needs of communities, strengthen local conservation and achieve sustainable conservation objectives?
- 3. How such governance institutions in the GLTP have affected the livelihood practices in Makuleke and Sengwe communities?
- 4. What is the model of governance institutions that the GLTP is following and how does this affect local people's access to natural resource driven livelihoods and their capacity to conserve natural resources?
- 5. To what extent are communities participating in natural resource decision-making since this process underpins motivation towards collaborative conservation?
- 6. What are the local communities' perspectives regarding the preferred GLTP governance framework

This study examined the GLTP governance in relation to its effects on community livelihoods and sustainable conservation using Makuleke community (Kruger National Park, South Africa) and Sengwe (Gonarezhou National Park, Zimbabwe) as case communities. The two communities are integral part of the GLTP. Whereas public authorities, conservation scientists and tourism investors may be excited about the concept of the GLTP, Makuleke and Sengwe communities are anxious and concerned with the manner in which they have been left out in the governance processes. One source of anxiety is that instead of communities playing a meaningful role, they have found themselves as conservation spectators. Has the GLTP leveraged real development for Makuleke and Sengwe communities through the promises of "trickle down" of benefits or merely extended state control of local livelihood processes? To progress with the issue of the GLTP governance and its attendant implications on livelihoods and conservation, the study pursues the following hypothesis.

1.8 The study hypothesis

The central hypothesis in this study is to find out how the GLTP natural resources governance is likely to result in communities to have no say in the governance, access and use of ecological

resources that they traditionally enjoyed in their domain through reaping its dividends, especially in supporting their livelihoods. It is the assertions of this study find out if the abolishment of the Community Working Group in the GLTP administrative structure meant that communities were to be excluded in conservation planning and contributing to environmental decision-making. This ideally, jeopardizes collective natural resource conservation by undermining local collaboration. The researcher therefore formulated the following hypothesis:

- The study presumed that the GLTP as a project, right from its conception, design and implementation was done with limited effective participatory consultations of the local people as key stakeholders. If anything, consultations done were summarily cosmetic and revolved on representative consultations, who knew little about the GLTP process.
- 2) As such, it is asserted that local inputs into the GLTP were minimal, and at worst tokenistic. Ideally, there are strong grounds for this research to find out how the GLTP project employed exclusionary GLTP consultation processes so as to understand the extent to which the GLTP is in achieving its objectives of empowering communities, guaranteeing local usufructs over natural resources and sustainable conservation.
- 3) The study also endeavours to bring to the fore that natural resources governance institutions that have emerged in the GLTP are not necessarily facilitating enhancement of attendant natural resource driven livelihood of the communities. Accordingly, MaCay and Jentoft (1998) put forward that there is a general dominance of higher-level institutions of natural resource governance over local institutional processes on matters relating to natural resource management in terms of regulating resource access, defining ownership regimes and use-rights. Ultimately, this undermines livelihood options of communities and their interest towards conservation of natural resources.
- 4) This study further presupposed that neo-liberal protectionism and market logics are not necessarily in par with the way local communities expect in terms of resource governance in the GLTP. When one looks at leveraging these resources for community development, clearly it is not conceivable that the current governance process is in concord with sustainable rural development practices based on the logic of localisation (Buscher and Dietz, 2005:1). Ideally, the process is configured in exclusive socio-political ecological way that entrenches a bottomup approach that affects local people's participation. This undermines resource usage by local communities that could have been 'centrepieces' to expedite rural transformation,

development and poverty alleviation. This perspective is further analysed by Spierenburg et al., (2008:87) who argue that the idea of rural participation in their development and democratic collective action, self-organization and self-governance of communities, guarantees natural resource access, raise a sense of ownership and utilization provides inspiration in resource conservation.

- 5) In addition, it is further argued that if conservation incentives are withdrawn from the local communities where they once enjoyed, the probability of free-riding leading to the 'tragedy of the commons' is likely to happen (Murphree and Mazambani, 2002:57). This is more particular when conservation and resource planning processes and responsibilities are transferred to state agencies and other development partners, with little or without input from communities so that they ensure that they receive value for their share of conservation from the commons. In many cases, this opens natural resources to contestations. Shambaugh et al., (2001:26), cited Hatton (2001) and buttressed this suggestion by arguing that when physical access to natural resource open up to private-sector operators without clearly defining community entitlements and their access to natural resources, extraction may occur unsustainably such as that occurred in Mozambique during their civil war. Thus, entitlement insecurity and exclusion, both evil twins may ecologically stimulate unsustainable utilization and exacerbate illegal over-exploitation of natural resources.
- 6) Finally, there are contestations over natural resource that engenders conflicts. These can be among stakeholders, which include state agencies, conservation technocrats, conservation NGOs and the communities, whose livelihoods are supported by resources in and adjacent to the transfrontier parks such as having access to dry land cropping, livestock grazing, deriving dividends from wildlife through local resource use systems and harvesting forests products for subsistence use. Inherent natural resource driven conflicts in common pool resources lead to problems, with conservation agencies usually not carrying out consultations with the communities. They, then open up natural resources to forces of markets in which case, communitarian resource governance systems change without promoting local livelihood sustainability (Joy and Thomson, 2006). In the majority of cases, such conflicts become regressive and environmental decisions are taken overlooking local people's interest and ignore their collective will to participate in preserving natural resources. To this end, Wolmer (2003:9;10) further argues that lack of effective community consultation concerning benefits sharing in natural resources exacerbates tensions in resource conservation. Ferreira (2006) and Sinclair (2007) buttressed these points and attested that there were limited community

consultations in the GLTP, and in the case of Zimbabwe, there was next to no consultation of communities (Wolmer, 2003). This explains the need to examine the underlying contestations around natural resource in the GLTP with a view to briefly examine these contestations, which ultimately will help in proposing strategic recommendations on mechanism to manage and reduce such agency-community natural resource conflicts so that there is ecological interrelationship harmony rather than disharmony.

1.9 The research problem and the GLTP governance contestations

Transfrontier or transboundary conservation (TFC) is at the centre of a regionally integrated natural resource management programmes being pursued in Southern Africa. State actors and several conservation organisations manifestly are facilitating the programmes seen as a model for regional economic development, sustainable biodiversity and ecosystems management, and as the building block for the integration of the SADC region through enhancing inter-state peace among partner participating countries. For example, Duffy (2006:90) put forward that in 2004, there were 15 Transfrontier Conservation Areas (TFCAs) in the Southern Africa region. Currently there are 22 existing programmes at different developmental stages in Southern Africa with a terrestrial coverage estimated to be over 120 million hectares of land in the region (Osofsky et al., 2009:90; Bengis, Undated:16). Ideally, the twenty-two TFPs/TFCAs are about 460,000 miles or 1, 200, 000 km², just a shy of the area of Texas, California and New York combined in land size (Osofsky et al., 2009:90).

As discussed in the background to the study, the process of establishing the GLTP, just like other transfrontier conservation projects in the SADC region, generates a lot of conservation interest, and ideally brings interplay of multi-level institutions in resource governance from the national, regional and international actors. Putnam's (1993) path-breaking study of institutions in Italy, and Mamimine and Mandivengerei (2001:1;11) studies, observed that institutions are a force for collective action. It is further noted in this study that the institutions are a form of social capital (social capital affects how communities interact with other stakeholders and agencies in a manner that there is mutual benefit and collaboration among actors), common knowledge networks and adaptive frameworks that facilitate collaborative resource management and conservation (Wai, 1997).

A close analysis of resource governance in the GLTP raises serious concerns of exclusion of the local people. The argument that arises therefore is that the governance operational trajectories of

various state institutions in the GLTP have inevitably progressed in a way engendering competing claims over management of natural resources in a way that entrenches state control at the expense of local communities, thus "disfranchisement at large" (Dzingirai, 2004). Exclusion subsequently diminishes enhancement of local livelihoods and affects local people's capacities and motivation to conserve natural resources. This study further argues that sustainable conservation objectives can be achieved if adjacent communities' legitimate claims over natural resources are recognised. This further goes to say in this study that local entities, cultural practices and local knowledge systems play important function to mediate and regulate environmental conduct, strengthens collaborative conservation of the GLTP and subsequently, reduces cost for policing the environment. Perhaps one critical issue that this study advocates that needs recognition in transfrontier resource governance is that resource use, have to be embedded in local practices, and with guaranteeing of local environmental participation in the governance and decision-making over access, ownership, usufructs and generally deriving of benefits as incentives for conservation, ultimately serve to smoothen conservation interrelationships. This has to take place conscious of the fact that communities have always regarded these resources as commonly owned and equally, they have had a historical obligation to conserve them as their livelihood supply pot.

Contrary to the assertion that local communities lack environmental scientific knowledge in understanding the complexities of biodiversity conservation, Gartlan (undated:218) cautions prescribing of inappropriate resource governance systems and further stated that those perspectives seem to be deeply rooted in western civilisation, but may not apply in Africa where cultures play a role in environmental conservation. Using a socio-ecological euphemism, he further says:

"There is also increasing evidence that the imposition of inappropriate models of governance, the inflexible and inappropriate imposition of western political paradigms in inappropriate social contexts--such as the promotion of gender rights--can lead to the destruction of the indigenous social fabric as surely as did the wars of colonial possession." (Gartlan, undated:218).

It is not surprising that the GLTP conservation and governance architecture shows those external values influencing environmental policies, conservation approaches and programmes that significantly change interrelationships in terms of local access rights and territorial control of natural resources by resident communities. This ideally contradicts the early 1980s and 1990s

CBNRM conservation paradigms, such as CAMPFIRE in Zimbabwe, in which consumptive utilization locally regulated witnessed financial benefits directly accruing to the communities with people making collective decisions. This presumably would have been a sound entry point to integrate the local people as key role players in experimenting with transfrontier conservation that brought hope for rural development (King, 1994:2). The early days of the Makuleke Community Property Association (CPA), similar to the CAMPFIRE programme in Zimbabwe, would have been the cutting edge to create synergies with communities and allow local structures to make environmental decisions. This study concurs with the observation that the ideological linkages between people and natural resources was progressing well towards local ownership and local management (King, 1994:2) during the time of CBNRM, however, changes have since taken place since the advent of the GLTP.

What becomes problematic in the case of the GLTP governance process is an attempt to separate communities (humankind) and their associated livelihood activities from their natural ambience as fundamentally inimical to sustainable conservation without backing it with scientific facts to justify it. This has tended to entrench neo-liberal market-based environmental logic hegemony, which from a biodiversity and ecosystems point of view, it is argued in this study, marginalises the rural poor, living in and adjacent to the GLTP. To this extent, Garlan (undated:219) went further to say that human needs and aspirations of local communities need to be taken into account in conservation planning,

"..but it is also right and proper that the views of biologists also be taken into account and that, in all the fanfare and trumpeting of human rights, nature's rights to exist are not trampled underfoot (Garlan, undated:219).

As much as it is important to balance conservation with community interests, the experience of the GLTP resource governance is glaringly discordant if one looks at it from a community claims point of view, which attests to the fact that the way resource planning is done contradicts local communities. Again, Gartlan (undated:219) causations scientists when he cited "The authoritarian biologist and the arrogance of anti-humanism" (Guha, 1997), which made the unsurprising observation that:

"Biologists have a direct interest in species other than humans; as ornithologists, botanists and zoologists, they are alert to the interests of bird, plant or animal life. This interest in other species, however, sometimes blinds them to the legitimate interests of the less fortunate members of their own."

Contextualizing this in the GLTP conservation and resource governance processes, this study reiterates in a cautionary way that there are risks if communities are ignored as currently is obtaining in Makuleke and Sengwe communal lands. This ignorance of the local processes has direct implications on the survival strategies of communities, let alone de-motivating them from active participation in natural resource conservation. Perhaps, one possible outcome of that is increasing the risks of resource poaching, consequently affecting biodiversity sustainability.

It is noted in literature that "wildlife management for the people" typifying the GLTP by its very nature, is dominated by the state agencies leading to strong resistance by communities since little benefits trickle to the local communities, and the link between wildlife and the people on whose land wildlife is found remain weak (DeGeorges and Reilly, 2009:752). Local livelihood insecurity and potential diminishing conservation incentives such as dwindling natural resource benefits among communities increases the chances of natural resource poaching and destruction in and adjacent to adjoining transfrontier parks and conservation areas. This led Dowie (2005:8) citing Richard Leakey's 2003 statement at the World Parks Congress in South Africa that the global conservation interests and their regimes in biodiversity conservation sometimes trump the rights of the local people. This study concurs with this thinking and further cautions that there is real risk of the local people losing their critical resources. Other authors are more critical with Ribot (2004) asserting that sharing the benefits of local resources also can contribute both to development and to environmental management agendas by providing local communities with material and revenues. However, the current GLTP governance trajectory is seemingly inclined to possible ecotourism corporate and elite capture and patronage, which in many instances, it is the elites rather than the most vulnerable, which capture and then utilize the resources to repress local people (Olowu, 2001:54).

Noticeably, multi-level resource governance institutions in the GLTP are appallingly state-centric, epitomizing a direct shift from being community-oriented towards privatisation of the commons. This resonates favourably with Hardin's 1968 theory of "The tragedy of The Commons", which paved the way for a conservation ideology that puts emphasis on putting resource under private ownership. It is presupposed that this eliminates 'free riding'. Hardin (1968) criticises it for causing resource depletion. As such, governments exercise substantial control of natural resource to prevent the tragedy of the commons. In a show of concern, as this study also upholds, Dowie

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(2005:8) warns that history has shown that the dumbest thing to do is to kick out people from areas demarcated as 'protected,' fail to support their local resource needs and diminish their participation in the management of resources. Both Makuleke and Sengwe communities, it is a fact that these rural communities subsist on local resources in their proximity. It is not by coincidence that this study argues that local people involvement is inexorably critical if conservation is to happen with minimum costs being incurred by state agencies such as ZIMParks and SANParks in conserving natural resources in the GLTP because local support lessen the financial burden for environmental policing. There is little promise on the ground regarding how the resource governance processes will mainstream community processes and institute a renewed sense of livelihoods security. Ideally, it is argued in this study that sustainability of the GLTP in terms of resource governance therefore has to be adjusted to local contexts, harness community experience in coordinating with local institutions as building blocks for community mobilisation and motivation in a partnership arrangement with the local people having to participate effectively to sustainably manage natural resources.

Jones (2011:1;3) therefore cited Whande and Suich (2009) arguing that the TFCAs win-win scenario remains elusive and research has shown that the GLTP in particular has had very little economic impact on the local people. Coupled with exclusion from participating in resource governance processes, the market led conservation of the GLTP is making resources more available to national and transnational agencies and elites to the at the expense of the local people (Jones, 2011:3). Therefore, the GLTP risks to pass the test of moral principles in its current governance form, in which the ideal situation would be to enhance local community participation in resource governance so that they can derive maximum benefits from resources in their areas. Moral questions are being asked regarding the commitment of the GLTP planners on community resource claims and user community rights. Dowie (2005:8) and Chapin (2004:18) further warn that transfrontier park managers and other conservation organisations wrongly view communities as not so good environmental stewards, which this study argues that it undermines collaborative conservation. Whilst Makuleke suffered physical removal from the Pafuri Triangle, losing their land, resources and personal belonging in 1969, the same restrictions in the GLTP governance both Makuleke and Sengwe communities face, still displaces the two communities from material planning that underpin their survival.

In many cases, it is noted in this discourse that many biological and environmental researchers have in the past, been persuaded by a strong ecological-thought that communities resident in natural resource rich areas degrade natural resources. The protracted environmental and nature

conservation discourses, have resultantly been epitomized by cataclysmic consequences and visions of impending ecological crisis in the conservation of natural resources, hence instituting biodiversity governance urgency that something should be done, unfortunately over communities who for long are viewed as not so good environmental stewards.

1.10 Institutional centralisation and the 'Tragedy of the Commons'

Whilst the objectives of sustainable conservation are logical, institutions that have emerged in transfrontier conservation unambiguously have tend to crowd out the resource governance space for local people to be involved in conservation. To avoid the 'tragedy of the commons,' as propounded by Hardin (1968), it is thus fashionable for transfrontier conservation agencies and state institutions to centralise biodiversity and ecosystems management. Generally, transfrontier natural resource rights have literally been transferred back to the state agencies, altering communal resource ownership from the rural people, which historically have been the characteristic in both Makuleke and Sengwe communities. Ghimire (1997:12) then predicts that the way such conservation programmes are implemented and the changes taking place currently have the potential to leave communities more vulnerable by undermining local people's lifestyles.

Ideally, changing resource rights in full, partially, or any such imposition of restrictive measures on user communities, whichever case, goes on to weaken local people's access to key subsistence and life support resources such as land for crop farming and livestock grazing, forest products use and wildlife utilization through local beneficiary processes. There are some scientific arguments that localised human-environmental anthropogenic activities in ecosystems are essential at times for the regeneration of biological diversity and ecosystems balancing (Ghimire, 1997:12). Evidence from Makuleke and Sengwe suggest that there are no biodiversity and ecosystem threatening activities on the part of the community, despite the competing interest for land due to natural population growth, but this is restricted to their communal land without necessarily having to encroach on to parklands. This constrain has acted as a push factor resulting in many young people indicating their willingness to migrate to other areas with not only better land, but where their lifestyles can change differently from the rural life they currently experience.

Furthermore, this study took note of conflicts of interests and criticism against institutions at different operational levels in the GLTP governance that they are on a collision course with communities as the various stakeholders compete to control natural resources, redefine access rights and determine how to manage the resources. In the majority of cases, conservation

institutions, particularly government agencies and aspiring private individuals wishing to invest in eco-tourism in the GLTP rely on the use of rigid laws and policies of government, which Peluso (1992:3) criticises for being coercive measures and in some situations turning to be 'militaristic' in proportions especially when dealing with issues of poaching. For example, Zimbabwe has a shoot to kill policy when handling poachers. Where incidents of poaching have occurred, for example, some members in Sengwe complained of harassment and subjection to near torture when interrogated. In Makuleke community, two poachers apparently from outside the Makuleke villages were shot dead. What worries in this process is that usually when incidents of resource poaching occur, the community members are on the receiving end as the prime suspects, and this has potential for the local people getting into direct serious conflict with park authorities. Without absolving the local communities for environmental wrong doing, there is need to appreciate that if anything poaching takes place at a local level, this might be directed at the small game with less commercial value as compared to the thriving ivory, rhino horn, other precious wild animal products markets. Through the power of the gunpowder, poachers targeting the big game can have always exacerbated poaching and the depletion of wildlife thereof in the GLTP. To understand the complexity of this problem, would need another research, however, it is important to understand it briefly that communities in and adjacent to the GLTP, have long had experience of biodiversity management and may not necessarily be responsible and accountable to the current poaching activities in the Park.

This brings one to the debate about neo-liberal commercialisation, commoditisation and privatization of the 'commons', a development evidently web nested in complex market logics that the rural communities do not have access to, neither do they benefit from them nor know how they operate. Resultantly, the GLTP's governance process ignorance about socio-ecological consciousness of resident communities claiming stewardship and territorial use rights are viewed largely in this study as not justified. Going forward, it is advanced by Ghimire (1997:12) that there is need, through scientific biological and socio-ecological means, to distinguish and measure between the consequences of subsistence activities that satisfy local needs and the impact of influential global commercial markets of natural resources with extremely powerful interests so that conservation interrelationships can be reoriented. The GLTP, is thus by its very nature in terms of governance, a top down complex process, and the institutions that have resultantly evolved since its consummation on 9 December 2002, subtly shows governance asymmetries and structural configurations that puts power in influential multi-level government institutions and conservation organisation, much to the amusement and surprise of local community processes. A new resource ownership regime has emerged, national and regional policies crafted, resource

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rights redefined, subsequently concerted efforts are being made to subject entire resource to forces of markets and privatisation under the concept of eco-tourism, and mechanisms to mainstream communities to participate in the governance process and derive benefits remain at the periphery of the GLTP planners.

In addition to that, it is important to clarify that the redefinition of user-rights and access to natural resources clearly expresses the dominant international, regional and national policy-making processes, which seek to entrench and consolidate what is being referred to as a contradictory conservation ideology to Community Based Natural Resources Management (CBNRM) (Satyapriya, 2009:6). CBNRM, such as CAMPFIRE in Zimbabwe and the CPA in Makuleke, are credited for having benefited communities as rural poverty alleviation strategies (Frost and Bond, 2005:778, Metcalfe, 1993:2;3). Metcalfe (2008:100;101;102) further argues that communities are concerned that wildlife tourism enterprises in the hands of private operators may not guarantee their livelihood security as an adaptive option. The most important point is, there is precedence for interaction in using these niches to integrate communities in the GLTP natural resource process, however, this has not been considered, and the worst-case scenario is that the Community Working Group was abolished at the instigation of the Ministerial Committee. Perhaps one would argue that the purported community participation and consultations are merely cosmetic, and far right demonstrate how tokenistic the GLTP process has become.

The gradual loss of control over natural resources gives the impression that local communities will not recover their rights over the resources for a long time, and ideally, this luxury of gradualism create potential subject of conflicts in the future among state institutions, conservation organisations and communities. The eco-anthropological perspective, as argued by Satyapriya (2009:6) therefore advanced that an integrative approach needs to be found. This perhaps will enable local people taking up active roles in this complex environmental governance. It is the view of this study conceivable view that existing normative social orders, both Makuleke and Sengwe communities have 'inalienable' rights to access and use natural resources they coexist with and Satyapriya, (2009:6) supports the issue of 'inalienability' of rights as fundamental to people whose existence thrive on what they hold on to. From this vantage point of 'inalienability' of rights, Makuleke and Sengwe people's claims to natural resources are nothing is than legitimate ownership to leverage resource access, territorial use-rights and in turn, negotiate and renegotiate conservation of environmental resources in a manner that helps them cope up with environmental uncertainties. If conservationist do not realise guaranteeing these rights, it provides disincentives for collaborative conservation leading communities withdrawing their support to the

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GLTP, and the consequences could be not so desirable to the objective of sustainable conservation.

It has further been noted that tensions have emerged in the GLTP, and transfrontier conservation areas in general between government agencies and communities who claim stewardships of the same resources (Wolmer, 2003), unfortunately, this is ignored while still at its infancy. The point of disjuncture is clearly lack of parity and mechanism that allows local participation in natural resource governance, in turn gradually leading to 'sustained' polarisation of stakeholders' priorities in TFCA against local communities' expectations. While this observation may sound less appealing to some guarters of conservationist and transfrontier conservation enthusiasts, the reality remains that some remedial measure are needed in terms of revisiting the concept, design and implementation of the GLTP in relation to communities' role in the project. There is a general view that communities are literally losing their rights over natural resources (De Villiers, 1999; Ferreira, 2006; Hanks, 2000). As such, the greatest challenge that comes to the fore is how can people's livelihood pursuits, locally specific conservation and other stakeholders' resource interests and conservation objectives be (made) compatible in this complex GLTP governance process? What possible synergies can be crafted as breath-taking governance framework, which helps to reduce mistrust among conservation stakeholders in the GLTP? All these concerns and others will be addressed in the next chapters.

1.11 Unbundling the GLTP objectives: Contextualizing the communities

The Great Limpopo Transfrontier Park is a manifestation and culmination of regional and global influences from inter-governmental and non-governmental conservation organisations. One of the criticisms of such multi-level origins of this project is that far from being a force for localisation or decentralisation of natural resource governance and management, the project allowed for a greater degree of centralisation of power and authority regarding management of natural resources. Generally, the local people regard the GLTP governance process as a means by which supra-national and global actors centralize control and concentrate power in the hands of networks of international conservation NGOs, international financial institutions, global consultants on tourism and bilateral donors (Duffy, 2005: 101). To buttress this point, for instance, because the Peace Parks Foundation had raised millions of dollars for creating the Transfrontier Park, the donors expected to see action on the ground. Thus, an instant park was created, rushing through without adequate community consultation (Duffy, 2005:101; Mail and Guardian, 2002:12;16).

It is important to note that countries that signed this trilateral treaty ushering the establishment of this mega-park, had aspirations and interests both conservational and developmental. In broad summary the collective interests of the partner countries as enunciated in the SADC Treaty, SADC Protocol on Wildlife and Law Enforcement, and more importantly, the GLTP Treaty are to:

- 1) Promote co-operation in the management of biological natural resources and ecosystems.
- 2) Encourage social, economic and other partnerships among government, private sector, local communities and non-governmental organisations.
- 3) Improve/enhance ecosystem integrity and natural ecological processes.
- 4) Harmonize wildlife management procedures across international boundaries.
- 5) Strive to remove artificial barriers impeding natural movement of animals.
- 6) Develop frameworks and strategies whereby local communities can effectively participate and tangibly benefit from the management and sustainable use of natural resources that occur in the GLTP.

Like other TFCAs in Southern Africa, this initiative was a strait jacket in the sense that it was initiated, designed and it was implemented by state agencies in partnership with conservation organisations promoting three principal goals, which include improved conservation of natural resources and ecosystems in the context of 'bioregional integrity' on a multi-lateral scale, socio-economic and tourism development.

While the GLTP project documents emphasize that the benefits would accrue to communities, there is little evidence so far that the initiative for the past ten years, has led or leading to increased roles of residents in the tourism industry, or to stronger partnership with the private sector. If anything, the reverse may be true. Several different reasons explain this scenario, and chapters 6 and 7 of this study present these issues, while an elaborate analysis of the GLTP processes discusses issues in chapter 8. In short, respondents argued that the conservation processes, and its subsequent governance regimes derive its logic from a curious blend of agendas in which community development concerns are a late addition. As such, renowned critiques of the GLTP have stated that the rationale for the GLTP revolved around re-establishing "ecological integrity" and migration corridors, such as 'Sengwe Corridor' for mega-fauna dispersal across national borders and has been lobbied for principally by conservation organisations keen for a high-profile flagship project without delivering valuable alternative livelihood strategies to communities (Wolmer and Ashley, 2003:37).

It is important to note that the neo-liberal conservation movement in Southern Africa has positioned the region as one of the leading sub-continent in terms of transboundary conservation. The projects have increased under the auspices of contemporary neo-liberal conservation as some analysts have noted:

"One of the main umbrella initiatives under which many neoliberal conservation strategies, such as nature-based tourism, conservation marketing and 'payments for environmental services', currently employed in the region is the establishment of 'transfrontier conservation areas' (TFCAs); large conservation areas across international state borders. Combining conservation objectives with rural development and international co-operation goals, transfrontier conservation has become a popular world-wide conservation strategy since the mid-1990s and Southern Africa has been at the forefront of its regional and global promotion" (Buscher, 2012:260).

Combining these observations, Ostrom (1990) further observed that institutional re-organization and mainstreaming is needed to allow community engagement. The most perplexing paradox is how some communities are able to manage their own natural resources, while others are not and excluded in the governance process. A closer analysis of community relationship with state actors and agencies in the GLTP conservation governance framework, show this seemingly pro-poor community development project is often failing to empower local people because there is transfer of local public power to a plethora of institutions, private associations and private companies to exploit resources at the expense of communities. Ribot (2007:16) and Larson (2005:20) lament that such transfers of power are detrimental to the legitimacy of local democratic institutions, leading to a fragmentation of authority at the local level as well as enclosure of the public domain. Ribot and Larson (2005) describe the local governance space as the domain of democratic public decision-making in resource governance, hence call for close scrutiny of what he refers to as institutional choice: an examination of which institutions are granted authority and what the impacts are of those choices on the legitimacy, representation, inclusivity and accountability to the people (Ribot, 2007:19).

A close analysis of the GLTP development, confirms the earlier argument that exclusion of communities followed the global conservation priority, which is dichotomous, separating 'people from parks', as set out in the Bali Declaration of 1982, and the 1987 Brundtland Commission (Spierenburg, 2008:88). These documents, insist that natural resource conservation, through

transfrontier parks arrangements generate significant economic opportunities for countries. The conservation discourse has as a result progressed in the direction too centralized and globalized, with serious preponderance of institutions on communities. The impact of such governance process has far-reaching ramifications. This study therefore, reveals these issues in detail to unravel the discourse, amplify community voice in seeking workable solutions in environmental governance.

1.12 Sengwe community: History of migration and clan politics

Sengwe community is made of various ethnic groups. These groups are said to have originated largely from Mozambique, having fled from tribal conflicts in that country. Thus, according to Cunliffe (2004:30), the Shangaan people moved to present day Zimbabwe because of conflicts and settled the South Eastern Lowveld. More essentially, Cunliffe (2004:30) put forward that a total of 11 clans are found in Sengwe communal land as the Chauke, Khosa, Baloyi, Hlungwani, Maluleke, Manganyi, Mathosi, Munisi, Ndlovu, Ngoveni and Sibanda. The Chaukes and Khosas are the biggest clans in the area (Cunliffe, 2004:30). However, these clans fall into one group of the Shangaan people. Ethnic composition in Sengwe is attributed partly to migration. Field research orations from local elders showed that the original inhabitants of the area are the Baloyis and Munisi who were subsequently displaced by Hlungwani/Hlengwe people (particularly of the Chauke dynasty) who migrated to Sengwe area from further south of Mozambique and South Africa in the 1950s (Leeuwis et al., 2010:4;5). The Ndebele people are said to have moved from the western side to the area, currently know as Bulawayo where Mzilikazi had established a Ndebele state.

Another school of thought postulates that the Mfecane necessitated the migration of these people (a period of political disruption and population migration in Southern Africa, which occurred during the 1820s and 1830s) from the Zulu Kingdom, at that time led by king Shaka in the Natal area of South Africa. The Shangaan fled the Kingdom under the leadership of Soshangana. Overall figures on a sample of three hundred and thirty households that resounded showed ethnical variations with the Shangaan people accounting for majority 43.3% (n=143 households) with the Venda who follow closely by 25% (n=83 households). It is not surprising that the Shangaan and the Vebda people have lots in common, and sociologically, they are said to be related in terms of cultural practices and origins both arte traced from Mozambique and South Africa.

In comparative terms, the Shangaan and the Venda people are the dominant ethnic groups in Makuleke. Implicitly, there are correlations of these people in Zimbabwe and those in Makuleke communities who were separated by colonial park boundaries. The Shona and Ndebele people constitute 19.3% (n=63 households) and the Ndebele accounted for 10% (n=30 households). The Ndau constituted 2.3% (n=8 households). The Venda were accounted for 25% of the overall survey (n=83 households) as shown on Figure 1.4. The Shangaan, constitute the majority of the population in the three Wards. As shown in Figure 1.4, the Shangaan speaking people constitute the majority in Sengwe. Their cultures interlink with the Shangaan people in Makuleke in sharing common languages and other related sub-cultures (Leeuwis et al., 2010:4-5).

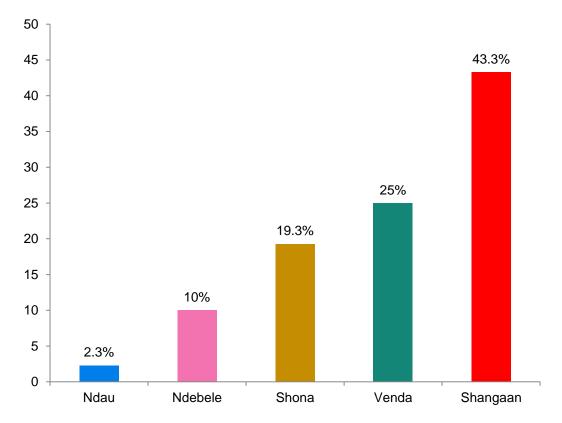


Figure 1.4 Current ethnic diversity from 330 surveyd households in Sengwe

Sengwe communal land falls under Chiredzi Rural District Council in Masvingo Province in Southern Zimbabwe that is shown by the Figure 1.5.

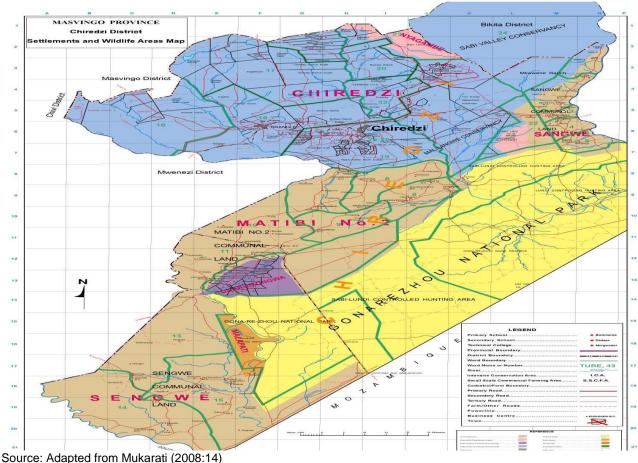
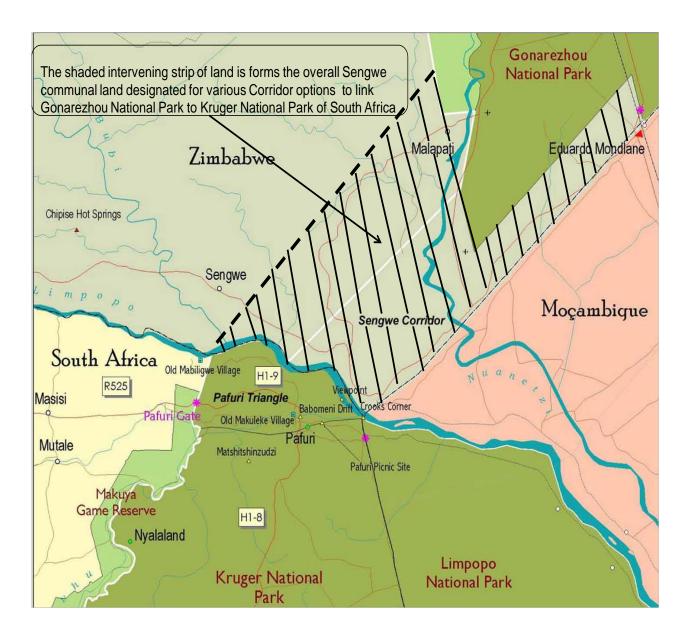


Figure 1.5 Map of Chiredzi Rural District Council in Masvingo Province, Zimbabwe

Sengwe communal land in Chiredzi is located in a dry ecological region Five. The Figure 1.5 also shows the yellow shaded area indicating the location and geographical expands of Gonarezhou National Park.

1.13 Sengwe community geographical contexts

Sengwe Communal Land is a critical component of the Great Limpopo Transfrontier Park (GLTP) initiative. While the Sengwe Corridor is still at the proposal level, there is consensus at the national level in terms of its demarcations. This intervening strip piece of land, which is inhabited by people has been proposed ecologically and geographically to connect Zimbabwe's Gonarezhou national park through the Sengwe-Tshipise to link with Kruger National Park as shown on Figure 1.6 and Figure 1.6. Figure 1.6 shows the study area by Wards demarcation in Sengwe communal land.



Source: Adapted with own additions from Spenceley (2006:657) Figure 1.6 Overall Sengwe Corridor strip

Without the establishment of the proposed Sengwe Corridor, Zimbabwe ceases being part of the GLTP, hence its strategic geographical importance. The Corridor either in full or covering part of Sengwe, significantly affect households in the community in relation to human-wildlife interactions. In terms of the GLTP Treaty signed on 9 December 2002, in Zimbabwe, the GLTP consist:

- Gonarezhou National Park (GNP).
- Sengwe communal land.
- Surrounding areas such as the Manjinji Pan Sanctuary.
- Malipati Safari Area.

Ecologically, Sengwe communal land is characterised by erratic rainfall and harsh economic conditions such that it is most suitable for ranching and game farming. Some recent scenario planning field research report states that region experience low rainfall, coupled with poor soils of low agricultural productivity and high temperature conditions (Chirozva et al., 2010:3;4). Chaka et al. (2010:3) further indicate that the region is characterized by low rainfall, poor soils of low agricultural potential and high temperatures. Agriculturally, subsistence crop and livestock farming are the main livelihood practices. Mean annual rainfall ranges between 300 to 600 mm and effective rainfall occurs mainly from October to April with variability over years, and the area experiences frequent droughts, which threaten household food security and negatively impact on crop and livestock production (Chaka et al., 2010:3).

Perhaps one other important point to mentions is that due to erratic rain in the area, livelihood vulnerability of households is high, making the issue of food security a critical matter that can be explained in the context of their dependence therefore on available natural resources. The incessant droughts, coupled with occasional catastrophic natural torrential rains such as the 2000 cyclone Ellyn that also hit the area, negatively affects crop and livestock productive systems, making dependence on natural resource vitally inevitable for households in Sengwe. This study start on the premises of critical analysis of the impertinence of natural resources to argue that livelihoods insecurity and the adaptive capacity of the local people to their local environmental conditions only makes sense to the community's in terms of interdependence relationships with their available natural resources that sustain them.

Furthermore, to achieve some measures of security, households need equity in the ownership and management of natural resources, which currently has changed from the local scale to the GLTP process. Most discussion about CAMPFIRE is not bearing fruits, if anything, the benefits accruing from the 'leased' Malipati hunting safari, which the Department of Parks and Wildlife Management Authority Official vehemently argued that the community is benefiting financially, is far from reality since this could not be confirmed at the local level. More essentially, ensuring local conservation culture helps people to maintain confidence in sustainable management of natural resources particularly when the processes build on local institutional and normative values. Local sentiments from respondents at a focus group discussion held at Headman Gezani homestead (on 26 July 2011) raised serious worries over restrictions on access to natural resources from their areas given the circumstances of environmental hardships, thereby threatening supplementation of local livelihoods. Rukuni (2012) in his recent titled "Re-framing the Wildlife Based Land Reform Programmes in Zimbabwe" postulatess that community participation is the future of conservation in Zimbabwe, and it is conceivable that with more partnerships, it can be the springboard to address issues of development in marginal areas.

Administratively, Sengwe communal land is under Chiredzi Rural District Council, with decentralised structures such as the Ward Development Committees (WADCO) and the Village Development Committees (VIDCO) forming part of the local government structure. There is also the traditional leadership structure (made up of Chief Sengwe, Headman Gezani and Samu, and kraal heads) exercise authority on control and management of the area. Custodianship of land is vested in traditional institutions and practices. Allocation and distribution are mediated using local traditions and practices such as inheritance, allocation traditional leaders or leasing land a neighbour (Chibememe, undated:5). Strong communal ownership of natural and cultural resources does exist, which are valued by the local villagers.

To understand Sengwe communal land fully, it is important to highlight that the area is under consideration for various regimes of annexations that are discussed and the different options shown in detail in chapter 7. In summary, the shaded Figure 1.6 shows the whole area for possible a transitory animal Corridor option that precisely link GNP with Kruger National Park. Figure 1.7 shows the location of studied Sengwe community, broken down into Wards, including a narrow strip, stretching parallel to Mozambique to Crooks Corner creating a geographical link that connects three countries (Mozambique, South Africa and Zimbabwe) to share a common unique border area.

THE AREA OF STUDY

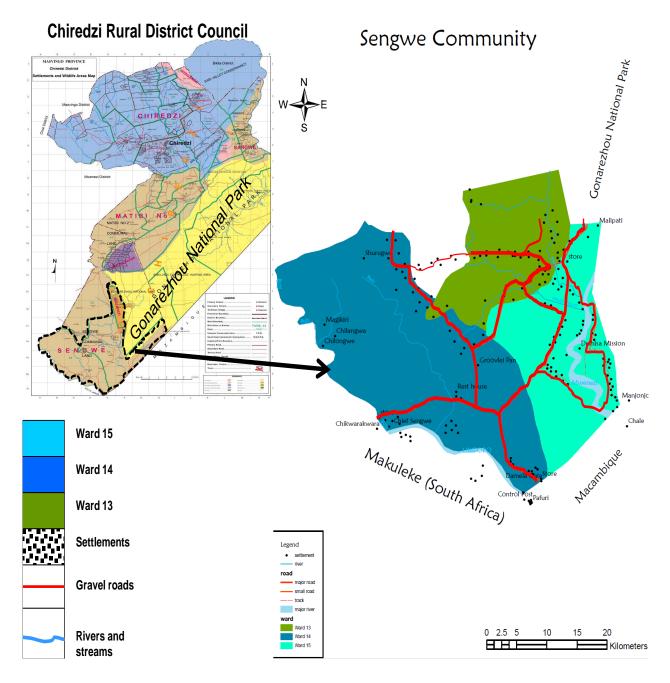


Figure 1.7 Sengwe communal lands by field research area by ward demarcation

1.14 The geographical importance and criticism

Looking at the geographical context of Sengwe and the interconnectedness of the survival strategies of the people and their environment, it is prudent for conservation authorities to avoid avidly gravitate towards a more restrictive and exclusionary conservation processes. Doing so

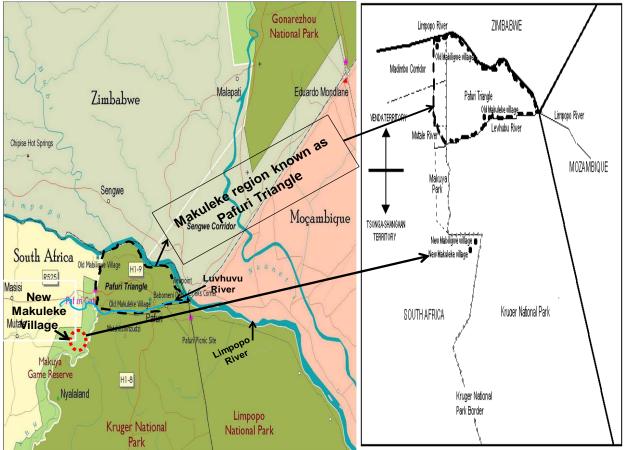
unbearably affects the greater part of Sengwe households in terms of access to natural resources. As part of the GNP where management regimes and governance of natural resources is conspicuous by its least involvement of the local people, it makes defining access rights; environmental decision-making and ownership of resources at the local level difficult, as the state superimpose itself administratively in running the affairs of the GLTP. Inevitably, the socio-economic activities and the attendant high sense of livelihood insecurity, coupled with ambiguous economic and social benefits, go as far as creating negative perceptions at the local level about biodiversity and ecosystems management in and adjacent to the GLTP in relation to communities. The obvious and most disturbing attitudes are that resources solely belong to the state than they are to the community. Consequently, there is a presumption that this culminates in less collaboration in terms of biodiversity and ecosystems conservation in the GLTP, potentially precipitating fears of natural resource poaching that leads to environmental conflicts premised on the struggle to control, access and manage them sustainably.

There are shocking socio-ecological criticism in the conservation discourses vehemently asserting that it is a misnomer to realign responsibility for protection of resources to local communities, who are said often have neither the technical resources nor the basic commitment to sustainable management (Gartlan, undated:220). Apart from sounding extreme negativism, such insinuation causes in conservation thinking regarding community-nature interrelationships, there is evidence to the contrary, justifying that the Sengwe people, relate to their environment sustainably in their interrelationships. The fact that the people in this community have always co-existed with wildlife and forestry resources under common property regime (Chibememe, undated:3), is enough justification to mainstream them and leverage on local capacity to advance conservation objectives. Common property rights do exist, and not 'open accesses' as often criticised for depleting natural resources (Hardin, 1968). The details of ownership to establish the theoretical aspects as they relate to resources and communities in Southern Africa are discussed in chapter 3. However, the summary is that what a group of people like Sengwe community hold in common, inform their collective rights over ownership, access to utilize and manage those resources in their areas. This also allude to the rules and laws governing the management of natural resources that are not owned in common or by a single family in which case resource are maintained under family regimes such as inheritance, and access is therefore limited to an identified group or community. This is supported by evidence gathered that traditionally, ownership of land, forests, pasturelands and other natural resources in the community is based on family holding systems, but vested in the traditional leadership, particularly the Chief (Sengwe), who is generally regarded as the

paramount custodian of all the land and natural resources under his jurisdiction (Chirozva et al., 2010:4;5). This forms the basis for local people's claims over natural resource.

1.15 Makuleke geographical contexts

Makuleke community has two dimensions. The first one is that the Makuleke people own Pafuri Triangle, a piece of land averaging about 24,000 hectares where they were evicted from in 1969 at the expansion of Kruger National Park (Spenceley, 2003:85). They were settled at Nthlaveni, about 60 kilometres away from their original land in Pafuri Triangle, creating the New Makuleke Village. The Figure 1.8 shows the two scenarios:



Source: Adapted from Shackelton and Campbell (2000:128) and Spenceley (2006:657) Figure 1.8 Location of the Makuleke region (old and the new villages) in Kruger National Park

The Makuleke region carries remarkable geological and ecological heritage that makes the area one of the most spectacular conservation zone in Southern Africa. Berger (2007:1) put forward that the 'triangle' is formed by the confluence of Limpopo and Luvhuvu rivers that create an intersection at Crooks Corner completing a 'triangle' of land that not only forms a meeting point for South Africa, Mozambique and Zimbabwe, but a unique ecological area punctuated by natural

choke of diverse pristine flora and fauna. Wild animals straddle to and from the three countries. The geographically extensive matrix of Makuleke Villages, are formed by variations in geology and climate that promotes spatial heterogeneity and hence biodiversity. The Makuleke region, being a lush area, is home to a plethora of wild animal, bird and aquatic species and creatures. On the overall, the two areas are a semi-arid savannas. They experience inherently high spatial and temporal variability in biodiversity and ecosystems as one move from the New Makuleke Village to the Old Makuleke Village at the Pafuri Triangle that is solely being used by the Makuleke community for conservation purposes. The fact that Limpopo and Luvhuvu rivers are passing through the Makuleke region at the intersection of the GLTP, which the local people define as the "Heart of The Great Limpopo Transfrontier Park" makes it a vital region for the entire project. According to Kruger National Park (KNP) Management Plan (2006:8), the diverse rivers cross the KNP, including the Pafuri Triangle, promoting biodiversity and sound ecosystems.

Research done in Makuleke established that the area physically lie in the low-lying savannas with tropical to subtropical climate, characterized with high mean summer temperatures and mild, generally frost-free winters (KNP Management Plan,2006:4). The KNP Management Plan states that the overall rainfall patterns that obtain generally, including the intervening areas like Makuleke that mostly, is through convective thunderstorms rainfall concentrated between October and April (KNP Management Plan, 2006:4). As such, rainfall gradient stretches from an annual mean of up to 350 mm in the north, although strong inter-annual and roughly decadal cyclic variations exist with drought considered prevalent (KNP Management Plan, 2006:4). This is similar to the conditions also prevailing in Sengwe, which further confirm that the two case studies communities experience more or less the same weather and climatic conditions.

The basic geological template comprises distinctive basaltic soils in the New Makuleke Village, with some sections having sandy darkened soil zones. The Pafuri Triangle, overlooking Sengwe communal land in the North, and Mozambique in the east, is unique because of its diverse assemblage of rock formations, major perennial or seasonal rivers that dissect the area (KNP Management Plan, 2006).

Current livelihood activities in Makuleke community are two-dimensional. The New Makuleke Village comprises of land use activities ranging between 1, 5 and 2 kilometers from the KNP fence where settlements were established. Makuleke community is dominated by small-scale subsistence cropping, with limited commercial farming and grazing in rurally impoverished villages. The second dimension is that the Old Makuleke Village (Pafuri Triangle) in terms of the

Contractual Agreement valid for 50 years on a joint management plan with the SANParks, their reclaimed land will be solely used for conservation and eco-tourism development. This is critical in emphasizing the point that if the GLTP is to have significant impact, then the defining governance principles should take into account the local institutional processes and the contributions that the local people can make towards the GLTP conservation. More importantly, high-value irrigated crop farming dominate other Makuleke community, the local community's participation in the GLTP and ensuring sustained deriving of benefits as noted by one key local figure, that expands on their existing livelihoods, and further dependence on their natural resources than to become hostage to the passions and prejudices of outside charity.

1.16 Makuleke: History of dispossession and alienation

The Makuleke (Old and New Makuleke) as noted above is situated in Limpopo Province, in the far north-eastern corner of South Africa. Makuleke region (Old Makuleke Village) is a remote area of lush land situated between the Limpopo and Luvhuvu rivers, and the New Makuleke Village is about 60 kilometres from the old Makuleke Village as shown on Figure 1.7. According to information gathered in the field, this area was formerly under Malamulele District, but changed to be under Vhembe District following the change of administration status of Malamulele to a municipal administrative area within Vhembe District (Bongani 2011: personal communication). The Makuleke people inhabited Pafuri Triangle, north of Kruger National Park in relative tranquility up until September 1969 (Collins, unpublished:1). This part of South Africa borders with Mozambique in the East and Zimbabwe in the North. To fully understand the history of Makuleke people, it is imperative to highlight that just like other African countries, which went through a period of colonial conquest, and domination, the Makuleke people's historical epoch is an atrocious one, punctuated with miseries of forced displacements, loss of livelihoods and as a result, they suffered social dissonance. In 1969, under the Group Areas Act of 1950 (Spierenburg et al., 2008:90), the Pafuri Triangle was annexed to the Kruger National Park (KNP), forcibly removing the Makuleke community, who at that time approximated to be about 3 000. They were resettled at Nthlaveni with only 6,000 hectares of land in size (Reid, 2004:140), adjacent to the Punda Maria Gate to the KNP where problems of malnutrition were experienced due to changes in sources of livelihoods coupled with limited alternative coping strategies. They were not used to the characteristic of the new savannah dry conditions that did not match the rich and diverse pristine flora and fauna from the Pafuri Triangle they previously occupied up until September 1969. As Fabricius and Collins (2007:87) note, the community was forcibly moved out of their fertile land. Because of the hectic and haste removals that exposed people to livelihood vulnerabilities, the area was never prioritized

for major livelihood coping and other human and social development by the Kruger Park administration authorities.

As to why the people were moved, various explanations have been given. There are strong argument that since 1800s, the rise of game reserves and parks concept prompted control over human mobility and livelihood practices of African native peasants living in what were relatively remote, and yet rich ecological zones (Dressler and Buscher, 2007:455). Parks Act enacted in 1926, saw the establishment of Kruger National Park (Dressler and Buscher, 2007:455). Due to geographical security importance of Makuleke region linking Mozambique and Zimbabwe, the political struggles in those countries at that time is cited as one of the reasons that necessitated the removal of people to pave way for effective security surveillance at the borderland area, and removal of people provided excellent cover military covert border operations (Spierenburg and Wells, 2006:4).

The birth of a democratically elected government in 1994 in South Africa, witnessed a number of policy transformations among them were land-based policies. Communities, such as Makuleke, dispossessed of their land under discriminatory laws were able to institute claims over lost heritage through the Land Claims Commission (Spierenburg et al., 2008:90) that had been established under the provisions of the Restitution of Land Rights Act, 22 of 1994. Empowered with this, in 1996, the Makuleke community with support from Transform (a Germany government financed organization) successfully reclaimed full ownership of the approximately 24,000 hectares and another 5,000 hectares, which was not fenced into the Park (Fabricius, 2007:87). They became one of the communities that started the battle to regain their once expropriated land legally. This culminated in an agreement, where the South African National Parks (SANParks) negotiated a settlement with the community in 1998 in which, Makuleke got back their land and because of this settlement, the land was de-proclaimed, and subsequently re-proclaimed as a Contractual Park in 1999 that is managed under the Makuleke Community Property Association (CPA).

In summary, Makuleke community took full control of land ownership in the Kruger National Park (KNP). However, as part of the agreement, the KNP would continue to manage the area while the Makuleke community will have rights to engage and enter into partnership with the private sector to develop eco-tourism project(s) currently run by Wilderness Safaris in partnership with the community. This marriage, of a joint SANParks/Makuleke management arrangement has a life span of 50 years from its inception. Of great interest from conservation point of view is that Makuleke community agreed and committed themselves to utilize the reclaimed land for

conservation purposes and not for either residential or agricultural purposes. The operational functionalities of the CPA in relation to natural resource governance will be dealt with in Chapter 6. What is critical to note in terms of the working relationship in the context of GLTP governance processes, there is growing dissatisfaction among community members over benefits sharing from tourism enterprises due to revenue reduction emanating from changes in resource use (Interview with a community member). In terms of ethnic diversity, field research established that Makuleke enjoys social ethnic cohesion. The Shangaan is the dominant ethnic group constituting 96.4% while the Venda constitutes 3.6% as shown in Table 1.2.

Table 1.2 Current ethnic diversity in Makuleke

Ethnic group	Ν	%
Shangaan	203	96.4%
Venda	8	3.6%
Total	211	100%

1.17 Analysis and discussion

It is clear from the above presentation that the GLTP process overall driving force are the states and their government agencies. In Zimbabwe, the DPWMA leads the process, setting up District and National TFCA Technical Committee that is headed by a TFCA coordinator. In South Africa, at national level, they also have a TFCA conservation unit under the Department of Environmental Affairs. The stakeholders promoting these at international and sub-regional levels are the World Conservation Union (IUCN), Global Environment Facility of World Bank and the Germany Development Bank (KfW), while sub-regionally, the Peace Parks Foundation is the recipient organisation offering financing and technical assistance to National Departments of each partner country involved in the GLTP. The GLTP institutional governance process and the impetuses driving particular conservation ideologies have manifested in glaring shortcomings with potential ripple effect to sustainable conservation as identified here:

Eco-tourism and premature graduation of rural economies: Private sector eco-tourism investments are presented as the major macro-economic panacea to ending rural development ills through infrastructure development in the GLTP. These issues were captured above in both the GLTP goals and the discussions thereto. Furthermore, the study raised critical issues relating to question arising from neo-liberal market logic principles. However, it is conceivable from literature and concerns raised by the local people that while eco-tourism is developmentally appealing, its unplanned intervention in relation to rural agro-based and pastoral economies of Makuleke and Sengwe communities dramatically migrate the local people to a tertiary-type of an economy they have difficulties to adapt to easily. In the event of

tourism business failing, communities become more vulnerable in terms of livelihood options. The GLTP process is exceptionally emphatic on tourism development, but no mechanism has been put in place in defining two major things critical to the community that are: lack of clarity on benefits sharing and absence of a mechanism to ensuring equity in the ownership and management of biodiversity and ecosystems in the GLTP in a beneficiary collaborative manner.

Neo-liberal market logic restrictedness: It has been highlighted that neo-liberal economic principles are at play in the GLTP process. The demand from financing partners, dictated by tourism market forces for nature based tourism activities serve to provide the private sector and other financially sound individuals with commercial advantages to gain control over natural resources at the expense of the rural poor. Ideally, where the GLTP Treaty highlighted that the primary beneficiaries are the communities in and adjacent to it, this is not being reciprocated by genuine definition of partnerships to allow communities to be active role players in diverse commercial activities, and subsequently have some measure of control over natural resources to enhance their livelihood options. To buttress this strong argument, increasingly, state-run protected areas, and practically so, the national parks, are facing funding constraints. Resultantly, the manifesting alignment with the private sector more than creating partnerships with the communities found in and adjacent to the GLTP, is being done to leverage financial support from the international conservation private sector towards income generating projects and adoption of sustainable natural resource conservation. However, this scenario does not give much advantage to the community irrespective of the information suggestions trying to convince public perception that it is working. In fact, a closer looks at the concerns raised at the local level, contrary to consultancy reports giving a node that all is working smoothly; it rather shows elusiveness of a win-win situation that has gone wrong in the formulation, design and implementation of the GLTP. Jones (2011:4) put forward that the decisions by the government implementing agencies and government officials in which communities are excluded reflect a narrow set of interests, not those of the people affected.

In addition, Spenceley (2003:112) indicates that many such conservation projects have shown that control over interactions, benefits and losses is predominantly held by the state agencies together with the private stakeholders. This is to the extent that ownership of resources such as land that provide the strongest and most stable livelihood positions to the rural people, is now managed with prescribed limitations and restrictions on land use. The degree of GLTP institutional superimposition on the communities in line with study objective number one, points

to the assertion that this engenders conflicting natural resource governance interrelationships with the local institutional processes as well as local commercial interests in the resources. Thus, this may not be in the interests of the local people, but rather the dynamic favours the state-private sector business partnerships, which pose problems when the government is the regulator and at the same time a player in the same game. The conclusive suggestions therefore of for the government to revert back to its role of policy making, facilitation and regulation rather than having conflicting interests at variance with the rural people it seeks to serve.

- State obligations and colossal local conservation revulsion: It is noted in this study that the states, both Zimbabwe and South Africa, are fulfilling their political obligations in ensuring that these mega parks become robust and best cases for biodiversity conservation. But the question that arises is that the conceptualisation, designing, implementation and evaluation of the project has remained stuck in the bureaucracy, with strong mistrust of involving communities largely because of not having technical expertise and adept to the sophistication of biodiversity and ecosystems science. In a controversial conservation journal, Gartlan (undated:220) insinuates that communities often have neither the technical resources nor the basic commitment to sustainable management of biodiversity. Ideally, the challenge that remains unaddressed in respect of the GLTP is the missing interface with the communities in the governance process. The fact that both Makuleke and Sengwe communities have some form of local institutional systems, they can best be leveraged to involve communities and use those local platforms in integrating traditional systems on a position of economic and ecological strength. The outlook of the GLTP governance discourse, is far removed from the local communities, culminating in Ramutsindela (2007:105) arguing that TFCAs constitute "scale of marginality", that is to say, the governance spatial variations operate at regional scale where communities have no a meaningful role to play. Thus, entrenching state-initiated and private sector led development framing of the GLTP, and the attendant marginalization of the local people is taken lightly at the community level who bear the brunt of natural resources in and adjacent them. Perhaps one other critical point to mention is that the GLTP processes certainly appear ambiguous in relation to mechanisms that facilitate local participation, which the next point tackles.
- **Nebulous and tokenistic local participation:** This study is premised on the argument that the current GLTP governance architecture as constituted, tends to undermine enhancement of local livelihoods, which can be guaranteed by ensuring local participation in formulation,

designing, implementation and participatory evaluation of the impact of the project. As one of the respondent mentioned in Makuleke during informal discussions, "Anything done for us, without us, is against us" (informal discussion with a member of the Traditional Structure of Makuleke, 9 September 2011) reminded the researcher on how important local participation is to the success of the GLTP. Therefore, the intricate conservation relationships as defined in terms of the state and the private sector operating tourism enterprises through leases, jeopardises real empowering processes of the community to enhance their rural livelihoods, and in the end through experiential learning processes of conservation, gain experience to manage natural resources sustainably. As Rukuni (2012) argues, "community participation is the future" with respect to conservation development in Zimbabwe. With respect to policy and natural resource management contradictions arising from the misunderstood Wildlife Based Land Reform, which has become a topical issues among conservationist in Zimbabwe, Rukuni (2012) cautions in a more advisory overtone when he says:

"Zimbabwe has 3 decades of experience with the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) programme. From that experience the model can be improved further into establishing more self-reliant Community Trusts with sufficient autonomy from the Rural District Councils (RDCs) who, in my opinion, should play a facilitating and regulatory role rather than as a business player".

Ideally, the role of the state should be examined. It is emphasised in this study that the whole GLTP can achieve greater success if it is anchored on community participation that also helps not only in accruing benefits to the rural poor, but in sharing the costs on conservation through their collaboration with an ultimate effect of drastically reducing environmental policing costs on the part of the government. The fact that the issue of participation is ill defined, in the end leaves interrelationships in the GLTP subject to predictable competition over control of natural resources that work at the expense of biodiversity and ecosystems conservation. This is particularly when stakeholders start playing a zero-sum game and contestation can have serious consequences on the sustainability of conservation of wildlife in Peace Parks or any such related conservation projects like protected areas and conservancies. Recent developments in Zimbabwe's Save Conservancy, give credence to this argument. Evidence emerging indicates that the way skewed distribution of wildlife benefits in which the process promotes the interest of the politically connected and powerful elites benefiting themselves, and not the communities at large. Ideally, this results in state agency and elites 'resource capture' and accrue to themselves most of the

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benefits at the expense of the communities. Kawadza (2012:3) quotes Zimbabwe's Minister of Tourism and Hospitality Industry being furious over this issue. He (Minister Mzembi) raised national and international alarm over Save Conservancy in South Eastern Lowveld that shares a borderline with the GLTP regarding how far the elites had gone in benefiting themselves under the Wildlife-Based Land Reform and Empowerment process. The minister asserted that:

"It promotes greed and alienation of our masses who are the legitimate broadbased empowerment partners in community share ownership and empowerment trusts as currently being applied in the mining sector. This business of empowering people who are already empowered severally in other sectors, such as farming, ranching, sugar cane farming, mining, etc, will not pass the moral test nor will it endear us to the people except to ourselves".

It is necessary to taken note of the fact that where communities are not participating, chances are high that those privy to policies and legislation, would always seek to benefit themselves in the face of competition for resources, particularly the lucrative wildlife business. As such, the current GLTP administrative ordering, ideally exclude the local people, and the central notion in line with objective four of this study is the obvious conclusion that the multi-level institutional processes 'disenable' rather than 'enabling' communities to participate in natural resources management, let alone deriving benefits.

1.18 Conclusion

It is clear from the above discussion that the rapid development of transfrontier/transboundary conservation initiatives in Southern Africa is driven by a popular conservation and tourism development logic, one that apparently is criticized for being state-centric and neo-liberal market based approach, which has limited benefits to the local people. This tends to undermine local community potential. For example, the recent community-based approaches would have been the anchor point to integrate rural communities in the GLTP, potentially making rural livelihoods diversified and achievable. The attendant GLTP state-driven transfrontier initiatives and governance, this study demonstrates, marginalizes local communities and contradicts the paradigm shift in biodiversity conservation, which adopts development approaches based on devolution of tenure rights and institutions (Hutton et al., 2005). For whatever reason, the current GLTP governance is not resonating with local aspirations, which in turn further complicates relationships with the communities. It is imperative to mention that the GLTP faces various

setbacks, particularly with increasing consciousness by communities that their interest remain peripheral to the GLTP process. Agreeably so, institutions of resource governance play an instrumental role in regulation, re-regulation and management of natural resources, and resultantly determine and prescribe access, control, ownership regimes and utilization of natural resources. In many instances, the competing claims over natural resources among stakeholders fail to converge in a compromising mix of local, government and conservation private sector interests to balance conservation objectives and meeting livelihood expectations of communities living in and adjacent to adjoining areas forming the GLTP. The outcome of that failure, if not addressed, can degenerate to contradictory and sometimes conflict-ridden relationships, with potential to negatively undermining sustainable biodiversity and ecosystems conservation in the GLTP. The ever perplexing issues is that how, in a globalizing conservation world, transfrontier park governance, conservation ideologies and competing interests can be synchronised? The answer lies in the "Communities as Resource Management Institutions" (1991:12) journal article, in which the author put forward that communities under right circumstances, conceivably Makuleke and Sengwe communities, can be effective institutions for resource management, while the above is also true. This chapter concludes with the assertion that if those who govern the GLTP make rational choices to collaborate with the local communities, the unworkable tragedy of the commons can be avoided. Perhaps conservation agencies need to reorient the manner they deal with communities in not only the GLTP, but also where TFCAs are in existence in the SADC region. This can be done by incorporating local demands-driven institutional processes as catalytic to natural resource co-governance with self-motivated demand being local livelihood interests and the necessity of creating robust integrated institutional structures to manage biodiversity and ecosystems, balancing governmental and conservation private sector resource interest and the collective aspirations of the local people.

CHAPTER TWO

2.1 Overview

"I know of no political movement, no philosophy, and no ideology, which does not agree with the peace parks concept as we see it going into fruition today. It is a concept that can be embraced by all" (Mandela, 2001).

Transfrontier conservation development generated high optimism for conservationists, bureaucracies and communities as they expected this to be the panacea in terms of alleviating environmental problems, surmounting frontiers of rural poverty, but simultaneously, this increased concerns over the convergence of a plethora of environmental interests that lack blending with local community interests. A look at this concept and the resultant debate would assist in contextualizing and situating these concerns in conservation discourses.

It is a fact that transfrontier or transboundary conservation, as some authors would refer them, have acquired greater significance in recent years as international treaties such as the Convention on Biological Diversity have included such projects in their programme of work (Ali, 2011:5). From as early as 1990s, Southern Africa has been witnessing proliferation of transfrontier conservation programmes, straddling territories across nations in the SADC region. The tremendous force of transfrontier conservation programmes, modelled as Peace Parks (Sandwith et al., 2001:3 and Barquet, 2012:5), is functionally underpinned by resource governance regimes that have received mixed feelings from local communities. Community exclusion, nature protectionism and strict regulation on access and utilization of natural resources, are characteristically omnipresent in these conservation flagships. Although well intentioned, the 'parks approach' adopted in the case of the GLTP, is viewed largely as having departed from the original plans, let alone the philosophy of rural participatory natural resource management under community-based conservation of the early 1980s and early 1990s, has been abandoned by both donors and government from supporting them at the expedience of transfrontier projects. This has had serious implications on rural livelihoods and the capacity of the local people to be motivated towards resource management. The natural resource governance regimes that have subsequently emerged, for all their practical management and control purposes, generate basic environmental and conservation perceptions viewed antithetically by the local people, as they tend to contradict expectations insofar as local livelihoods and local conservation processes are concerned. From the national to the regional levels, this study has noted, resource governance trajectories indicate a movement away from the local scale, thus, creating 'scales of marginality' (Ramutsindela, 2007:105), in which people's livelihood strategies (crop and livestock husbandry, and forests utilization), are regarded as secondary at the convenience of non-consumptive eco-tourism enterprises development in neo-liberal economic terms. From an environmental ethicist point of view, natural resources are part of the local people's culture with which they have not only mere emotional attachment, but use them as a source of livelihood. Consequently, nature is not valuable for its own sake, but embedded in human valuation of the resources, which make sense to rural people as key livelihood components, and for this reason, the local people find motivation to conserve resources when they derive benefits. Dwelling on the Great Limpopo Transfrontier Park's (GLTP) Makuleke and Sengwe communities, this chapter explores literature to examine the emergence of transfrontier conservation, its ideological imperatives in Southern Africa and the connectivity of these theoretical underpinnings in relation to impacts on natural resource dependent communities in line with the study objectives. More essentially, this chapter is one of the two sections of literature that analyses local and worldviews about transfrontier conservation both in its conceptual and practical context. In the end, this study argues that while it is ecologically logical to avoid the 'tragedy of the commons' (Hardin, 1968), there is also the need to avoid the tragedy of the common people in the GLTP biodiversity and ecosystems governance and management.

2.2 Introduction

"We must look more closely at why conservation, whether of renewable resources or of wildlife, succeeds in some cases and fails in others. There is a great deal to learn from the record about what options to try in the future," (Western and Pearl, 1989:164).

Historically, rural communities in Southern Africa were known for protecting natural resources based on their normative values and indigenous knowledge systems. These practices are amplified in their nature driven values and culture, which form part of conservation culture in defining human-environment relationships and interactions. Based on various valuations, natural resource conservation directly or indirectly is regulated, and therefore, local practices form part of biodiversity "institutions" responsible for its management since they are associated with economic incentives that people attain (Muchapondwa et al., 2009:9). However, when biodiversity experience threats biologists and other conservationists respond rapidly by calling for action to correct the causal aspects (du Toit, 2010:231). In the case of Southern Africa, the philosophical foundations of such interventions and actions, are informed by one powerful global conservation imperative, "The Tragedy of the Commons" expounded by renowned biology Professor Garret Hardin in his popular journal article published 44 years ago in 1968. This prompted Moore (1985:602) to say:

"If only I had a way, Hardin's 'tragedy of the commons,' should be required reading for all students, and if I had my way, for all human beings."

The dominant legacy of Hardin's theory in contemporary conservation is in consonance with Southern Africa transfrontier conservation projects, and follow the philosophy that natural resources held in common property (peculiar to rural communities in many African states), such as land, wildlife, rivers, forests, air and oceans, are subject to massive degradation (Fenny, et al., 1990:76). In essence, this theory was accompanied by debates and predictions of cataclysmic destruction of nature, envisioned to lead to environmental crisis. This is finding its way in the pressure currently exerted on both governmental and non-governmental institutions to impose strict rules and regulations on matters of resource governance and management of biodiversity in many parts of the world, and especially in Southern Africa. This is against the backdrop of competing resource needs by the communities located/found inside and adjacent to transfrontier conservation zones. As a result, trepidation about nature becoming extinct is part of conventional wisdom in modern socio-ecology (McEvoy, 1988:214), and this does not preclude of course, the current governance systems of transfrontier conservation programmes in Southern Africa being exclusionary. It is the view of this study that some well-intended actions in transfrontier natural resource conservation may prove to be counter-productive if they derive their models of management from communities and local resource management and local use aspirations. To buttress this point, du Toit (2010:231) put forward that there is absence of reliable population data over which planners and conservationists can interpret natural dynamics of biodiversity population to set an ecologically meaningful target for recovery, even interventions.

While there is ecological logic for the current transfrontier conservation philosophies to be statecentric and adopting a parks approach in resource management, it needs to be noted that this has adverse local livelihoods consequences by undermining collective action at the communal level, and therefore less motivating to preserve natural resources. It is a fact that transfrontier or transboundary conservation, have acquired greater significance in recent years as international treaties such as the Convention on Biological Diversity have included such projects in their programmes of work (Ali, 2011:5). However, as the transfrontier projects roll out in Southern Africa, it is emerging that the concept is aggressively being advanced by conservation agencies for ecological and economic interests of corporate entities rather than those of communities living inside or adjacent to the adjoining parks (King and Wilcox, 2008:229). The expansion of transfrontier parks or its metaphor the 'Peace Parks' have produced a sense of insecurity among neighbouring populations (King and Wilcox, 2008:221; Neumann, 1998; King, 2007). Thus, the

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conservation ideological underpinnings are manifesting in the ascendancy of international conservation organisations and state dominance in shaping conservation policies, programmes and resource governance in the developing world (Chapin, 2004). The purpose of highlighting this is to focus this debate on the driving force of transfrontier conservation in Southern Africa in its rightful place in order to understand and appreciate its ideological intricacies in its unfolding character and the impacts on communities. The intricacies being that the interplay between environmental conservation concerns and development in Southern Africa are caught in an endless "trap" of stakeholder contestation, a vicious cycle war of competing interests (Collier, 2004:5). The possible way out of this dangerous trap is the need for concerted global effort to reverse marginalization; otherwise, a significant part of the world will become a "social-ecological wasteland" (Collier, 2004:5). With this background in mind, this study discusses transfrontier conservation's multi-dimensionality and its development. Transfrontier conservation projects in the SADC sub-region are designed to co-opt marginal areas and integrate them productively in the broader macro eco-tourism economy. The idea of looking at its implications on communities and the contestations thereof helps to identify, increase inquiry and ultimately sharpen the understanding of socio-ecological faulty areas that can stimulate a re-thinking on strategies to avert current and potential future problems in transboundary biodiversity conservation. By doing so, it is hoped that this understanding will help to address bickering over marginalization of communities, and move towards conservation stakeholders' collective action and at the same time also meeting conservation of pristine flora and fauna. To achieve that, it is important to look at the ideological underpinnings of transfrontier conservation, what constitute it and unpack the various concepts as they relate to conservation in Southern Africa.

2.3 Transfrontier conservation scale

From the national to the regional and international levels, this study has noted that resource governance trajectories shows a movement that puts conservation processes away from the local scales. Thus, this create 'scales of marginality' (Ramutsindela, 2007:105), in which people's livelihood strategies (crop and livestock husbandry, and forests utilization), are regarded as secondary at the expediency of non-consumptive eco-tourism enterprises development in a neo-liberal economic sense. Looking at this process from an environmental ethicist point of view, natural resources are perceived to be part of the local people's culture with which they have not only mere emotional attachment, but they use them as a source of livelihood. Consequently, this study argues that nature is not valuable for its own sake, but embedded in human valuation of the resources, which make sense to rural people for key livelihood components, and for this reason, the local people find motivation to conserve resources when they derive livelihood benefits from

natural resources. Looking at the Great Limpopo Transfrontier Park's (GLTP) in relation to Makuleke and Sengwe communities, it is apparent that the emergence of transfrontier conservation, its ideological imperatives and definition in relation communities, have serious disjuncture. The worldviews about transfrontier conservation both in its conceptual and practical context have not given room to incorporate local contexts regarding natural resources, with the potential therefore to side-step communities that are dependent on these natural resources found adjacent to their localities. It is therefore argued in his study that while it is ecologically logical to avoid the 'tragedy of the commons' (Hardin, 1968), there is also need, in its defining principles for the GLTP, to avoid the tragedy of the common man in terms of transboundary biodiversity and ecosystems management. Ideally, conservationist and development planners should take note of the fact that "we must look more closely at why conservation, whether of renewable resources or of wildlife, succeeds in some cases and fails in others. There is a great deal to learn from the record about what options to try in the future," (Western and Pearl, 1989:164). In defining scales of conservation in Southern Africa, especially the Great Limpopo Transfrontier Park, is operating largely at three levels: the national level that is largely governmentalized, the regional scale, which is dominated by conservation organizations and trilateral government structures) and the international scale, dominated by conservation organisations, financial institutions and

2.4 Transfrontier conservation concepts

Transfrontier conservation is referred to by different names. Terms such as Transfrontier Conservation (TFC), Transfrontier Conservation Areas (TFCAs), Transfrontier Parks (TFPs), Transboundary Protected Areas (TBPAs), Transboundary Natural Resources Management (TBNRM) and Transfrontier Conservation (TFC), are found in literature and feature prominently across Southern Africa conservation programmes. These conservation programmes phenomenally are increasing since 2000. These form the context within which the Great Limpopo Transfrontier Park (GLTP) was established. According to the Southern Africa Development Community (SADC) conservation Unit, twenty-two solid projects exist in the region (www.sadc.inte/fanr/naturalresources/transfontier/tfcas.gif). Other terms such as "bi-national parks," "tri-national parks," "super parks," have also been used to describe geographically connecting, partly fenced, unfenced park reserves and bioregions rather than just ecosystems (Harmon, 2006:209 and Martin et al., 2009:5). One important characteristic to take note of, is that all of these terms, have been used in one way or the other to refer to seemingly different, but common and intertwined conservation programmes that extend beyond one country, hence they have little differences that distinguish one from the other (Katerere et al., 2001:12; 14; Wolmer, 2003:1). In 2001, the World Conservation Union (IUCN) advocated and pushed the development of transboundary conservation to include the goals of peace and cooperation, and there emerged the term "Parks for Peace" or "Peace Parks". According to Sandwith et al., (2001:3), the IUCN stated in its conservation guiding principles that parks for peace are:

"Transboundary protected areas that are formally dedicated to the protection and maintenance of biological diversity and of natural and associated cultural resources, and to the promotion of peace and cooperation"

In many instances, the term 'Peace Parks' is widely attributed to the merger of the Glacier National Park in the US with Waterton Lakes National Park in Canada in 1932 forming what became known as the Waterton Lakes Glacier International Peace Park (Harmon, 2009:208; Martin et al., 2009:5 and Van der Linde et al., 2001:4). An analysis of these varying dimensions shows few differences.

However, these conservation programmes all refer to "relatively" large areas that straddle frontiers or boundaries between two or more countries, and allude to one common dominant characteristic of state involvement, typical of international relations. It is important to note that the concepts are closely related and are applied by researchers and conservation development planners sometimes interchangeably to refer to various scenarios. This study, after careful consideration and analysis of conservation Southern Africa found that the terms "transfrontier conservation area" or "Transfrontier Parks" are most commonly used. To understand the discourses around transfrontier conservation concepts, it is important to make an analogy all of them.

2.4.1 Transfrontier Parks or Transboundary Conservation

Transfrontier Conservation Parks or Transboundary Protected Areas (TFCPs/TBPAs) describe wildlife and nature conservation areas with common international boundaries managed as a single unit by a joint authority comprising the representatives of participating countries (Metcalfe, 2005:5). Sandwith et al.,(2001:3) further postulate that this may refer to land or sea that straddles one or more states or sub-national units such as provinces, regions and autonomous areas whose constituent part are especially dedicated to the protection and maintenance of biological diversity, natural and associated cultural resources managed jointly. This version of "transfrontier parks" applies to the GLTP, which involve South Africa, Zimbabwe and Mozambique as the tri-nations with their borders converging at the confluence of Luvhuvu and Limpopo Rivers, rich in pristine flora and fauna. The borders create an ecological and ecosystem zone that precipitated amalgamation of the adjacent Gonarezhou, Kruger and Limpopo National Parks from Zimbabwe, South Africa and Mozambique respectively, into one mega park, the GLTP.

The process of the GLTP meant incorporating national parks, and the nature governance and management approach that were pursued; clearly demonstrate state control and centralization. Critics have voiced their concern to the effect that local communities are being alienated. The conservation process in this regard, often makes positive appeal to traditional park managers, who use protected areas for international nature-based tourism, sport hunting and relate to 'parks' as restricted conservation areas (Metcalfe, 2005:5). Power struggles abound between the state and communities in the course of resource allocation, accessibility, resource control and utilization. To enforce authority on transfrontier biodiversity conservation, global and regional conservation institutions have also supported the states, adding pressure onto the communities in the hope of achieving sustainable natural resource conservation and management objectives (Peluso, 1993:201). These parks establishments and the manner in which they are managed follow colonial trends in Southern Africa, where local people were routinely separated and tightly restricted from owning, accessing and using natural resources adjacent to their households or within the now called animal corridors of the parks, conservation areas and protected areas. Such privilege to have access and the right to use the resources were reserved for the elite white settlers (Adams, 2003; Murombedzi, 2003), and currently the areas are popular for tourists with money to buy flora and fauna, and to enjoy the tourism products.

These manifestations are not only historically divisive and discriminatory, but resuscitated practices in the GLTP that foster a legacy of ongoing mistrust over land and natural resources in these areas (Fabricius et al., 2001). This has detrimental effects on parks-local community relations particularly through undermining collaborative conservation. The stakeholders therefore no longer trust each other in the management of natural resources. Following this argument, this study established that communities in the GLTP as an example within the Southern African region have not been able to participate fully in the design and implementation processes of transfrontier parks/transboundary conservation. Hence, clearly it is becoming clearer that the conservation programmes are usually premised on the park model, which is criticized for lacking local development focus in terms of advancing community natural resource driven needs to support local livelihoods.

2.4.2 Transfrontier Conservation Areas or Transboundary Conservation Areas

The term 'Transfrontier Conservation Areas' (TFCAs), is widely used internationally. Broadly, it is defined as 'any process of co-operation across boundaries that facilitates or improves the

management of natural resources', and from it emanated the term 'Transboundary Conservation Areas (TBCAs)', which is typically a Southern Africa jargon aimed at claiming more ownership of transboundary conservation movement (Wolmer, 2003:267). The Southern African Development Community (SADC) Protocol on Wildlife Conservation and Law Enforcement of 1999 define Transfrontier Conservation Areas (TFCAs) as "the area or component of a large ecological region that straddles the boundaries of two or more countries, encompassing one or more protected areas as well as multiple resource use areas" (Hall-Martin and Modise, 2002:9). TFCAs as currently being implemented and practiced in the Southern Africa region are informed and rooted in this definition. Marginal land areas of ecological and ecosystems importance shared by two or more countries, are put under a joint management regime incorporating sustainable use zones and core protected and heritage areas and therefore acclaimed as having locally, nationally, regionally and globally significant biodiversity and ecosystems value. Other authors prefer to call these areas "mega flora and fauna" zones.

2.4.3 Transboundary Natural Resources Management (TBNRM)

The popular and most used term in Southern Africa is Transboundary Natural Resource Management (TBNRM). TBNRM is defined as "an area in which cooperation to manage natural resources occur across boundaries" (Griffin et al., 1999 and Buzzard, 2001:1). To Metcalfe (2005:5) TBNRM is viewed as more of a process orientated than just being concerned about establishing a spatially fixed entity, which aims to increase collaboration across boundaries and improve the effectiveness of attaining natural resource management or biodiversity conservation goals spanning large areas. These areas could be habitat to human beings as well and the case of Makuleke and Sengwe communities serves as good examples. As such, Metcalfe (2005:5) further contend that TBNRM is perceived as an open-ended approach to collaboration along national boundary and not necessarily involving parks, but some other areas rich in natural resources, and subsequently lacking the leadership and support of "park" authorities at times. This is less appealing to, not only park authorities, but also to the media constituencies as it is hard to brand since it is perceived largely as the outcome of local initiatives, which public authorities and donors are reluctant to support as they have shifted to more centralized transfrontier parks such as the GLTP.

While this concept seemingly offer intellectual space in trying to differentiate them, however, the interests of important actors, their indented outcomes and operational modalities of transfrontier conservation are often predicated on one specific ideology, the neo-liberal economics, leading to specific outcomes (Wolmer, 2003:3-4). This is precisely the central issue given the pressure

gravitating towards tourism investments in the GLTP as a non-consumptive livelihood option. The unbundling of territories into transfrontier parks create vast parklands, with huge wilderness habitat for wildlife and tourism. However, from a social-ecological or anthropological point of view, the local people, their empowerment and natural resource driven livelihoods, are equally important. They should be incorporated in broader development planning of transfrontier parks without compromising local livelihood sustainability and without curtailing the participation of the local people in natural resource governance.

2.4.4 The Peace Parks or Parks for Peace

This concept of Peace Parks or Parks for Peace also features prominently in Southern Africa. The Peace Parks Foundation was named in recognition of the importance of transfrontier parks' potential to create interstate sound relations. The term 'Peace Parks or Parks for Peace' has a long political ecological history. It started with the agreement between the United States of America (USA) and Canada in 1932 that ushered the Waterton-Glacier International Peace Park. This was a union between Waterton Lakes National Park in Canada and the Glacier National Park in the USA, making it the World's first international Peace Park (Harmon, 2009:208; Martin et al., 2009:5; Van der Linde et al., 2001:4). It is from this perspective that this concept incrementally graduated from its early manifestations in fostering inter-state peace building to provide the first practical and empirical examples for use of peace parks in the promotion of interstate peace found in the 21st Century from an ecological and ecosystems conservation point of view.

Clearly, it is evident that there is has been a paradigm shift on the understanding of peace parks to conservation and development, not necessarily based on friendship and peace symbolism of countries (Mihalic, 2007:2), but actualizing it in the way states collaborate in managing fugitive and other natural resources transcending national boundaries. The GLTP is more focused on biodiversity and bioregional development, than merely to engendering peace. Interestingly, in Southern Africa, the leading Non-Governmental Organization (NGO) promoting the GLTP at sub-regional level is the Peace Parks Foundation (PPP), formed by Dr Rupert, thus, some prefer the term "Peace Parks" in relation to how biodiversity conservation across boundary can be a building block for peace among nations.

The definitions are used by different countries in Southern Africa region. Clearly, most countries are attempting to manage resources under harmonized planning efforts and integrated conservation law regimes. This to some extent does not disregard the autonomy of nations, but it is recognized that the sovereignty of each country is as important as supporting each other for

mutual interests in the conservation of common natural heritage, natural resources and bioregions (Swatuk, 2004:20). However, differential interests of individual states in the case of the GLTP, still saddle the process of harmonization of conservation laws and practices. This has been forestalling the implementation of important transfrontier conservation decisions. The reason for this is that South Africa, Mozambique and Zimbabwe are coming from different historical political ecological backgrounds. For example, in the case of the GLTP, Mozambique emerged from a civil war and instabilities by a rebel movement Renamo led by Alfonso Dhlakama. South Africa came out of an odious apartheid system in 1994 it still battles with correcting the apartheid inequalities. Zimbabwe attained independence in 1980, but it was gridlocked in political contestations since 2000, going through economic transformation processes in an environment of grinding economic sanctions and deep-seated economic problems since 2000. Due to varying problems and different stages of economic development, these countries at times tend to be inward looking more than outward looking in dealing with their biodiversity problems. This helps to appreciate the slow pace of harmonization of conservation regimes and harmonisation of transboundary conservation processes. While the above terms describe the object in question, Amerom and Buscher, (2005:164) clearly pointed out that TFCAs or TBCAs terminologies bring environmental, nature conservation organisations and governments to coalesce interests rapidly, rallying around concepts to a new and politically motivating epistemological level, particularly in Southern Africa where the Peace Parks Foundation was established to support the initiatives. By adopting varying terms, the conservation discourse has joined the arena of other much-publicised elusive development concepts such as "sustainable development," "community ownership" and "good governance," which shares a similar all-embracing motivational overtone, purpose and appeal (Amerom and Buscher (2005:164). Conservationists and this study in particular, is therefore concerned about the convoluted terminologies that accompany biodiversity development debates. This study would argue that this create confusion and raises unnecessary arguments that overshadow the real human-environment relationships in particular reference to the affected communities and local livelihood development agendas. The confusing terminologies means that a diversity of programmes are crafted to attract funding, which subsequently do not benefit the intended beneficiaries such as poor communities living inside and adjacent to these conservation areas who day-in and day-out suffer the brunt of wildlife predation, crop raids and other natural calamities. At the end of it all, the terms have subtle differences, but in essence, they refer to more or less the same situations where conservation initiatives straddle national boundaries (Wolmer, 2003:262), therefore, we conclude that in practice, the terms can interchangeably be used depending on scenarios at play. In the course of this study, the phrases "transfrontier conservation area," "peace parks" or "Transfrontier Park "are used in the region to mean conservation programmes or projects involving two or more countries and straddles political boundaries.

2.5 Transfrontier conservation evolution and implications in Southern Africa

The historical development of transfrontier conservation derives from various environmental considerations, socio-economic, political interest for peace and building friendship between and among nations. Today's transfrontier conservation programmes are filled with pomp and grandlaunches usually coming after high level signing of Memorandum of Agreement and Treaties by heads of state and government. This is usually followed by setting up of ministerial, technical, partner country teams and various Working Groups. To understand transfrontier conservation, one needs to appreciate the genesis of the concept. It has been highlighted that the Peace Parks concept was developed to promote management of natural resources across national boundaries and it was introduced in the 1920s and 1930s (Griffin et al., 1999). Transfrontier Conservation (TFC) therefore progressed with tremendous force when the first such TFC was established through an agreement signed in 1925 between Czechoslovakia and Poland (De Villiers, 1999:8). However, the first formalised park was established only after the first World War between the United States of America (USA) and Canada by the Waterton-Glazier agreement in 1932 (De Villiers, 1999:9). Another TFC based on the Peace Parks concept was proposed in the 1930s between the U.S.A. and Mexico border. This linked Big Blend National Park, Big Blend Ranch State Park, Black Gape Wildlife Management Area and the Rio Grande Wild Scenic River in Texas (U.S.A), with the Canon de Santa Elena and the Maderas del Carmen Flora and Fauna Protection Area in Chihuahua and Coahuila, Mexico (King and Wilcox, 2008:225). Transfrontier conservation agreements were widely entered into in North America, Europe and Central Africa in the last century or so (Buscher and Dietz 2005:7). According to Schoon (2008:4), Buscher and Schoon (2009:33), the number of global transfrontier/transboundary conservation increased from 59 in 1988 to 169 in 2001, 188 in 2005, 227 in 2007 and 230 in 2010 that straddle international borders in several countries (Griffin et al., 1999).

Since then, the cumulative awareness on transboundary environmental issues has accelerated culminating in the birth of environmental movements and organisations that are well funded and powerful in transfrontier conservation. Tracing this genesis, in 1968 and 1972, international conferences dedicated to assess global environmental problems and suggest corrective strategies. The first was the Biosphere Conference held in Paris in 1968, followed by the 1972 Stockholm Conference on human environment. It was this later conference that resulted in the formation of the United Nations Environmental Programme (UNEP). Treaties and ad hoc

agreements were concluded by different countries for the sole purposes of joint management of biodiversity and ecosystems, particularly wildlife resources for mutual benefit by participating countries. Of great interest in Africa is the 1968 Algiers African Convention on the Conservation of Nature and Natural Resources, which was subsequently followed by the 1971 Ramsar Convention (Van der Linde et al., 2001:6). These two conferences dealt with collaboration and interstate consultation on shared watercourses. Two other important conventions were held and these included the 1972 World Heritage Convention (a convention that called for the protection of the world cultural and natural heritage sites, for example the Victoria Falls and the Lower Zambezi between Zimbabwe and Zambia managed under the UNESCO World Heritage shared Commission based in Paris, France). The 1973 Convention on International Trade In Endangered Species (CITIES), also came into force and called for interstate collaboration in conforming to restrictions and practices in trade on species listed as threatened (Van der Linde et al., 2001:6). Other conventions, such as the Bonne Convention on the Conservation of Migratory species of 1979 called for the elimination of obstacles to movement of migratory species, increasing interstate collaboration and consultations on curbing the problems of poaching and exchange of information. As Van der Linde et al (2001:6) clearly state, the Convention on Biological Diversity (1992) articulates the need for countries to improve collaboration and consultation on effective management of bioregions, ecosystems and biodiversity (Van der Linde et al., 2001:6). Against this background, a plethora of international conventions and treaties were concluded. This meant that traditional national sovereignty and ownership of natural resources fundamentally shifted and increasingly, challenged juridical statehood in ecological conservation. As a result, transfrontier biodiversity and ecosystem conservation amplified as donors also begun to support them as they are of spectacular scale and stimulate global conservation interest.

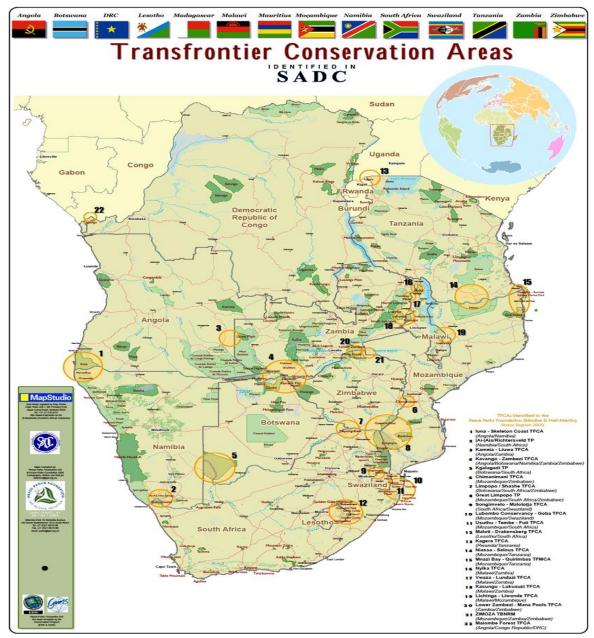
More often than not, interstate collaboration implies a huge shift of conservation mandate to higher scales in terms of governance and environmental decision-making. In so doing, it is noted with concern that this is a major shift from the local scale in terms of resource governance and management since the international biodiversity and ecosystem conventions escalated the issues from the micro to the macro-level integrated development to sub-national, national, regional and international levels. This becomes the point of contention considering the Community Based Natural Resource Management (CBNRM) that preoccupied global funding agencies prior to early 1990s. This study therefore questions, 'who' and 'what' define the national and regional conservation interests? What is the impact thereof on the local people in terms of participation in resource governance, community livelihoods and locally specific conservation? What are the operational modalities of the actors in relation to conservation relationships?

Without pre-empting much, what comes out clearly is that while the GLTP project documents emphasize that the benefits will accrue to the communities, there is little evidence on the ground that show positive impact of the initiatives are having on the communities. It is on this basis that the whole transfrontier conservation process is decreasing the roles of residents in transfrontier conservation, and equally so, their participation in the tourism industry. There is also a concern that no stronger partnership with the private sector and the communities exists since most investment ventures are gridlocked in government and private investors. One obvious reason for this is that the GLTP remains an intergovernmental project. This study, as much as other authors have done, question the blend of transfrontier conservation agendas in which community development concerns are a late addition (Wolmer and Ashley, 2003:37). Primarily, the conservation programmes are state-orientated initiatives. The rationale for the GLTP revolves around re-establishing "ecological integrity" and migration corridors across national borders. It has been lobbied principally by conservation organisations keen on high-profile conservation flagship projects. Thus, today the GLTP development is seen as a vehicle drives both environmental protection and economic development at the national and regional levels. In the face of this growing popularity and phenomenal impetus for transfrontier parks, Southern Africa has found itself under a lot of influence to develop peace parks. As early as from 1990s, the Ford Foundation started to support Community Based Natural Resource Management (CBNRM) and identified transfrontier resource management as 'cutting edge development' for Southern Africa (IUCN-ROSA, 2002:2). Transfrontier conservation concept was presented as an alternative for effective management of pristine nature reserves, particularly wildlife. It capitalizes on environmental economies of scale for sustainable rural transformation and development. This coincided with the founding of the Peace Parks Foundation by Rupert in 1997. What ensued in Southern Africa was the formulation of various conservation protocols, establishment of conservation projects and programmes at that are at different stages in the region. The regional laws and SADC Protocols that have a bearing on transfrontier conservation and a summary of implications are shown in Table 1.

Table 1: SADC Laws and Protocols Governing Transfrontier Conservation

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Protocol	Summary of implications	
1) SADC Protocol on Wildlife Conservation and Law Enforcement of 1999	 -Article 6 (2) (e) encourages State Parties to harmonize legislation governing conservation and sustainable use of wildlife by putting in place measures facilitating CBNRM practices in wildlife management and wildlife law enforcement. -State Parties are required to promote cooperative management of shared wildlife resources and wildlife habitats (bioregions) across international borders. -Special recognition is given to the important role played by rural communities, hence the need to include them in CBNRM initiatives (Article 7). 	
2) SADC Protocol on Tourism	 -Recognizes the pivotal role that host communities play in any successful tourism development endeavours in the region as it is state that the protocol will "ensure the involvement of small scale and micro enterprises, local communities, women and youth in the development of tourism throughout the region" (Article 2 (4). -State Parties are required to play an active role in ensuring the rights of these communities are protected and recognized. This is to be achieved through the formulation and pursuance of policies and strategies that promote the involvement of local communities and local authorities in the planning` and development of tourism (Article 3, section 4). 	
3) SADC Revised Protocol on Shared Watercourses	 -Article 4 (2) (ii), encourages state parties to harmonize legislation especially in relation to environmental protection, protection and preservation of ecosystems. -The Protocol is silent on the issue of community-based management of shared watercourses. 	
4) SADC Protocol on Fisheries	 -Covers issues of fisheries for subsistence; small-scale and large-scale commercial trade purposes. -Article 7 and Article 8 requires State Parties to amicably resolve disputes, share information as well as coordinate, cooperate in the management of fishery resources, harmonize legislation related to fisheries especially in relation to management of shared fishery resources, including dealing with illegal access to fishery resources. -State Parties to seek a balance between social and economic objectives by protecting the rights to fishery resources of artisanal, subsistence, and small scale commercial fishing activities of fishing communities and support their education, management and consult them when coming up with legislation. 	
5) SADC Protocol on Forestry	 -Recognizes the trans-boundary characteristics of forests and therefore the need to manage them as integrated ecosystems through the implementation of transfrontier management strategies. -Indigenous/traditional knowledge of communities are recognized for use in management and compels state parties to accord communities entitlement to effective involvement in sustainable management of forest resources on which they depend and to share equitably in the benefits arising from their use (Article 4 (9) and (10). -Article 16 requires state parties to recognize, respect and protect the rights of individuals and communities over their traditional forest related knowledge and their right to benefit from the utilization of this knowledge. 	

While the Protocols and Laws recognize and emphasize the role of communities in terms of enhancing their livelihoods using local resources in their vicinities, the authority and power for transfrontier conservation planning and execution is invincibly vested in the "state parties", who can chose to or chose not to deal with communities. Protection of indigenous knowledge is not even guaranteed in these laws and harmonization of laws has taken long to give room for community participation in transfrontier resource conservation. This legal default and lack of gatekeepers over state actions in implementing transfrontier conservation projects negatively affect the communities, leaving them with a plethora of livelihood vulnerabilities. Figure 2.1 shows the distribution of transfrontier projects at different stages in Southern Africa.



Source: Adapted from SADC TFCAs (<u>www.sadc.int/fanr/naturalresources/transfrontier/tfcas.gif</u>) Figure 2.1 The Geographical Distribution of Transfrontier Programmes in Southern Africa

There are currently twenty-two areas that have been identified in Southern Africa for transfrontier parks and or transfrontier conservation areas. These are at different stages of development as shown in Table 2.2:

Nar	ne of TFCA	Countries involved	Status
1.	Iona-Skeleton Coast TFCA	Angola and Namibia	-MoU signed 1 August 2003.
2.	Ai-Ais/Richtersveld Transfrontier Park (TFP)	Namibia and South Africa	-MoU signed October 2000. -Treaty signed August 2003.
3.	Kameia-Livwa TFCA	Angola and Zambia	-Conceptual phase, first planning meeting held 7 June 2006.
4.	Kavango-Zambezi TFCA	Angola, Botswana, Namibia, Zambia and Zimbabwe	-MoU developed, to be signed during 2006. -Launched March 2012.
5.	Kgalagadi Transfrontier Park	Botswana and South Africa	-Agreement signed 19 April 1999 and officially launched on 12 May 2000.
6.	Chimanimani TFCA	Mozambique and Zimbabwe	-MoU signed 2001.
7.	Great Maoungubwe TFCA	Botswana, South Africa and Zimbabwe	-MoU signed 22 June 2006
8.	Great Limpopo Transfrontier Park (TFP)	Mozambique, South Africa and Zimbabwe	-MoU signed 10 November 2000. -Treaty signed 9 December 2002
9.	Songimvelo-Malolotja TFCA	South Africa and Swaziland	-Protocol signed on 22 June 2000.
10.	Lubombo Transfrontier Conservation and Resource Area (TFCA)	Mozambique, South Africa and Swaziland	-Trilateral Protocol signed 22 June 2000
11.	Usuthu-Tembe-Futi TFCA	Swaziland, South Africa and Mozambique	-Protocol signed on 22 June 2000.
12.	Maloti-Drakensberg Transfrontier Conservation and Development Area (TFCA)	Lesotho and South Africa	-MoU signed 11 June 2001.
13.	Kagera TFCA	Rwanda and Tanzania	-Conceptual phase.
14.	Nissa-Selous TFCA	Mozambique and Tanzania	-Conceptual phase.
15.	Mnazi Bay-Quirimbas TFCMA	Mozambique and Tanzania	-Conceptual phase.
16.	Nyika-Kasungu-Lukusuzi	Malawi and Zambia	-MoU signed 13 August 2004.
17.	Vukiza-Lundazi TFCA	Malawi and Zambia	-Conceptual phase.

Table 2.2 Various stages of TFCAs Programmes in Souther	n Africa
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18. Kasungu-Lukuzi TFCA	Malawi and Mozambique	-Conceptual phase.
19. Liwonde-Lichinga TFCA	Malawi and Mozambique	-Preliminary negotiations.
20. Lower Zambezi- Mana Pools TFCA	Zambia and Zimbabwe	-Conceptual phase.
21. ZIMOZA TBNRM	Mozambique, Zambia and Zimbabwe	-Planning phase
22. Masiombe Forest TFCA	Angola, Congo Republic and the Democratic Republic of Congo	-Conceptual phase.

Source: Adapted from PPF Status Report (2002) and SADC TFCAs Unit (www.sadc.int/fanr/naturalresources/transfrontier/tfcas.gif)

The discussion above showed pertinent transfrontier conservation concepts, laws and Protocols' implications on local communities. It is critical to note that the communities that are affected in terms of livelihood and conservation point of view are too many. Before going into other critical issues, it is imperative to establish the entry point of transfrontier conservation in Southern African countries. This consideration takes the debate to the evolution of transfrontier conservation in the region, looking at the ideological imperatives in order to understand its development.

2.6 Establishment of the GLTP

The Great Limpopo Transfrontier Park was launched on 9 December 2002. It was a manifestation and culmination of regional and global influences from both governmental and non-governmental conservation organisations. One of the criticisms of such multi-level natural resource planning is the generation of governance regimes that lack localisation or decentralisation. In fact, this allows for a greater degree of centralisation of conservation power and authority regarding management of natural resources. Generally, in the case of the GLTP, global actors facilitated centralisation of control over resources in the hands of narrow networks the state agencies and that of international NGOs, international financial institutions, and global consultants on tourism and bilateral donors (Duffy, 2005:101). This ultimately excludes the local focus as encapsulated in the GLTP Treaty.

Indeed, there is evidence, for example, communities in Mozambique and Zimbabwe sides of the GLTP, expressed concerns that the whole project has the potential to jeopardize their livelihoods, leaving the local people at the mercy of government and donor programmes, which may not be sustainable in dealing with their problems. Coupled with demands to change land use and restrictions on crop and animal husbandry, forest products and use of medicinal plants, households become exposed to a number of vulnerabilities. To buttress this point, it is argued in this study that the Peace Parks Foundation had raised millions of dollars to create the Transfrontier

Conservation Area (TFCA) as opposed to a Transfrontier Park. The TFCAs would have allowed more local players having a say in the planning process. However, the donors expected to see action on the ground with less consultation problems. Thus, the three governments of Mozambique, South Africa and Zimbabwe fast-tracked the GLTP establishment process, hence an instant park was set up. In the quest to achieve that and meet donor expectations, the programme was rushed through without adequate community consultations (Duffy, 2005: 101: Mail and Guardian, 2002:12-16). This was done to the detriment of considering seriously the livelihood needs of the people and locally specific conservation practices based on their indigenous knowledge systems that the SADC Protocols and laws on transfrontier conservation emphasises on.

2.7 Ideological journey of the GLTP

It is imperative to examine how transformation conservation programmes have transformed over time from both a theoretical and practical point of view. The starting point would be to look at the ideological underpinnings of the GLTP. In this regard, it is important to highlight that policy thrust that were adopted and institutional processes governing transfrontier conservation are largely governmental and they are not community oriented. This is not accidental, but it is premised on particular transfrontier/transboundary conservation notions and ideologies from various perspectives that are examined bellow.

2.8 Globalization of Transfrontier Conservation and Implications

Since the dawn of modern day states, international cooperation between states and regions has become ardently unavoidable in international relations. Socio-ecological relations and cooperation, although not its intended objective from a functional point of view, also entered subtly, into the field of diplomacy arena. Hence, this has helped to consolidate intestate relations. Because of the incredibly increasing interdependence of states and regions in a fast globalizing world, it has become unavoidable for countries not to collaborate when it comes to conservation particularly of fugitive natural resources that defy geo-political boundaries. In the same way, Thomas Hobbes's political epistemological constructivism argues that national citizens establish social contracts through constitutions in which they submit their liberties socially, economically and politically. In the same vein as global citizens, people conclude agreements (social contracts) to advance their common interests (Ferguson, 2007:15; 17). Furthermore, Ferguson added his voice to Hobbes's contention that the subjects (citizens) retain the right to disobey or resist when their lives are in danger. Reminiscent to Thomas Hobbes's theory of 'social contracts,'

conservation of natural resources is thus, governed by a set of rules in the form of treaties and conventions.

In addition, some authors put forward that the spread of transfrontier conservation arose from globalisation perspectives and ideologies, which are expounded in ecological sciences internationally. These are held as the most appropriate and scientifically justified ways for biological diversity management without compromising nature so that it also benefits the future generations (Sigh and Houtum, 2002:255; Finnemore, 1996:2). As such, rules and regulations have been propagated to achieve sustainable use of natural resources; hence, conservation becomes a key aspect of a successful ecological continuity. For instance in 1992, the IUCN stated major objectives in its plan that 10 per cent of the world's terrestrial areas be set aside as protected areas in order to ensure the survival of the world's biodiversity, and at the same time involve the private sector in management and conservation of natural resources (Barzetti, 1993:xi).

It is critical to highlight also at this point that the objectives underpinning transfrontier conservation in general and the GLTP in particular, also derive from IUCN goals. Msimang (2003) has argued that IUCN's globally accepted guidelines for transfrontier biodiversity conservation have been adopted wholesomely in Southern Africa. Sandwith et al (2001:17) helps this discussion by outlining the nine IUCN guidelines on conservation as follows:

- 1. Identify and promote common values.
- 2. Involving and benefiting local people.
- 3. Obtaining and maintaining support of decision makers.
- 4. Promoting coordinated and cooperative activities.
- 5. Achieving coordinated planning and protected area development.
- 6. Develop cooperative agreements.
- 7. Working towards funding sustainability.
- 8. Monitoring and assessing progress.
- 9. Dealing with tension and armed conflicts.

It is important to indicate that the global conservation discourse that backed by international corporate entities and conservation think tanks, assume a new dimension insofar as conservation of natural resources is concerned in differe4nt countries around the world. Thus, the creation of the GLTP as a natural resource management model guided fundamentally by similar IUCN principles. However, of interest in Southern Africa, is the emergence of command

environmentalism. This is epitomised by global influence espoused in state commanding and controlling natural resources governance in terms of utilization, accessibility and ownership of biodiversity. Locally, institutions governing natural resources are perceived as a function to benefit elites or outsiders, who are parroted as tourism investors. That in itself alone, creates problems of mistrust by the local communities who aspire to collaborate in conservation of natural resources (Fisher, 2002:119). In fact, what it does is the creation of corporate conservation individualism, in which case the local communities are excluded.

From a global perspective, the coalition of governments and conservation organisations across various scales assume the role of thinking and speaking on behalf of communities. In so doing making superior advocacy on behalf of the population and great promise of tourism benefits to the people (Redford et al., 2000:1362). Duffy (2005:68) cautions this approach by putting forward that the promise of tourism ventures in many of these areas, often is exaggerated and takes years to become financially viable, and it may be too long enough than necessary for the poor communities to wait.

In addition, Duffy (ibid) further lamented that the revenue, profit and employment opportunities the enterprises generate do not wholesomely go towards the local people, but instead end up in the hands of outsiders or elites. In Southern Africa the GLTP, is being promoted and marketed as the realization of the African dream with a combination of promises of economic growth, employment creation, development and sustainable environmental conservation as the means to an end of restoring investor confidence in the sub-continent beset by development problems (Wolmer, 2003:4). The fundamental question that remains unanswered is the extent to which those benefits that are much publicised can be shared equally between tourism investors and the local communities. Indeed, it is appreciated that tourism is being offered as an alternative livelihood option to compensate for loses by the communities culminating from the change instigated by the new resource use. However, concerns are pervasive in Sengwe and Makuleke communities that lack of transparency on sharing natural resource proceeds give an impression of a gloomy livelihood future. Some interviewees stated clearly that the GLTP remains elitist and largely benefit governments and the private investors. These sentiments reinforce the views of the two communities that view the GLTP benefits negatively. There is no doubt that the people's natural resource based lifestyles have changed, and are calling for a revisiting of the whole GLTP plan.

Looking at the global ideological influences regarding transfrontier conservation, some proneoliberal conservationist authors propose that anyone who is concerned with the human costs of environmental capitalism, has to abandon the old ideas that seek the so-called 'Third Way' between free-market ideology (capitalism) and 'outmoded' social democracy and socialism (Western and Pearl, 1989, 2001:23). Furthermore, while cognisant of the force of neo-liberal environmental economics, it is noted that this has produced both fortunes for some, and misfortunes for others when it comes to sharing of natural resources between the 'haves' and 'have nots' (Western and Pearl, 1989:123). The idea of 'haves' and 'have nots' in the context of community livelihoods consideration in the case of the GLTP, is deeply rooted in economic ideology of capitalism. People living inside and adjacent to GLTP as Peace Park; find themselves in livelihood insecurity with ambivalent ownership regimes casting a gloomy picture on their survival practices. While the GLTP has given the assurance and enthusiasm for sustainable environmental protection and sound natural resources natural resource management, it has not reciprocate this to the local households in terms of safeguarding local livelihoods and attracting substitute investments for the local people (Heltberg, 2001:184-185). Other sceptics admit that this prototype of environmental use, benefits the holders of capital at the expense of customary beneficiaries such as the local communities (Beuret et al., 2009:4). This has led Wolmer (2003:6-7) to argue that this is a new form of 'privatization of the commons.' It is also noted in this discussion that both corporate and financial capital determine access to natural resource, which is very inegalitarian from the outset because the local people who are without capital to enhance their livelihood options lose out in most cases. Kipuri (in Weber and Reveret, 1993) reported that 'privatization of the commons' in Kenya, meant that the wealthy had the capital power to purchase and literally grabbed conservancies, grazing land, water holes and salt deposits, while the poorest were marginalized.

Going forward with this discourse, the global conservation ideological influence therefore can be seen to have amplified the demands that countries save the remaining biospheres and biological diversity, but without defining how communities can also substantially derive benefits. As such South Africa and Zimbabwe in their implementation of the GLTP, derive from these global influences and the disjuncture in the GLTP epitomize the global conservation ideologies and policy thrust. This disenfranchises the local people.

The global frameworks have long been at the centre of debate in guiding nation states with regards to biodiversity conservation. For example, the 1968 Algiers African Convention on the Conservation of Nature and Natural Resources, subsequently followed by the 1971 Ramsar Convention (Van der Linde et al., 2001:6). These two touched on collaboration and interstate consultation on shared watercourses. The World Heritage Convention (1972) and the Convention on International Trade In Endangered Species (1973) also came into force, requiring interstates

collaboration in conforming to practices regulating trade in species listed as threatened (Van der Linde et al., 2001:6). The Bonne Convention on Conservation of Migratory species (1979) called for the elimination of obstacles to the movement of migratory species, interstate collaboration and consultation on curbing poaching, and emphasised the need to exchange information. As Van der Linde et al., (2001:6) clearly stated, the Convention on Biological Diversity (1992) articulates the need for collaboration and interstate consultation on the management of bioregional ecosystems and biodiversity (Van der Linde et al., 2001:6).

All these international or global conventions speak of "state parties". Thus, entrusting power and authority in governments to lead the process of conservation since only governments have such powers reposed in them by their citizens in establishing such "social contracts" with the international community. The global natural resource governance architecture treats natural resources as "global commons'. What is driving this system is the current theory on natural resource conservation, including the resurgent TFCA, in which the GLTP is rooted in western epistemological assertions, encapsulated in Hardin's (1968) "Tragedy of the Commons". This theory was based on the population-resource ratio of agro-pastoral communities in which he vehemently argued that the disproportionate imbalances culminate in resource depletion such as rivers, oceans and grazing lands. These resources are neither privately owned nor controlled, henceforth they are inherently prone to overexploitation as individual resource users gain full benefits of using the resource but bear little or no cost of overuse (Katerere et al., 2001:7).

It is apparent that in Southern Africa, the global conservation architecture is resolutely pursuing Hardin's argument with respect to communal natural resources. This is to the extent that it has inspired institutional design, and hypothetically, communities in transfrontier conservation areas, are viewed in somewhat "open access" contexts, where accountability, cost of replenishing nature is minimal and the resources are being depleted. This has pitted the local communities concerns centred around their natural rights, sceptical of exclusively centralising conservation and advancing private sector tourism development whose benefit seem not to have trickled down to the local people. In one of the interviews with a top government official, he illuminated contestations on natural resource ideological differences arising from how varying players view the concept of transfrontier benefits premised on equity and access by saying:

"When a community feels disenfranchised, the situation creates a potentially explosive mix of burgeoning local and national crisis, and perceived social discrimination therefore threatens peace and stability. Active involvement of the local people in any process helps to alleviate one important cause of this festering discontent, which only is exacerbated by such kinds of social cleavages and social exclusion. My position and clarion call on the Save Conservancy saga that is part of the GLTP for example, has been for broad-based public participation in Community Share Ownership Trusts by the local people as opposed to corporate and individual empowerment, especially those that have benefited in other empowerment schemes".

As such, government institutions and private sector entities operating in the GLTP, which are responsible for enforcing conservation, have assumed processes in which transformation in the GLTP transboundary conservation is solely government led and private sector driven. The missing link in the GLTP community relationship matrix with the communities is therefore the governance of natural resources that substantially lack guaranteeing local livelihoods. More essentially, there is lack of processes that ensure conservation to be community driven to the extent that even tourism development is largely dominated by government agencies and influential individuals as opposed to communities' themselves. Commenting on transfrontier evolution from a global perspective, Muboko in his recent research argues:

"Various perceptions on globalization of natural resources have created uneasiness and anxiety within the developing world, with some even calling it another face of neo-colonialism and an international elite conspiracy to maximize resource "capture" in the developing world" (Muboko, 2010:58).

Until an inclusive and integrated model is locally developed, locally accepted by the rural people, adopted and implemented, the socio-ecological governance architecture in the GLTP continues to be contested between centralised control of natural resource on one hand and communities making divergently competing claims on the other hand. Ultimately, biodiversity conservation will find itself gridlocked in ecological contestations. In that regard, it is possible that transfrontier biodiversity conservation can suffer from conflicts. This will put the GLTP in bad light considering the high expectations that were raised from the mere fact that it could be the flagship of panacea for rural development and a benchmark for regional conservation argues that the meteoric rise of the Great Limpopo Transfrontier Park was a well-thought out project for purposes of sustainable conservation of shared pristine flora and fauna regarded as 'global commons'. The GLTP was conceived as one of the world's richest biospheres. Ordinarily, it is considered that it would promote nature-based tourism, consolidate regional integration and development, and boost

economic growth and ultimately enhancing political cooperation in environmental governance. In addition, the GLTP was parroted in a sense that it would maintain and promote peace and security. True to this spirit, globalization of conservation as alluded to above and with the influence of international funding institutions and conservation organisations played important roles to ensure that the 'Park' came into fruition. Unequivocally, these factors determined the "scale" that led to the current natural resource governance (Katerere et al., 2001:4). It is evident from this point, and not surprising therefore that the Community Working Group was abolished, making a way for governance agencies dominating decision-making processes. It became even harder for the local people to have their livelihood practices and conservation interests such as participation in the GLTP biodiversity management difficult to undertake.

In this regard, it is conceived that the hierarchical ordering in the development processes of the GLTP, is largely a top-down fashion, which persuaded this study to conclude that transfrontier parks by their very nature are supranational and ideally marginalize the local people. To this end, Ramutsindela (2007:102) refers TFCAs as 'scale of marginality', in which case the local residents have little or no room to manoeuvre in contributing towards construction of regional scales, let alone, the governance models that accompany transfrontier conservation management. While there are justified misgivings about globalization ideological influence as far as the GLTP is concerned, it is argued in from a different perspective that the reality of globalization is an inevitable process. The world is fast becoming a global village, with coalition of interests in conservation at different levels in the areas of peace building, defence and environmental security. One cannot therefore ignore the tide of what the world has inherently become. In Southern Africa, transfrontier conservation is indeed catalytic to efforts on regional integration, particularly in the areas of economic growth, trade liberalization, peace, security and stability as encapsulated in the SADC Treaty and various Protocols that have been ratified at the sub-regional level for human and social development. The technological revolution has also added impetus to catalyze advancement of strategic alliances in many areas such as information exchange where physical barriers and distance have been obliterated. Physical boundaries are no longer hindrance to interaction of global communities, thus, affecting every sphere of human existence and the humanenvironment relationship. Ideally, it will be naïve to imagine that the region remains static to phenomenal global forces on conservation transformation.

Other advocates in this global commons discourse argue that local environmental problems have global ramifications and affect everyone. Hence, the global commons issues become part of contemporary conventional wisdom in environmental, natural resources science, ecology, policy, economics and ecosystems relations (McEvoy, 1988:124). Moore (1985:602) went a step further and called lamented that if only he had a way, the "tragedy of the commons" that was espoused by Hardin (1968) is a must read for all. This is the premises upon which global institutions get involved in natural resources management. One of the reactions to such thinking is manifestly a behavioural shift of environmental responsibility from local institutions to the national, regional and international institutional bodies, and rules of the game such as international donors, international experts, international financial institutions and conventions that support conservation efforts in many countries in the Southern hemisphere.

The bigger picture in such a scenario is unsurprisingly the fact that the local people in the case of the GLTP perceive this as a travesty of their mandate and see natural resources governance as now belonging to some distant entities and not them. This thinking and its associated negative attitudinal manifestation are amplified and ramified by local people's historical circumstances and experiences that they suffered during colonial subjugation when Parks were created. These epochs, were odiously characterised by resource conquest, alienation and dispossession of land from the communities that depended on these natural resources. A good example is the forced removal of the Makuleke people from Pafuri Triangle.

In fact, globalization in a more neo-liberal conservation style of transfrontier areas in this case, represents most processes driving current conservation values and approaches in ecological systems in Southern Africa. To this end, SADC countries came up with a variety of protocols that speak to the global commons management and conservation and these have been analyzed in the following discussion. What is important to note is the extent to which globalization of ecosystems have affected and felt at local level, and the tendency has been the transfer of responsibility and power of managing the global commons from the local institutions to multi-level institutions.

2.8 African Renaissance and its implications on the GLTP

The above section tackled the issues of globalization and its implications on institutional design in defining international, regional and national conservation relationships in informing transfrontier governance processes. What comes out in that analysis is an overt ascendency of resource governance and management that are governmental observed from the mere fact that the whole process is located in interstate global architecture of the state-environment discourse. Far from globalization, there is also a Pan-African euphoria that many African countries are gridlocked as far back as early 1990s when the continent started to witness phenomenal initiation of a wide

range of ideology-laden concepts from development to political ecology (Amerom and Buscher, 2005:160). These sought to capture and stimulate the continent's sustainable development, with biases towards environmental sustainability and collaborative Pan-African development (Amerom and Buscher, 2005:160). As Amerom and Buscher (ibid) put forward, the Peace Parks concept and the African renaissance as a development ideology, emerged concurrently in Africa and most importantly in Southern Africa. The "African renaissance" as a concept in terms of development cooperation and environmental conservation was espoused in "Ubuntu" (African unity, humanity and dignity) that emphasize trans-cultural magnanimity of the African people embedded in the values of teamwork, hard work, collaboration, cooperation, equality, helpfulness, appreciation, trust, and respect. 'Ubuntu' according to Mbigi (1997:2) is a literal translation for collective personhood and collective morality of the African people in their cooperation as individuals and communities as well. This entails not only the breaking up of geographical and social boundaries, but also the formation of broader networks (Jaidka, 2010:1).

The concept of transfrontier parks, therefore, came at the right time and in the right region, and just immediately after the end of apartheid in South Africa in 1994. This made it easier for the community of nations in the region to indulge in an ideology-laden talk of the 'African renaissance' that became characteristic of former South African Presidents Nelson Mandela and Thabo Mbeki in their approach to regional and African development (Amerom and Buscher, 2005:160). Generally understood as the re-birth or 'resurrection' of the African continent, the African renaissance concept was parroted and promoted as an ideological thrust overarching the response to a wide array of problems plaguing the continent, and this stimulated Africans to a political imperative wanting to find African solutions to the African socio-economic, environmental and political problems (Ramutisndela, 2007:142). The 'Cape to Cairo' dream of the colonial times seemed to have found expression in ecological politics in Southern Africa. In supporting this argument and idealization, Wolmer (2003:264), cited the Biodiversity Support Program and put it clearly, when he says:

"It is crucial that biodiversity conservation be extended even further, beyond buffer zones and protected areas, to include all elements of the African landscape and all ecosystems".

This ideological logic justified expansion of protected areas into new spaces and across national boundaries, and even extending on areas inhabited by people. This has invited expanded role of international experts. At its most functional conservation reason in defining geographical levels,

the 'African renaissance' ideology holds that "Africa should endeavour to join all its game parks contiguously from Cape to Cairo" (Wolmer, 2003:264).

Although 'African renaissance' and 'Peace Parks' are catchphrases, each unites many goals in one concept, that is, integrated development arising from the images of the continent that emerged after the end of apartheid in South Africa and end of the Cold War, which therefore sought to shape Africa under a new environment (Ramutsindela, 2007:142). Together with the personal commitment of many highly influential actors like Nelson Mandela, it explains why Southern Africa emerged on top of the rest of the continent in promoting and developing Transfrontier Parks (Amerom and Buscher, 2005:161). Although there are hot debates as to what is "African renaissance," it is only logical in this analysis to conclude that the association of Nelson Mandela to transfrontier conservation through the Peace Parks Foundation that he is said to have championed in the SADC region, is the mere reason why transboundary programmes are so popular in the region. It is important to note that at its launch in 1997, Nelson Mandela buoyed transfrontier conservation and the Peace Park concept from a Pan-African renaissance and global perspective when he said:

"I know of no political movement, no philosophy, and no ideology, which does not agree with the peace parks concept as we see it going into fruition today. It is a concept that can be embraced by all. In a world beset by conflict and division, peace is one of the cornerstones of the future. Peace parks are building blocks in this process, not only in our region, but potentially in the entire world" (www.peaceparks.org/Home.htm).

Accordingly, transfrontier conservation progressed from that time with iconic legitimacy and respect that was founded in African renaissance in which case the quest was that of securing peace and bringing an end to conflict. Ideally, this manifested in the emphasis on more collaboration and cooperation in transfrontier conservation to incentivise peace building among African countries, taking a cue from Nelson Mandela's clarion call to leverage on transfrontier park concept as a building block for peace and common ecological understanding. It is no surprise therefore that this has continuously inspired conservationist and added impetus to transfrontier conservation initiatives and programmes in the SADC region. It is strongly upheld that peace parks are seen as building blocks for development, collaboration and peaceful coexistence.

The statement by Nelson Mandela, is largely seen as having espoused functional over-arching point, which has catapult Southern African states to realize the African renaissance not only as a dream for a united Africa, but through it, territorial amalgamations have found true expression. This is evidenced by the fact that transfrontier parks are spreading as important building platforms for Africa's development and transformation. Further to that, in consonance with Nelson Mandela's point, Thabo Mbeki, then the South African President at that time, puts it more explicitly at the launch of the GLTP when he said:

"The birth of the Great Limpopo Transfrontier Park today, tells the citizens of our continent that the AU and NEPAD are not merely a set of good and grand ideas whose accomplishment will be in the distant future. This Transfrontier Park says that each passing day transforms the dream on an African Renaissance into reality".



Figure 2.2 Signing of GLTP Treaty Source: Adapted from Peace Parks Foundation (www.greatlimpopopark.com)

From right: Former Presidents, Thabo Mbeki, (right), Former Mozambiquean President Joaquim Chissano. (in the middle) and President of the Republic of Zimbabwe Robert Gabriel Mugabe (Left), shake hands after the signing of the GLTP Treaty at Xai-Xai, Mozambique (2002).

Former President Mbeki enunciated in his speech the socio-economic benefits that were to accrue to the region and broadly, so, it was envisaged that the park would be an example of the fulfilment of the African renaissance dream rooted in the New Partnership for Africa's Development (NEPAD) initiative. Therefore, the GLTP was positioned to become the flagship of the most sought-after wilderness places in the world, which would feature on the list of must-see wilderness and tourism destinations offering a new dimension for global travellers as well as the citizens of the region. It has been found out that the GLTP as a project increases the chances for a galore of global travel coming into the region as a competitive tourism market. Thus, creating many job opportunities and bringing in the much-needed foreign currency. Above all, Mbeki in his popular speech also indicated that the Great Limpopo Transfrontier Park would encourage infrastructure investment in terms of roads, building of bridges, lodges, hotels, upgrading of the border posts facilities and securing game fences.

Broadly, this means African renaissance strengthened national and regional scales in terms of resource management. This was confirmed by this spectacular GLTP launching and its endorsement as an African developmental flagship with tourism as the key driver tourism of that development process they envisage. Of great interest in is what O'Brien et al (2000:206; 233) called complex multilateralism, which implied the ways in which tourism investors and nature conservation NGOs collaborated with governments in this matrix. However, little is mentioned in clarifying the role that the communities would play except for the promises of employment opportunities, which were said, would be created and environmental education. Such are the '.scale of marginality' in natural resource governance (Ramutsindela, 2007:105). For example, the Community Working Group (CWP), which was earlier on mentioned was abolished from the GLTP administrative structure (GLTP Integrated Business Plan (GLTPIBP), March 2009:13).

It is therefore arguable that the Ministerial Committee that decided for the demise of the CWP through which community issues would have filtered through to the decision makers, acted unfairly against local community interest. The reason that has been said now and again is that the community issues would be dealt at the national government level (GLTPIBP, March 2009:13-14). Limiting community involvement shows political expedience, and serves to validate the claim made earlier that local people do not see themselves as part of the GLTP plan. The sentiments that they are participating is mere rhetoric and insinuation of their inclusion is just an afterthought in the design and implementation of the project. As a result, there is no guarantee to their livelihood claims. In this regard, natural resource problems/conflicts are bound to occur especially over control, ownership and access to land, pasture, wildlife and forests resource that underpin local livelihoods. In the end, this study found that there is a sense of insecurity with potential to undermine once a noble idea.

2.9 Regional Conservation Integration and Implications

At the sub-regional level, the SADC Treaty, various development decisions and protocols, clearly put briefly the objectives, policies and programmes that resonate with the concept of transfrontier conservation. The GLTP objectives equally derive its genesis from these regional frameworks such as the:

- 1. SADC Common Agenda and Objectives as spelt out in Article 5 of the SADC Treaty as amended in 1992.
- 2. SADC Dar-as-Salaam Declaration on Agriculture and Food Security; the SADC Regional Indicative Strategic Development Plan.
- 3. SADC Policy Decision.
- 4. SADC Protocol on Wildlife and Conservation and Law Enforcement Protocol (1999).
- 5. SADC Protocol on shared watercourse systems.
- 6. SADC Protocol on Fisheries, and
- 7. The SADC Protocol on Forestry.

These protocols have implications at the regional conservation cooperation level. The summary of the SADC Treaty objectives (Article 5), speaks of regional integration, express the agenda that relates to the GLTP as a building block for achieving sub-regional integration. The aspects covered include:

- Promoting sustainable and equitable economic growth, and socio-economic development that ensure poverty alleviation with the ultimate objective of poverty eradication, enhance the standard and quality of life of people and to support socially disadvantaged people through regional integration.
- 2. Promoting common political systems and other shared values, which are transmitted through institutions that are democratic, legitimate and effective in service delivery to the region.
- 3. Promoting sustaining development based on collective self-reliance, and the interdependence of Member States.
- 4. Strengthening and consolidating on the long-standing historical, social and cultural affinities and links among the people of the SADC region.

The SADC Protocol on Wildlife Conservation and Law Enforcement to which South Africa and Zimbabwe signed on 18 August 1999 further amplifies the objectives encapsulated here. It is important to note that this Protocol on Wildlife Conservation and Law Enforcement, while it is intergovernmental, it does not acknowledge the existence of local community institutions when it comes to conservation collaboration. The emphasis in terms of Article 3 (Principles) and Article 4 (objectives) spell the out the mandate and mechanisms for cooperation of "state parties," such as:

- 1. To ensure co-operation at the national level among governmental authorities, nongovernmental organisations hereinafter referred to as NGOs, and the private sector.
- 2. To cooperate to develop as far as possible common approaches to the conservation and sustainable use of wildlife.
- 3. To collaborate to achieve the objectives of international agreements which are applicable to the conservation and sustainable use of wildlife and to which they are party;
- 4. To achieve sustainable utilization of natural resources and effective protection of the environment.
- 5. To promote the development, conservation, sustainable management and utilization of all types of forests and trees.
- 6. To achieve effective protection of the environment, and safeguard the interests of both the present and future generations.
- 7. The state parties will assist and support each other to address issues of common concern including deforestation, genetic erosion, climate change, forest fires, pests, diseases, invasive alien species, and law enforcement in a manner that makes the best use of the technical, financial and other resources in the Region.

2.10 The Dar-as-Salaam Declaration on Agriculture and Food Security

This is another important policy position. It called for the promotion of conservation, management and sustainable utilization of plants and animals, including fisheries, forest and wildlife.

2.11 SADC Policy Decisions

The SADC Extra-Ordinary Summit on Poverty and Development, held in Mauritius in April 2008, recognized the urgent need for the region to address climate change, particularly adaptation in order to safe guard livelihoods. It further articulated the idea of achieving sustainable utilisation of natural resources and effective protection of the environment and the strengthening and consolidation of long-standing historical, social and cultural affinities and links among the people of the Region.

2.12 The Rupert's conservation legacy

One of the key individuals who also championed transfrontier conservation in SADC region is Anton Ruppert. Transfrontier conservation in the SADC region cannot be discussed without recognizing the mentioning of the Peace Parks Foundation (PPF), which was founded by Nelson Mandela (former President of South Africa), Dr Rupert (former president of World Wildlife Federation South Africa and the founder of the PPF) and the late Prince Bernhard of the Netherlands (Ramutsindela, 2007:148;156). The three important luminaries launched the PPF in February 1997. The principal role of the PPF is to facilitate conservation of natural resources and the environment through establishment of Peace Parks or transfrontier conservation areas (TFCAs) in Southern Africa. The spectacular success achieved so far are mainly due to the dedication of PPF workers, the regional governments spirited efforts toward the projects, the devotion of the international conservation community in terms of sourcing funds to finance the projects and the setting up of the necessary institutional infrastructure for the operationalization of transfrontier projects within the SADC region.

It is important in recognizing Rupert's work that the concept of Peace Parks had not been popularised until Dr Rupert, a South African business tycoon brought it to the fore when he met former Mozambique President, Joaquim Chisano in 1990. Their meeting focused on the possibilities to link South Africa's Kruger National Park and some controlled hunting area of Cautanta 16 of Mozambique into a common wildlife reserve (Buscher and Dietz 2005:7). Before the transfrontier conservation programme gathered momentum in the early 1990s, Griffin (1999) noted that the inter-state engagements in TFC issues were informal up until 1997 when the Peace Parks Foundation (PPF) was established. Dr Rupert played an important role. The Star news study suggested that Rupert co-founded the PPF with South Africa's former President, Nelson Mandela and the late Prince Bernard of the Netherlands (The Star, 2006:1; in Ramutsindela, 2007:155). The association of Nelson Mandela with the PPF accorded transfrontier conservation iconic legitimacy, respect and made it difficult for states not to support the ideas.

The other significant observation is that the TFC concept was organized around Anton Rupert's philosophy of co-existence. He emphasized partnership between "man" and "man" on one hand, and "man" with nature on the other hand (Cape Times, 2006), hence, the GLTP was created as a result (Ramutsindela, 2007:155). As previously noted, there are contradictions that problematize the issue of co-existence between "man" with" nature" given the fact that conservation processes and institutions that have been put in place in the GLTP were at least expected to involve the communities. Unfortunately, no precise mechanisms were set up to ensure communities participate in the GLTP processes to derive benefits mutually, hence the GLTP is criticised for not being in accord with Rupert's idea (Fine, 2008:9).

This problem is seen as pervasive of late in the transfrontier conservation projects. Incessantly, the region is experiencing marginalisation of communities in transfrontier conservation that appear to contract the very founding principles of the progenitors of the projects. As comparative example to demonstrate these elements of cleavages and social exclusion within the SADC region in Botswana, for instance, some localized conflicts erupted between the government and the Bushman having been forced from Central Kalagadi National Park (part of the Kalagadi Transfrontier Conservation area).

In his address to Parliament in November 2008, President of Botswana, Mr. Khama described the Bushman's way of life as 'archaic fantasy' and called them to move with the changing times (Ndlovu, 2010:20). On the contrary, in Okavango Delta, (part of the Kavango-Zambezi Transfrontier Conservation Area), the indigenous Batswana communities have moved from being marginalized to mutual collaboration in conservation as they have been integrated in land use planning, conservation and natural resources management. There is recognition of the important roles that local people are "naturally" conservationists, and therefore can contribute to sustainable management of biodiversity (Mbaiwa et al., 2011:2). These divergent comparative revelations among the Okavango communities and that of the Bushman mirror how inherent unsystematic the implementation of transfrontier projects is at a country level and ultimately within the SADC region. The approaches used are not homogenous, and the implementation ideally shows quite substantially that authorities have adopted an 'all size fits all' approach. However, where communities are integrated and involved, it is important that it becomes easier to get their support and collaboration as opposed to taking a 'park approach' that is, in many cases of transfrontier biodiversity conservation has been noted to be usually exclusionary, therefore it generates widespread antipathy towards wildlife conservation (Mbaiwa et al., 2011:6).

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Researchers and authors who have done extensive research in transboundary natural resources management therefore have raised concerns. These concerns are questioning the modus operandi in transfrontier conservation flagships. While on study the transfrontier projects are presented as simple and intuitively removing territorial boundaries, spread benefits and development at a regional scale, and the people resident inside or adjacent to these conservation areas are envisaged to be the ultimate benefactors through employment creation improving their lives, there is little meaningful happening on the ground (Dressler and Buscher, 2008:452). In an apparent contrast, the communities and even Rupert might be turning in his grave for the mere fact that the communities, which he also represented at the earliest stages, seem not to be part of the development matrix. Some of the major concerns arise from the mere fact that co-existence between nature and surrounding communities remain nested in mistrust, suspicion and characteristically detested by the local communities because the governance of these transfrontier parks have remained far too long centralized. More essentially, the hypothetical tourism benefits trickling theory to the rural poor, it is argued here, for the ten years of the GLTP existence since 2002, the envisaged benefits are a pipe dream. To put it more clearly, a cursory empirical analysis revealed that no mechanisms are in place at the national and regional levels linking communities to ensure that they benefit.

2.13 The Implications on communities

The above ideological imperatives, transfrontier conservation objectives, declarations and statements, going forward, served to inform how SADC as a regional economic block yearning for change and transformation, in the true spirit of sub-regional cooperation and collaboration, has transformed inter-governmentally in pursuit of collective objectives that underpin ideals of a united and progressive Southern Africa. There is symbiosis with the African renaissance process at the sub-region and the continent at large, and this takes note of the importance of environmental issues that are so pertinent regionally and globally. Because of that, transfrontier conservation is deeply rooted in these objectives and ideological manifestations. In doing all this, the Southern African region faces enormous complexities in dealing with defining the roles of communities regarding their involvement in transfrontier conservation, particularly in trying to balance the equation of sustainable multiple land-use by communities for poverty alleviation and sustainable biodiversity conservation. The biggest challenges in these complex relationships with respect to the GLTP were identifies during the study as follows:

The prioritization of conservation and governance of natural resources in terms of joint management observably lacks community integration regarding multiple land-use practices such as farming, forests exploitation, water harvesting and agro-pastoralism as livelihood strategies for communities residing inside or adjacent to the GLTP. This lack of synergy has a huge negative impact on social and human development of communities. For instance, Sola (2004:253) highlighted that possible vulnerabilities can easily be created around communities, noting the example that income from the basket industry accounted for 20.5% of annual income of households in Xini (ward 15) in Sengwe community forming a strategic local livelihood practice. Sola (2004:260) further noted that the basket industry had not had visible negative impact ecologically on the availability and resource base of the area particularly the *hyphaene petersiana* plant. The reasons for this is that the people in Sengwe always harvest young leaves for basket making and no visible negative impact on that sustainable use of the resources so far can be described as environmentally detrimental at the time of the research.

However, this study is also persuaded to caution that it is critical to guard particularly against this complacency, especially in terms of tracking the gradual long-term impact that humans can have on environmental plants. While indigenous people in Sengwe and Makuleke communities have been utilizing *hyphaene petersiana* for sap taping, crafts and baskets making, utilize the fresh rachis for mats and the dry petioles for doors and chairs (Sola, 2004:246), it is also important to highlight that over time, this can potentially have some serious environmental consequences on the population of the species. In other cases, depending on the amount of leaf harvesting, the rate of regeneration can easily be exceeded by the rate of harvesting especially in these two areas where the population is exacting pressure on the available resources. The absence of evidence on depletion at the moment that Sola (2004) mentions, is not absolutely a sign post that indicates exclusive sustainable use, but probably may also show lack of long term scientific inquiry to determine the change that is taking place of the plant species and forest-use impact correlations, between use and species natural quality and diversity.

In addition, there are studies, which have been done in other areas, and the results are quite significant in this discourse. For instance Schwartzman et al., (2000:1362) gave the example of the Amazon, and cautioned that there is simply no doubt that human hunting of wild game where population are seen to be fairly small, just like with the cases of forest products utilization, can cause dramatic localized reduction in the density of game species. Those of forests that people habitually use, at times can easily become extinct with increased use for commercial purposes and population growth that also increase the demand for the plant product. The studies in the

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Amazon further found that 24 Amazonian sites, including extractive reserves and Indian lands where subsistence hunting in Amazon is practised, could result in profound changes in the structure of tropical forests vertebrate communities though three major aspects, which are:

- a) Shifts in relative abundance of different size classes.
- b) Significant reduction in the overall community biomass, and
- c) Changes in guild structure.

Interestingly, Schwartzman et al (200:1370) vehemently warn conservationists, biologists and conservation institutions to seek to strike a balance between the overarching conservation objectives and those of surrounding human communities. As argued earlier on, this is particularly important in efforts to achieve community support and collaboration at all levels as far as sustainable natural resource conservation is concerned, they say:

"If we give priority to protection of areas we deem pristine on the basis of a hypothetical 'permanent protection' and at the expense of supporting the constituencies in and around forests with interests in using forest resources to secure areas large enough to perhaps change the trend-we end up with nothing".

This observation is very important and critical with in view of transfrontier conservation institutions to involve communities in resource conservation or protection. Striking a balance between multilateral natural resource interest and those of the communities in order to give them some form of incentives to the local people, can serve a great deal in securing sustainable environmental conservation collaboration. Of essence is the fact that the management committees in the GLTP therefore need evaluation of the symbiosis between communal use of natural resources that will then inform interventions and appropriate governance systems needed in these areas for purposes of defining natural resources management, regulating access and utilization of the resources. By identifying this symbiosis through scientific means, negative consequential use of the resources by communities can be minimised. In a show of solidarity, Swatuk (2005:65) quoted Chapin (2004) who called that humility was in short supply among global purveyors of conservation, which manifestly find expression in bypassing local communities in transfrontier conservation matters. If anything, Chapin (2004) further noted that community consultation is done cosmetically, if not best described as tokenistic, with programmes and outcomes predetermined without community inputs. In his controversial article Chapin (2004:20) went further to argue that local people should be recognized as equal partners in the development, implementation of conservation programmes and use of natural resources in their territories, and he cautions that if patronizing them becomes the norm, transfrontier conservation will fail.

The fundamental point is, no one enjoys monopoly of conservation truths, and the local people, in their own humble ways can have something to say on matters of the conservation of natural resources. Presumably, they are better than biologists, who in many cases may be lacking experience of working with communities, and do not appreciate that because the local people are richer in indigenous knowledge systems about their environment, they understand the environment better (Chapin, 2004:19). On the basis that, it is highlighted here to illustrate the complexity in ecological discourses as follows:

- 1. The undefined role of communities: Unclear levels of local community participation in resource governance and lack of clarity on benefits sharing mechanisms remain elusive, leading to suspicion and mistrust between proponents of GLTP and the communities. For example, there are local expectations that it is a moral obligation for them as the inhabitants of the two communities to conserve transfrontier natural resources because conservation is linked directly to regional development (Wilshusen, 2002:20). However, the hypothetical community participation in the current governance affairs, ignore social and political realities (pre-existing use rights) to which interventions must adapt to if transfrontier biodiversity conservation is to have meaning in the lives of the local people.
- 2. In other dimensions, it has been noted in this study that institutional convolutions have created divergent competing interests on natural resource governance especially with respect to multi-level national and regional institutions where higher-level administrative structures take precedence in the governance process over local structures. This is based on the belief by many conservationists at various levels who literally view biodiversity conservation as a technical field that they assume that the local people have no full understanding. Hence, their ecological knowledge is mistakenly perceived with inferiority complex at the expediency of the superiority of scientific knowledge. Ideally, these assumptions complicate things, and potentially doom transfrontier conservation to failure when since it is based on untested hypothetical considerations. It is based on the top-down development discourse that has caused monumental project failures in the past. Of great importance of any success of projects are the broad-based bottom-up processes that tap from voluntary compliance of the local people. The top-down approach in nature conservation is contrary to contemporary conservation advocated by many developmentalists because the process is simply allows for

the broad-participation of the grassroots people, hence it is regarded as more people driven than governmentally led processed. To this end, it has been postulated that the people around the protected areas if consulted and involved, ultimately decide the fate of forests and wildlife (Wilshusen, 2002:19). In this regard, it is clear those communities that are excluded to input into transfrontier conservation development, when the very environmental decisions have a bearing on their lives particularly on the sensitive issues of their livelihood interests, easily abdicate from collaborating in conservation.

3. Pursuant to the above, the initial hype around TFCAs is that it took shape premised on African renaissance. It is being promoted in development within Southern Africa no matter how elusive it might be to the local people. The intention of many regional governments is to achieve regional integration and unite the continent through peace parks. It is, argued in this study that TFCAs are arguably catalytic to regional integration, with great potential to bring to an end among other plethora of problems such as poverty and again realizing the dream of African renaissance through ecosystems connectivity. Indeed, advocates of TFCAs in the SADC region are increasingly promoting and justifying the concept on this premise and are convinced that there is need for countries to take advantage of the diverse environmental economies of scale of each other and package TFCAs as single products for international tourism growth. Hence, developing of the region's economy is seen as partly depended on this future prospect of environmental cooperation at a larger regional scale. Drawing on this insinuation, the creation of the GLTP is parroted as a good ecological example that marries intricately to the political ecology of the African renaissance. However, it may not be as good as it sounds to the local communities residing in and adjacent to the parks because of the concerns that historically, parks exclude them from benefiting from the resources due to the nature of park governance. Generally, parks by their nature are 'protected areas' requiring some strict protection (Wilshusen, 2002:20). Based on evidence gathered, it is argued that while strict protection is required, there is also need to clarify how it can and how it should occur, taking into account local institutions that play important roles in conservation processes. In numerous cases, as confirmed by responses from the local people in the two communities of the study, multi-level and state interventions are seen as disrupting traditional institutions that also govern and self-enforce resource use, hence across Makuleke and Sengwe communities, the levels of dissatisfaction with resource governance in the GLTP is high. Clearly, it is anomalous to overlook the importance of how environmental decision-making and governance institutions at the local level shape peoples' motivations and abilities to participate in conservation.

- 4. Exclusive focus on ecological and biodiversity maintenance cannot guarantee successful conservation when communities as key stakeholders are excluded in the management of the natural resources. So much is expected of these communities in terms of collaborating in conservation of protected areas.
- 5. The tendency of the GLTP to impede local people from their cultural and social reaffirmations, ultimately cause social and cultural dysfunction and disruptions due to restrictions and threats of removals from their customary places of great importance. This study noted that this tendency directly overlooks the issue of how different cultural groups' perceptions, beliefs, environmental cultural practices and interactions with the natural world, can be harnessed as an intervening variable for positive conservation outcome. Hypothetically, there is oversimplification of rural communities' motivations and cultural practices to support conservation.
- 6. The governance processes in the GLTP marginalize local communities from taking charge of their resources because of rapid institutional changes that repose conservation power and authority in high-level state, regional inter-governmental and international institutions. Management of natural resources by indigenous people using traditional practices are viewed pejoratively. The general assumption is that local communities cannot guarantee protection of wildlife species. This assumption connotes local communities cannot adapt to social change.
- 7. Given the institutional set up of the administrative structure of the GLTP and subsequent governance aspects of it, the 'human rights activists' do not agree with the changes taking place on local livelihoods and resource conservation processes. This is arising from the mere fact that the GLTP governance processes are not providing resident communities with acceptable alternative sustainable livelihood options. The impact on communities' livelihoods and their capacity to locally conserve nature, has to be taken into account in the design and implementation matrix of the GLTP so that there can be measurable success of conservation based on collective and inclusive local collaboration. In this way, fears of landlessness, homelessness, loss of grazing land, loss of access to forest products as food and herbal medicines, loss of access to wildlife benefits and loss of direct participation in communal natural conservation, can be allayed completely.
- 8. This study also questions the widely accepted generalization that tourism businesses accrue huge benefits to communities through the 'trickle down' theory in the form of employment

creation and infrastructure development. While the macro-benefits from tourism at the national and regional level are spoken of highly, it is noted that the 'trickle-down theory' has emerged strong as the mode for the communities to benefit, but this cannot do much to effectively benefit communities on a larger scale. This is simply because from a neo-liberal model, which driving this development model, economic development is problematic since it is argued that:

"In contemporary times, neoliberal rationality informs action by many regimes and furnishes the concepts that inform the government of free individuals who are then induced to self-manage according to market principles of discipline, efficiency, and competitiveness" (Ong, 2006:4).

Two modalities are clear from this analysis on competition and commercialization of the resources. As such, neoliberal conservation that advocates for opening up of natural resources to forces of markets, entail that an increasing amount of life's facets are becoming embedded within a competitive market whereby communal natural resources, either found inside or adjacent to transfrontier parks, can be traded through monetary means (commercialization) to the global market. This is typical of the current non-consumptive eco-tourism and safari operations emphasis in Makuleke and Sengwe communities. This is good news to conservationists and investors as they are on a galore of reaping benefits from 'privatization' of the 'commons.' However, the question that arises is how competitive are the local people against the forces of private sectors to reap equally and optimum benefits to offset loss of livelihoods in those areas? This prompts this study to argue that the GLTP has a long way to go in addressing these complex modalities essentially in mainstreaming communities not only in the governance sense, but also in creating parity in the benefit-stream if tourism and safari business in the GLTP is to make economic sense to the local people. In other words, the ethicist point of view here, ardently implores that natural resources are part of the local people's livelihood and culture, and nature is not valuable for its own sake but embedded in human valuation, which only make sense for them to conserve them as integral to their survival (Pearl, 1989:221). Pearl (1989:222) went further to argue that every culture of a people, as well as every religion, has distinctive concepts linking humans to the natural environment. These concepts are embedded indigenous knowledge system, which is a force that motivate conservation also at the local level, only if communities see benefits from the resources, and regard them as theirs as well.

2.14 Challenging "The tragedy of the commons" discourse

The philosophical foundation of Peace Parks at different scales across the world in one way or the other, are inspired by Hardin's "tragedy of the commons" theory published 44 years ago in 1968. Southern Africa has not been exempt from this influence as already noted in the analysis on ideological imperatives underpinning transfrontier conservation in the SADC region. The importance of Hardin's theory is admired and has been adopted by many conservationists. In other instances, it has been lauded as one of the most influential theories in the conservation debate that has stood the test of time. This prompted Moore (1985:602) to argue that:

"If only I had a way, Hardin's 'Tragedy of the commons,' should be required reading for all students, and if I had my way, for all human beings".

The dominant legacy of Hardin's theory in contemporary conservation is its emphasis on the presumption that natural resources held in common property and open access such as land, wildlife, rivers, forests, air and oceans, are subject to massive degradation (Fenny, et al., 1990:76). Hardin (1968) insinuated that renewable resources, which are not privately owned are bound to be over-exploited and advocated therefore for the privatization of such resources, or at least to bring them under state control (Beuret et al., Undated:1). There is no doubt that the coalescence and collaboration of conservation organisations and strengthening of state institutions in controlling common and open access to resources, resultantly derives from the 'tragedy of the commons' clarion call as it were for privatization of resources that are perceived to be under threat from human activities. The 'tragedy of the commons,' is therefore, questioned as it ignores certain considerations in the context of Africa natural resource ownership systems. In other words, this study would argue that Southern Africa has different experiences in terms of resource ownership systems that put Hardin's theory difficult to relate wholesomely as a conservation philosophy. It is postulated in this study that natural resource ownership systems held by communities (communal ownership) cannot be regarded as 'open access' since there are local processes that regulate and mediate use through specific rules and values regarded also institutional webs embedded in rich indigenous knowledge systems. State and private ownership also exist. Access and user rights, are ascribed to various groups adapted to their conditions thereby setting a system of selfregulation, self-supervision and self-monitoring, exercised within local communities with sanctions applicable over abusers. The 'tragedy of the commons' clearly inspired ecological thinking and design of transfrontier parks, and the assumption mistakenly insinuate that there are no local regulations that ensure sustainable use in Southern Africa.

It is turning out that the 'tragedy of exclusion' of local people as the theory unfolds (Beuret et al., Undated: 1). Criticism in this study is that to assume that communities degrade natural stocks when resources are 'open access' or 'communally owned,' miss the point. This is because African communities by the very essence of their culture and long-standing co-existence in harmony with nature are known to be conservationist, and regard biodiversity as shared natural assets either in modernized or non-modernized communities. Beuret et al., (Undated: 3) further supported this argument and attest that the absence of the private and state ownership, and control, which Hardin intimated, is not and should not be mistaken to being synonymous with unrestricted access. Hardin (1968) presumed that absence of property rights result in free ridding and therefore overexploitation of resources culminate in extinction. To this end, it is rather unrestricted access (open access), not common to Southern Africa that leads to the "tragedy of free access" in place of the 'tragedy of the commons' (Bertrand, 1999:70). Ideally, the 'tragedy of the commons,' goes as far as it can, but it limits and ignores scientific reasoning and innovation that is taking place in conservation such that it leaves conservationist and people with presumably wrong assumptions. In that regard, the impression create is that the only viable option to sustainable management of natural resources is to privatize ownership of nature, thus putting biodiversity into the hands of private organisations, the state and elites who have money thus leaving out the local people. The result of that process is closing out the local people as discussed in the following sections.

2.15 Closing out the locals: Communities and transfrontier conservation

Establishment of the GLTP has been associated with the term "parks", which evokes negative reactions from different people depending on their political ecology. For many rural communities especially in Sengwe and Makuleke, it is synonymous with colonial experiences characterised by dispossession and exclusion of the local people's land and state-led "park models" epitomised by forced removals (Mbaiwa et al., 2011:9). To this end, Jones and Murphree (2004:63) argue that 'fortress conservation' sought to reserve places for nature conservation and separated humans from natural species. Fortress conservation is philosophically based on the intrinsic value of nature. It is biometric, and regards local people as utilitarian and anthropocentric (Jones and Murphree, 2004:63). Clearly, this resonates with 'environmentalism' and 'deep-ecology' conservation where nature is absolutised, hence, nothing should be done to disturb it (Schutte, Unpublished: 21). In this case, the 'park model' of conservation becomes dichotomous.

The selling point of the GLTP has been the opportunities from tourism potential, economic growth and general infrastructural development that come with tourism development. This derives from the popular idea that rural economies thrives in a sustainable way through encouraging nonconsumptive utilization of wildlife. This makes economic sense to some extent. However, while wildlife tourism certainly supports economic growth in Southern African countries on a national scale, this does not directly benefit rural communities. It is less certain and less appealing to local communities who have not had meaningful benefits so far (Murphy, April 2010). This research attests that how people benefit in the case of the GLTP process remains improperly defined. It appears that there are contradictions in cases where community channels outline the manner in which they benefit from wildlife where some CBNRM programmes exist. For instance, wildlife tourism brings benefits at the broader national and local level, thereby fostering cordial ecological relations. This is demonstrate by research findings in the Okavango region of Botswana, which demonstrates that trophy hunting of wildlife in safari or sport hunting, enable community-based tourism enterprises to raise USD1.7 million in 2002 (Mbaiwa et al., 2011:8). While there are distributional complexities when one analyses the per capita benefits to the households, generally, there are elements of direct benefits to communities. Paradoxically, the conservation rhetoric in transfrontier conservation is centred on tourism, and the impression created thereof is 'nonconsumptive use,' on the part of the community, yet in reality, sport or safari hunting imply "killing the game" or 'killing for commercial and sport use', thus, commodifying and commercializing wildlife and other natural resources. The point of contention here is that communities are not allowed to engage in such forms of wildlife use, yet this is the most lucrative business in the wildlife sector. Usually, communities are regarded as 'consumptive users', with disastrous consequences particularly in depleting natural resources and wildlife species. Paradoxically, the same wildlife resources are subjected to 'commercial and sport hunting' by private safari operators with the same impact on wildlife population.

A synergy is missing in this matrix to unite communities and state conservation agencies and privately to run businesses as a collective so that the local people can derive maximum benefits. This has to link also with local people's participation in making decisions over their natural resources. The current state of affairs where the local people have a limited role to play in transfrontier wildlife resources, typifies widespread suspicion communities have over ambiguous GLTP governance process. This ideally, creates mistrust in terms of conservation agencies and the communities, with the imposed limitations on their participation in natural resource governance affecting negatively on existing subsistence livelihood practices. In that context, it has been observed that areas have become playground of the rich to benefit more from tourism to the detriment of the local people (Munthali, 2007:55). The approach that communities are largely encouraged to venture into confine them to village tourism and cultural tourism.

However, there are problems with that development approach. In other words and more realistically, tourist who visit the villages under the new and not so popular concept that the planners are seriously experimenting, do not yield substantial benefits for a decent livelihood of communities. The concept of 'Village Tourism' may not materialize for the benefit most local residents. This study further notes that tourism, which is usually seasonal and complexly sensitive to political developments and natural changes. Ideally, it may not produce the envisaged monetary benefits from selling traditional wares to tourists in the village, as this is dependent on a number of factors. Again, when one compares the macro-benefits people realize from their existing traditional livelihood practices such as crop and animal production; cross-border crafts trading and forests resource harvesting for their livelihood, with just relying on' Village Tourism', it is unimaginable to prematurely graduate Makuleke and Sengwe rural economies into a tertiary industry that is not familiar with the local people.

This research takes note of the mere fact that tourism is subject to external market behaviour, which the local communities to not have control over. For example, the 2008 global financial crisis in Europe had a negative impact on their nationals to travel to Southern Africa or to other parts of the world. In fact, the European Union and the United States of America applied tougher external travel by their nationals to motivate domestic tourism in their countries. More essentially, regarding rural communities as homogenous in terms of tourism potential as substitute for other livelihood strategies is an attempt therefore, assumes that the sector will forever remain robust and insulated from both internal and external shock. It is argued in this study that this poses dangers in event of tourism collapsing. Tourism is a sensitive sector as shown above, which is susceptible to many shocks such as political perceptions and instabilities. The issues of personal security, safety and stability are the major considerations in a potential traveller's decision to visit any foreign destination of a country's overall political stability more than the hospitality and leisure part of it. If there are indications of possible domestic turmoil, this may result in a decision not to visit a particular destination no matter how beautiful it has been packed by the tour operators (Ankomah and Crompton, 1990:19). This sums up the situation with particular reference to Zimbabwe, which over the last 11 years since the launch of the GLTP in 2002, a sharp decline in tourism receipts were experienced owing to political and socio-economic problems the country was gridlocked in and going through. The turmoil in Egypt since 2012 has largely deterred tourists to avoid visiting the Pyramids of Egypt despite their medieval antiquity. In the case of Zimbabwe, while the tourism sector is on a recovery and growth trajectory since 2009 following the consummation of the Inclusive Government, 'village tourism' in Sengwe does not attract the required mass for meaningful income to accrue at the household levels. Hence, village tourism remains rudimentary and very low due to undeveloped tourism infrastructure and lack of product diversification at the village level. In addition, changes in the global economy and natural calamities, such as floods and outbreak of epidemics such as swine flu, in Europe and Asia, have had the potential to affect arrivals, thus affecting negatively on tourism performance as a new livelihood option. As a result, the unforeseen circumstances that directly affect tourism and its natural sensitivity as a sector, pose real threats on rural development and transformation in cases where communities rely on tourism dollar economy. It is argued therefore in this study that community tourism, as a 'non-consumptive use' should be supplementary by traditional livelihood strategies.

More importantly, 'tourism employment' remains elusive. Discussions that were held by the researcher with the Ministry of Tourism and Hospitality Industry officials in Zimbabwe (2012) alluded to the fact that the tourism sector would be growing. In their Policy, it is estimated that the sector will employ one person in every 12 by 2015, contribute 15% to the Gross Domestic Product by 2015 and raking in case of about 5 billion United States dollars again in 2015, there are limited signs on the ground for this improved performance to take place. This study notes with concern that the over-publicized tourism performance, and specifically the prognosticated employment galore, is not a homogenous benefit across households, equally negates the fact that not too many people in the rural areas can benefit substantially from it. There are obvious criticisms against over-emphasising tourism employment if one looks at the monetary benefits that come with it. In this view, not too many rural people are qualified to occupy managerial positions in the overall tourism sectors.

Therefore, the romanticized employment opportunities in tourism have absorptive limitation whereby it can employ only a particular number of people. Resultantly, the per capita spread of tourism employment does not compensate loss of existing livelihood practices in transfrontier conservation zones. The aggregate economic benefits that individual households derive from their traditional practise far outweigh what individuals get from tourism employment. As caution is needed to prevent a number of risks on local communities that come with lose of access to strategic natural resources. To demonstrate this, Munthali (2007:54) and Cernea (2006:1821-1823) used the Impoverishment Risk Analysis and Reconstruction Model to assess possible impacts on communities in resource rich areas that are indicators in assessing Sengwe and Makuleke communities risks scenarios outlined as follows:

Table 2.9a Conservation expansion risk scenario/impoverishment analysis of communities

Risk scenario	Risk scenario
1.Landlessness	Removes the main foundations on which people build their productive systems and livelihoods. It is the main form of de-capitalization and pauperization of local communities because natural and man-made capital assets are lost. The case of Makuleke is a good example. Forced evictions and restrictions from land have the potential to deprive locals of both the areas on which they live, and the land on which they generate an income through subsistence farming, harvesting of forests products and livestock production. In many cases, their losses are neither compensated nor replaced by viable alternative income source as a part of a post-displacement-reconstruction strategy. The communities "commonly express the view that conservation has taken their forest and forced them into poverty".
2.Homelessness	Landlessness comes with loss of land for housing and shelter, occurring on a temporary basis for many people before they are allocated some places to settle. In the GLTP, the establishment of Sengwe Corridor comes with its land-use demarcations that potentially affect residential plots. Homelessness, thus, creates a situation of loss of a group's cultural space, ties, social capital and cultural identity impoverishment, and recovering it, more often than not, is difficult. This can lead to a decrease in acceptance of the resettlement processes for purposes of conservation. Homelessness can further advance poverty and exacerbate antagonism between conservationist (conservation NGOs, government conservation agencies, conservancy owners) and the affected communities, which can be difficult to extricate due to complete erosion of trust.
3. Marginalization	Loss of economic power and sliding down towards lesser socio-economic positions becomes is a direct result of marginalization. For instance, average-income farming households become small, crafts producers may fail due to shrinking of markets (Sengwe is a good example in which the basket industry market has failed dismally over the last ten years). Regulation of livestock herd and ultimately leads to business as conservationist and government try to manage the livestock-wildlife interfaces in the corridors. This pulls down the community below the poverty thresholds because their sources of income and livelihood would diminish drastically. The loss of traditional rights dismantles traditional authority and local governance institutions. Generally, such rural communities are ethnically, culturally and enjoy lingual cohesion. Any changes initiated around these variables can prevent communities from internal social cohesion and non-consensual communal change disrupts social systems and lifestyles.

4.Increased morbidity and mortality	Increased stress and psychological traumas, increased vulnerability to illness as a direct consequence of what people go through.
5.Food insecurity	Diminished access to various natural resources based livelihoods increases the risk of chronic food insecurity. Changes in land tenure increases food insecurity and impoverishment can negatively affect the diets of the people making them susceptible to nutritionally health related problems. Without secure rights to land, local people cannot reliably produce sufficient food to feed themselves.
6.Loss of access to common property	Change in ownership regimes from common property goods to state owned or privately owned natural resourced managed as tourism entities, affect communities (loss of access to forests, water, grazing and farming land). This represents a form of income loss and livelihood deterioration that is usually uncompensated for the restrictions, or even displacements from their areas. Because much of traditional land-uses in Sengwe and Makuleke are communally owned and any loss of defined community, open the resources to regimes they have no control over to determine access and use of natural resources.
7.Social disintegration	Dismantling of community structures, communal social organization, dispersion of localized informal and formal networks, local associations, can be huge possible losses of social capital. Such disintegration diminishes social and political authorities, as forced change of lifestyles and social organisations affect the nucleus of existing beneficiary social links of the communities. This further complicates governance at local level and conflicts abound.

Source: Adapted with additions from Cernea (2006:1821-1823) and Munthali (2007:54)

The risk scenario helps to understand socio-economic and political disruptions arising from transfrontier conservation projects. It is potentially able to engender competing interests as regards to the interactions between livelihoods development through natural resource use and resource conservation by state, conservation institutions and the communities. Peluso, (1993:200) in her study in Sengwe, put forward that the relationships that exist between the local people and conservation institutions is not clear in defining areas for cooperation. This missing link and other ambiguities, conservation usually progress with little attention being given to social-ecology and livelihood contexts of the communities that are either living inside or adjacent to transfrontier parks. Accordingly, where communities have been encouraged to take a greater role in exploiting the economic potential of wildlife tourism in conservation areas, there is considerable success such as the Okavango Controlled Hunting Areas projects (Mbaiwa et al., 2011:7). However, too often,

insufficient support in terms of capacity building for the rural communities affects them negatively of the much-anticipated success in some rural areas (Murphy, 2010). For example, Murphy (2010) cited that high illiteracy rates are still persistent in many rural areas, which means that community members often lack the basic capacity to gain skills for effective manage of natural resources. In so doing, they have not been fully integrated in the wildlife tourism economy apart from taking up menial roles. There is evidence to the effect that local people are given jobs of being appointed as porters, grounds-caretakers, cleaners and cultural dancers. In most of these jobs, they usually earn little money. Most of the benefits that accrue are shared between government conservation agencies, the elites and the investors, with little or nothing going towards communities. It is important to highlight that, there is convergence of thoughts between state agencies in conservation and conservation organisations having a common approach in adopting a seemingly 'parks approach' and entrenching state control, synonymous with the colonial strategies that resulted in the local people losing their access to land. The importance of land and its natural endowments, from which people derive decent livelihood, is very important to several communities. In the case of Makuleke in 1998, one of the community members who was at the forefront of the land claim, Livingstone Makuleke, reduced listeners to tears when he spoke of how important land and access to it, with all that it carries was when he spoke on the topic "Voices, Values and Identities". He had this to say:

"To an African tribesman, land is the heart. Land and ancestral spirits are one. When we were forcibly removed from our land, we lost not only our livestock and sacred places, but our human dignity as well, to make way for wildlife" (Sowetan, 15 January 2003).

If anything, exclusion of the local people through changing resource governance and management regimes, only serve to complicate transfrontier conservation success as noted by Jones (2003:5) that the concept is more in opposition than it is in complicity with local people's livelihood expectations. In fact, Jones (2003:5) quoted Hughes's conference study of 2003, and observed that the Great Limpopo Transfrontier project is not as good for the rural people as it has been said, particularly, if one examines sharing benefits between the local people and the investors. In addition, the peripheral attention accorded to community concerns in the planning and implementing process of the GLTP transboundary conservation project demonstrates that communities have not much do. The GLTP has moved in its planning process from its initial community conservation plans as envisaged in the TFCAs, back" to "fortress conservation," as a park (Buscher and Dietz, 2005:1-2; Jones and Murphree, 2004:63). To integrate the national,

regional and international natural resource governance's impact on communities, this study puts it clearly that governance of resources has become state-centric, bureaucratic, regionalized and internationalized. Thus, this has created alienating scales of local governance processes, giving little room for the local people to participate. Ostrom (1990) hypothesized the theory of 'governance of the commons' in the sense that local communities have to be involved in decision making in natural resources in an effective participatory strategy to solve problems of resource degradation and over-exploitation. Ostrom (1990) further advised that this process entail institutional re-organization to the extent that it allows community engagement. Further to that, several scholars have argued in the recent past that countries and agencies that have programme supporting pro-poor community development agendas, often fail to empower the local people, let alone democratic local governance (Ribot, 2007:16). In view of this, Ribot (2007:16) conceived that public power, instead, is transferred to a plethora of institutions including higher-level institutions, non-governmental organisations (NGOs), private associations and private companies, to operate and exploit natural resources at the expense of the communities. Ribot and Larson (2005:20), further argue along the same idea that as much as power is transferred from the local people in natural resource governance, it is detrimental to the legitimacy of local democratic institutions, potentially leading to fragmentation of authority at the local level as well as closing out on the public domain. Ribot and Larson (2005:22) called this important public arena of governance as 'the domain of democratic public decision-making' in resource governance. If this public domain allows for local participation, then all vulnerabilities created out of various land and natural resource loses can be avoided.

In a provocative article in scholarship, Chapin (2004) mentions that the focus by governments and conservationists in transfrontier parks in which the exclusion of the local people is apparent, generally it is a deliberate move that seeks to move away from the local people and to keep away from supporting local livelihoods. Consequently, this again keeps these entities from the mere obligation of involving local communities in nature conservation. The promotion of transfrontier parks in which government agencies working with conservation organisations keep away from the people, Chapin (2004) maintains, is a reaction to the difficulties environmental organisations created through neglecting building the local capacity that they experienced with community-based conservation. Therefore, they have always needed to escape from the banal of local partners that organisations consider not very good ecological stewards (Chapin, 2004).

The unfolding drama in the development in the GLTP follows global conservation trends and priorities as set out in the Bali Declaration of 1982 and the 1987 report of the Brundtland Commission (Spierenburg et al., 2008:88). The institutions that evolved in the GLTP, including

state agencies, private sector companies, environmental organisations and development agencies, have limited links to communities that are directly affected (Wolmer, 2003:7;9).

2.16 Understanding the GLTP governance and conservation complexities

This section examines the concept of governance. This study argues that conventional understanding of natural resource governance and its associated institutions in the GLTP fail to focus on how to deal with the ever-increasing demands of the communities' yearning for participation in the management of natural resources. Ideally, there is uncertainty among Makuleke and Sengwe communities on the ever-impingement on their livelihoods and lack of participation in conservation. From the theoretical understanding of various governance processes, it became clear that the governance dynamics in the GLTP through its administrative structure and the scale construction influences behind them, neglect the everyday contexts within which institutions are located and the needed overlapping domains needed between different institutional arrangements to include local processes in the management of natural resources. The conclusions drawn from this understanding calls for a radical re-thinking of transfrontier park governance and a new conventional ways to viewing communities' resource-relationships from a legal systems, policy and property rights regimes that also enhance the rural people's conservation and resource needs. Perhaps, part of the important consideration is to have a new form of resource governance. The structure of the GLTP should be inclusionary in environmental decision-making, address imbalances of power dynamics and overhauling of sharp dichotomies between the local practices, the national, regional and international processes so that there is some resonance at all governance scales in other transfrontier programmes in the SADC region.

2.17 Overall Transfrontier perspectives

The advent of transfrontier conservation in Southern Africa heralded a new dispensation and added impetus to biodiversity and ecosystems conservation in the sub-continent. In the process of concerted transboundary conservation efforts, governance systems that have emerged with respect to the Great Limpopo Transfrontier Park (GLTP) appear to be at variance with local resource governance processes in terms of inclusivity. To argue that communities inside and adjacent to the GLTP participate in resource governance to fully derive benefits from natural resources in their vicinity, is a negation of the fact that authority and power mediating relations, is not reposed in local institutions, local values, norms and local practices, but state agencies and multi-level institutions. While accumulated literature shows the success of Community Based Natural resource Management (CBNRM), community engagement is limited and conservation

bureaucratized and technical beyond local people's comprehension. This paper questions the sustainability of this well intended programme given that governance trajectories evidently epitomize the ascendency and preponderance of multi-level institutions over the local systems and processes, thus, marginalizing the already marginalized communities. Consequently, the mechanisms for community benefits are not clear despite the promise of a galore of tourism benefits. It is argued that due to unclear local participatory institutional processes potentially undermine collaborative conservation of natural resources. This paper derives from literature from ongoing research and examines natural resource governance dynamics on transboundary conservation.

This section of the study discusses and explores resource governance institutional construction to understand how various institutional scales and perspectives relate with one another and impact on relationships of actors in conservation. So pervasive are the global and state-centric governance construction systems, rendering community institutions ineffective. Thus, we conclude in this discourse that this undermines collaborative conservation of natural resources and this has far-reaching ramifications on the sustainability of transfrontier biodiversity and ecosystem conservation in the GLTP. The paper concludes by calling for a re-thinking on resource governance processes so that it is in accord with local institutional dynamics, at least a synergy of the higher level and local process can result in effective cooperation in the management and conservation of natural resources. Generally, there is acknowledgements with respect to adopting and implementing inappropriate strategies to conservation governance and resource management. In view of this, one author has this to say:

"There is also increasing evidence that the imposition of inappropriate models of governance, the inflexible and inappropriate imposition of western political paradigms in inappropriate social contexts-can lead to the destruction of the indigenous social fabric as surely as did the wars of colonial possession" (Gartlan, undated: 218).

It is indeed critical to state that transfrontier Parks, transboundary conservation areas or simply Peace Parks, have phenomenally increased in Southern Africa. The increase is attributed to concerted national and supranational efforts to conserve remaining biospheres rich in pristine flora and fauna. Consequently, resource governance systems that have emerged, particularly taking the example of the Great Limpopo Transfrontier Park (GLTP), is seemingly at variance with participatory local processes meant to achieve effective and collaborative conservation realized under Community Based Natural Resource management (CBNRM) in Botswana, Namibia, South Africa, Zambia and Zimbabwe in the early nineties (Baldus, 1987). Current Transfrontier Parks or Peace Parks differential institutional governance construction characterize transfrontier conservation by being exclusionary and ignorant of the local resource governance processes. Thus, transfrontier conservation areas are viewed to create 'scale of marginality' in which the starting point for Transfrontier Conservation Areas (TFCAs) is the supranational level (Ramutsindela, 2007:102) rather than the local scale. Perhaps, it is understandable given the enormous and visible crisis of biodiversity loss. However, it is realized that Peace Parks governance institutions, adopt exclusionary conservation approaches, which is simply not sustainable even this manages to stave off some extinctions and save a number of crucial habitats. Is also ethically justifiable when it is imposed by those who have adequate means of livelihood and even luxuries, on those who are already living on the edge of poverty. It is noted in this discussion that ecological resources, function as interconnected web of life-supporting systems and local people's participation through their institutions, is therefore crucial to enable rural folk safeguard their livelihood needs and find motivation to collaborate for biodiversity and ecosystem management.

2.18 Governance dynamics and institutional construction

Resource governance in the GLTP lies in institutional relationships, particularly concerning communities as local actors in the conservation matrix. It is important to note that communities in the GLTP depend predominantly on natural resources from their areas since they are largely subsistence sedentary agrarian crop growers and communal livestock breeders. Above all, they rely on forest products. How one understands institutions that govern human-environment relationships in the GLTP, rest on socio-ecological analysis at various levels. In keeping with institutional construction, a theoretical analogy of influences at different levels was considered in the context of intuitional processes that help to comprehend the restructuring of relationships in the GLTP. These issues are dealt with by three considerations in the following analytical framework as the 'endogenous,' 'exogenous' and the 'environmental' factors that determine institutional variables and operational issues with far-reaching implications in mediating human-environment relationships in transfrontier conservation projects as follows.

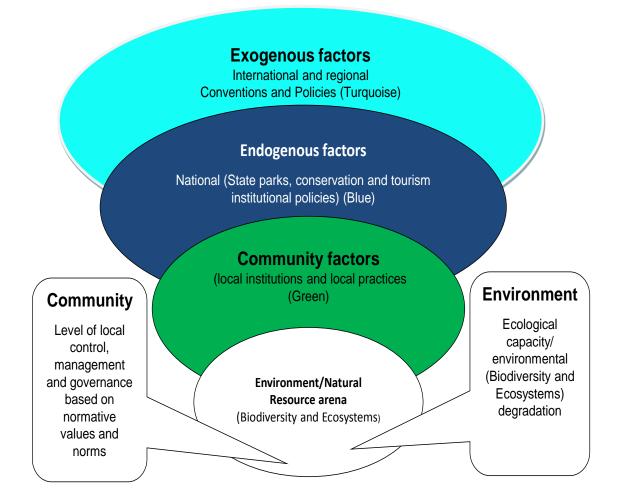


Figure 2.3 Institutional construction factors in resource governance

This conceptual framework shows components that affect stakeholders when looking at institutions that define interactions in transfrontier conservation governance. Each level forms a central component of the overall system whose role fleshes out through stakeholder authority, power and behaviour that informs and determines influence each level has over the other in the governance and management of natural resources with respect to ownership rights, access, utilization and conservation. It is perhaps crucial to highlight that interdependencies across levels undoubtedly exist in all the four construction levels. This is important in framing and interpreting relationships when it comes to analysis of institutions in the GLTP's communities. Governmental institutions and the manner they behave in relation to communities, depends on exogenous influence variables. The challenge is to figure out an understanding of these, postulating how different kinds and levels of variables are directly and indirectly related in particular aspects of constructing governance institutions, how they affect communities and ultimately conservation,

which is the focus of this study. To facilitate comprehension of the four components above in empirical terms, this study integrated framing of institutional construction factors analysis and some aspects of the Spiral Dynamics as follows:

Exogenous factors (Turguoise): This is one of the most crucial and wider global arenas with enormous influence on state actors through conventions and global policies. According to Don Beck (1999), the global level is shows compassion, harmony and therefore assumes a holistic approach to issues on global consensus. For example, the Biosphere Conference held in Paris in 1968 followed by the 1972 Stockholm Conference on human environment that resulted in the formation of the United Nations Environmental Programme (UNEP). Treaties and ad hoc agreements were concluded by different countries for purposes of joint governance and management of biodiversity and ecosystems particularly wildlife resources. This has been done for mutual benefit of the participating countries and the 1968 Algiers African Convention on the Conservation of Nature and Natural Resources, the 1971 Ramsar Convention (Van der Linde et al., 2001:6), and the World Heritage Convention (1972) provide frameworks for cooperation and meeting specific conservation targets. The Convention on International Trade in Endangered Species (1973) also came into force, requiring interstates collaboration in conforming to practices for trade in species listed as threatened (Van der Linde et al., 2001:6). The Bonne Convention on the Conservation of Migratory species (1979) called for elimination of obstacles to the movement of migratory species, interstate collaboration and consultation on curbing poaching and exchange of interstate information. As Van der Linde et al., (2001:6) clearly state that, the Convention on Biological Diversity (1992) articulates the need for collaboration and interstate consultation on the management of bioregions ecosystems and biodiversity (Van der Linde et al., 2001:6). Significantly, such environmental governance therefore directly and indirectly affects communities through supranational institutional considerations as espoused by the conventions. The challenge in this context is how these governance and institutional processes interlink with local processes.

Endogenous Factors (Blue): The endogenous factors refer to the internal systems of institutional construction at three levels. These are the national, the community and the environmental (biodiversity and ecosystems) levels. The national construction level is typified by legislation formulation and enforcement, determine what is right and wrong, is absolutistic in ensuring obedience and purpose (Don Beck, 1999), which derives from the global system 'exogenous' factor (Figure 1.1). Usually, conservation of natural resources is done according to set rules and regulations, hence the blue colour coding (Don Beck, 1999). In this case, the focus of the national construction is the local echelon where both exogenous and endogenous (state level) institutional

constructions superimpose authority and power in resources governance on communities even without their input. In this case, key institutional sets with respect to the GLTP follow this design process as follows:

- 1) Parks conservation operating rules, policies, regulations and tourism activities determine socio-economic conduct and well-being of communities.
- 2) Parks derive legislative and policy authority from the exogenous level (global level) in the form of signing, ratifying and domestication of international conventions that are localized or domesticated, manifestly determining local processes in terms of legislation and policies that govern participation and livelihood options communities can pursue in ecologically sensitive biospheres such as the GLTP.
- 3) Benefits and cost for conservation are also determined by the national level for purposes of sharing of both benefits and cost of conservation in a legally binding arrangement within set rules and regulations. For example, the Communal Areas Management Programme For Indigenous Resources (CAMPFIRE) in the case of Zimbabwe and the Makuleke Community Property Association Contractual Park (South Africa).

Community: The community is the recipient of hierarchical orders from the national and global levels. At a local level, it thrives on communal networks, localized interactions across multiple households usually based on normative values and norms mediating interactions in a self-sustaining and self-governing manner. It is egalitarian in nature, characterized by communal approval, equality, relativistic, personalistic, sensitive and pluralistic (Don Beck, 2006). However, this construction with respect to communities, as this study shall show is diminishing, giving in to the hierarchical national and global ordering changing the manner of resource governance in terms of defining community-environment relationships. In short, the responsibility of resource use, access, ownership and conservation in Peace Parks, lie within state institutions as custodians of natural resource, and communities play a seemingly insignificant role as eco-tourism companies and conservation organisations have substituted them.

Environment/Natural Resources: This is the field of practice in terms of conservation governance (biodiversity and ecosystems). The intention of the global and the national levels is to optimize resource use for socio-economic and political benefits at a macro-level as these resources constitute the 'global commons' (Hardin, 1968), hence they should be prevented from

degradation. However, this hypothetical consideration ignores, in many cases, the local communities generally perceived not to be so good environmental stewards. Environmental conservation and leadership, given the global and national influences, mean that transfrontier governance power is literally the responsibility of state agencies as environmental stewards. The agencies functions as the owner, manager, seller of environmental goods and services in line with government policy (Hemson Draft Consulting Report, 2010:63) in which the community is unable to do.

However, there are strong arguments that suggest that because communities derive economic and sustenance benefits from natural resources as they depend upon them for livelihood inevitably motivates them to take care of nature. Thus, international (global) institutions should complement the local level processes by supporting and rewarding local efforts toward conservation without bypassing nation state institutions (Agrawal et al., 1999:631).

Two main themes that needs to be taken into account when looking at involvement of local communities have thus, emerged as the protection of existing practices, resulting from the rights surrounding indigenous issues and a mixture of new responsibilities brought by the new environmental stewardship and the governance architecture that accompany it (Agrawal et al., 1999:631). Under normal circumstances, local community participatory governance processes should work as a stimulant for effective conservation. From an exogenous perspective as in Figure 1.1, the Convention on Biological Diversity (CBD) as a global policy framework, requires that communities be involved, hence state parties for instance, Costa Rica, Tanzania and Mongolia provide good examples on how global concepts permeated into national legislative systems down to the local communities with varying degrees of strength (Fach, Undated:24). In fact, Cotula (2007:54) goes further to indicate that it is critical in the construction of institution for resource governance to vest collective resource rights with private legal entities established by the local people as resource users. This thrust is what the CBNRM in South Africa, Botswana, Namibia, Zambia and Zimbabwe achieved in the late 1980s and early 1990s (Twyman, 2000:325; Bond and Frost, 2002:8 and Cumming, 2008:61). In understanding these issues and the institutional relationships in the GLTP, this study examines Makuleke community, one of the few communal areas affected by the GLTP processes.

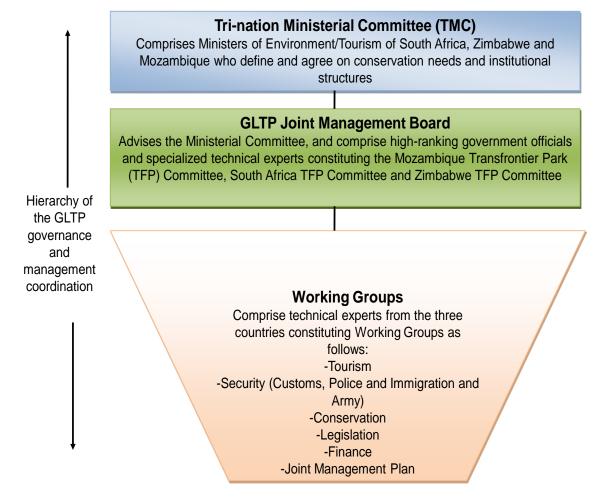
2.19 The GLTP and community relations

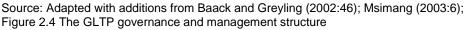
In Southern Africa, as with other parts if the world, transfrontier conservation have increased phenomenally. Clearly, what emerges out of this process is that conservation has become inevitably state-led; with agencies playing a critical role and institutional design for resource, governance and management thereof are state-centric. This development process and the governance structures set are embedded in negotiations and socio-ecological diplomacy relating to bilateral, trilateral or multilateral conservation cooperation. Agreements, thus, have been concluded by state agencies represented by top bureaucrats either at ministerial or presidency levels such as Memoranda of Understanding, protocols and international treaties, which contain the rules, frameworks (should) guidelines for action plans for the consolidation of negotiations in environmental diplomacy. This process as noted by Buscher (2009: 121) is the domain of the state, the basis upon which communities do not contribute effectively to the construction of institutions for resource governance. Yet, this reasoning ignores the simple reality that these communities have naturally been participating in 'unofficial' transfrontier conservation, particularly looking at the communities surrounding the GLTP on either sides of Zimbabwe, South Africa and Mozambique.

Based on 'state-centrism,' in the hierarchy of GLTP resource governance, communities are therefore not involved. Hence, decisions taken at that high inter-governmental level legally bind nation-states and citizens alike to comply with set out practices officially declaring the existence of Transfrontier Parks (TFPs), its institutional functionalities and the relationships of stakeholders. Unfortunately, and regrettably, national processes usually do not translate and guarantee equal opportunity for communities to define institutional interfaces with their local processes and functionalities pertaining to natural resource claims under customary arrangements. The simple reason for this is that formal international treaties, protocols, memorandum, laws and rules are negotiated and concluded by representatives of sovereign nations (Buscher, 2009:121), and not by community members since they are a microcosm of society. In so doing, the construction of institutions of natural resource governance, is dependent on several socio-economic, ecological, and most importantly, political considerations of governments.

In the Figure (1.1) the analysis showed the global, national systems working together, while the community is the recipient of already made decisions, which is argued by Dzingirai (2004) as 'disenfranchising at large' process with serious implications on the livelihoods of the local people, let alone their participation in resource governance. For example, Figure 1.2 below shows the governance structure of the GLTP. As captured in Figure 1.2, the Tri-nation Ministerial Committee

(TMC) is the highest policy decision-making organ of the governance structure, which according to interviewed local representatives in Makuleke, decided that the Community Working Group be abolished, and the local issues will have to be dealt with by partner countries. The TMC is supported by the Joint Management Board (JMB) as the main implementing agent of conservation programmes, and works closely with various Transfrontier Park (TFP) Committees at a country level. The JMB relies on technical contributions from Working Groups (WG) on issues such as tourism development, security, immigration and customs, legislation, policy and law harmonization, biodiversity and ecosystems conservation and projects financing within the GLTP development zone.





2.20 Transfrontier park governance: A Local disconnection

It is essential to highlight that the absence of the Community Working Group in the GLTP governance structure is of concern in as far as local participation is concerned. Ideally, the trend across TFCA/TFP programmes now turns out that community participation has drastically diminished. This is contrary to the argument that, often, communities have in place their own conservation practices, including elaborate and effective institutional systems, whose roles were taken over by bureaucrats through crafting official regulations based on state owner ship of natural resources (Borrini-Feyerabend, 2004:20). Therefore, there is huge concern on 'multi-lateralization' of natural resource governance with authority and power residing in national and international organisations. Some have authors criticise inclinations towards giving communities a lot of influence in biodiversity and ecosystems conservation and claims on natural resource by arguing that 'the kindest statement one can make about such claims is that they are biologically illiterate' (Gartlan, Undated:219). Such characterisation potentially undermines local motivations to participate effectively in natural resource conservation and it is saliently manifesting in less participation of local communities. However, other ecologists a counter such perceptions by a more rights-based and legalistic consideration agitating for communities to use legal tools to tackle unbalanced power asymmetries and have a greater control over environmental decisions and processes that affect their lives (Cotula and Mathieu 2008:15).

In view of the GLTP governance architecture, this study notes essentially an emerging dominant ideology underpinning transfrontier conservation as that seek to emphasise that people are bad for natural resources. Institutions, policies and practice have been crafted seeking to exclude people, discourage all forms of local participation and concentrate conservation power and authority in the hands of state agencies as well as investors in ecotourism based on non-consumptive tourism. This style of conservation in Transfrontier Conservation Areas (TFCAs) and TFPs, have neglected local people, their indigenous knowledge and management systems, their institutions and social organisation, and the value to them of wild resources (Pimbert and Pretty, 1995:2). In view of this, the key figures interviewed indicated that the cost to conservation will increase as the local people will ordinarily withdraw their support of TFPs and social conflicts will grow in and around protected areas, and conservation goals themselves threatened.

In view of these debates around transfrontier governance, the unbalanced distribution of power and authority in the GLTP governance architecture, mirrors potential problems with implications on communities' participation in conservation, and at the same time affects resource utilization and accessibility by the local people who depend on them. Evidence from Makuleke case study

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from a research covering Sengwe community in Zimbabwe will help to understand the local governance efficacies and local perceptions over the GLTP resource governance process.

Makuleke community and its resource governance process in relation to the GLTP is a 'hot' topic. Governance' determines the societies' wellbeing and the variables constituting it are difficult to tackle (Graham et al., 2003:1). More importantly, it has to be noted that environmental resource governance is not a concept confined to the exercise of power directed exclusively to state function or the public sector, but community structures and other key stakeholders as well complement state institutions in complex relationships. To this end, Newman (2001: 12) supports this view by positing that the states need expertise, financial resources and collaboration that are essential to institute effective governance and they have to rely on a plurality of interdependent organisational networks, relationships, actors and institutions from within and without their boundaries to complement their efforts in governance. It is not surprising that in the case of the Great Limpopo Transfrontier Park, collaboration has been crucially centred on state agencies such as the park authorities from the tri-nations of Mozambigue, South Africa and Zimbabwe. The Peace Parks Foundation provides technical and financial support towards the park's conservation and implementation of strategic trilateral development plans thereby complementing the agencies and other crucial governmental structures. What comes out amiss is the link with community structures, and as shown in Figure 1.2, the Community Working Group was abolished. Perhaps one important highlight that needs to be emphasised is that the resource governance in the GLTP from the onset, remained largely governmental, hence this created challenges particularly on the inclusion of the local people.

To understand this, we asserts that this disconnectedness with local institutional processes in terms of resource governance puts local natural resources management, sometimes on a collision course arising from a diversity of competing resource interests that are not harmonized and holistically understood from the state, conservation organisations and communities. One aspect clear is that an empirical study in Makuleke and Sengwe communities in South Africa and Zimbabwe respectively, showed that divergent interests are not easily reconcilable especially when it comes to governance processes. This is particularly with respect to communities arguing that their exclusion from participation in environmental planning and decisions thereof taken on their behalf, remain a preserve of government institutions and their partners. It has been indicated on the onset of this paper that there has been coalescence of interests between state entities and conservation organisations around common worldviews regarding environmental governance. However, this 'marriage of common interests' fundamentally lacks local input in the conservation

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discourse. This creates a huge challenge in that the scales of governance of natural resources, from institutional construction as the institutional construction framework (Figure 1.1), gravitates towards higher levels taking centre stage with little incorporation of the local people, and minimum broad-based local participation of communities. This paper is cautious to note that worse than ignoring local knowledge and skills, many initiatives and projects have ignored existing formal and informal institutions. World over, it is becoming a common practice that even on small conservation and protected areas not only in Africa, but in Asia as well, the propensity to avoid and exclude local communities in the governance and management of natural resources is appalling. In the Philippines, for example, the law establishing the National Integrated Protected Area System claims to have the "preservation of ancestral domain and customary rights within protected areas as a management objective" (DENR, 1992).

However, it is of interest to indicate that the law also aims to put protected areas under "close management, control and study" so that "experts" can decide where, when and how local communities can extract natural resources (DENR, 1992). As a result, local systems of decision-making and resource management are eroded and the bureaucracy and professional bodies replace local institutions. Similarly, in India, State control over natural resources has led to "severe conflicts with the local populations attempting to maintain their customary rights to resources. In the process, the local traditions of resource conservation have been increasingly disrupted or have broken down altogether" (Gadgil, 1992). Reflecting these experiences on the GLTP, there is a link and worrying that the incessant sidestepping of local governance processes can potentially affect a good intention of transfrontier conservation. The Conservation Working Group's position during the Kavango Zambezi (KAZA) meeting in Maun, Botswana, involving Angola, Botswana, Namibia, Zambia and Zimbabwe) over the proposed Traditional Leaders Forum in KAZA expressed disapproval of the proposal arguing that the issues pertaining to the local needs be left to be dealt with by partner countries (KAZA Conservation Working Group minutes, 2012:7).

Local organisations are crucial as even such proposed Traditional Leaders Forum enables local leaders and the broader community to participate in conservation and leaders to adjudicate sustainable use of biodiversity and ecosystems. This is informed by the fact that traditional leaders, in their own humble rights, are custodians of culture, reservoirs of rich indigenous knowledge in their communities, hence they can play important collective roles in the bigger TFCA/TFPs resource governance and resource management. As Michael Cernea (1993) puts it "resource degradation in the developing countries, while incorrectly attributed to `common property systems' intrinsically, actually originates in the dissolution of local level institutional

arrangements whose very purpose was to give rise to resource use patterns that were sustainable". Thus, this study argues that local groups enforce rules, incentives and penalties to institute behaviour conducive to rational and effective resource conservation and use at the local level. For example, even in marine resources straddling vast territorial waters, the Marovo Lagoon in the Solomon Islands anglers/fishermen rely on complex, unwritten local resource governance rules on ownership, management and use of marine and agricultural resources (Hviding and Baines, 1992). It is indicated by the author that rules specify fishing and cultivation methods and limit the period and quantity of fishing in areas threatened by excessive off-take. As such, social commitment to sound ecological resource management is managed successfully and effectively through a set of flexible and equitable access mechanisms to resources, based on exchange of rights to use resources and rules on inheritance (Pimbert and Pretty, 1995:12).

The same researchers note that although the system is currently under pressure from increased commercialisation of fishing and incremental population dynamics, the local communities have equally devised resilient and adaptive change to accommodate successfully these developmental changes within their customary frameworks and cultural practices to meet the change for betterment of their livelihoods and mutual participation (Pimbert and Pretty, 1995:12). Thus, community management based on customary marine tenure is proving to be the an alternative option for both local governance, which can be integrated into other systems of multi-level governance resource governance and management while ensuring that there is sustainable use of resources (Hviding and Baines, 1992).

Bringing contexts closer home, this paper noted that the governance, preservation and adaptation of informal customary systems of natural resource management in the GLTP generally have not been taken as a national priority as an integrated process in transfrontier resource management. In fact, Mehta et al., (1999:8;9) argue with respect to marginalization of community institutions representing rural people's interests that forces of globalization brought in new forms of uncertainty and inevitable vulnerabilities, and increasingly, the rural practices and institutions are caught up within global processes of change. For example, biodiversity and ecosystem management are linked to international trade and agreements on natural resource products and markets, global commodity chains and global capital flows (Mahta et al., 1999:9). As such, this paper notes that rural governance processes, local livelihoods maintenance and natural resource claims, utilization and conservation practices are gradually and tenaciously marginalized in a newly constructed multiple resource governance networks. This, we argue, marginalised, the already marginalised communities, which Dzingirai (2004) referred to as "disfranchisement at

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large." Thus, despite the demonstrated success of the Communal Areas Management Programme For Indigenous Resources (CAMPFIRE) projects in devolving proprietorship of wildlife and other resource from central government to district councils in Zimbabwe, there is lack of evidence to justify that steps have been taken to delegate proprietorial ownership to the community, especially in the context of the GLTP framework. Because many local governmental authorities do not trust local communities that they can take the right decisions, such initiatives do not yet have the formal combination of production, management, authority and benefit necessary for an effective community-based regime of conservation and management (Murphree, 1993:6).

2.21 Resource governance analytical framework

Before tackling this matter of synergies and the effects, they have on local resource governance processes, it is important to highlight that the understanding of transfrontier governance discourse in its pragmatic sense as it applies in transfrontier environmental processes, is that there is scarcity of researched information about resource governance as relating to transfrontier conservation. Perhaps what has emerged from literature is that the accumulated information tends to be coming from commissioned consultancy by government, hence, the research agenda and presumably, the outcomes are pre-determined. As such, the thrust has been to defend governmental policy and structural configurations. What is currently available therefore is vastly accumulated knowledge derived from Community Based Natural Resource Management (CBNRM) programmes, parks and protected areas. This has to be linked to how the institutional governance processes interacts with communities, multi-level government agencies and conservation civil societies operating within and outside local communities in the governance discourse in the conservation of natural resources (Buteau-Duitschaever et al., 2010:33). The issue of conservation civil society in the 21st century, thus, cannot be ignored, and one can only do so at the peril of reality and contemporary deductive and inductive logic. As Buteau-Duitschaever et al., (2010:32) noted public governance systems exist because both civil society and governments have found each other and realized the importance of collaboration in order to have governance models that are more efficient and viable and function well, especially when it comes to dealing with complex issues.

As a result of this realisation, the multiplicity of contested claims over access, ownership and use of natural resources by various users, governments find it difficult to go it alone in conservation because of the amount of resources and expertise needed are enormous. Ideally, any action that the government can take therefore would also require legitimacy, and in a fast globalising world, outside actors in conservation play an important role. Thus, by engaging conservation organisations at regional level such as the Peace Parks Foundation and other international conservation financing and policy organisation, governments are adopting globally acceptable conservation principles in line with international obligations. They, in the process acquire international legitimacy and recognition in which international conservation organisations can enhance their effectiveness through partnerships when dealing with nature conservation policies and programmes at a country level. However, one important aspect to note is that the deliberations and agreements they conclude at higher levels, in many cases, have little or no input from their peripheral communities to be affected by those policies.

Be that as it may, Pamela Martin (2010:15;18) examined interactions in park governance, which she finally described as complex and synergistic, with serious boomerang implications on those affected by the governance regimes. She further noted with concern that this entrenches the state's traditional dominance on natural resource governance (Martin, 2010:15;18). Deducing from Martin's analytical study of dynamics of global governance networks in her paper "Global Governance from the Amazon: Leaving Oil Underground in Yasuni National Park, Ecuador," this study adapted this framework to analyse conceptual interactions of resource governance contexts of the GLTP. This model can be improved through further research to provide a basis towards formulation of a resource governance framework suitable for transfrontier conservation governance.

Figure 2.1 and 2.2 illustrated how ecological global, regional and national governance architecture operates having varying effects on communities. The governance regimes and the networks are mainly associated with policies and programmes regarding planning, regulation and management of natural resources to mediate ownership, access, allocation of resource rights and consumptive and non-consumptive uses. Perhaps, it is crucial to point out that the influences exerted on user communities regarding natural resource use, particularly local claims show imbalances in ecological power dynamics. Generally, there a double edged power asymmetries from state institutions, outside conservation institutions, regimes (global influences) and policies as in Figure 2.1 (exogenous factors). All these factors interact invariably in different ways, exert sustained enormous pressure on local user communities and their resource governance institutions with predictable effects on community livelihoods, and can undermine locally based sustainable resource conservation. Figure 2.3 attempts to integrate and analyse the flow of interactions with and its boomerang effects.

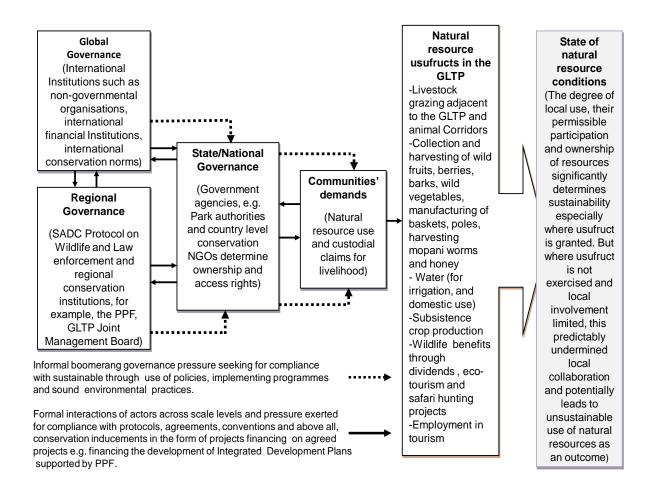


Figure 2:5 An analytical framework of stakeholders' influence and resource outcomes

From the above theoretical framework, it is argued that multiple custodial claims and use rights at the community level that multi-level (global, regional and national) resource governance regimes seek to dominate in terms of governance through crafting of policies and institutional design, overlook the fact that transfrontier adjoining areas have traditionally been inhabited or used by indigenous and local communities. Thus, Pimbert and Pretty (1995:9) argue that often, communities have in place their own conservation governance practices, including some quite elaborate and effective systems, which were 'replaced' by official regulations and conventions based on state governance systems and ownership of natural resources. Many of the indigenous and local communities apply a variety of management regimes either traditional or conventional for conservation of the resources based on their culture and history.

In parallel with these observations of transfrontier conservation governance, there have also been recent ecological theoretical and knowledge mistakes made as to reason that these local people lack the scientific knowledge on conservation. This has been demonstrated by Steve Gartlan (WWF country representative for Cameroon) in his journal article that "claims for land and territory are often vigorously upheld indiscriminately by social anthropologists, the human rights movement and increasingly by the orthodox conservation movements on the dubious of indigenous rights" (Gartlan, undated:216), and he gives Africa as his particular reference. It has become increasingly clear that existing ecological science and the governance systems function out of perceived local incompetence and institutional knowledge deficit, thus, ignoring the uniqueness of indigenous knowledge systems and local process in its historical context. Pimbert and Pretty (1995:24) counter such assumed scientific wisdom by arguing that understanding the particular history of a community and their interactions with the ecosystems is critical to its current management processes to modernise. Right through literature, there is consensus among researchers that ecosystems are dynamic and continuously changing, and this has very significant implications for management principles and practices that have to change accordingly, but the question is that the change, regrettably is coming from the top as opposed to initiate it from below, make it more participatory to achieve broad based collaboration. The obvious conventional view therefore, insinuates the notion that local governance systems largely enable human interference with ecosystems, and cause a depletion of biological diversity. This conventional view has justified the removal of people from national parks and restrictions on the use of protected area resources (Pimbert and Pretty (1995:25). However, the communities bordering the GLTP have strong historical aspects conservational in character ranging from outright emphasis on resource use to an emphasis on respect and preservation, guided by spiritual, cultural or aesthetic objectives with the latter based on strictly protected elements such as sacred groves or areas with limited and codified access and use (Oates (1999:xvi). In fact, this literature study has noted a variety of community management efforts, be they strict protection or use-oriented, locally ascribed governance and management in conserving biodiversity and associated ecological service and cultural values existing in Makuleke and Sengwe communities that are inside and adjacent to the GLTP respectively.

Looking at the at Synergistic boomerang framework in Figure 1.3, the global, regional and state actors play a critical role as already alluded to in the natural resource governance. As a result, two hypothetical formulations link natural resources governance with the wider actors as follows:

- 1) At the international, regional and national levels, the natural resource governance regimes impose ways communities use, own and manage natural resources.
- 2) The higher level governance systems (international, regional and national levels), make decisions as they assign responsibilities as well as rights to ensure the amount of use of natural resources, and the types of resources that can be used, and at the same time sanction or punish wrong use (illegal exploitation).
- 3) The resource governance systems locally vary in transfrontier parks depending on institutional arrangements existing in the community widely articulating rights of use, access and participation. What may happen in Makuleke community in Kruger National Park may not be the same with Sengwe community in Zimbabwe despite the two communities being part of the GLTP initiative.

Taking it from the framework in Figure 1.3, this study notes that global governance actors and their systems interface with regional governance actors and collectively, exert tremendous influence on individual states. Equally, each of them (global and regional governance actors) can correlate individually with the national level directly or indirectly in influencing environmental resource policies and programmes at a country level. In this institutional interface in resource governance, the state represents the claims. The pressure incontrovertibly comes in different forms to the state varying from policy requirements, policy inducements to recipient countries such as financial aid, collaborative technical support and cooperation (Martin, 2010:19). Therefore, natural resources in this case, provide a uniting focus for the practices of governance and a critical occasion for collaboration among a plethora of higher-level actors in environmental governance (Mangones, 2004:13). In Figure 1.3, it is noted that the higher-level actors' intensions seek to influence the direction biological, ecosystems conservation and other development programmes happen without undermining the resources in general. If there is compliance on prescribed standards and principles of governance of natural resources by user communities, then hypothetically in terms of the Figure 1.3, the natural resource conditions at the last lap can be considered as 'sustainable.' However, if the local people realize that there is abrogation of their resource rights (hard edge restrictions on resource access without their consent); this study postulates that the likelihood that a zero-sum game in the use of natural resource may occur resulting in a condition of depletion of nature and the ultimate environment can undergo 'unsustainable' biodiversity and ecological changes.

2.22 Transfrontier conservation 'technicised'

Through technical expertise, ideas and diffusion of information, international and regional actors can foster conservation values that result in social ecological consciousness and pressure for change in conservation policies and institutions. As a result, global and regional actors influence environmental behaviour worldwide and since states may lack the prerequisite media articulacy, expertise, scientifically researched information and financial resources that the actors have, the degree of multi-level superimposition of values, institutional design, policies, programmes and disregard of local considerations are high. The states, through its national structures such as parks authorities further superimpose the values cascading down to the communities through local government administrations. This changes community-environmental relationships, in the majority of cases, having an effect of undermining local governance processes, conservation and impeding local livelihood enhancement. To this end, Ribot (2002:12) cited the example of South Africa, Burkina Faso, Zimbabwe and Uganda and argued that there is a troubling convergence of state institutions and donors' efforts to find the 'real,' 'conventional' natural-resource managers to empower them to manage the resources. National Park institutions analysis, epitomize the 'conventional' natural resource managers and government bureaucrats in the Great Limpopo Transfrontier Park (Figure 2.2), and the local people in particular are not part of the GLTP governance structure.

At the same time even if the 'conventional' natural resource managers were to give powers to communities, the experience of CAMPFIRE in Sengwe as most respondents showed, does not strengthen democratic decentralized in natural resource governance because the state institutions are well-known for resisting with authority and power in line with modern democratic decentralization dispensations. While institutional plurality and decentralization of resource governance is most desirable and important, it needs to be monitored lest this may serve the best-organized and most powerful interests of the ruling elites (Ribot, 2002:12). This observation, culminated in Kaufmann (2003) to appeal to conservation movements that there is an urgent need for the international community (international conservation organisations) to support local broad-based participatory efforts. However, there is a challenge also in the field of natural resource governance particularly 'localization' of expertise and institutionalizing country level problemsolving (diagnostic) tools on local institutions when those institutions are not robust and not supported by their governments when it comes to resource governance. Therefore, relying on uniform templates of regimes propagated at higher levels (globalisation), at times ignore real challenges faced in each setting (localization) that may not be good for the people at a local level.

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2.23 The need for 'glocalisation' of the GLTP governance

In addition, Bovaird (2005) and Edgar (2006) added their voices by putting forward that the involvement of international NGOs with states in decision making processes and designing of programmes, do not usually indicate that good governance principles are always followed. Since governance norms directly affect local people over time, taking into consideration avoidance of their localized practices, values and local institutions governing the environment, this study would agrees with suggestions in literature that it is important for conservationists to ensure that future conservation has to take note of 'glocalisation,' of resource conservation. Glocalisation combines 'glocal' and the process noun 'glocalisation' to form the telescoping 'global and local' to make one blend' 'glocalisation' (The Oxford Dictionary of New Words, 1991:134 and Robertson, 1995:28). In this view, it is noted that the term in its original application would be relevant to apply in adapting transfrontier governance techniques to local conditions, systems and operations (Khondker, 2004:4). In the business world, for instance, the idea was adopted to refer to global-localization processes (Robertson, 1995:28). Accordingly, Wordspy states that glocalisation means, 'the creation of products or services intended for the global market, but customized to suit the local cultures' (http://www.wordspy.com/words/). Although the term glocalisation has come to frequent use, there are several related terms that socio-ecologicalists use and continue to use, with the most popular one being indigenisation. As such, resource governance in this perspective would be blended in institutional designs, processes and practices so that they link between the local institutions and higher-level institutions.

The interface between mainstream environmental movements and the environmental justice movements can be used to illustrate the 'glocalisation' process. Largely, the mainstream environmental movement focuses on sustainability and conservation, thus, depicting natural resources as global 'commons,' (Hardin, 1968) and, then the responsibility of the international community through conventions and treaties protect natural resourced from depletion. The environmental justice movement therefore, bridges ecological and social justice issues in that it puts the needs and rights of the common poor, the excluded and the marginalised at the centre of its concerns (Cock, 2004:1). In this view, the mainstream movement in the case of transfrontier conservation in the GLTP, overpowers local people's livelihood interests and increases the power of the state and other like-minded stakeholders, creating networks and partnerships with powerful global conservation movements (Cock, 2004:1). For example, sustainability goals, as they have been articulated by the global movements manifestly derive from the Brundtland Commission Report 'Our Common Future' (1987), indicating that development should be done in a way that

'meets the needs of the present without compromising the ability of future generations to meet their own needs' (UN, 1987). As often is the case with transfrontier conservation initiatives that are embraced at a higher level in three dimensions emerging from the above definition that there is:

- A conceptualisation of resources management in Hardin's perspective that they are 'global commons' which should be used sustainably for other generations, prompting current resource use contestations around resource claims between local communities and conservation apparatus.
- 2) a shift in focus away from the inequalities in environmental burdens that currently occur across social groups at a local level in terms of people's attempt to develop and alleviate poverty, towards a hypothetical environmental conservation from depletion for future generations to enjoy the same from current perceived over-use.
- 3) Centrally driven processes in environmental governance, which increases the role of the state and other non-state actors in ecological politics. In this way, developers are allowed to dismiss the immediate environmental needs of the disenfranchised (Baeten, 2000), which Dzingirai (2004), called 'disenfranchisement at large' and Ramutsindela (2007:105), referred it as 'scale of marginality.'

Going forward, while natural resource governance appear to be ridden with contestation, this paper has already noted that this concept was newly coined within environmental resource debates and is clearly distinguishable from terms such as management and planning. It is crucial in this paper because of an attempt to understand the impact governance has on local people's participation to safeguard their livelihoods and local conservation. Looking at the distinctions stated, practically, planning on one hand deals with developing long-term goals for the conservation of natural resources, while management on the other hand, fundamentally deals with the implementation of those goals to address what is supposed to be done regarding natural resources at a specific site or situation (Borrini et al., 2006; Eagles et al., 2010). In this case, management can be viewed as an activity designed to meet organisational goals using people, available resources and work (Worboys and Winkler, 2006).

Furthermore, governance viewed as a process in which the government, movements and organisations interact in the public and how decisions are made (Graham et al., 2003). Accordingly, to Balloffet and Martin, citing Borrini-Feyerabend, Johnston and Pansky (2006:16), proposes that there is a distinction between management and governance by further espousing that 'management is about what is done about a particular site or situation, governance addresses

who makes those decisions and how.' Governance in this case, is therefore, seen as a process of decision-making (policy-making). To Eagles (2008: 39), governance is "the means for achieving direction, control, and coordination, which determines the effectiveness of management.' This resonates with Newman (2001:6), Rhodes (1997:46) and Kooiman (1993) assertion that governance denotes the way governments seek to govern and the role of the state in 'steering' actions towards achieving something in a complex system with other partners and social formations. This culminated in Newman (2001:33;34) to postulate that the process usually occurs in two hierarchical ways:

- 1) The state exerts direct control over policy formulation (decision-making processes), development and implementation through hierarchies (government structures) to its people.
- 2) The processes of such governance occur within bureaucratic power, characterized with vertical relationships flowing in an upward and downward trend.

This process of governance helps also to appreciate Figure 2.2 and Figure 2.3. Lee (2003:5) went on to say governance by its very nature is political, and is all about the interactions between the government, private sector and civil society in which case, negotiations and compromises take place among competing participants with various interests, and consequently, there are winners and losers in the process of bargaining. In expanding this argument, Lee (2003:5) further notes that governance also comprises formal institutions, decisions and influences, as well as informal ones by various participants or groups associated with policy-making processes and implementation of the agreed policy positions. Therefore, in transfrontier natural resource governance, the governments are the major actors as decision makers at national level governing the areas under their jurisdictions and they interact with other stakeholders at higher levels in an upward trajectory, and pass on the agreed positions downwards to citizens. Inevitably, this study notes that the interactions do not and should not happen in isolation of communities as custodial landholders living inside or adjacent to parklands from there they rely on resource for their livelihoods and they receive monetary benefits.

As a result, pragmatic transformation of governance at higher levels in so far as involvement of critical stakeholders in resource governance is of paramount importance to facilitate local people's livelihoods, and move towards what Hamilton and Ruta (2006:26) call an increase in local control of natural resources that motivates long-term investments, management, accountability and

performance in of natural resources governance. As Hamilton and Ruta (2006:26) further pursues this argument, it is noted that by putting local communities in charge of 'their' governance of natural resource, allows a reduction in financial burdens of central governments on conservation, maximizes revenue generation and avoids inefficient expenditures for management purposes since the lower level plays a part in conservation.

For instance, the CAMPFIRE project in Zimbabwe is an example, which, for years, allowed state agencies to enter into sharing not only the governance and management of natural resources, but sharing financial and material benefits that accrued from wildlife-ecotourism activities with local communities (Hamilton and Ruta, 2006:26). Therefore, the quality and type of collaborative governance regimes in transfrontier conservation areas are important mechanisms for reducing biodiversity and ecosystems costs, particularly where there is greater participation of communities and civil society in parkland governance management in enhancing long-term sustainability of natural resources (Borrini, 2007). In this case, Newman (2001:34) and Lee (2003:6;7) analysed at length the characteristics of governance and espoused four classifications in four categories as hierarchical, rational, open system and self-governance that have a lot of spiralling downward influence to communities, critical in this study in trying to understand resource governance processes of transfrontier conservation as follows:

Governance model	Explanations and characteristics
1. Hierarchy model	 Is characterized by centralization and give 'responsibilities' to bureaucracies to take charge emphasizing formal authority, control, standardization and accountability. It is driven by bureaucratic vertical ordering.
2. Rational goal model	 Epitomized by centralization, however, allows for change and innovation. It emphasizes managerial power, maximization of outputs and economic rationalization. In the case of transfrontier governance, the economic approaches adopted such commoditization and commercialization of natural resources as the basis for establishing institutions for purposes of generating income for macro-economic development can exemplify this.
3. Open system model	 Is characterised by decentralization allowing for innovation and change going down to communities and is characterised by flexibility and adaptation. The flow of power relies on organisational networks and links to maximize each other's competences to achieve goals and objectives collectively.
4. Self-governance model	 I characterized by decentralization, devolved broad based citizenry participation. Generally, it is characterised by sustainability vested in the citizens or community power.

Source: Adapted with own additions from Newman (2001:34) and Lee (2003:6-7)

Accordingly, it has to be emphasised that environmental governance as a new process, is seen here to have diverse networks with other organisations, which form a new form of coordination within nation-states. This is the new age of environmental democratization. However, what is crucial to take note is the continuation of the nation-state taking centre stage in the hierarchical model and structures that characterize the context of environmental negotiations, still dependant on central governments, and the centre can unilaterally change the rules of the game (Rhodes, 2007:1253).

This study agrees with the argument that neoliberal economic principles generally seen as the most appropriate form of environmental governance is far from reality since market based schemes are highly problematic and at times fall far too short of the promises made by the protagonists of global environmental governance (Duffy, 2006:101). This arises from the realization that local people are largely ignored, and the worst-case scenario, relegated from the participation in governance of their natural resources. To this end, Wolmer (2003:7) in his article, notes that the case of the GLTP transfrontier park suggest the emergence of a new line of a topdown approach, market oriented environmental interventions by multi-level bureaucracies such as the World Bank, bilateral donor aid and international environmental organisations. These organisations guit the once prosperous community oriented conservation programmes (Community Based Natural Resource Management) that they regarded as antiquated in preference of transboundary approaches (Wolmer, 2003:7). The culmination of this new network of resource governance in transfrontier parklands has increased communal people's vulnerabilities by diminishing their not only their resource rights and usufruct, but by elevating resource governance locus from the local scale to central bureaucracies and parks departments, far removed from the communities. As such, what is it that 'governance' means? The following section deals with this question so that as the debacle rages on, natural resource governance can be understood better and simpler as a concept in practice within institutional network systems.

2.24 Defining 'governance'

The Institute on Governance (IOG) expounded that governance encompasses traditions, institutions and processes that determine how power is executed, how citizens are accorded a voice and how policy decisions are made on issues of public concern (www.iog.ca/about_us.asp). In a much similar way, the World Bank document views the concept of governance as ways and types of using power in the process of management of national economic/social resources (World Bank, 1992). In addition, Lynn et al. (2001:7) added a voice that governance is 'regimes of laws,

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rules, judicial decisions, and administrative practices that constrain, prescribe, and enable the provision of publicly supported goods and services.'

While the responsibility of the state comes out very prominently, the anti-study to this state-centric or hierarchical model of governance shown in Table 2.1, dictates that nation-states cannot go it alone in the conservation of natural resources. In a way, they have to involve some national, regional and international organisations to achieve the goals and objectives of conservation. This is the reason why , in Southern Africa, for example, organisations such as the Peace Parks Foundation is contributing towards conservation initiatives by providing financial and technical expertise to support transfrontier conservation among a host of other networks of funding and conservation organisations involved.

Related to this interdependence and networks of conservation organisations, is the argument proffered by some critics that effective 'steering' of governance (Rhodes, 997:46; and Kooiman, 2002), must today go via multi-level governance (Rhodes 2000: 57). The state, in this case, is presumed to give away part of its power both upwards to the international organisations and downwards to the local level on the assumption that the state is by and large, 'too big to solve the small problems and too small to solve big problems' (Bell in Pierre and Peters 2000:16).

As a result, what do we understand about 'governance' in the context of resource governance from this analogy is that if is a relatively new concept in the conservation field, and literature has it that this was brought to prominence at the Durban Congress (Borrini-Feyerabend, 2004:17). Quite clearly, governance in simple terms is all about power dynamics, relationships, responsibility and accountability relating to 'the inter actions among structures, processes and traditions that determine how power is exercised, how decisions are taken on issues of public concern, and how citizens or other stake holders have their say (Graham et al., 2003:ii). Thus, a combination of explicit and implicit policies, practices and institutions affect public life. In transfrontier conservation contexts, governance covers a broad range of issues from policy to practice, from behaviour to meaning, from investments to impacts. It is thus, crucially related to the achievement of conservation area objectives (management effectiveness), determines sharing of relevant costs and benefits in conservation and sustenance of public support (Borrini-Feyerabend, 2004:17).

Having mentioned that, one would need to understand natural resource governance from two contemporary schools of thought. The first school of thought encapsulates the human and social

aspects of governance based on the United Nations Development Program's list of characteristics that define 'good governance. Graham et al (2003:8 and 10) elucidated the principles defining governance in his paper presented at the Fifth World Parks Congress in Durban, South Africa in 2003, in which the set of principles were simplified in the context of conservation governance processes as shown in the following Table 2.11.

Table 2.11 Principles of good governance

Box 1: Five Principles of Good Governance	
The Five Good Governance Principles	The UNDP Governance Principles.
1. Legitimacy and Voice	 Participation – all men and women should have a voice in decision- making directly or through legitimate intermediate institutions that represent their intention. Such broad participation is built on freedom of association and speech, as well as capacities to participate constructively. Consensus orientation – good governance mediates differing interests to reach a broad consensus on what is in the best interest of the group and, where possible, on policies and procedures.
2. Direction	• Strategic vision – leaders and the public have a broad and long-term perspective on good governance and human development, along with a sense of what is needed for such development. There is also an understanding of the historical, cultural and social complexities in which that perspective is grounded.
3. Performance	 Responsiveness - institutions and processes try to serve all stakeholders. Effectiveness and efficiency – processes and institutions produce results that meet needs while making the best use of resources.
4. Accountability	 Accountability – decision-makers in government, the private sector and civil society organisations are accountable to the public, as well as to institutional stakeholders. This accountability differs, depending on organisations whether the decision is internal or external. Transparency – transparency is built on the free flow of information. Processes, institutions and information are directly accessible to those concerned with them, and enough information is provided to understand and monitor them.
5. Fairness	 Equity – all men and women have opportunities to improve or maintain their well-being. Rule of Law – legal frameworks should be fair and enforced impartially, particularly the laws on human rights.

Source: Adapted from Graham et al (2003:8;10) on Governance Principles for Protected Areas

The second school of thought is that of Eagles cited by Hemson-Corp Consulting (2010:38), which conceived three elements of environmental governance with respect to the study of Rouge Park of Canada useful in this study. This school of thought identified three aspects critical for natural resource governance, which are:

- 1. The ownership of natural resources
- 2. The sources of funding park management, and
- 3. The management body

The Hemson- Corp Consulting (2010:39) argues that issues of management institutions need to be separated from other issues of ownership that is critical as it defines other aspects such as access and rights to utilize the resources. At the same time, funding support management processes of natural resources, hence the success of any natural resource governance regimes rest on clear line of ownership of natural resources and the capacity to manage. As a result, the Hemson- Corp Consulting (2010:39) paper, further suggested ten principles of natural resource governance that need to be considered, and the following points were seen to be relevant for the understanding of the GLTP governance processes:

- 1. Public participation (also implies community involvement in decision-making, programmes and projects design, implementation, monitoring and evaluation).
- 2. Consensus orient (getting the local buy-in).
- 3. Strategic vision.
- 4. Responsiveness to stakeholders.
- 5. Effectiveness.
- 6. Efficiency.
- 7. Accountability to the public and stakeholders.
- 8. Transparency.
- 9. Equity.
- 10. Rule of Law.

Clearly, these benchmarks provide a basis to evaluate governance in the GLTP, and in the most importantly, the impact of governance institutions can be measured also in terms of how these aspects and principles interplay with local communities' livelihoods and conservation of natural resources. This simplifies assessment of not only the impact on people, but the effectiveness of the governance regimes as they relate to local communities. Perhaps some of the considerations this study examined relate to the issues of public participation, consensus orientation (getting the local buy-in) environmental governance accountability to the public and stakeholders responsiveness to stakeholders and the impact that governance in its various dimensions affect local livelihoods and sustainable conservation. The impacts in transfrontier parks from a livelihood

and conservation perspective is not necessarily negative, but there are positive impacts too that will be appreciated.

2.25 Conclusions

The GLTP as a flagship for the conservation of the environment is indisputably important in as much as t using it to enhance development at the sub-regional level. Equally, local livelihoods of the communities require to be guaranteed in a sustainable long term way. The above analysis has demonstrated clearly that there are varying ideological dispositions underpinning the GLTP, and contestations also arise from the mere fact that the whole discourse of transfrontier conservation has assumed a 'parks' approach as opposed to a broad-based community oriented disposition. From its theoretical and ideological manifestation, the GLTP in Southern Africa has shown developmental contradictions pitting competing ecological interest of various conservation stakeholders seemingly in opposition with communities. The governance and management architecture of the GLTP as a 'peace park' requires review in approach and ideological context. This is meant to allow the formulation of governance regimes that can respond appropriately to potential problems of resistance from communities. The GLTP's ideological underpinnings suggest centralization as opposed to devolution of governance of resources to the communities. The exposure of the local people to a number of vulnerabilities to the extent to which rural communities can easily slide into poverty should development planning process of transfrontier conservation go unchecked. There are dangers, peculiar to different cases, particularly when local communities have no access, lack control of their natural resources that they live side-by-side. More essentially, 'privatisation and commoditisation of natural resources' as highlighted in the case of the GLTP seriously affects communities (Munthali, 2007:57). This is simply because in many cases, the proceeds from tourism are not sufficient to offset losses in livelihood strategies. Allowing well managed multiple land use, such as conservation subsistence farming, livestock production and sustainable forest products harvesting, widens livelihood options of rural communities. Another important aspect to note is that, international conservation movements and financial institutions can shape social-ecological relationships in Southern Africa and can influence the emergence of robust governance regimes that can reflect on the needs, not necessarily of their mandate, but also those of communities if they choose to engage the local people. In many cases, these organisations have little experience in understanding historical and contemporary socio-ecological relationships of the local people, their environment and conservation programmes that are suitable for their sustainable co-existence that existed for decades. This arise from purely different experiences with the developed world where most well resourced organisation come from, who, in most cases fail to appreciate Sub-Saharan Africa. Clearly,

particular approaches are suitable to some places, but may not apply homogenously in a 'one size fits all' approach.

It is critical therefore to assert that the governance of natural resources with respect to the GLTP needs revisiting its context. The governance processes remain elusive and heterogeneous across communities in the same project. Thus, this poses problems when communities in the same transfrontier park cross-compare the cost and benefits in transfrontier conservation. The resource governance regimes that obtain currently have had a significant impact on communities. The processes are largely globalized, state-centric and far removed from the local people and from the scales. This needs a rethinking to achieve a sustainable balance between competing conservation on interests on one hand, and enhancement of community livelihoods on the other hand. Overall, the practice of transfrontier conservation is highly complex, often in contrast with the needed local consensus on how transfrontier conservation should be, and how biodiversity in their proximity should be governed. Consensus building in the governance of natural resources creates an environment in which different interests can be accommodated, and critically so, conservation of natural resources become easier. It is clear that natural resource ideological foundations and subsequent governance in transfrontier projects have not accommodated all the different interests of stakeholders and the people involved. This implies a gap between policy and practice of governance. Accordingly, Mosse (2004:663) put forward that "policy goals come into contradiction with other institutional or 'system goals' such that policy models are poor guides to understanding the practices, events and effects of development actors, which are shaped by the relationships and interests and cultures of specific organizational settings." While this is correct in view of the GLTP, there is also the need to go further to argue that the conceptual frameworks of governance, how it affects local organizational culture, the interactions of these actors in pushing for transfrontier conservation agenda forward, is contested premised on the GLTP's exclusionary ideological manifestations and disjointed planning process. The GLTP ideological underpinnings and the obtaining divergent policy expectations from the communities, policy practices, events, effects, interests and cultures, often find transfrontier conservation in complex contradictory configurations. In addition, the term governance described and discussed above as it relates to transfrontier biodiversity and ecosystems management is problematic. More research is required to understand the concept deeper in Southern Africa conservation contexts. While this paper takes note of the existence of CBNRM governance model, the paradox is that this has not been integrated into the broader and more complex TFCAs/TFP governance matrixes. However, it is even more complex when researchers, policy makers and multi-level conservation actors assume that local institutional processes and the indigenous people lack scientific and biological

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knowledge to comprehend environmental or ecological complexities in terms of change, impacts and viable conservation strategies that can be applied. Accumulated indigenous knowledge, lessons and all the experiences in Southern African under the CBNRM seem to have caught a cold, and the debate advocating the rightful place of communities has literally been 'high jacked' by bureaucrats and other expert conservation think-tanks. Overall, when one looks at power dynamics and the institutional relationships and that of stakeholders in transfrontier conservation, it is unavoidable to assert that its successes without local collaboration become doubtful, and more research over time is needed to assess its success given the change in governance process. At the same time, sound environmental governance cognisant of local communities' roles, or at least their incorporation, ostensibly enhance chances for successful collaborative and inclusive local conservation that also reduces cost of policing TFPs/TFCAs. Given the contestations and failures to bridge the bureaucratic institutional gaps in transfrontier governance with local institutions, opting for preponderance of multi-level institutions, there is remarkable disconnection in resource governance. This means that this institutional disconnection, therefore, needs more research ascertain how governance consequences, particularly in the GLTP.

The effectiveness of governance of transfrontier parks, juxtaposed with local communities has not been evaluated and trends of discontentment of local residents such as Makuleke and Sengwe communities, is yet to be established. However, at least at this stage, this paper managed examine multi-level institutions of resource governance and therefore concludes that they ignore the reality that rural populations especially in Southern Africa, do not regard resources as open access that potentially slide into the 'tragedy of the commons' (Hardin, 1968). Rather the local people have their systems that have historically mediated use, accessibility and define ownership. Perhaps one important point to mention is that the local people have had management forms, which derive in large part from their heritage of communalism, in which order is induced by 'affective' modes of personal relationships, which emphasize ascriptive roles, peer pressure, collective communal natural resource governance, control, ownership and usufruct based on their normative culture and values. The challenge therefore, is that current transfrontier governance practices face problems arising from its globalist and centrist difficulties to transform to integrate, re-organize institutional processes and recognise institutional heritage of communal areas and incorporating them into its modern day governance practices and institutions. Without re-orientation and rethinking of governance approaches in transfrontier conservation along this direction, it is difficult to imagine and quantify the success that transfrontier conservation can make in the future and its contribution to the lives of rural communities might remain elusive. This may be a matter of major concern especially when resource are not used in part for poverty alleviation since they may be

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subjected to eco-tourism corporate and elite capture for individual and outsiders' benefit, and not for the benefit of the community. As such, there is room for more research to find answers on theoretical and pragmatic interventions and suggest strategic governance models that ensures biodiversity and ecosystems protect, but at the same time leverage on the TFPs to enhance rural people's livelihoods and participation in natural resources governance.

CHAPTER THREE

3.1 Overview

"And if any man works for the community, he must perceive and feel the meaning and value of this community, and what it is as a living, organic whole. He can only do this when the community is something other and quite different from a more or less indefinite totality of individual men. A spirit in which each single person plays his part must inform it. Therefore, the communal body must have a spiritual mission, and each individual of it must have the will to contribute towards the fulfilling of this mission. In every single member down to the least, this Spirit of Community must be alive and active" (Steiner, 2008).

This chapter deals with natural resource rights in order to understand various resource claims from the community to multi-level institutional claims. The previous chapter examined how transfrontier conservation projects have instituted fundamental changes on accessibility and utilization of resources by surrounding communities. It has been observed that resource ownership is clearly state-centric and in favour of the private sector. Ideally, it is noted that this might be heading to a collision course with communal ownership in Africa has a long history as a form of conservation in Africa, and mediates human-environment relationships in communal areas. To expect over-exploitation of resources as envisaged in "The tragedy of the Commons" considering the claims made with respect to 'open access' in communal areas, fundamentally ignores the mere fact of effectiveness of communal ownership as a mechanism for environmental resource regulation. Further to that, it is important to highlight in this discussion that transfrontier conservation redefinition of property rights, apart from being exclusionary and putting ownership in the state, and advocating for private ownership, pose problems of circumventing local claims. Ultimately, these repose conservation responsibilities on the state and private sectors that are conceivably viable options in terms of sustainable natural resource management. However, this overlooks the contention that local people can meaningfully contribute towards conservation. Through the lens of the positivist, classical liberal and utilitarian theories, local claims are analysed to give comprehensive understanding of the discourses around natural resource ownership from various hypothetical considerations.

Most importantly, through the psychological aspects of human behaviour in relation to natural resources rights and claims, this study took the Spiral Dynamics espoused by Don Beck (1999) as an important framework to draw some critical considerations in trying to broaden socio-

ecological behaviour of conservation stakeholders within Makuleke and Sengwe community. This is a highly complex synthesis, but one that is important to tackle at this stage to bring to the fore, the critical path in this debate. In this context, the Spiral Dynamics value system will help to comprehensively deal with the complexity of behavioural aspects of environmental stakeholders and their interactions at various transfrontier conservation levels concerning communities. In this context, the study notes that loss of biological diversity and diminishing of ecosystems across boundaries of sovereign states, as much as disenfranchising of the local communities to exercise their *usufructs* over natural resource, pose a double tragedy with serious consequences on both humanity and ecosystems sustainability (Foss, 2010:94). From widespread poverty reduction in rural communities to ecological sustainability, there is need for an honest evaluation of local resource claims. This is particularly important when one looks at local institutions and ownership regimes in order to establish conservation potential and avoid the blanket invalidation of local claims, let alone instituting a blanket application of theories, strategies and biodiversity conservation practices that may be in conflict with communal livelihood attainments and locally specific sustainable conservation processes.

It is realized in this section of the study, as shall be demonstrated that there is evidence of important elements of communal conservation efficacies at the community level that can influence positively on the GLTP objectives. This is despite bastardization of local claims. The fundamental efforts of the state conservation institutions and international organisations reconstruct governance and resource ownership regimes in complete ignorance of local governance processes and local ownership, generally perceived to be archaic by virtue of the mistaken perception that it lacks biological science sophistication to enhance and improve the quality of local biodiversity management. It is important that instituting a new form of transfrontier biodiversity and ecosystems elitism only complicate conservation.

3.2 Introduction

"We cannot alleviate poverty over the long term without managing ecosystems sustainably. Nor can we protect ecosystems from abuse without holding those with wealth and power accountable for their actions, and recognizing the legitimate needs of the poor and dispossessed. We must strike this balance in all of our decisions for the Earth. Properly mandated, empowered and informed communities can contribute to decisions that affect them and play an indispensable part in creating a securely-based sustainable society" (IUCN, 1991).

Since 1999, when the first transfrontier park (Kgalagardi) was established between South Africa and Botswana, a lot of effort by states and global actors to increase transfrontier conservation projects and programmes was devoted to increase the number of conservation straddling countries in Southern Africa. Consequently, in recent decades, global proliferation of protected areas resulted in change in land use, ownership and access rights to natural resources by communities who have traditionally enjoyed environmental benefits for livelihood purposes for a long time (Himmelfarb, 2006:1). A philosophy of exclusionary protectionism has remained central to many of the conservation initiatives pursued in Southern Africa sub-continent. It is noted that although well intentioned these conservation programmes might be, they lack inclusion of communities, and they have had severe repercussions on livelihoods of rural communities, let alone their interest to collaborate in conservation of biodiversity and ecosystems in the region. Ideally, the institutional regimes epitomize centralized state control of ecosystems in the form of 'park' governance approaches as a dominant conservation paradigm, and it has been fuelled by neoliberal approaches in international conservation (Brockington et al., 2008). This approach has often resulted in adverse effects on the livelihoods of local people (Saberwal et al., 2001; Adams and Hutton, 2007). Attempts have been made to link conservation of biological diversity with livelihoods and poverty alleviation. However, Community Based Natural Resources Management (CBNRM) that ushered in such hope has since dwindled in the last decade. As a result, this study observes that there has been a redefinition of rights over natural resources in the advent of new conservation governance and management models in Southern Africa. This chapter interrogates natural resource rights in order to bring to the fore, various contesting views with regard to implication of each concept on livelihoods and conservation of local natural resources. The last aspect this section deals with is resource governance in transfrontier conservation in terms of how it changes resource management in order to understand whether this 'enables' or 'disenables' communities in line with one of the study objectives so that people can realize both livelihoods and conservation of nature.

3.3 Natural resource rights and rural communities

Some of the challenges facing transfrontier conservation in Southern Africa are contradictions in defining ownership of natural resources in governance processes. This study is persuaded to assert that these contradictions coupled with lack of clarity on local ownership, affects the noble ideas of conservation, given the successes registered so far over the years in the region under Community Based Natural Resources Management (CBNRM). This study would challenge the state-centric ownership as it alienates local communities, and therefore, call for a compromise so

that communities living inside and adjacent to the GLTP do not completely lose out in terms of their livelihoods strategies derived from natural resources, and at the same time, ensure natural resources are sustainably managed. However, before arguments and conclusions are drawn, there is abundant literature that demonstrates that certain ownership regimes have varying implications. Ideally, most of them do not work in many scenarios, while others promote sustainable conservation of natural resources and the environment (Bonti-Ankomah and Fox, 2000:250; 251; Ellen, 1986:11; 12). As argued before, communities yearning to find motivation to conserve natural resources sustainably. In supporting this view, Aggarwal and Elbow (2006:1) put forward that property rights, secured access to and control over land, and other natural resources, can generate critical incentives for conservation and in promoting sustainable utilization, management and governance of natural resources. At the same time, insecure, unclear, limited or short-term property rights can inhibit sustainable land and natural resource management and discourage stakeholders from acting as long-term stewards of land and natural resources. In this case, the rights of communities over natural resources are as important as conservation is, to sustain rural livelihoods. It is important also to acknowledge that ownership of resources have been given international recognition in a vast set out international biodiversity policy regimes espoused in the United Nations General Assembly (UNGA) Resolution 1803 of 1962, the Rio De Janeiro Declaration on Environment in 1992 to the Earth Summit on Sustainable Development held in South Africa in 2002 (Iwere, 2008:2). The UNGA Resolution 1803 of 1962, Article 1, clearly stipulates:

"The right of the peoples and nations to the permanent sovereignty over their natural wealth and resources must be exercised in the interests of their national development and of the wellbeing of the people of the state concerned" (lwere, 2008:2).

The Rio Declaration and the Stockholm conference provides in Article 2 that the states, have the overall sovereign right to exploit resources pursuant to their own environment and development policies, and ensures that their activities within their jurisdictions do not cause damage to the environment. This is spelt out in the Rio Declaration Principle 2 in that stipulates that:

"States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction" (Rio Declaration, Principle 2).

What is important to note is that the principle did not preclude the rights of the local people as well as the UNGA Resolution 1803 of 1962 and the Rio Declaration of 1992, which in Principle 1, unequivocally stipulated that:

"Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature" (UNGA, 1992).

Iwere, (2008:2) further argues that the conventions and their principles did not specify prohibition of ownership of resources by citizens, rather, they emphasized the protection of the people's interests, hence, left the responsibility for individual countries to develop laws that ensure or guarantee the enjoyment of such rights by their citizens. Implicitly, it means that citizens' environmental rights over natural resources are inalienable. This study would further argue that conservation therefore could be achieved through guaranteeing community property rights under different ownership arrangements. Therefore, this research will look into what is implied by property rights as they relate natural resources, the rights of communities and the relationships with other actors in the conservation discourses.

3.4 Natural resources rights context

Property rights are defined as an individual's right to use, derive income and transfer assets (Demsetz, 1967:354). This definition corresponds with the Roman law between *usus, fructus*, and *abusus*, respectively (Foss, 2010:94). In fact, it was recognized by Foss (2010:2) that property rights may exist in the absence of the state structures and institutions, that is, even under wholly anarchic conditions, for example, mostly in conflict ridden parts of the world where the conflicting parties control and utilize resources such as diamonds and oil to finance their illicit activities. In communities in many of African societies rich in biodiversity and serene ecosystems, strong social norms, values and beliefs local practices guarantee de facto control over the use of and income from a resource, as well as mediating communal resource ownership and utilization relations (Klein et al., 2010:94 and Muchapondwa et al., 2009:9). This analogy is of great importance in this study as it clearly shows that property rights, particularly as they relate to natural resource rights of communities, are inherently forward-looking through localized self-regulation mechanisms imbedded in local culture and understanding and that; therefore, uncertainty about their viability and robustness in protecting natural resources is naïve to the local processes. Another

observation this study also has made is that, property rights are defined from an economic perspective, hence property rights are understood in value terms and "that agents, seek to maximize the value of control they hold over assets" (Klein et al., 2010:94). In most of definitions of property rights, there is limited theoretical consensus to relate property rights to natural resources. Much of the information across disciplines define property rights in economic, legal and land administration perspectives. However, Alchian and Allen offered a highly compact definition of property rights as:

"The expectations a person has that his decision about the uses of certain resources will be effective" (Alchian and Allen, 1969:158).

The most important point to note is that property rights can be understood in economic terms at any given level be it at community, national, regional and international level. Consequently, Barzel (1994:394) explains further that property rights are an individual's net valuation in the expected "ability" to consume directly the services of the asset, or to consume it indirectly through exchange. A key word to take note of is "ability" that entails the allowable rights, presumably in his locality to have access and use those resources from which one derives benefits directly or indirectly. This perspective is not only concerned with what people are legally entitled to do but also with what they believe they can do (ability) over resources in their communities. Essentially, property rights in this way are not necessarily in legal terms, but in the normative value systems communities uphold as a collective, which defies the "tragedy of the commons" (Hardin, 1968) to the extent that many property rights theorists have stressed the fundamental social nature of property rights. For instance, Demsetz (1967:347) argues:

"Property rights are an instrument of society and derive their significance from the fact that they help a man form those expectations which he can reasonably hold in his dealings with others. These expectations find expression in the laws, customs, and mores of a society. An owner of property rights possesses the consent of fellow men to allow him to act in particular ways. An owner expects the community to prevent others from interfering with his actions, provided that these actions are not prohibited in the specifications of his rights".

Deininger and Feder (2002:4) elaborated this point by emphasizing that property rights can be described as social conventions that define terms of who has the rights to enjoy certain benefit streams arising from the use of assets and the length of such enjoyment. This includes limiting

societies or community members on the use and disposition of asset resources to avoid undesirable outcomes and this is ideally done using structures put in place to enforce property rights compliance, including mechanisms that can be invoked socially or legally to grant such protection through local social mores or state apparatus (Deininger and Feder, 2002:4). The above authors added their voices by highlighting three elements, which they identified as crucial and relevant when looking at property rights in terms of:

- The breadth.
- Duration.
- Assurance of property rights.

Therefore, this study would assert that it is through assuring communities of their ownership rights of through which they can be motivated towards environmental conservation and sustainable stewardship of natural resources over time (duration) and in proper context (breadth). At a more practical level, most definitions of property rights in the context of natural resources advocate for the conferral of three qualities. These are excludability, withdrawal and transfer (Sheehan and Small, 2002:16) that are examined in the coming section to appreciate fully how these concepts relate to natural resource rights and how they can affect communities in transfrontier conservation areas such as Makuleke and Sengwe in the GLTP.

3.5.1 Excludability: The ability to exclude others

Sprankling, (1999:5) observed that the metaphorical understanding of the right to exclude others implies prohibition from use or occupancy of a particular "thing." The same author states, for example, if O "owns" Redacre, O is generally entitled to prevent neighbours or strangers from trespassing Redacre that hypothetical owner 'O' possesses. The author goes further to attest that in the same manner, if you "own" an apple, you can exclude others from eating it. This is typical of communal natural resources ownership and the rights of use. For instance, the Makuleke community has a Contractual Park and Sengwe community uses their resource under the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) as locally specific ownership arrangements that regulate and mediate resource rights in terms of access and use at the local level. Interestingly, these local institutional systems have ensured that there is sustainable governance and management of natural resources at a local level in complementation of their traditions in relation to natural resources in the two study areas are valued assets, and cannot be regarded as "open access" that is criticised for potentially undermining biodiversity sustainability. In the GLTP, community ownership it is acknowledged for having access rules,

which are defined in terms of community membership and they are regulated as such (Heltberg, 2001:185). The communities can therefore, legitimately exclude others who are none members to the communities in question from enjoying rights of access and use of resources under their communal jurisdiction and governance structures.

In contemporary democratic governmental systems, the right to exclude is not absolutely reposed in the community alone since the community is a sub-set of the broader nation. This observation prompted lwere (2008:5) in his analysis of 'absolute ownership theory' to contend that one can own the land and all that is underneath it, but he cannot own the fugitive hydrocarbons in the sky. Thus, states develop agreements to manage fugitive resources, and in the case of the GLTP, parameters of ownership, access and usufruct, are defined through trilateral treaty processes following the ratification of the treaty by the countries concerned when it entered into force on 9 December 2002. The treaty established the Transfrontier Park in a regionally integrated conservation strategy. In view of excludability, Sprankling (1999:5) observes that there is a limit, to which the principle can be applied, arguing that police officers may enter Redacre (example above) in pursuit of fleeing criminals, in which case, the owner cannot exclude others in terms of trespassing Redacre. In the same vein, fugitive natural resources such as wildlife and water in the GLTP imply that communities alone cannot claim absolute ownership. Hence, the park authorities by virtue of their conservation work inevitably get involved in wildlife governance, management and conservation as they regard the resources as national assets, and it is politically convenient for governments to do so in the administration and conservation of fugitive resources (lwere, 2008:5). As much as the government and other institutions control and value natural resources, this does not take away the fact that communities have a stake in the same resources as their sources for a descent livelihood, hence the need to recognize their resources needs as equally important as much as conservation is to park officials and other actors.

3.5.2 Withdraw of resource rights

One of the most important aspects highlighted in literature about natural resource property rights is the right to derive benefits, which is of interest to communities as their livelihoods are anchored on what they can obtain from their environment. The obvious changing governance regimes in transfrontier conservation potentially alter the right to use or receive benefits. Mitchell (2005:3) observed that use rights are the most primary rights individuals or a community can ever have, in as much as the right to occupy is to ownership of resources. More essentially, is the right to exploit the natural resources (World Resource Institute, 2002:10; Mitchell, 2005:3). The right to possess and use natural resources is common among rural communities. Natural resources are largely

viewed as essential for survival as an entitlement, but Sprankling (1999:5) would argue that when resources are being leased out, or are under the custody of the government, it does not mean that communities do not respect those resources as property. For example, the author states that if O leases Redacre to tenant T for a 20-year term, O temporarily surrenders his right to possess and uses the land; but O still holds property rights in Redacre. However, in the case of GLTP communities, the local people have legitimate rights to derive benefits under the communal ownership arrangements, and whatever sub-contracting the government may engage private actors in leasing natural resources management and exploitation through eco-tourism, does not preclude the custodial rights communities have as stewards of natural resources. Through this mechanism, they would derive benefits.

From these various points, it has to be made clear that communal ownership gives people the rights and opportunity to extract resources for livelihood purposes in various ways. Consequently, even though the state reserves the juridical ownership rights over its territorial boundaries and all that is found in it, it does so for its people who should be seen as having equal use claims to pristine natural resources, since they would have contributed for the upkeep of the natural resources in their areas (Mazor, 2009:iii). In a liberal theoretical eulogy to equal concern in sharing natural resources, Mazor (2009:5), put forward that the governments must act with concern for the life of each person it governs. Taking the debate further from Thomas Hobbes's Leviathan World, Mazor (2009:11) raises an important point with regards to natural resource claims (including deriving benefits) that the communal people's claims have received limited attention, and yet for Hobbes cited by Tuck (1996:237), people initially had rights to every creation. Gourevth (1997:161) attest to point in his analysis of the discourse on the Origins and Foundation of Inequality Among Men, and argues that Jean-Jacques Rousseau, (one of the greatest political philosophers), explicitly endorsed the natural communal claims and he wrote:

"The first man who, having enclosed a piece of ground, to whom it occurred to say this is mine, and found people sufficiently simple to believe him, was the true founder of civil society. How many crimes, wars, murders, how many miseries and horrors mankind would have been spared by him, pulling out the sakes of filling the ditch, had cried out to kind: Beware of listening to this imposter; You are lost if you forget the fruits are everyone's and the Earth no one's" (Gourevitch, 1997:161).

An interpretation of the above would show that property rights for Jean-Jacques Rousseau are the fruits of the earth and are everyone's in the sense that all the people, in a defined community, are allowed by nature's inalienable rights to derive benefits out of the environments. Through the application of their labour in terms of conserving resources and direct application of their labour to harvest them, the people depend on them for survival. To this end, Mazor, (2009:15) also noted that Jean-Jacques Rousseau sounded to express the people's claims on land, which possession facilitate for farming and it does not seem problematic. However, the problem occurs when, land (natural resources) is used one year to the next (unsustainable use), which, as it makes for continuous use, is easily degraded and transforms to cause poverty (Mazor, 2009:15). This resonates very reasonably with the need for proper conservation of natural resources (land management) by individuals so that resources do not become exhausted, and driven into extinction.

Perhaps, one important point to take not of in view of property rights in the context of resource conservation, it the coalescence of institutional interests at national, regional and international levels in the management and governance of the Great Limpopo Transfrontier Park's (GLTP) biodiversity and ecosystems to that ecological calamities can be avoided. It is therefore, not coincidental that the fear of depletion of natural resources has proven to also be the force behind redefining of the quest to minimize consumptive utilization of environmental resources by communities, opting for non-consumptive eco-tourism related enterprises. However, that can also be contested as the commoditization and commercialization of natural resources, has turned to be in a way, commercialized consumptive use by the global markets. This observation makes economic logic regarding conservation of natural resources. But the right to derive benefits from nature as espoused by Gourevth (1997:161), insinuate that wildlife, land, harvesting of forests, water and grazing livestock, are also important to communities such as the Makuleke and Sengwe, as the local people have inalienable rights as the "Rights Bundle" (Aggarwal and Elbow, 2006:4) can demonstrate in Figure 3.1.

Aggarwal and Elbow (2006:4) espoused that transfer rights of property refer to the authority to assign or reassign both management and use rights of property (natural resources). The same authors go further to indicate that transfer of rights may be definitive and absolute. This means that the transfer may include all rights included in the property rights bundle. In addition Aggarwal and Elbow (2006:4) pointed out that the ability to transfer the entire property rights bundle is a typical feature of property rights systems predominant in the West, and may be referred to as *alienation right*. However, a transfer of property rights may also apply to something less than the entire property rights are not transferable (Sprankling, 1999:5).

Box 1. The Rights Bundle

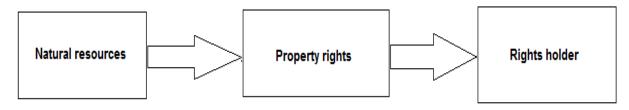
A bundle of rights relate to a unit of land and the associated natural resources which include: -Right to own -Right to use -Right to manage -Right to transfer Source: Adapted from Aggarwal and Elbow, (2006:4)

Source: Adapted with own additions from Agarwal and Elbow (2006:4) Figure 3.1 Analytical resource rights bundle framework

In the context of natural resources, communities can transfer management and use rights attached to specific natural resources to an institution they create for regulation or they can transfer such rights under partnership arrangements. Depending on the existing normative rules and regulations for inclusion or exclusion governing communities' interactions with the environment, the environmental rights in any case, include the right to use land for crop cultivation, pastures to graze livestock, access to and benefit from wildlife and forests harvesting for food, medicines and construction. Communities can also transfer management in a partnership arrangement with a private operator for technical support, which they may lack but they always retain ownership rights of the resources as articulated in the Rights Bundle (Aggarwal and Elbow, 2006:4). The major emphasis in this regard is the role and influence that communities have to assign rights to use, manage and benefit from natural assets. At the same time, they accept new persons and enter into contractual agreements such as the Makuleke Contract Park. Above all, they take full responsibility to observe the rules of conservation and sustainable use of the resources that are owned by the community.

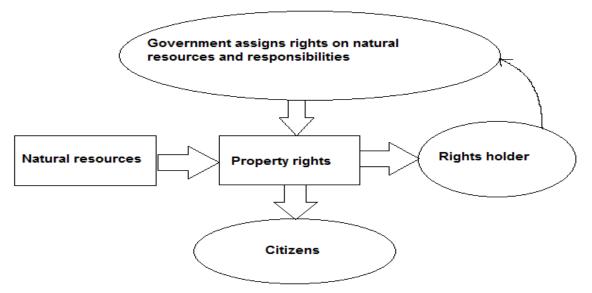
In exploring property rights in natural resource governance, the rights bundle provides a basis to appreciate various actors' resource claims in TFCAs. There are underlying currents of

inalienability of community rights to natural resource assets, which in essence are equated to as property rights. Most definitions have shown three distinct aspects that view property rights in econometric, legal terms and as property in land holding systems under different arrangements that can be private, communal or government. Tan's (2002:2-4) definition uses an approach that property is merely a legal entity and defined in terms of relationships between a legal person and the resource in question. Figure 3.2 illustrates this relationship:



Source: Adapted from Bennett et al (2005:7) with own additions Figure 3.2 Traditional Approach to Property Rights

This traditional model conforms to communal natural resource property rights theory. As shown earlier on, customs, traditions, implicit knowledge, laws, rules, codes of conduct and normative values as regulatory institutional systems (Muchapondwa, 2009:9). These determine access, use and ownership of such resources and are regarded as governance processes. An improvement to this model in contemporary legal governmental systems, demonstrates this complex network in defining holders of property rights. The belief that only government generates property rights is espoused as legal positivism (Sprankling, 1999:5;7; Bonti-Ankomah and Fox, 2000:246), and is quite dominant in contemporary conservation discourses such as the Great Limpopo Transfrontier Park as shown in Figure 3.3.



Source: Adapted with own additions from Bennett et al (2005:7) Figure 3.3 Functional governmental views on natural resource rights

This modern functional approach is responsible for defining the current interrelationships between citizens and the government in allocating resource rights. Ideally, the framework suggests supremacy and superimposition of government in defining and enforcing legal rights (Bennett et al., 2005:7). Perhaps, it is important to highlight that authorities determine land use, which in this case is motivated by a number of factors such as conservation, land use and eco-tourism. The emphasis is largely on community non-consumptive use. This consequently, affects communal tenure rights over resources. It has the ability of transforming and equating statutory title and claims to government agencies, which alienate communal local people from enjoying their resource rights under their tenure systems (Metcalfe and Kepe, 2008:107). This is contrary to marginal people's rights and claims over resources, which governments have to be cognizant of to avoid conflicts that can actually undermine collaborative conservation.

Giving the case of Inyambo and Sekute of Zambia under the Kavango-Zambezi Transfrontier conservation initiative, Metcalfe and Kepe (2008:110) argue that social and ecological issues cannot be adequately addressed without paying attention to tenure systems. This is simply because tenure rights over resources are divided between the land and natural resources managed by government agencies that are not effectively combining government and private sector with community interests. The social assets of indigenous knowledge systems in the Inyambo Chiefdom have resultantly been weakened by the government's appropriation of wildlife and forest use rights (Metcalfe and Kepe, 2008:111). This appropriation, denies the local people access to utilize natural resource for their livelihood. Wolmer (2003:276:278) in his study of the GLTP questioned whether transboundary initiatives really improve livelihoods. He warns of a "bioregional plunge" that may not necessarily encourage true self-determination and alienate community land as is the case with Mozambique's side of the Great Limpopo Transfrontier Park (Wolmer, 2003:276;278). It is perhaps critical to observe that livelihoods in Sengwe and Makuleke communities can still be protected if conventional statutory and customary systems are merged to produce hybrid tenure rights over resources, unlike having governments ascribing itself ownership, use rights and conservation responsibilities. Due to these concerns, it becomes prudent to tackle theories related to property rights in the context of natural resources to understand if communities deserve the resource rights, claims and user rights, as they want to in the face of changing biodiversity and ecosystems management regimes in the advent of the GLTP.

3.6 **Property rights theories discourses**

The above discussion open the debate on natural resource property rights theories. It is important to note that inalienability of property rights of communal people, who are custodians of natural resources, was clearly outlined in the context of the rights bundle in trying to understand the justification of communities' claims. The definitions of property rights, though somewhat convoluted due to its econometric overtone, do in essence relate to natural resource claims. To appreciate the discourse deeper, one has to understand the different theoretical underpinnings of claims by various actors. Three theories of property rights have emerged in social ecology literature. These are the legal Positivism, Classical Liberalism and Utilitarianism (Bonti-Ankomah and Fox, 2000:246; Mazor, 2009:11;19).

3.6.1 Legal Positivism

The legal positivism theory of property rights refers to property rights originating from legislation by legitimate entities that are established by the state (Bonti-Ankomah and Fox, 2000:246). Iwere (2008:7) refers to as the "National Ownership Theory." In both theories, it is clearly argued that natural resources property rights exist whenever there is legislation that outlines duties that binds individuals, and that role to define duties is vested in the state (Bonti-Ankomah and Fox, 2000:246; Iwere, 2008:7). For example, the South African mineral law states that mineral resources are the common heritage of all the peoples of South Africa and the state is the custodian thereof, for the benefit of all South Africans (Iwere, 2008:7). The South Africa's White Paper on Conservation and Sustainable Use of Biological Diversity (Chapter 5, 5.1) alludes to two major components of natural resources that they seek to promote economic opportunities compatible with conservation and sustainable use and creating incentives that support sustainable use of biological diversity. The same White Paper (Chapter 5, 5.1) indicates that policies and programmes have to be formulated to ensure that resources are harvested sustainably, that the cultivation of harvested species is promoted and that the local economic value of such resources is maximized. Interestingly, the duty of stewardship is clearly reposed in state institutions, with no indication as to how local people participate and benefit from resources. The positivist theory (Bonti-Ankomah and Fox, 2000:246), which some refer to as the "National Ownership Theory" (Iwere, 2008:7) culminated in Locke in Mazor (2009:13) to argue that the state driven conservation has been failing people's claims, however, where communities have been actively participating, conservation has been more successful. As such while government retains authority over resources in its geographical confines, it is a matter of policy and choice for it to facilitate and enhance local people's resource rights while retaining control and allow private sector partnerships with those communities in exploiting resources. This is currently lacking in the GLTP, particularly in Sengwe community.

Mainstreaming of local communities is crucial to the extent that Mazor, (2009:13) added his voice that this can only be achieved through 'mixing' ownership in a way that respects people's equal claims to natural resources. Arguably, the need for mainstreaming communities in complex transfrontier conservation is of important to achieve rural development and sustainable conservation. To technicise this debate, there is need for governments to approach the issue of ownership diligently and with less emotion and less politicization of resource ownership processes. More essentially, the stakeholders need to be aware that local people have rights and any engagement of experts has to be done in the context of mutual complementary roles that actors perform to find a consensually agreed solution (Haysom and Kane, 2009:26).

3.6.2 Utilitarianism

The utilitarian theory considers natural resources property rights as a system of nametags that specify an individual's right to possession, use and disposition of property. The utilitarian believe that the government is capable of making efficient benefit-cost calculations and allocating rights based on that calculation to maximize the total welfare of society (Bonti- Ankomah and Fox, 2000:247-248). Putting it in the context of communities, this theory falls short of security of tenure of communities since those who ascribe the rights also exercise the right to withdraw them. This prompted Bonti-Ankomah and Fox (2000:248) to argue that the notion of rights advanced by the legal positivist and utilitarian are transitory, and may make it difficult for property owners to make long-term decisions over efficient use of their property. This is because both legal positivist and utilitarian perspectives consider rights as transitory, which implies that a property owner's rights over a given property may be changed over time by the government.

This present problems to communal natural resource owners such as Makuleke and Sengwe communities in the GLTP, who may not be aware of conditions that will warrant 'social efficiency' in the future since they do not know how rights will be allocated and what legislation will exist for the allocation of rights by government (Bonti-Ankomah and Fox, 2000:248). This points to the predicament communal people residing inside or adjacent to transfrontier parks face when it comes to the "development of tribal peoples against their wishes-really to let others get their land and resources" (Foreword by Corry, 2006 in Ginzburg, 2005), as resource enter into the global market as 'commodities' and treated as global commons. What the utilitarian theory attempts to do with respect to natural resources rights, is to put government at the centre of assigning rights over natural resources. However, Rothbard (2010:3-4) criticizes this misadventure demanding that justice must be arrived at, which goes beyond government allocations of property titles (rights) to

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man (communities) to own not only his person, but also the material objects for his control and use. Rothbard (2010:5) in the end concludes with an appalling criticism of government against unilaterally assigning natural resource rights under utilitarian theory of property rights stating unequivocally that:

"Land in its original state is unused and unowned. The pioneer, the homesteader, the first user and transformer of this land, is the man who first brings this simple valueless thing into production and use. It is difficult to see the justice of depriving him of ownership in favour of people who have never gotten within a thousand miles of the land and who may not even know of the existence of the property over which they are supposed to have a claim. It is even more difficult to see the justice of a group of outside oligarchs owning the property, and at the expense of expropriating the creator or the homesteader who had originally brought the product into existence" (Rothbard, 2010: 5).

Put simply, it is not presumably in the interest of effective conservation in avoiding bestowing ownership rights of natural resources to communities and then anticipates reciprocity from them in exchange for collaboration towards sustainable conservation. To assume that communities do not know conservation as the utilitarian theory does and therefore, local communities should not have natural resource rights and that government alone and its agencies should be the sole owner, and distributor of rights, is rather utopian and results in a top down approach that may not work in conservation of Africa's resources. In fact, Ginzburg (2005) argues that the destruction of tribal peoples in the name of development invariably is simply because outsiders literally take land and the resources. This continues to be the most acute problem being faced, and not confined to poor countries only but in many other parts of the world. The trend of degradation, depletion and poaching of natural resources therefore, happen with complicity of some government officials, and such is the case with rhino poaching in South Africa. In validating this argument, Rothbard's (2010:4) stated; "considering the historical record, we may indeed say that relying upon government to be the guardian of property is like placing the proverbial fox on guard over the chicken coop".

Looking closely at the above arguments, the utilitarian theory has its own fair share of shortfalls to synergize property rights between communities and government. Instead, it emphasizes supremacy of the government in owning and ascribing rights to any individual. In many cases, this creates insecurity of tenure among communities to the extent that FAO (2002:23-24) suggest that

land, other natural resource tenure and environmental conditions, are related and insecure tenure is likely to lead to poor land use which in turn leads to environmental degradation. Mitchell (2005:7) supports this argument by positing that lack of rights can reduce incentive to implement long-term natural resource measures. Situating these perspectives in the GLTP, it is only prudent that in the process that governments are taking the lead in the conservation project, they should take heed of how ascribing of rights are synergized to include the local communities for purposes of successful conservation of resources. Ideally, cultivating a sense of local ownership is incentivizes communities to participate actively in conservation of natural resources.

3.6.3 Classical liberal theory

The classical liberal theorists argue that property rights are unalienable right in the use and transfer of something owned (Bonti-Ankomah and Fox, 2000:246). Unlike legal positivist and utilitarian theories, the classical liberal theory does not consider property rights as transitory, but assert that no legislation is required in allocation of rights because if an individual owns a property, that individual has the unalienable and unlimited right to that property within its physical boundaries. Therefore, the individual must be allowed to exercise his rights with respect to use of the property (Bonti-Ankomah and Fox, 2000:246). Iwere (2008:6) further insinuated that classical liberal theory is similar to 'qualified ownership theory,' which has its origins in Pennsylvanian history in the United States of America (U.S.A.). He goes further to argue that just like the liberal classical theory, 'qualified ownership' theory is based on the rule of capture in the U.S.A. in which individuals are qualified in terms of ownership subject to their ability to have captured the resources and put them under their exclusive custody, and thus, no one can lay exclusive claim to it.

In this view, Ryan (2001:484) this study note with great interest that the classical theory of property rights gives primacy to aspects, which are private autonomy to control property and elevate the right to exclude others as the most important in the bundle of rights that constitutes property. The other argument posed with this analysis is that if it is a collective claim over the resources such as by a tribal group or a community, puts those resources under some collective communal ownership arrangements, in which case, the community reserves the right to exclude others as a collective. Communities would detest an approach whereby resources in their proximity end up being owned by some remote government entities and giver rights further to some private ownership all in the interest of business partnership, particularly with eco-tourism and safari projects without allowing communities playing a role. Ryan (2001:484) after being perturbed by such adventurism argues that many environmentalists reject this classical liberal theory because

it elevates individual autonomy above communities' considerations in defining relationship between the human and natural resource components of the world, and it fails to account for ecological realities of interconnectedness and interdependences between nature and rural communities.

From this discussion, it seems that these theories show more pre-eminence of government and private sector ownership of natural resources. This basic theorisation of natural resources rights to assign ownership to state agencies, appear in a variety of combinations, often with competing interests, but it is consolidation of private sector rights as is the case with Europe and North America (World Resources, 2002-2004:10). In Africa, and manifestly Southern Africa, state sanctioned titling of natural resources is common, but in the majority of cases, traditional communal ownership has been historically strong, and moving from traditional ownership practices to more formalised communal ownership arrangements blended in private sector partnership because of the ownership uneasiness from communities (World Resources, 2002-2004:10). For this reason, any theory lacking to recognize communities, serves to set precedence for resource ownership contestations between communities and other such actors involved. What it implies is that there has to be logic to ascribe communal rights to people living inside and adjacent to the adjoining areas of the GLTP. Having looked at these theories, it does justice to examine various ownership arrangements and analyse them as they relate to communities found inside and adjacent to transfrontier conservation. Perhaps one of the most important aspects to note in this analysis is in keeping with the research questions and objective in chapter 1 that seek to understand various community resource rights so that local claims can be justified.

3.7 Resource ownership

The efficacy of property rights hinge on ownership categories of natural resources in the GLTP. There are four categories identified in this study, which are communal, private, state and open access (Adger et al., 1997:2-4; Bonti-Ankomah and Fox, 2000: 248-250; Demsetz, 1967:354; World Resources, 2000-2004:10). In view of Makuleke and Sengwe communities, natural resource property ownership regimes, it is important to indicate that they have always existed with varying impact on livelihoods and conservation of natural resources. As such, different scenarios to be presented provide valuable comparative benchmarks of ownership regimes either enhancing or inhibiting both livelihoods attainment and how this can motivate successful conservation.

Firstly, ownership of natural resources come with authority to use resources such as land, forests, wildlife, minerals or exercising harvesting rights, which translate into control of natural resources

(Aggarwal and Elbow, 2006:7; World Resources, 2000-2004:10). It is imperative perhaps to also mentions that rural communities depend on natural resources, thus, how ownership of natural resources are defined and ascribed in terms of who benefits from these rights, and how they are enforced, are central issues that motivate active participation in conservation of resources at the local level (World Resources, 2000-2004:10). In this view, a mismatch between local people's claims and unfair distribution of benefit streams are frequently a source of disagreements and conflicts that manifest from poor environmental governance and poor nature conservation (World Resources, 2000-2004:10). The centrality of the matter is that natural resources communal people ownership arrangements cannot be ignored and should not be doubted at all. For instance, Aggarwal and Elbow (2006:12) observe that a study in Zimbabwe's Southern communal area of Sengwe, found that wild products managed at community level contributed to 40 percent of average household income, and any future partnership with the private sector in wildlife conservation and exploitation, could open great opportunities for rural livelihoods. In this case, claims to natural resources is communal, which is of great importance as this informs benefits flow from a common (Aggarwal and Elbow (2006:12). Accordingly, the World Resources (2000-2004:10) classified property ownership into four categories:

- 1) Communal.
- 2) Private.
- 3) State owned, and
- 4) Open access

3.7.1 Open access

Open access imply to a set of resources where they lack rules about their use (World Resources, 2000-2004:10), and in the majority of cases, it leads to a condition described as "the tragedy of the commons" espoused by Hardin (1968). Based on this analogy, natural resources can easily be subjected to overexploitation and ultimately exhaustion. This culminates in resource extinction. Under Open access, there is a likelihood of resources being used with no restrain for future benefits to others and in many cases, the individuals are not obliged not manage them sustainably because someone else may benefit from it (Bonti-Ankomah and Fox, 2000:249). Undoubtedly, this leads to the depletion of resources as argued by the World Resources (2000-2004: 10) that open access, lacks rule enforcement on resources, leading to unsustainable use. An analysis of the GLTP's surrounding areas and the park itself, confirms that, the vast areas fall into three categories either as private, state or communal ownership. The issue of Open Access therefore, does not apply even in these area's historical times. In that regard, Hardin's "the tragedy of the

commons" theory is relevant under open access ownership where no rules, norms, values and institutions to regulate access and utilization of resources. As such, no due diligence is given for future use of those resources and the likelihood of extinction is high.

3.7.2 Private ownership

Private ownership is one of the most important resource ownership emerging in the GLTP. It entails ownership by individual agencies, institutions or an organization, to hold the rights to exclude non-owners from using the resources and the communities around it will have to recognize the rights of the owners to exclude them from the private resources (Bonti-Ankomah and Fox, 2000:250; Demsetz, 1967:354). In the case of the GLTP, the numerous conservancies and hunting concessions in and around parks constitute private ownership regimes where stewardship of natural resources and rights to use are reposed in private concession or leaseholders. World Resources (2000-2004:10) argues that private ownership provides incentives to maintain and continue benefits from a property's resources, but can also allow destructive activities on the part of the private owner, which may affect other people who enjoy such resources. Thus, in as much as private ownership gives tenure security, it still requires monitoring otherwise the actions by private owners, may turn out to be ecologically destructive if no standards and rules are enforced to ensure that certain biodiversity and ecosystem standards are met. In the case of the GLTP, it is interesting to note that private operators exist on both Zimbabwe and South Africa, through a leases and concessions arrangement, and their operations are confined to eco-tourism, wildlife trophy and sport hunting. However, leasing private operators without creating mechanisms for community benefits is problematic as it creates a sense of loss of enjoyment of those resources on the part of communities living side by side with wildlife, and at time face problems of predation, crop raiding and intermittent human injury from problems animals. While local arrangements such as CAMPFIRE in the case of Sengwe and a Contractual Park in the case with Makuleke, meant that communities participate, the net benefit per capita of revenue generated from these projects have been dwindling. Research evidence showed that there is growing pessimism about their relationship with the holders of rights to hunt and run projects.

3.7.3 State ownership

State ownership implies that governments have ultimate control of resources within their territorial jurisdictions and may exclude other nationals and certain people from accessing and using those resources as long as the state follows accepted political and legal procedures in determining who may or may not use natural assets (Demsetz, 1967:354). Bonti-Ankomah and Fox (2000:250) argue that what distinguishes the state from any other form of ownership is the fact that it has the

power to levy tax and take it. This is within the acquisitive function of governments as expounded by David Easton's (1965) political systems theory. However, the state faces huge challenges, which may limit the exercise of its power especially where ownership overlaps between the state and community ownership (Bonti-Ankomah and Fox, 2000:250). The convolution web in terms of these overlaps in Makuleke and Sengwe were confirmed by the claims local people made concerning resource ownership. The following 3.5.4 therefore, analyses communal ownership, its utility and applicability in view of contested natural resources claims in the GLTP.

3.7.4 Communal ownership

Communal ownership is one of the most crucial focuses of ownership, particularly when one looks at it from community-environment point of view. Communal ownership is the cornerstone for local people to enjoy autonomy in presiding over natural resources in their areas. In this sense, community ownership implies that natural resources are owned by a group of individuals such as a village, and in many cases, this consist of social groups who share the same rights to use the resources while excluding non-members from having access and use rights of the resources (World Resources Institute, 2000-2004:10; Bonti-Ankomah and Fox, 2000:249). Communal ownership is regarded as an example of common property, which is controlled, owned and used by a group of individuals together, and hence contrasts with private property or state regulated property (Adger et al., 1997:4). It is characterized by excludability of those regarded to be nonmembers. In addition, communal or common property ownership should not be equated to open access, which the Hardin (1968) argued would culminate in "the tragedy of the commons." Thus, communal property rights especially over natural resources should be treated as a separately from open access ownership. The communal property ownership is a characteristic among the majority of communal areas in and adjacent to transfrontier conservation areas. These local people as a collective hold one another accountable over the way they use of the environment. This shows great promise in conservation and environmental management, at least from group theory point of view where people exercise self-regulation to enforce access and non-access, hence achieving cooperation among members without having to pursue individualist strategies (Adger et al., 1997:5).

Equally, the management regimes under common property ownership are rooted in local communities' practices. Usually, it is through a set of institutional arrangements, customs, rules, formal and informal laws, codes of conduct, norms and strategies (Muchapondwa et al., 2009:9) that define conditions for accessing natural resources and control of a range of benefits arising from collective use of natural resources (Swallow and Bromely, 1995:100). The authority to

administer communal property ownership in the case of natural resources is founded at two levels in the two case study communities. These are local government systems such as Village Committees (VC) (Adger et al., 1997:5) and group associations such as CAMPFIRE in the case of Sengwe community of Zimbabwe. In Makuleke, the local people laid their customary claim to their ancestral land lost in 1969 through support from human rights lawyers and conservationists, which they regained and restored full ownership rights the Communal Property Association (CPA) (Steve Collins, unpublished; Steenkamp and Uhr, 2000:5).

Communal ownership means that it is regulatory, and access to resources can be denied to some individuals (Demesetz, 1967:354), which rights are a preserve of defined community or individuals. From this perspective, communal ownership is self-regulatory to the extent that the "tragedy of the commons" is unlikely to occur where the norms, values and rules are strong. The World Resources (2000-2004:10) argues that communal ownership allows efficient sharing of resources among those dependent on them, but can be harder to define, govern, and enforce formal legal terms.

What comes out clearly is that communal ownership shows characteristics for flexibility to evolve in the face of changing socio-economic and political environment (Aggarwal and Elbow, 2006:17). To this end, it is not in the interest of communities to replace communal and some customary systems with state ownership or privatise the resources, but it can be improved and modified taking cognisance of community livelihood interests and local conservation rooted in rich indigenous knowledge systems. If the goal is to improve stewardship of natural resources, then the local communities should be the starting point for any ecological intervention rather than promoting and facilitating exploitation of resources under regimes that enhance outsiders to reap more benefits more than the local people. The government can materially strengthen communal property rights or combine them to have hybrid ownership systems and accord them official recognition (Aggarwal and Elbow, 2006:17).

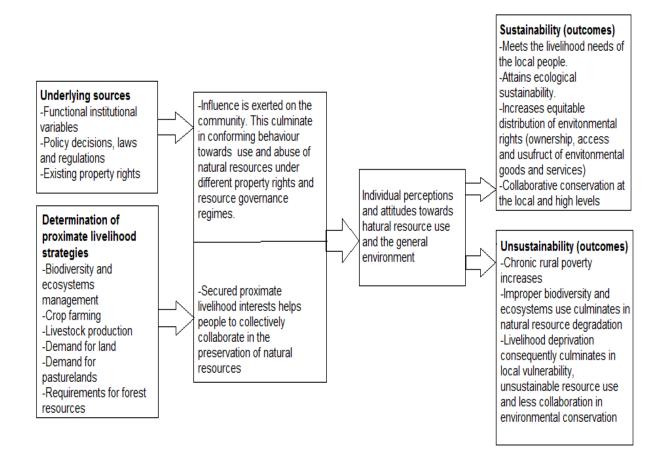
3.8 Resource rights, implications on livelihoods and conservation

As a starting point, rural communities in many instances rely on multiplicity of natural resources to sustain their lives. Agricultural practices include crop farming, livestock, wildlife and forest resource harvesting as integral part of rural livelihood (Ashley, 2000). In some cases, a number of strategies including seasonal wage employment and remittances from relatives working outside the community to supplement their livelihoods and this were evident in both Makuleke and Sengwe communities. Therefore, a number of assets that households have ownership over determine livelihoods options that the local people draw from to match specific needs (Shackleton et al.,

2000). Access to and ownership of assets is thus key determinant to avert rural vulnerabilities. In supporting communal rights, literature has it that for a long institutions at various levels have to play important roles in the specification and functioning of property rights at the local level so that they have meaning on communities (Borge and Shonhoft, 2000:2). As a result, David Easton's (1965:185) political theory suggest that institutions function in a way that determine who gets what, when and how. In support of this point, Demsetz (1967:347) used econometric models and theorized that property rights are instruments of society, and derive significantly from the fact that they help man to achieve their expectations, which can reasonably be held in their dealings by others. Demsetz (1967:347) went further to note that expectations find expression in laws, customs and mores of society, thus, an owner expects the community to prevent others from interfering with his or her actions, particularly if the actions are not prohibited in the specifications of his rights. It is clear, then, that property rights in natural resources specify how persons benefit or fail to benefit (exclusion) from resources they collectively own.

One important aspect to consider when looking at natural resources rights as noted by Borge and Shonhoft (2000:2) is that the central issue is to understand behaviour of rural people's interactions with the environment in general and the agencies managing or having legal rights over such resources. It is noted with concern that their interactions are not smooth, and research has shown that usually the relationships conflicts ridden due to prohibitive measures superimposed by state institutions in the management and governance of resources (Borge and Shonhoft, 2000:2). The existence of conflict goes as far as to demonstrate the contradictions found in natural resource rights in the GLTP, with Makuleke and Sengwe communities' claims having to be subjected to fundamental change in terms of how people use their environment following the establishment of the Great Limpopo Transfrontier Park.

One observation this study makes is that the property rights debate is primary a function of property rights guides and incentives (Demsetz, 1967.348). The issues of incentives distribution in this regard underpin directly the extent to which people conserve natural resources. In expanding this analysis, Heltberg (2001:187) and Nanjundaiah (2008:9) suggested a framework, which this study used to depict interactions and the way awarding and withdrawal of rights as well as incentives from communities influence the condition of natural resources at the end of the human-environmental relationships as shown in Figure 3.4.



Source: Adapted with own additions from Heltberg (2001:187) and Nanjunadaiah (2008:9) Figure 3.4 Policy and Community resource influence and resource outcomes

From the above framework, this study has reservations on the preponderance of state institutions and international organisations against overlooking the vital roles played by communities in conservation. It is argued in this study that when resource rights are guaranteed, the attitudes and behaviour of communities influence natural resources conservation in a positive way, and the environment result in positive human-environment relationship. This in turn leads to positive outcomes manifestly meeting local livelihoods needs of communities and motivates them towards environmental sustainable conservation. Even though communities may lack scientific knowledge on conservation, but they can always be negotiated with less hustles with them based on actors' consensus. If not, the opposite outcome results in loss of livelihoods and unsustainable "resource capture" resulting from a sense of ecological marginalization (Murphy, 2005:3, Lind and Sturman, 2002:52). This occurs when there is structural imbalance in resource distribution when the underlying currents of functional institutions' policy decisions and ascription of property rights are skewed to over-advantage state institutions and other outside actors in terms of exploitation of natural resource at the expense of the local communities (Murphy, 2005:3, Lind and Sturman,

2002:52). This happens more particularly when those policy decisions and distribution of property rights impose restrictions on proximate livelihood strategies of the communal people, resulting in unsustainable environmental practices (Lind and Sturman, 2002:68). This can have extensive consequences for human populations who directly depend on the environment for their subsistence. One such mechanism occurs when dominant groups in a society shift their practices, policies, laws and institutions governing distribution of resources in zero-sum game in using resource in their exclusive favour. However, through re-conceptualizing the nature of resource rights allocation efficiency and acknowledging the multiple uses those rights could be put, as well as the relationships between the various actors, the "zero-sum" outcome can potentially be transformed into a "plus-sum" outcome, with enhanced actors' confidence as a major positive outcome (Huggins et al., 2006:391).

In many instances, institutional currents are caught up in complex situations of having communities claiming rights of ownership whilst living adjacent to the park area and undertake production activities such as agricultural crop and livestock production, wildlife exploitation through various local arrangements and harvesting of forest resources. Institutions working on biodiversity conservation development as argued by Crewe and Harrison (1998: 27), assume that local communities do not have rights to land declared as a transfrontier conservation area or park. Allegations have been always that these people do not protect the environment and rather they hypothetically degrade it because they are perceived as "primitive" and not aware of the modern scientific ways of managing natural resources and the environment. Crewe and Harrison (1998:27) and Borge and Shonhoft, (2000:3) gave the example of the Masai Mara and put a strong argument that Masai pastoralists devised techniques for managing (harvesting, improving, protecting and regenerating) natural resources because they have rights over such resources and understand vulnerabilities associated with depleting them. Therefore, in their humble way, they place themselves among the uncelebrated conservation experts. Further to that, Niamire (1995:255) rejected the extremism that defies the logic of local people's conservation capacity and indigenous knowledge to manage resources. The premise of the argument is that local people with ownership rights have in place rules, customs, values and regulations enshrined within traditions of societies to ensure smooth functioning of their environment, and Muchapondwa et al., (2009 9) concurs with this idea when he looks at the importance of institutional variables enhancing biodiversity conservation in bioregions.

Narrowing these arguments to the GLTP, this study observes that the community resource rights are caught up in a complex power relations struggles, and makes local claims difficult to realize

and advance because of the multi-level governance architecture determining who gets what, when and how. In environmental governance, community property rights failures potentially precipitate environmental degradation, natural resources depletion and subsequently engender poverty and environmental conflicts among groups of people. Apart from that, in many instances, natural resources such as oil in Nigeria, diamonds in the Democratic Republic of Congo and Liberia, are often major sources of national conflict and instability especially in cases where resources are not shared equally among various groups of the society (Haysom and Kane, 2009:5). Notwithstanding the above, clearly, where natural resources occur in abundance and are seen as the predominant source of wealth, any ownership mismatch between the state and indigenous people, most likely generate resource based conflicts and poor environmental decisions is the ultimate of such processes (World Resources, 2002-2004:10; Haysom and Kane, 2009:5). In above analysis, state ownership is so apparent that it is taking precedence over local rights, and it is being complemented by international organisations. In that regard, this study cautions that any ascription of property rights should take cognizance of the political ecology of communities for conservation to succeed. Again, it would be a misnomer to assume that community ownership and its accompanying rights at that local level, leads to the tragedy of the commons as envisaged by Hardin (1968). Due to these perceptions and contradictions, it is crucial to briefly examine how these manifestations affect communities and conservation successes, and how actors in the whole conservation matrix relate with each other from a behavioural point of view in the work by Brown (2005) "quadrants analysis" and the "spiral Dynamics" a "Theory that Explains Everything" espoused by Don Beck (1999).

3.8 Understanding human-environmental behaviour

There is no globally prescribed human environment behaviour since this is determined by various factors in a given scenario, at a given time and place. Human behaviour at both the individual and group levels is the cause of many critical environmental problems, from global warming to resource depletion to environmental degradation. Understanding what motivates individuals and groups to behave in environmentally friendly and unfriendly ways is thus critical if the world is to face effectively these ever-worsening environmental problems. This area of analysis in the context of the GLTP stakeholders sound new and complex, but relatively being a young field, derives from conservation psychology that seeks to approach the issues of environmental conservation from an individual and stakeholder/agency based perspective. This thrust has two primary goals: to determine how actors behave, influence or impose other stakeholders in a quest to achieve environmentally friendly behaviour to come about (or fail to come about) and to promote participation in various ways that are pro-environmental behaviours. Because conservation

psychology looks at human behaviour in both individually, collectively or institutionally, it makes intuitive sense that the interrelationships therefore are critical to understand and eventually help solve issues of human-driven environmental problems.

Generally, research into environmental decision-making and behaviour has produced numerous examples of the important roles that certain institutional and stakeholders' actions can have in improving the state of the natural environment and the relationship of human beings to it. Much of the research done to date has sought to explore the determinants of various environmental behaviours, and reflect pre-determined attitudes towards rural people living adjacent to bioregions rich in pristine flora and fauna, with the general perception of treating them as not so good environmental stewards being obvious. Factors often cited in the literature of transboundary conservation include environmental attitudes, beliefs and values, indigenous knowledge, local practices, past experience and the desired behaviour, the level of local effort to participate and demographic variables not being in line with modern conservation.

Survey studies in Makuleke and Sengwe communities have found these variables to be significant, depending on the behaviour-type that stakeholders seek to institute in a particular environmental scenario and the population concerned. While studies of many different environmental behaviours have been completed, a few have addressed aspects pertaining to the important roles that local communities play to enhance transboundary natural resource governance, management and achieve the national, regional and international biodiversity and ecosystems sustainability. This has always generated high levels of environmental acrimony between the governmental and conservation stakeholders vis-a-vis communities found in or adjacent to the conservation areas such as the Makuleke and Sengwe communities that were studied. As long as environmental problems remain deeply rooted in human behaviour, there will be a significant role for local communities to play in helping to improve treatment of and interaction with the natural environment.

3.8.1 Spiral Dynamics and behavioural interfaces in resource governance

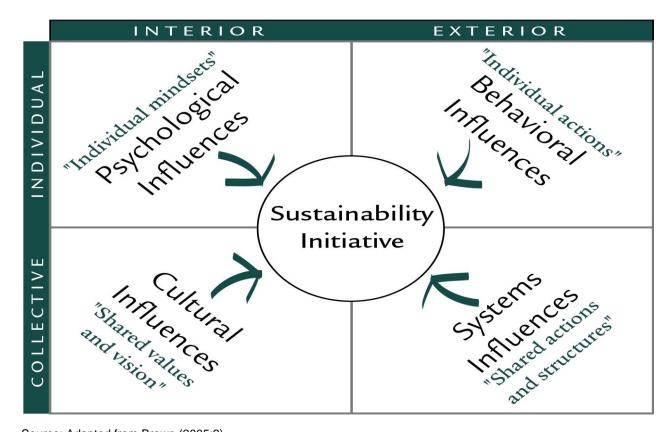
When considering natural resources conservation some of the central issues crucial to look at are the behavioural manifestations of actors involved in biodiversity and ecosystem in terms of how interact with each other in conservation. In the majority of cases, the interactions show diverging interests arising from what Don Beck (1999) describes as "...endless clashes over worldviews, constant threats about "us" (institutions) versus "them" (communities) or class-based violence, and expensive, politicized solutions that are both inappropriate and ineffectual." The current global

influence on transfrontier conservation policies, institutional construction and the redefined resource governance and the ascription of rights thereof, epitomize "universal awakening on environmental consciousness worldwide" (Yang, 2006:25-26). From the environmental conference held in Stockholm in 1972 to the World Conservation Strategy, Our Common Future, Caring for the Earth and to the 1992 Rio De Janeiro Earth Conference and Agenda 21 blueprint of action, serve as evidence of a powerful global wave shaping behaviour of international, regional and national institutions in relation to the environment (Yang, 2006:25-26). Perhaps one crucial observation made in this study is that conservation policy prescriptions consistently follow guidelines prescribed at the global level, with presumably limited local input because of the scale levels at which discussions and deliberations take place.

Agrawal (1999:6) complements this observation and argues that attention and understanding details se manifold developments is critical when it comes to policy changes, which at times are taken on behalf of communities leading to outcomes that are unsustainable and inequitable as demonstrate in Figure 3.3. This is so obvious to the extent that in the postmodern society, Beck (1999:2), questions on who can unite the global knot so that both the capitalist and common people's goals can be meshed for the common good remains far from being achieved today. Through the lens of 'Stages of Social Development,' Don Beck (ibid) inspired this study to unravel the pre-eminence of rigid conservation ideologies when crafting and shaping perceptions and behaviours of state institutions and international organisations regarding their relations with communities living inside or adjacent to peace parks or transfrontier conservation areas.

As a starting point, most of the discussions as alluded to by Don (1999:2) intimate on competing economic models of open political access, with mandated equality of global systems synthesized and ramified as the new world order. This results in socio-ecological preponderance of external top-down process and superimposition of solutions on lower tiers of society. In the majority of cases, this happens with limited consultations with those to be affected by those decisions at the local level. Interestingly, as is the case with the Great Limpopo Transfrontier Park in particular, its conception was not rooted in local ideologies and aspirations of the indigenous people. This leads to external design of conservation approaches that can easily falter, unless they include as parallel and simultaneous tracks, the essential steps and stages in integrating the interior and exterior collective and individual aspects in dealing with complex issues holistically as envisaged in the Spiral Dynamics and the Integral Framework for development (Beck, 1999:2; Brown, 2005:2).

According to Beck (1999:1) in Spiral Dynamics thinking, "The Theory that Explains Everything," human actions, behaviours and attitudes can be understood through colour coding to explain various worldviews that inform human behaviour in relation to, in this case, to other actors in biodiversity and ecosystems management. On the other hand, Brown (2005:2) uses the Integral Framework in the form of "quadrants" in a comprehensive systems to examine cultures, psychology and behavioural issues in comprehending human behaviour, which is referred to as the "Theory of Everything" as supported by Hesler-Key and Wood (2002:3). Diagrammatically and analytically, the Integral Framework and the Spiral Dynamics are born twin theoretical perspectives that explain the same thing using different models as shown in Figure 3.5.



Source: Adapted from Brown (2005:2) Figure 3.4 The conservation guarants and human-environment behaviour

Through analysis of various quadrants, one is able to identify the major forces, which influence human behaviour that determine success or failure of any initiative (Brown, 2005:2). The territory of each quadrant reveals different aspects, subjects and objects that relate to environmental behaviour are analysed in Table 3.5.

Table 3.5 Quadrant analysis table of human-environmental behaviour

Quadrant	Context	Area that are addressed	Tools for transformation
Psychological influences (Individual-Interior; self-consciousness and internal reality of an individual) Guided by 'l'	-Self-identity and consciousness; intentions; personal values; attitudes; spiritual beliefs and commitment; depth of responsibility and degree of care for the environment and others.	-Development; emotional intelligence; motivation and will; understanding of one's role in the community and impact on the environment; personal goals and connection to the natural world.	-Compassion practices to nature through self- questioning (introspection) and emotional literacy.
Behavioural influences (Individual-exterior actions) Guided by 'It'	-Behaviour; actions; capabilities; physical boundaries and individual qualities.	-Conduct toward environmental conservation; response to rules and regulations etc.	-Clear rules and regulations; guidance from respected authorities; use of sustainability technologies; use of litigation to enforce regulations; etc.
Cultural Influences (Collective-Interior: Culture and Worldviews: Internal realities of groups) Guided by 'We'	-Share values and worldviews; shared meanings; mutual resonance; cultural norms; language; boundaries; relationships; symbolism and agreed upon communal ethics; etc.	-Collective vision; community/family/orga nization members' relationship with the environment; collective interpretation of power, class, gender and inequities; collective perception of the environment and pollution (environmental degradation).	-Dialogue (participation); community directed development; inclusive decision making; consensus-based strategic planning; trust-building; cooperative participation; group introspection; etc.
Systems Influences (Collective-Exterior: Social systems and Environments) Guided by 'Its'	-Visible societal structures: systems and modes of production (economic, political, social, informational, technological and educational); strategies; policies; measures natural systems, processes and the interactions in the environment; etc.	-Stability and effectiveness of political and economic systems; legal frameworks; class; global biosphere; restoration; protection and sustainable use of natural resources; climate change; restoration, protection and sustainable use of natural resources; etc.	-Policy making; shareholding activism; organizational reengineering; regulations; natural resource restoration and management systems; micro- enterprise; natural environmental changes; population changes; etc.

Source: Adapted with own additions from Brown (2005:3).

The framework divides both individual and societal behavioural aspects into four categories from individual behaviour, attitudes, feelings, collective attitudes, collective behaviour, and systems response having a strong bearing on the sustainability of an initiative at the centre. This framework was adaptable to help in assessing success or failure of conservation programme or project. As already indicated, the success of the GLTP depends on key success factors espoused in this model. The psychological, behavioural and cultural influences highlighted express wide perspectives that relate to individuals and local communities, which the systems theory deal with

at the higher echelons of governance. If one contextualizes the Spiral Dynamics principles, the blue colour coding augers well with the systems influence as a quadrant in explaining the worldviews, rules and regulations that individual states demonstrate in implementing governance regimes and management of natural resources. A good example this study has noted is that of the United Nations General Assembly Resolution 1803 of 1962, the Rio de Janeiro, Agenda 21 of 1992 that apply to the systems theory in line with the colour coding of the Spiral Dynamics (Beck, 1999). It is pertinent to mention the integral framework explores the moral, psychological and cognitive issues and simplify our understanding of conservation psychology in human interiority (Hochachka, undated:2). At the same time, it is important to mention that for communities to be motivated to conserve natural resources effectively with full agreement with others who share the same views. The global views therefore, have to be merged with communities' way of life and strategies in order to achieve sustainability of conservation (Hochachka, undated:2). It is argued further for the "world-centric" views to move away from the global level (systems influence) to the local level. This would help communities to understand issues in their simple way to enable them infuse their own cultural meanings into conservation work in order for that work to correspond with their local traditions and ways of thinking. If it is policy-making, shareholding activism, organizational reengineering, regulations and natural resource restoration and management systems, natural environmental changes and population changes that matter (Brown, 2005:3). These essential issues have serious implications on nature conservation, still need to be addressed from the local level perspective and to have local buy-in for purposes of enlisting support before being implemented such that the local people will not view them as outside interventionists (Byers, 2007:2). This is so critical so much that Byers (2007:2) in his conservation relationship analysis, laments:

"Outsiders-actors from national or international levels-should assume that local people who use and manage resources directly are making what they perceive to be the best choices they can, given their options. The assumptions should be, unless there is a great deal of evidence to the contrary, that local management practices are often sustainable and ecologically wise, and if they are not, it may be because the choices available to local people are constrained by factors outside their control."

Increasingly, it is becoming clear from literature that the behavioural aspects of individual organisations, communities and state institutions should find some interface in the whole matrix of resource governance. This should not be ignored when it comes to because they form some

ecological systems integration in their interactions relating to the environment, thus, the assemblage of behaviours called natural resource governance, conservation, sustainable livelihoods and human ecology, meet at a common rendezvous between ecosystems (natural resources) and social systems (Byers, 2007:1). In other words, this meeting point, is the driver where the rubber meets the road, an analogy that is perhaps familiar in developed countries, and is where the hoe meets the soil and a tree is planted, a wild plant is gathered for basket making and traditional medicine (Byers, 2007:1-2; Sola, 2004: 245). This quadrants analysis sharpens our understanding of relationships that ought to exist at various levels off environmental governance. To broaden the scope further, the Spiral Dynamics, will help to appreciate the above assertions when environmental leadership behaviour is cross-examined from a colour coding perspective.

3.8.2 Contextualising the Blue/Yellow Institutions and Green Communities in TFC

The Integral Framework addressed the issues holistically in broadening the understanding of individuals actors ranging from rural people to conservation managers in terms of how they conceptualize policies, engage in practices that affect natural resources in the decision making ladder. To this end, the unfolding conservation governance regimes and the assigning of specific resource rights thereof in the GLTP, attest to the systems quadrant in which transfrontier conservation is contextualized as rooted in worldviews that inform conservation strategies, policy measures, governance institutional design and broad interactions of actors. Linking these analytical aspects to the Spiral Dynamics by Don Beck (1999), this study makes serious considerations to argue that multi-level actors involved in the GLTP are collectively in the blue and yellow category. This is in terms of the interpretation of how biodiversity and ecosystems governance have evolved from the global, regional and national level vis-sa-vis communities generally fall within complex interface of the purple and the green colour coding categories as demonstrated by the Spiral Dynamic as envisaged by Beck (1999) shown in Figure 3.5.

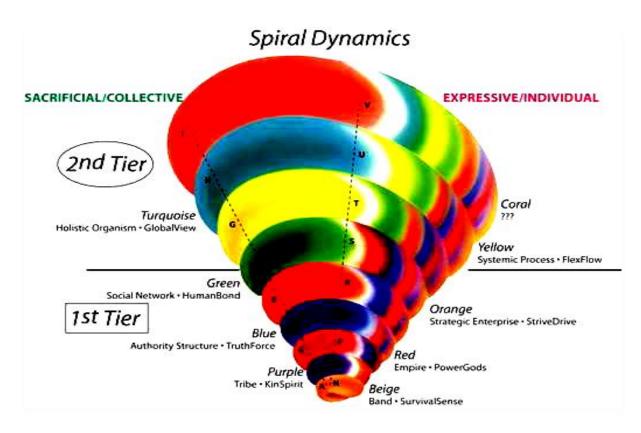


Figure 3.5 The environmental colour codes of the Spiral Dynamics

The Spiral Dynamics shows that colour codes can be useful in describing human socio-ecological behaviour in terms of attitudes, behaviours and social organization as they relate to the environment. These codes as Beck (2002) envisaged, create global diversities and drive evolutionary changes in societies. These changes described as "magnetic forces," attract and repel individuals, form webs that connect people within organisations, social strata and forge the rise and fall of nations and cultures (Don Beck, 1999). The following table was constructed from Don Beck's (2002) arguments to contextualize his views into conservation processes. In Chapter 2, Figure 2, this study referred briefly on the Spiral Dynamics and discussed about these aspects within institutional construction factors in analysing governance of natural resources. In this table, the various values affect conservation worldviews in relation to community resource and conservation claims were linked. Again, this is not an easy study of complex theoretical value systems. However, this study is confident that by expanding Don Beck's analysis of individuals and organisations through the lens of the Spiral Dynamics value systems, there is enormous influence that can be comprehended in the manner conservation institutions and individuals operate, relate with each other as actors individually or collectively. Taken together, this study would assert that these value systems drive the appearance of certain interrelationships that characterize the attitudes, perceptions and approaches applied in transfrontier conservation such as the GLTP. Ideally, Beck (1999) defined the different tier colours in terms of what they imply, congruent leadership style exhibited or associated with a particular colour and the organizational configurations, imbedded in those leadership characteristics that can exist at different stages of society's development. These value systems are further contextualized deductively in Table 3.6 in various colours on how they directly relate to communities.

Table 3.6 The bio-ps	vcho-socio-ecologica	l and conservation	behavioural analysis

The Value System	Description	Congruent environmental Leader style	Organizational characteristics
1st Level: Beige (Instinctive/survivalistic Vmeme and the basic theme is: Do what you must just to stay alive).	 Produces instinctive skills to survive in the rainforest, savannas, bush and tundra, as well as in cases of serious deprivation and tragedy. Survival dependent on the land. 	Caretaker	Survival band
2nd Level: Purple (Magically tribal, embedded in spiritual animistiv vmeme and the basic theme is: keep the spirits happy and the tribe's nest warm and safe).	 Creates traditional and cultural thinking, bonds humans closely as knit groups with a common destiny. Shows allegiance to chiefs, culture, elders, local practices and socio- ecological clan affinities and the individual is subsumed in-group action. Preserve sacred places, events and objects (nature) and observe rites and tribal customs, which build into indigenous knowledge systems with which give meanings and magical significance to nature. 	Caring Parent or a caring community of people	 Tribal Orderliness and local internal cohesion.
3rd Level: Red (Egocentric vmeme and the basic theme is be what you are and do what you want, regardless).	 Stimulates the impulsive self while generating powerful images of aggressiveness, conquest, and predator/prey relationships (e.g. neo- liberal environmental commoditisation, corporate and 'elite resource capture' at the expense of local communities). 	The big boss phase pre- eminently dominated by powerful and exclusive conservation ideological underpinnings with no regard to local level processes of the local actors.	 Exploitative empire or relationships that is typical in neo-liberal capitalism.
4th Level: Blue (Purposeful vmeme and the basic theme is: Life is organised, regulated and has predetermined outcomes).	 There is enforcement of order through the bureaucracy based on a code of conduct both internal and external absolute principles e.g. national, regional and international conservation regulations, laws and conventions. Laws and policies build discipline, character and moral fibre, particularly the witnessed superimposition of conservation values on communities. 	• Rightful Authority e.g. governmental, inter- governmental and legitimate conservation institutions in the GLTP.	Order-Driven hierarchies with actions guided by a set of rules and regulations at various levels.

The Value System	Description	Congruent environmental Leader style	Organizational characteristics
5th Level: Orange (Is the strategic phase and the basic theme is: Self-interests by playing the game to win).	 Forges the autonomous self, creates the algorithms of strategy, changeability and pragmatically stresses status, winning and success. Manipulates natural resources to create and spread the abundant good of life and the general belief is that society prosper through strategy, technology and competitiveness. Usually manifest in elite resource and corporate natural resource capture also. 	 Win- Win situation driven by institutions and individuals in a more market based neo-liberal perspective. 	Strategic Enterprising e.g. eco-tourism in the GLTP, but the win- win situation remains elusive and stuck in controversy over benefit streams to the community.
6th Level: Green (Communitarian/ egalitarian value system and the basic theme is: Seek peace and explore it with others by caring for those things that matter collectively as a community).	 Rejects authoritarian and materialistic codes while exploring the inner self of others. Searches for harmony, supports egalitarian communities in a quest for peace and caring. Endeavours to spread the earth's resources and opportunities equally through consensus processes. Depend on local decisions and bringing harmony with the environment that enriches human development. Is also cultural and local practice driven predicated on freeing people from the dogma of divisiveness, hence the caring for the environment supersedes cold rationality. 	 Sensitive facilitator characterise by inclusivity and broad based participation of the populace. Leverage on local processes, values and institutions to create harmony in environmental governance. 	 Social networks and internal cohesion. Communities are organised in terms of their local specific requirements e.g. Makuleke Community Property Association.
7th Level: Yellow (Integrative value system and the basic theme is: Live responsibly)	 Integral, systemic, natural works to restore human viability to a world convoluted by First Tier systems, both their successes and failures. Legitimizes all of the vMeme codes; works to keep each healthy and open to movement along the Spiral. The magnificence of existence is valued over material possessions. 	Competent partnerships (e.g. environmental partnerships at national, regional and international levels, however, this has excluded the local people and their institutions).	Systemic Flow guided by specific integrated and interdependent regulations.
8th Level: Turquoise (Globally holistic value system and the basic theme is: Experience the wholeness of existence through mind and spirit).	 Regards the world as a single entity 'global common' (Hardin, 1968), which is dynamic and enjoys its unique collective mind (e.g. encapsulated in conventions and global laws). Self it distinct, but blends as part of the larger compassionate whole and everything connects to everything else in ecological alignments in the environment. Constructs large-scale mandates in acting on behalf of all life. Nurtures all human manifestations that contribute to "the whole," while sensing big picture perspectives and comprehensive initiatives. It emphasises on a holistic approach, intuitive thinking and cooperative actions are expected at all the multi-levels of society. 	Counsellor role at multi-inter- governmental and non- governmental level.	Holistic and complex organisation that thrives on paternalism and the basic approach is epitomised by multi- lateral relationships in which the desire to help, advise, and protect may neglect individual or local choice and responsibility.

It is critical to note that the term vMEME, has its origins in a Greek terms "mimeme" used to describe "a unit of cultural information such as a political ideology, a fashion trend, language usage, musical forms, or even architectural styles. It involves self-replicating patterns of information that propagate themselves across the ecologies of mind, a pattern of reproduction much like that of life forms. They evolve to fill the empty niches of local environments (Csikszentmihalyi, 1993:120). In this study, this reflects on the surrounding belief systems, cultures and values people attach to the wildlife in the GLTP. The Memes, therefore, reflect a worldview, a valuing system representing core intelligence that directs human behaviour. For example, the intuitive collective thinking of the two study communities that the nature is a supply pot for their livelihood, and therefore they are obliged and have the responsibility to conserve their natural resources, which manifest the core local environmental intelligence for a health ecosystem.

If one looks at Table 3.6, it may be difficult to make sense. However, the power in this model comes from the ability to identify what value systems in operation, and which value systems naturally seek to emerge as the community develops and the worldviews change in biodiversity, ecosystems governance and in assigning resource rights. These manifestations are embedded conservation psychology (bio-psycho-social development) of human interrelations that finds expression in institutional relations, capacities and life forces, which can help the understanding of transfrontier conservation resource discourse from a behavioural perspective. The Spiral Dynamics value systems therefore, assist the visioning of institutional resource and community environmental relations.

In essence, this study makes an effort to interpret simplified details of the Spiral Dynamics in describing ways its viewpoints interconnects with transfrontier conversation actors' behaviour. This is particularly important in trying to understand how the rich territory of value systems are a reference point to interpret interrelationships and influencing existing conservation characteristics as it relates at various developmental stages of societies. This study's framework discusses the critical colours as highlighted by Beck above, but confine itself to the "Blue," the "Yellow," the "Turquoise," the "Purple" and "Green" colours as they are significant in understanding institutional governance dynamics and natural resource rights perspectives in relation to communities as they evolve in the GLTP. Figure 3.6 illustrates a conceptualization of Beck's (1999;2002) colour codes with detailed explanation of each colour code and institutional levels as each colour relates particular environmental and conservation ecological behaviour.



Figure 3.6 Aanalysis of hierarchical conservation behaviour and the Spiral Dynamics

Human and stakeholder behavioural ecology is important to the GLTP conservation and biodiversity and ecosystems management. Repeatedly, conservation failure arises not from the managed organism's life history and behaviour, but at times human actions often fail to do enough to manage natural resource properly by blocking behaviours that offer solutions. The idea postulated in the Spiral Dynamics addresses societies, cultures and subcultures as well as the worldviews from different stages of psycho-cultural emergence evolving in a complex manner through different stages (Beck, 1999) in terms of colour coding that looks at actions of individuals, communities, nations and interest groups in relation to community development. These act in a manner reflecting how they are affected by different developmental stages and they change, showing particular relationships deriving from each evolving developmental stage. Typically, the

relationships at each developmental stage inform various conservation actions and the manner in which actors relate with communities, particularly Makuleke and Sengwe in the GLTP that reflect actors' values in terms of environmental leadership, policies and practices such as park approaches and neo-liberal conservation. Accordingly, it is argued in literature that humans and their institutions are complex and change biodiversity and ecosystems rapidly and repeatedly, and are not only social, but also extraordinarily complex as they invent "third parties", that is, interventions, policies, regulation, controls and institutions that determines environmental actions of stakeholders (Low, 2004:15).

Then how does the Spiral Dynamics become relevant to this study and where does it fit in the whole debate about the GLTP especially resource governance, assigning of property rights and relations with communities? It becomes a central framework particularly when global biodiversity problems associated with use or overuse of environmental resources push states to rely on global support and global solutions, which, in turn, dictate their national policy positions as they relate to their citizens, fundamentally showing global thinking (Beck, 1999:6). From a colour coding perspective, the world-centric views of actors involved in the GLTP such as state institutions, regional and global conservation organisations clearly follow what this study refers to as the "global conservation enlightenment". These are exemplified by buttressed by conventions, global conservation consensus, rules, regulations, policies and practices such as Agenda 21 (Rio De Janeiro (Brazil), the Earth Summit, 1992 Declaration) and the Johannesburg Earth Summit of 2000, which at this stage of conservation are exemplified by two three levels: the "Blue," the "Yellow" and ultimately the "Turquoise" colour. These have important conjecture to this study if we juxtapose them with how actors in the "Blue-Yellow-Turquoise" categories are analysed, although they are complex and difficult aspects to deal with as they relate to this discussion. However, this study tries to do justice to the discourse and bring some exciting perspectives.

One assumption of Beck's Spiral Dynamics in terms of the various colours is that as societies grow in numbers or complexity, the tensions of the "Red" conflict ridden egocentric society becomes unacceptable and perpetual uncertainty and individualistic struggles create a sense of societal disorder reminiscent of Thomas Hobbes state of nature type of a society. That society, from Hobbes's perspective, is rigidly deterministic with a pessimistic vision of the consequently natural state of human beings in perpetual struggle against each other in an attempt to escape the grim fate. To this, Hobbes argued that this culminates in people forming the commonwealth, surrendering our individual powers to the authority of an absolute sovereign, then, individual obedience to even an arbitrary government is necessary in order to forestall the greater evil of an

endless state of war (Tricaud, 1998). Such personal interests of power absolutism is insufficient for stability and society then, hungers for an overarching goal to which all members may adhere to. Such a scientific approach is more evident in terms of human agency producing delights or displeasures within societies, obviously the desires for those pleasures or delights, induce activities rather than painful or even contemptible ones, and so are in a fixed search for felicity and aversion to pain (Joe, 2012). In this regard, the quest of conservationist is the pleasure derived from sustainability of biodiversity and ecosystems conservation from which wildlife thrives and flourishes unrestricted. Consequently, 'The Natural Condition of Mankind' from a conservation and Spiral Dynamics point of view, calls that a form of government could be justified, in which the state could best control human behaviour, in this case, environmental conduct.

Essentially, it raises a number of interesting and truthful points that auger coherently with the assertion that the society goes further to seek rules and principles which members are expected to abide by, and the "Blue" category, according to Beck (1999), comes into being, with a search for purpose, rules, regulations and systems to maintain and arbitrate on fairness. At this stage sees the development of organised societies that brings legal structures and democratic rule based on a mirage of laws applied to the whole society (Beck, 1999), whose interests typically represents the entire community in terms of rules, policies and procedures. This is to the extent that there is an attempt to institute basic internal standards, which in the context of conservation, compels communities in transfrontier conservation zones to abide with in terms of biodiversity and ecosystems management with the state having an enormous degree of control to ensure that there are incentives and disincentives for compliance and none-compliance respectively.

Typically, this is an area where park authorities from both South Africa and Zimbabwe participating in the GLTP, derive what can be referred to in this study as "guided mandate" from a plethora of laws and hence the park model ensures that certain standards are met enabling biodiversity and ecosystems to flourish. According to Beck (1999:5) and Wilber (1996), the blue category technically requires that state actions be embedded in specific ideology, impulse control, principles (policies), rules, discipline and focuses on future rewards. This assessment resonates with resource governance regimes unfolding in the GLTP with huge impact on livelihoods (socio-economic) practices of the local communities as well as undermining their capacity to conserve natural resources. The adoption and implementation of a coercive 'park strategies,' in the GLTP conservation corresponds with the concept of 'rules' that apparently is reposed in state agencies under the blue category in the Spiral Dynamics. The idea that the GLTP will attract huge investment is solely related to the hypothetical economies of scale envisaged to be presented and

realized through eco-tourism investments by private companies or state agencies, in which case governments are expected to reap benefits through taxation. Again, this point put emphasis on the necessity of national control in terms of distributing rewards because it is only the state and its institutions with the mandate and entitlement to levy taxes and distribute it to its citizens.

However, there is no clear indication on how the local people benefit, hence making the issue of benefit sharing an elusive and the issue of resource governance, resource rights remaining highly contested. At the same time, it is important to highlight that state actors and complementing conservation organization, especially the Peace Parks Foundation (PPP), blending with the colour dimensions in conservation in the GLTP. It is shown by a combination of colour manifestations of the "Yellow" and the "Turquoise" colour categories as the global conservation overarching value systems that should provide the basis for common sharing, consensus and collectivism at a global level towards sustainable conservation. The national thinking, which is "Blue", because it is inadequate in meeting sustainable conservation of natural resources, is supported fundamentally by regional and global protocols and conventions to guide actors on conservation programmatic and policy matters. According to Freeman (2008), the "Yellow" colour integrates multiple complex global viewpoints. It seeks to manage communities from strong global conservation traditions in a regulated world, containing passionate idealists with healthy individuality, have a mix of employed and intentional community members with organisations undergoing growth, and combining them into larger and more complex forces for policy formulations governing relations all of which aspire to consensual ways of life (Freeman, 2008).

Further to that, the "Yellow" value provides the toolset to support hierarchies, and flexible complex models, which recognize the competence, attitude and knowledge to respond collectively to global needs (Freeman, 2008). Above the "Yellow" colour code is the "Turquoise" value system constructs large-scale mandates in acting on behalf of all life and nurtures human manifestations to contribute to "the whole," while sensing big picture perspectives and comprehensive initiatives that allow sustainability of things beyond sectorial interests (Beck, 1999). How does this link with transfrontier discourses in this study? It is argued in the framework developed above in the analysis of the Spiral Dynamics that worldviews dictate that state parties and conservation stakeholders consensually agree on conservation policies and programmes through conventions, which ultimately prescribe acceptable "best "global" environmental practices for managing biodiversity and ecosystems. These have found expression in established transfrontier or transboundary conservation programmes such as the GLTP. Perhaps one important point of interest is that the "Yellow" and the "Turquoise" colour value combinations evolve and operate

almost in the same manner at very high global environmental decision-making level processes manifestly through United Nations and other international and regional conservation organisations. One such example at sub-continent level in Southern Africa, it the Peace Parks Foundation founded by the late, Dr Rupert. Going forward in this discourse, a combination of the "Blue," "Yellow" and the "Turquoise" colour value perspectives in this study, produces a hybrid of mirage of colour coding preferably referred hereto in this study as the "Blue-Yellow-Turquoise" characterization for purposes of analysing both conservation state actors and other organisations involved in the GLTP. Accordingly, a deductive logic of Beck's Spiral Dynamics in this case, shows that global regional conservation influence being at play in the GLTP. It becomes more apparent through its manifestations in terms of conservation philosophy is well articulated through neoliberal conservation biodiversity conservation approaches, in which resources are subjected to forces of global markets, global and regional policies as well as conservation practices in a topdown approach in the hope to prevent the "tragedy of the commons" (Hardin, 1968). This global wisdom resonates fervently with the quest for a common future in the envisaged biodiversity kingdom that the United Nations 1992 Agenda 21 and the 1987 Report of the World Commission on Environment and Development, "Our Common Future" talked about the thrust needed to be pursued insofar as defining the human-environment relations are concerned. A combination of these succeeding complementary colour codes in the value system, clearly help the understanding of multi-level institutional construction in ascribing and determining the direction of conservation programmes, practices, policies, resource ownership, access, utilization rights and defining stakeholders' relations with communities. Ideally, the multi-level neo-liberal attitudes and perceptions is pro-business more than they are pro-poor poverty alleviation particularly regarding when one looks at the changing use rights and ownership of natural resources in the GLTP.

It is important to address what the UN Agenda 21 implies in understanding actions by various stakeholders with respect to resource governance, community livelihoods and sustainable conservation. The term 'stakeholders' or put different interest groups as put forward by Byers (2007:4), refers to people with varying interests from local, national, regional and international levels in terms of how they perceive use and management of natural resources in a particular place, area or region. Agenda 21 is a globally accepted blueprint for sustainable development in the 21st Century. Its basis was agreed during the "Earth Summit" at Rio de Janeiro in 1992, and signed by 179 heads of states and governments, among them South Africa, Mozambique and Zimbabwe, who are involved in the GLTP programme. This is in concurrence with the blue colour coding in the Spiral Dynamics in which the GLTP leadership is basically driven and characterized by global-views in neo-liberal economic terms. Based on this consideration, it is clear that the

acceptance of the 'tragedy of the commons' (Hardin, 1968) is unsurprisingly pervasive in the region's conservation programmes, and has been adopted as the guiding conservation philosophy inclined to public (government) and private sector partnership in both governance and management of transfrontier biodiversity and ecosystems under the development auspices of ecotourism. Consequently, this has attracted capital project investments, equally changing existing community conservation and resource utilization that have existed and benefited communities for decades. It is also critical to note at this juncture that it appears that the Rio de Janeiro encapsulated what local councils would do in terms of producing local environmental plans, which can be described as Local Agenda 21. This would have given more power and authority than just state apparatus involving communities in taking a pivotal role in the management, conservation and determining use of natural resources because the local people have the knowledge needed ready to be harnessed to make sensible decisions regarding natural resources in their proximity. This would ordinarily reduce cost on conservation tremendously. Thus, Agenda 21 as a guide for environmental leadership would help in making choices for development that benefit the society and the environment.

Agenda 21 shows that if issues concerning key stakeholders such as communities if not tackled, especially those deeply rooted local poverty and lack of integration of the local people in conservation of biological diversity, humanity faces higher levels of human suffering. Consequently, damage to the world we live in becomes inevitable (Agenda 21, Chapter 3: 1992; Agenda 21, Chapter 15: 1992; Agenda 21: www.iol.ie/~isp/agenda21/watsa21.htm). While the idea is to seek to strike a balance among competing socio-economic interest such as sustainable development, poverty alleviation, sustainable use and conservation of biological resources, it is apparent that the creation of buffer zones would culminate in loss of livelihoods by affected communities. Brown and Wyckoff-Bair (1995:23) observe that lack of consideration of local people's rights and interests in buffer zones is the missing link in policies that directly have a bearing on achieving conservation objectives and more indirectly influencing positive behaviours of people concerning their resource-use patterns not only in buffer zones, but also in adjacent areas. This is critical to the extent that recent academic revelations bemoan the elevation of the current paradox in which there is a lot of globalization pressure for private property rights simmering in these transfrontier parks. Thus, some have argued that this institute a new form of resource exploitation under neo-liberal economic markets, particularly with the introduction of conservation hunting by someone else for sport hunting, implying that animals can be killed for sport profit (Kahn, 1998:378). As a result, it is noted that communal or common property resources, which are predominant in rural areas of the GLTP, the combination of the "Blue-YellowTurquoise" national and worldviews assume to the contrary that they are unsustainable. However, this atavistically ignores the naked truth that communal resources ownership regimes often have restrictions on the use and are locally self-regulatory, whereas open access as espoused by Hardin (1968) does not (Kahn, 1998:378). In essence, for example, in the United States of America, cultural traditions among Native Americans dictated the methods and magnitudes of hunting, and those traditions tended to conserve the resources (Kahn, 1998:378). Communal people in Southern Africa have similar mores that are applied locally to regulate and constrain unsustainable local behaviour regarding how resources are used. Thus, this study would argue that the superimposition of global-views under the "Blue-Yellow-Turquoise" in terms of assigning rights, conservation policies and programmes manifestations in the GLTP, overlooks, and literally rejects local traditional transformation are quintessentially important to conservation, governance of natural resources and livelihood support of the largely rural poor communities.

The "Green" value perspective in Spiral Dynamics clearly articulate issues of attitudes and behaviour of local networks, common values and the quest for an egalitarian society that exist in many in rural communities. This "Green" does not imply that communities' perceptions and attitudes typify the "green ecology," but can be linked to Level 2 "Purple" representing what is thought to be tribal societies (Freeman, 2008). The life conditions thereof epistemologically show a shift from mere survival into relative safety and existing cultural values are intended to preserve coexistence of communities. The key features, as Freeman (2008) argues, involve the authority of elders, traditional systems that values kinship and demand high levels of community members' conformity to social norms, traditions and cultures that also define environmental relationships of the community. As a result of this, mystical beliefs, cultural practices particularly views on respect for totems and the sacredness of certain flora and fauna species, expressively emerged during research as having helped communities to conserve natural resources in both Makuleke and Sengwe communities. With that in mind, this study is of the view that traditional conservation wisdom, if harnessed, could enhance the "Blue-Yellow-Turquoise" in terms of the national and worldviews over conservation objectives and programmes, with limited cost incurred in policing biodiversity and ecosystems management the world over. More importantly, it is noted in this research that for rural communities, the "Green" stage is often an early phase in which people strongly rely on traditions, founders wisdom (mostly strong community leaders) cultural beliefs and practices, which develop and evolve over time.

To buttress this point, Freeman (2008) also went further to state that the "Green" culture links with the "Purple" colour, with the "Green", having evolved from the "Purple" where it is seen as relatively

stable, but eventually, the founding beliefs would show signs of failure to adapt to altered environmental changes and the changing times (Freeman, 2008). This is particularly with a number of changes that are take place on the biotic and abiotic components of the environment precipitated by both human and natural changes such as cases of poaching and climate changes, jut to mention but a few at this stage. Figure 3.7 derives from these perspectives to demonstrate the evolvement and the interface of the "Purple" and "Green" colours envisaged in the Spiral Dynamics.

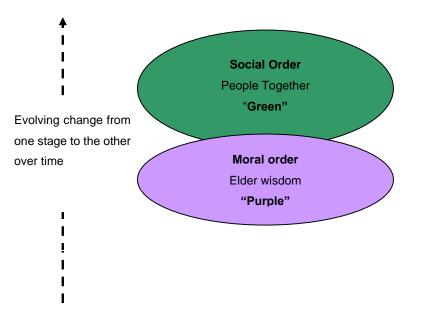


Figure 3.7 The 'Green' communities and and the 'Purple' moral environmental dictates

In furtherance of the above point, it is argued in this study that for example, climate change has created new conditions that require certain community livelihood adaptations, institutional construction and reconstruction, promulgation of conservation policies, laws and programme reorientation to respond to the hostile vicissitudes of nature's anger. This has also forced changes in biodiversity and ecosystems governance processes with strong global, regional and national policy and institutional interventions to save the global commons.

Interestingly, those institutions that govern natural resources in the GLTP superimposed certain measures for compliance at different levels. Such was the case with the Bushman in the Kgalagadi Transfrontier Park inferred to in this study, a project that involves South Africa and Botswana. Social changes that are treated as externalities such as migration of people also bring pressure on communally owned resource, as is the case with Makuleke and Sengwe communities. Consequentially, the communities may fail to enforce excludability of other people from accessing of natural resources and this can lead to unsustainable pressure over the resources (Kahn,

1998:66). Equally, this is an internal dynamic and the environmental consequences can be disastrous. For instance, too much pressure towards compelling the communities for conformity may prove unacceptably restrictive to those with strong and independent spirits even if the community, for example, may want to manage resource such as forests in a sustainable way (Freeman, 2008). It is noted in this study that communal property (indigenous property) rights held under the "Green" and "Purple" category regulated environmental conduct through mores. While these may not have the ability to ensure total compliance, it usually happens when outsiders migrate to the same area having no legal rights to use the resources, feel they have no obligation, let alone having no incentives to protect the environment and destruction can result (Kahn, 1998:66). The simple linkage this study makes in this analysis is that, despite having robust localized mores for conservation of natural resources, Makuleke and Sengwe communities face two pronged challenges of population growth and people migrating into these two areas. Thus, it is inevitable to avert long-term pressure on natural resources particularly from the mere fact of non-conformity of the new comers to the area, and generally, the loss of respect to local mores and conservation practices by those migrating to the area may exacerbate environmental crisis. This is especially due to lack of legal and resource access entitlements due to excludability.

While Makuleke and Sengwe communities' search for ownership and inclusion in the governance of the GLTP resources and their claims are in deep environmental contestations, the "Green" and "Purple" colour categories are compelling on the part of the community for environmental peace as this sustains their lives. Ideally, the issue of environmental care is strategic to the wellbeing of communities and ordinarily, they strive to end poverty using resources as their supply-pot, hence communal poverty rights over natural resources are inexorably part of human existence. To this end, many researchers have raised important points that rural people often have the most direct and indirect material and intrinsic interests over natural resource (Byers, 2007:4). However, they are often most marginalized of any stakeholder group in terms of participation in conservation (Byers, 2007:4), particularly where the emergence of high-level institutional construction have taken place, which, in terms of scale of governmentality, is far divorced from the local focus. Others radically challenge the rationality of such global wisdom and multilateralism of local resources. In essence some institutions ignore empirical local realities in terms of indigenous needs by unclearly defining their roles, rights and convolute benefit-sharing hence they recommend a radical rethinking to go to the drawing board and craft mechanisms that "promote local control over access to resources and effective institutions that set and enforce rules over use" (Brown and Wyckoff-Bair, 1995:42).

Combining the Purple and the Green values, this study argues, motivate humans towards inner peace and spiritual exploration, but it also has a tendency to express in New Age ways, to cherrypick from the buffet of traditional knowledge and seek microwaved enlightenment. Spiritual development can be similar to local conservation values, traditions, and the emotional psychology attachment that motivate people towards protection of the environment in a sensible and rational judgement. Equally, Green communities and organisations tolerate behaviours, which conform to collective needs rather than damaging and risk the community. These suggestions are increasingly supported, which suggest that there could be a way to design better strategies by appealing to people's perceived short-term interests, both familial and local in support of conservation (Low and Heinen, 1993; Ridley and Low, 1993; Low, 2001). If this approach is correct, government agencies, regional, international and private conservation organizations may find it productive to devise for policies that create real, personal communal motivation and incentives to conserve biodiversity and ecosystems. The more immediate and most significant benefits are practically realised at the local level, the more successful should and positive the outcome. Indeed, there is scientific evidence that supports this view such as Elinor Ostrom (1998) who revealed ideas about how incentives work by postulating that the more costs and benefits are separated (across individuals, across communities, across space or across time), the more difficult sustainable solutions are likely to be.

In essence, what comprises rational environmental behaviour for an individual is not necessarily (or even usually) a rational policy imposition on communities, but putting in place governance systems and addressing natural resource property rights that ensures behaviours to promote sound management of natural resources over relatively long periods (Dietz et al., 2003). Most traditions in Southern African communities have been good short to medium-term ecological managers, although not large-scale biodiversity and ecosystems, and generally, they are futuristic preservationists. Calls to the effect that we can solve environmental problems through "a radical reinterpretation of the human place in the world" (Katz, 1997), seem less likely to be effective. Perhaps the ideal situation is to look at strategies that can work in specific situations with the evolving processes and values embedded in that particular community interests, rather than self-centred high level institutional interests and tendencies (Ridley and Low, 1993; Low and Heinen, 1993; Low and Ridley, 1994; Low 1995, 1996; Penn 2003). If transfrontier conservation institutions in the GLTP could set aside evolutionary past and act without self-interest, perhaps there is room to easily be inclusive and act as if the GLTP one family critical to a plethora of equal stakeholders with valid interests, that also include the communities.

3.9 The ecological confluence of the spiral dynamics and GLTP communities

It is important to mention, perhaps at this stage that the stages that Beck (1999) talks about are developmental, and needs to be understood that societies as they evolve from one stage to the other never lose the capacities from earlier stages. The migration to another stage(s) emerges in response to the demands of changing life conditions within a particular environment and a particular ecological polity. If conditions change, this study further observes that there is reversion to the use of earlier sets of capacities, underpinned by different values systems. Hence the power in this model comes from the ability to identify what value systems are in operation, and which value systems are naturally seeking to emerge, as conservation actors interact with community as they develop, going forward. The reality of the matter is that the human community capacities and life forces such as their environmental mores cannot be constrained, but grow like grass through concrete and the most important interface therefore, if the various multi-level actors to find a synergy with the local processes to achieve collaboration in conservation. As Freeman (2008) would argue:

"When a community shows signs of stress or collapse, we can identify earlier stages which have become weak, and we can underpin them. We can also identify where individuals are most at odds with the surrounding conditions and values of the whole, and help them understand why and how to change in ways that will help them on their own developmental journey. The development of the community and the health of the individual are inseparable, in line with the social ethic".

The integral viewpoints, this study can note, which emerge with the "Blue" "Yellow" and "Turquoise" value systems provide a means to understand the national, global and community dynamic in all of its aspects. The impact of state actors, from the perspective of the Spiral Dynamics, provides a lens through which to view the balance of values present at high level of biodiversity and ecosystems institutional construction, which have had an enormous effect at local conservation level. Equally, this tend to affect adjacent communities in different ways depending on existing policies that either enable or disenable local members to have ownership, access to and exercise usufruct rights over biodiversity and ecosystems they lay claim on. Externally, it has been observed from the Spiral Dynamics analysis that the global forces enable multi-level institutions to relate to the surrounding culture, and it is clear to understand how various perspectives drive through to the local levels with legitimacy via state actors. However, this study proceed with caution that this may not imply outright biodiversity and ecosystems sustainable conservation because if the link with the local people is weak, it may completely fail to recognize local impulses which are driving ingredients for holistic and collaborative resource governance and sustainable conservation.

In the final analysis, this study notes that South Africa and Zimbabwe, governmental agencies and other conservation organisations, are pursuing effective conservation of natural resources in the GLTP in clear actions that exhibit the "Blue-Yellow-Turquoise" colours as far as state conservation relations and collaboration with multi-level global systems are concerned. Equally, the various global views combined with national laws and policies, make up mixture of perspectives and institutional webs that generally have dictated not only who gets what, when and how from biodiversity and the ecosystems in the GLTP, but also determine who governs and owns the resources. On the other side, communities in the GLTP have shown to be "Purple" and subsequent evolvement into "Purple-Green" in their quest for communal ownership, caring for their nature using their locally based institutions, values, norms and practices that seek to end rural livelihood miseries in a largely egalitarian way. This assertion should not be viewed as utopian, but should be looked at from Beck's (1999:3) claim that when a society moves from one colour coding, the older systems does not disappear, rather, they remain subsumed in the total flow and reappears to reorganize society. In the end, there is endless competition of diverse interests, thus, the need for an integrative approach in which stakeholder interests are harmonized for the good of all.

As noted by Freeman (2008), "the Blue value, which can be challenged from Purple (that's not our way) from Red (Restricts my freedom to practice as I see fit) from Orange (constrains my options to develop) and Green (unnecessary bureaucracy). At Yellow, professionalism becomes just one of the many positive approaches that support quality, in just the way that the Ways to Quality model presents. Community–This may be seen from a clan/tribe model (our identity and traditions as distinct from the rest of the world) in Purple, as an ordered structure with management systems in Blue (which may be sought by regulators) and from the egalitarian sharing of Green. We may need to encompass aspects of all of these, at the same time as allowing individuality at Red and the entrepreneurial spirit of the community shop / café at Orange Red is not interested in community except for its own ends. In addition, Orange is more interested in the entrepreneurial aspect of the shop than its community worth. This also embraces the area of "Gemeinschaft versus Gesellschaft"-the distinction and balance between moral community bonds and socioeconomic association. Yellow will view community as an integrating force and as a means to create coherence throughout the first-tier dynamics, in shared ideals, effective organization and social expression. It will value all of the threefold aspects of society, and work for their healthy expression and integration".

The Spiral Dynamics and Quadrant framework introduced some understanding of how environmental interactions are influenced and how actors respond to various forces of change over time to affect other groups in society, particularly where the two frameworks are contextualized within transfrontier resource governance, communities' livelihoods and sustainable conservation. What is clear through the lens of the Spiral Dynamics is that a complex network of interests, often difficult to know exactly which behaviour should first prevail for the maintenance of a better change in conservation processes in the GLTP, which is not within the scope of this study, but clearly a cause for further inquiry. Too often, conservation programmes and activities are propagated at higher level, premised on presumably untested hypotheses about local social situations of communities, and that alone, is a recipe for failure (Byers, 2007:3) of conservation.

3.10 Conclusion

It is without doubt that communities remain caught up in this puzzle of contestations of complexity of global conservation ideas premised on resource ownership and use rights. These contestations have had significant effect on how the local people protect the environment. In addition, the local people's claims in so far as their livelihoods and attendant economic, social and ecological relationships are con. Such a puzzle regarding usufruct, ownerships, community access to natural resources and environmental responsibilities as well as obligations between communities on one hand, and state institutions and conservation organisations on the other hand, are ostensibly not yet reconciled, with potential negative implications on local collaboration in conservation of biodiversity and ecosystems in the GLTP. Ultimately, the state institutions and other multi-level natural resource governance structures follow a biodiversity and ecosystem development path moving away from the local people's competing livelihood interests, punctuated with negative attitudes and perceptions over how communities claim ownership to use resources in their vicinity. This in technical terms, negates some essential ecological realities that human-environment relationships between communities and their natural resources, are like born twins, and separating one from the other, might do harm to both due to interdependencies that exist for life support and motivation thereof to conserve resources. If the local people's trust can be secured, their claims guaranteed in actual collaboration and their indigenous knowledge systems buttressed for conservation, it is difficult to imagine the utopian "open access" as responsible for Hardin's (1968) "tragedy of the commons" in transfrontier conservation projects in Southern Africa. If not, this study is cautions that transfrontier conservation might remain elitist and far removed from the local people, and entirely tucked in state ownership and state driven governance regimes, and that can be a recipe for disaster in biodiversity and ecosystems management. Ideally, what comes out

clearly from this analysis is that communities are in latent contestations with conservation institutions based on disagreement over resource governance. The change in prescribed resource use, unclear benefit sharing, resource ownership and local people's participation to safeguard local livelihood interest, remain elusive, saliently hostile and potentially undermine biodiversity sustainability because collaborative conservation has not been secured, and is remote from realisation. The perceptions that obtain is that of loss of incentives for conservation at the local level. By arguing in this way, the study's deductive empiricism of the current state of affairs is not immune to invite criticism. However, it serves to alert policy makers to realize environmental contestations to cause a rethinking and further research to reorient approaches from the current processes to new models that are compatible and acceptable to all stakeholders, including communities. Consequently, this study would argue, one can only ignore this consideration at the peril of valuable biodiversity. As such, in as much as the issue of benefit-sharing, ownership and resource governance remain highly complicated, there is need to understand in part, the contribution that can be made by communities to conservation. This underpin motivation for Makuleke and Sengwe communities to effectively participate in self-regulatory sustainable conservation as the "Green" and "Purple" mores and attributes have shown, which can be harnessed in the GLTP biodiversity and ecosystems conservation.

CHAPTER FOUR

4.1 Overview

Chapter 4 introduces the description of case study communities. It gives justification for choosing Makuleke and Sengwe communities and more importantly, put into perspective, the research contexts. It is important to highlight that this chapter discusses the need to avoid telescoping socioecological issues at a distant, as this has traditionally tended to generate unrealistic data in explaining community-environmental relationships in protected areas. Ideally, the general conclusion is that researchers should engage socio-ecological matters based on empiricism and practicality, which ultimately helps to strike a balance between clarity, precision and comprehensiveness of findings in articulating the discourse of transfrontier conservation and its complexities in relation to communities. It is an anathema and repugnant to view socio-ecological issues in a remotely punctuated way, which for all its purposes is devoid of science when dealing with complex transfrontier conservation issues.

4.2 Introduction

This chapter describes the case study communities and gives justification for selecting Makuleke and Sengwe as case study communities in the Great Limpopo Transfrontier Park. Finally, the chapter makes an effort to situate the research context of the study, which is proceed to chapter 5 further clarify methodological issues to help readers understand why certain techniques were applied.

4.3 Case study communities

This research used two case study communities to provide in-depth analysis of the impact of institutions of governance regimes on livelihood practices and conservation in the GLTP as it relates to community resource management processes for various socio-economic reasons. Analysis of historical and existing institutional processes, livelihood activities, participation of various stakeholders in conservation, environmental decision-making processes, and presentation of empirical data are dealt with in chapters 6 and 7 where findings are analysed and discussed in an integrated mixed style to give the reader the flow in a way that offers coherent flow of issues. The analysis of historical information from conservation philosophical foundation, ideological perspectives to property rights and ownership regimes, give more insights about the discourse of transfrontier conservation governance. Concurrent examination of local use of environmental goods and services in relation to how local users perceive natural resources in the GLTP as they relate to their local livelihoods, and therefore the motivation they have towards

biodiversity, are some of the critical aspects that have been addressed by this research. This would help in defining conservation working relationships between multi-level actors, fashioned in neoliberal style and encapsulated in chains that link production and purchase of particular 'environmental service', which is conceivably is critical in understanding stakeholders cooperation at different levels of resource governance (Buscher, 2011:306). Due to the current "commoditisation and pricing" of natural resources, local livelihood practices in communities in the GLTP have been chastised, and participation of the local; people in transfrontier natural resource governance has consequently been reduced in those instances. This study therefore can put across that biodiversity becomes a product or a commodity that is largely seen as ready for the market. It is no understatement then, to assume that the inclination "to commodify nature and market its services is a massive transformation of the human-environment relationship and of the political economy of regions and landscapes" is pervasive across transfrontier conservation projects with serious negative implications on communities as critical stakeholders (Liverman, 2004:734).

The study Communities: The selection of Makuleke and Sengwe communities was premised on the knowledge and understanding of the centrality of the two rural communities in respect to the GLTP. Above all, the two study communities were considered by the researcher based on their accessibility to do the research from which sample households, individuals and park government officials would be successfully interviewed to provide their valuable insights into the study. In any case, it is one of the most important considerations for any researcher to ensure that the target sample size is accessible, without which it can render the study difficult. It is imperative to mention that any research is bound to experience challenges, and in this case, the fact is that lingual problems were highly anticipated that it would be encountered during the research in the two communities since many of the local people speak mainly Shangaan. However, there are sizeable numbers of people who speak English, which further made it easier for the execution of the study. Considering the language barriers, the researcher, taped into the experience of assistants who were carefully chosen to facilitate the study in gathering data. Their mandate was confined to distributing and collecting back completed household questionnaires. They also helped the researcher in facilitating for focus group discussions and in conducting interviews (structured and unstructured) with informants. This yielded valuable information that answered the study questions in fulfilling the study objectives.

Sengwe community, particularly Wards 13, 14 and 15 as shown in Figure 1.3, are located in the larger geographical area that is at the centre of the proposed Sengwe Corridor that ordinarily

adjoin Gonarezhou National Park (Zimbabwe) to Kruger National Park (South Africa). This strip of land, makes Sengwe community geographically inexorable part of the GLTP. Geomorphologically, the Limpopo River intersects with Luvhuvhu River, thereby creating a strategic confluence that separates Sengwe and Makuleke, on one side and Mozambique on the other side. This ideally brings three parks meeting in one place, forming a borderland that in Kruger National Park, Limpopo National Park and Gonarezhou National Park of South Africa, Mozambique and Zimbabwe share a lot in common as bordering states. Zimbabwe's Sengwe community is made up of Ward 13, 14 and 15 lying within an ecological buffer zone, where an animal ' Sengwe Corridor' has been envisaged, which would connect Gonarezhou to Kruger National Park, hence becoming part of the GLTP.

The new Makuleke village is located about 60 kilometres from Pafuri Triangle (Old Makuleke Village), with three villages just the same as Sengwe community with three Wards or Villages. The three Makuleke villages are Makuleke, Ntaveni and Mabaligwe villages found in western Kruger National Park. The Makuleke people lost their piece of land in the Pafuri area in September 1969 because of forced removals from the Pafuri Gate by the then apartheid government. The Makuleke people reclaimed control of this piece of land in 1996 following a protracted court processes for land restitution, ultimately leading to Pafuri Triangle being restored back to the Makuleke people as the original owners. This set in history of the stories on how communities fought to reclaim their heritage in post-colonial times. This piece of land has been, and continues to be managed under a Contractual Park arrangement between the Makuleke Community Property Association, SANParks and Wilderness Safaris since 1996. This has earned the Makuleke Contract Park a brand conservation identity as 'The Heart of The Great Limpopo Transfrontier Park' due to its strategic location in the centre of the three parks mentioned. It is interesting to note that strong cultural and historical ties exist between Makuleke and Sengwe communities since the two are made up of mainly the Shangaan tribe. There are minority tribes that live among the Shangaan people, and these have been assimilated through adaptation, such that they share a lot in common as one community to the extent that there are limited sociological differences with the rest of the Shangaan people. This has ultimately created cultural cohesion logics, and therefore, coherence and semi-homogeneity of the tribal societies that manifest in organisational and social structure, cultural practices and hence building acceptable value systems that communities respect so much. The two communities have relations that span on all sides of the Limpopo River. Anthropologically, Makuleke, Sengwe and communities in Mozambique, are connected historically by a border line and a popular place known as the Crooks Corner, which to these people, never existed in their minds, thus giving inexcusable contemporary conclusion that there exist strong

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cultural and social ties that connect these people in South Africa, Mozambique and Zimbabwe. By virtue of this proximity, historical attachments and geographical inter-connectedness on all sides remain critical to the local people as much as their environments are important also for their livelihoods. In that regard, the analysis of resource governance processes become critical in understanding their far-reaching impact to these communities in terms of livelihoods and sustainable conservation. Through the examination of institutional processes, issues relating to local participation and the attendant resource ownership in the context of access and utilisation of nature to support local sustenance, become too important in appreciating how the GLTP and its biodiversity could be used now and in the future as a bulwark of rural development.

A case study approach that was adopted in this study has had its fair share of criticism, which could potentially affect research outcomes. For instance, there are strong reservations that are expressed by researchers over the representativity of the views arising from case studies because phenomenology, grounded theory and ethnography are criticised at times for generating useful data, however the outcomes of such studies are difficult to generalise (Easton, MacComish and Greenberg, 2000:701). This lack of generalisability of findings in case studies results in some people guestioning the validity of data. However, the researcher worked diligently hard to meet the study objectives. The risks to data validity was mitigated by applying the mixed research approach that integrated a number of research techniques to ensure that the study did not only rely on one strategy of getting views, but on a plethora of techniques that culminated in objective collection and analysis of the findings. Data gathering techniques were not limited to household surveys, but indeed incorporated many other strategies such as focus group discussions, expert interviews, literature study as well as exploratory field observations in the study communities to ground-truth livelihood activities. The information obtained through these mixed techniques, in an interpretivist approach, helped in assigning meaning to variables that provided tremendous insights into the understanding the impact of multi-level GLTP natural resource governance architecture on the communities, and this fulfilled the study objectives. The problems highlighted in this study were practical challenges and ideally, the interpretivist and concurrent use of a various of techniques in data gathering as well as concurrent presentation, analysis and discussion of findings, averted many research criticisms by generating authentic information that was simplified in this seemingly complex TFCAs biodiversity and ecosystems governance discourse.

This study was with concerned with natural resource governance interrelationships as they relate to the affect local communities and their processes in terms of livelihood and their subsequent actions in conservation. These variable (livelihood attainments and participation in conservation), have a huge bearing that contribute to the sustainability of any biodiversity and ecosystems management programme. The case study approach that was used in this instance, besides providing strategic resource governance benchmarks, it also capitalised on secondary sources. These buttressed empirical data, which became the basis upon which the arguments were formulated in understanding the complexities of the GLTP as a super park, governed by a multiplicity of regimes and therefore having practical and possible negative and positive implications on the rural people's livelihood aspirations and sustainability of conservation.

4.4 Justification for selecting Makuleke and Sengwe communities

The premise of selecting Makuleke and Sengwe communities in complex scenarios such as Peace Parks interrelations with communities was driven by the desire to understand transfrontier conservation governance deeper and find solutions to these contemporary problems. More essentially, generalisable data from these communities would easily be extrapolated and replicated to other areas where similar projects are being implemented in the Southern Africa Development Community region. In that perspective, experiences in these case study communities, for example, could be compared with possible impacts in other transboundary conservation projects in the Kavango Zambezi Transfrontier Conservation programme that involves five countries, which are Angola, Botswana, Namibia, Zambia and Zimbabwe. As argued earlier on, there are huge considerations that merits found in the notion that multiple case examples are more convenient in testing hypothesis (Yin, 1994). Researches that deal with natural resource governance in transfrontier conservation processes and the attendant effects on communities' livelihoods and local resource conservation, is largely a complex and challenging field that would need one to examine not less than two localities to justify particular claims as scientifically testable. Use of case the study communities was also critical especially with a view to explore the multi-dimensionality and functionalities of resource governance regimes in concurrent analysis and discussion of findings on livelihood practices and conservation thereof in the GLTP's Makuleke and Sengwe communities. Through this scientific analysis of institutional processes from a regional, national and local level perspective, the study was able to capture and discussed the concerns pertinent to the people as they see it. In the end, Makuleke and Sengwe communities offered the much needed 'social-ecological scientific laboratories,' from which the researcher was able to examine various aspects in trying to get insights on the impact of the GLTP governance and operational trajectories on community livelihoods and sustainable conservation. Undoubtedly, the rural populace in Sengwe and Makuleke communities received the GLTP conservation programme with audacity of hope, enthusiasm and high expectations that this would partly deliver them from developmental guagmires that they face. While the GLTP transfrontier conservation programme brought so much hope, this far from being reciprocated on the ground with corresponding development that meets the needs of the local people. Many of these such conservation programmes have rapidly increased in territorial space in Southern Africa, and it is without doubt that people who are depending on the natural resources in their vicinities, ultimately face the mammoth tasks of meeting their livelihood needs, considering the changing circumstances of resource restrictions that affected them either positively or and largely negatively.

Building on this deductive approach representing the positivist view (Tsoukas, 1989), it can be asserted that empirical data from stakeholders were captured to construct the arguments, which justify the formulation of a co-governance framework, the amalgam of livelihood processes and decision-making model that this study makes in chapter eight to improve the GLTP governance processes. Going forward, it needs to be kept in mind that Makuleke and Sengwe communities lie at the centre of biodiversity conservation in the GLTP, a world acclaimed park, only second, in size to the newly established Kavango Zambezi. The two communities (Makuleke and Sengwe), while having varying niceties regarding local institutional establishments, they provided good examples that help to understand complex resource governance interactions, impacts on people that can be related to how successful and sustainable conservation can be if communities' role are undermined or undefined for livelihood security reasons.

Untelescoping socio-ecological research: The remoteness of the two communities posed enormous challenges to the researcher, but it was important for the researcher to undertake field research in order to understand the issues from the community's perspective. In many cases, it is fashionable for many researchers, particularly those in the western world to telescope their studies when accounting for certain events in many of the developing world. This alone creates a disjuncture in understanding some phenomenon, and it is the plea of this study to encourage researchers to move away from viewing socio-ecological issues at a distant. The fact that the issues involved in the GLTP in relation to communities are practical, and ultimately entailed the inevitable need to conduct fieldwork in the case study communities in order to understand the issues much better from the local people's perspective. In the words of Dr James Yen's vision in 'The Credo of Rural Reconstruction'' cited by Singh (2006), it is clearly stated that that issues of communities are best addressed when you "Go to the people; Live among them; Learn from them" and "Plan with them", which then help in the formulation of policies and programmes that indeed address their development needs. Perhaps, without having conducted field research in the two communities, it was going to be difficult to imagine having captured and understood what the

people of Makuleke and Sengwe think about the GLTP, let alone a plethora of issues regarding the livelihood activities that obtain in the two communities, the preferred resource ownership regimes and the overall understanding of how the local people want to be involved in the GLTP governance processes.

The research work that was undertaken included travelling to and from these communities, dealing with complex institutions that are involved in natural resource conservation, exploring relationships that exist between and among stakeholders, and tackling the human-environment discourses to understand livelihood practices, synergies, convergences, resonance and dissonance in the GLTP resource governance processes. This was not an easy task to do. While praises have been lauded about the GLTP as a panacea to rural poverty alleviation through eco-tourism enterprises development, the governance of the GLTP seem is too remote if one is to look at it from the local expectations. The simplest reason to this is the mere fact of the elusiveness of the win-win situation of the GLTP, in which case, it has shown that very little economic impact is happening especially in advancing benefits to the local level (Whande and Suich, 2009). Similarly, the economic and social cases are often not couched in reality without being realised in manifest tangible livelihoods (Whande and Suich, 2009). The negative sentiments from many conservationists that local communities inside and adjacent to protected areas are not good environmental stewards, needs a review and should not be treated with a pinch of salt, but taken seriously as the consequences arising from this process affects communities adversely.

Given the mere fact that many transboundary conservation areas were declared without substantial local community engagement, the tendency to isolate communities and their local institutions, undermine the local people in environmental decision-making processes generally (SEDDON, 2000). This same approach is relevant as it applies to the GLTP, where in the case of Mozambique and Zimbabwe, the local inhabitants were least consulted, and along the Limpopo River in Mozambique, the local people were opposed to the concept (Whande and Suich, 2009). Schoon (2008) noted that the GLTP there had been a strong top-down approach in developing the Transfrontier Park and its governance processes then reflect preponderance of higher level processes. This is resulting in poor local support. The bottom-up support is nothing less than mere cultivation only as an afterthought to secure local buy-in. This solicitation is rather coming belatedly, which is not translating into giving real power of environmental decision making to the community as equal stakeholders in the GLTP governance process. It remains important that the understanding of these issues would need a study approach that looks at more than one community on different sides of the GLTP. The political ecological governance approach

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particularly the top-down approach and institutions that have emerged in the overall GLTP, help to make proposals for integrative co-governance and decision-making frameworks. It is thus important to be realistic that the GLTP as a transfrontier conservation project in relation to community transformation has not yielded much; rather, empirical cross-community data suggests that there has been more marginalisation of the local people and disenfranchisement. So far, the galore of tourism benefits as initially envisaged are yet to see the light of the day in the GLTP. At the same time, adequate understanding of how communities' livelihoods, local conservation and how people are affected, could only be attained by indulging in empirical field-based research to generate realistic data not easily done at a distant. This researcher deliberately ventured into this long journey, one that was difficult, but in which the GLTP governance dynamics were examined, understood effectively articulated.

Juxtaposing communities and conservation governance: What comes out from this study is that conservation bureaucrats have populated the governance space. The talk of transfrontier conservation in Southern Africa is too technical a discourse, which is literally far removed from the local sphere. This makes transfrontier governance processes less responsive to the people or their representatives. The process of decision making with direct and indirect effects on communities, is equally far removed from the local people, hence communities find it difficult to articulate their environmental interests in natural resource planning processes. Thus, it is argued in this study that community interests are viewed peripherally. Cumming succinctly raised an important general argument that buttresses this assertion by putting forward that:

"A major challenge facing the TFCA is therefore the development of appropriate incentives for rural communities to conserve and protect biological diversity in the matrix between protected areas. Present national policies with possible exception of Namibia, effectively tax community wildlife resources and so greatly reduce the potential benefits rural communities might gain from their wildlife" (Cumming, 2008: v; vi).

In the end, the two communities, from theory to practice, offered an opportunity for the researcher to examine transfrontier governance implications on local livelihoods and natural resources conservation as they are currently going through various transformations. It is essential to highlight that the two case study communities have shown enlightening aspects of conservation governance ideologies, policies and practices in the GLTP, which give indications of challenges that transfrontier conservation programmes face in Southern Africa in relation to communities living inside and adjacent to the adjoining areas.

By juxtaposing communities concerns and the GLTP governance processes, the researcher was able to contrast the two communities and their conservation institutions from a functional point of view. Through case study of these communities, the researcher came to understand how and why the Community Working Group in the GLTP governance affairs was abolished, hence the interest of the communities are not being effectively articulated and not captured in terms of policy and programmes (Spierenburg, Steenkamp and Wels, 2007:6).

Interviews conducted in the two communities indicated that there is a deep-seated sense of livelihood insecurity, despondence and overt sense of marginalization. As a result, people are questioning the 'peace parks' concept and the GLTP's objectives on socio-economic development of the communities through poverty reduction, if this is in any way, going to benefit the local people. One interviewee lamented, "Anything decided for us, without us, is against us".

This shows how communities are cautious about the GLTP governance processes. In fact, the most worrisome situation is fundamentally lack of inclusive environmental decision-making, with consequential negative impact the local people. This put into question those decisions taken by conservation agencies as seemingly against the rural folk, and generally perceive as the potential of undermining the livelihoods of the local people in the case study communities. Yin (2003) stated that case study is the most preferred strategy when "how," "what" and "why" questions are posed, particularly when the researcher has limited control over events in a given phenomenon. To that extent, the case study of Makuleke and Sengwe communities enabled the researcher to understand these issues better.

4.5 The research setting

Sengwe community is located along a proposed animal transitory zone (Sengwe Corridor), which will link Gonarezhou National Park of Zimbabwe with Kruger National Park of South Africa (see Figure 7.1). The whole of Sengwe community area has been designated for various corridor options that cover the three wards that are 13, 14 and 15 as shown in Figure 1.6. In the absence of the proposed Sengwe Corridor, Zimbabwe would not qualify to be part of the GLTP project. Ideally, linking ecosystems in this manner where communal land falls directly in the proposed Corridor, is certainly problematic because people living inside and adjacent to such areas would be required to pave way for the creation of the animal corridor for purposes of the new

conservation arrangement. Issues of loss of livelihood resources come into question in as much as the issues of loss of ancestral land and heritage.

Makuleke community is located in the north-most part of Kruger National Park bordering with Zimbabwe and Mozambique. The people in the two communities lead largely rural life styles. They are sedentary and subsistence agro-pastoralists. They are facing a crisis of superimposed transition that calls for a change of life from a subsistence type to an eco-tourism based economy due to the emerging and evolving GLTP economy since 2002. It is important to note that livelihood practices of the two communities revolve around natural resource as their sole assets. Because of the new rules governing access to, ownership of, and use rights over natural resources, as implemented under the new GLTP arrangements, threaten livelihoods and locally specific conservation of natural resources directly. The consequential negative impact will inevitably be felt most by the local people. It is noted that this affects local people's accessibility to natural resources with potential for struggles and contradictions to be experienced arising from the inadvertently competing interests between multi-level institutions governing the resources going it alone in putting stringent restrictions and the local people, wanting to access resources inside and adjacent to the GLTP for livelihood purposes.

The question that arises is how can transfrontier governance enhance livelihoods of the communities inside and adjacent to it? How can the capacity of the local people be enhanced to utilize natural resources in a sustainable way? In viewing these pertinent questions, it is apparent that the governance regimes in the GLTP have ushered new challenges and can have far-reaching impacts on the human-wildlife-environment relationships. The changes in access rules to natural resources, implicitly affect livelihood sustainability and community-specific conservation. In fact, livelihood practices such as livestock production, subsistence farming, access to water and forests resources are subsequently affected negatively at the local level since the GLTP resource management and governance processes is sliding back to 'fortress parks approach' in conservation of natural resource, which is a replica of the colonial management practice that generated local hostility to parklands. 'Fortress park approach' refers to a conservation policy and practice that restricts and criminalise human access to natural resources. It is based on the philosophy that nature should be separated from human culture. Ideally, still in the fortress mode of conservation, policies that promote separation of humans from nature are strengthened through the development and declaration of protected areas, which are subsequently devoid of community influence. These are characteristically associated with highly restrictive access to resources and deprivation, which in any case, limit rural community development index, despite the fact that these people have also

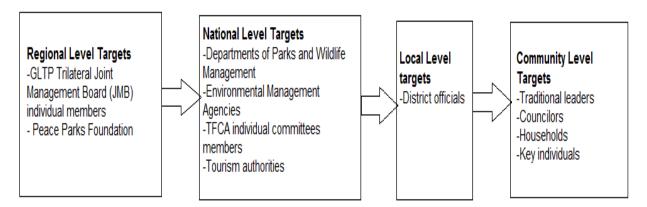
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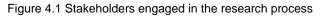
environmental rights that need to be respected. This is opposed to community-based conservation policies and practices that previously fostered not only ecological unity between nature and communities, but were also appealing towards local sustainable conservation for a better society for all.

4.6 Situating the research context

The study was an invigorating fieldwork in the two communities within the GLTP. During that period, the researcher built a good rapport and trust with members of the communities. This also included government officials, individual community members, community leaders and key conservation organisations experts at the local, national and regional levels. This gave rise to getting deep insights on diverse views from different stakeholders. In the end, this enriched the study in terms of understanding the discourse of the GLTP as a transfrontier conservation initiative, and ultimately had the advantage of providing strategic focus for the formulation of frameworks and identifying of gaps for future improvements in the governance of transfrontier conservation and research.

Figure 4.1 shows the sequencing of data gathering that was adopted by the researcher as the work progressed from different levels using various techniques. Stakeholders and individuals from the regional, national, local and community levels were engaged to contribute towards the study as outlined in Figure 4.1:





4.7 Value of stakeholder participation

As mentioned previously, communities in transfrontier parks, or 'peace parks,' are viewed pejoratively when it comes to conservation of natural resources. Hence, they are apparently seen not good environmental stewards. This socio-ecological radical thinking defies conservation

wisdom of the local people from the mere fact that they have to be accorded befitting respect as equal conservation stakeholders. Their rich indigenous knowledge and environmental traditions, all add up to their unequivocal abilities manifestly encapsulated in their historical and contemporary co-existence with nature from which they derive benefits and attach great value for their livelihoods. Ideally, imagining them being not responsible environmental steward denies the naked reality of how rural people in Southern Africa have and continue to be natural conservationists. This is premised upon local people's inherent motivation to protect natural resources. Lack of local participation in the governance of natural resources is actually the reason why collaboration at the local level towards sustainable conservation is seen to be difficult circumstances, particularly in the GLTP project implementation and evaluation.

At a more general level, if communities as stakeholders are perceived in that way, and they notice that they are not recognized where they believe they deserve such recognition to contribute meaningfully, or if they feel that they are being side-lined in certain processes, they tend be reluctant in rendering their support toward conservation of biodiversity. In any case, communities are self-engineered group identities such that they work in support of biodiversity conservation. contrary to the hypothetical considerations of what conservationist may plan to do. The statement by one of the respondent said, "Anything decided for us, without us, is against us", which is a clear testament that the GLTP process, ideally, should ensure local involvement, without which people would not take it lightly in their areas. Without being naïve on key stakeholders and their alacrity, ideally, the tendency of people and local attitudes change to be negative if their input is not considered carefully, and can be a recipe for conflict generation, ultimately cultivating the failure of transfrontier projects. One typical example in the GLTP is that the Community Working Group (CWG), which initially provided a platform for the local people involvement and engagement, was abolished at the directive of the Ministerial Committee. Thus, Castro and Nielsen (2001) gave a scenario where conflicts usually arise at different levels if the community feel that they are not part of the process. This is even worse, when benefits derived from wildlife are unclear to service their livelihood needs as a community. The communities are concerned with a number of things, which revolve around the scientific, aesthetic, and orderly allocation and use of land, water, other natural resources, facilities and services with which they are able to secure their physical, economic and social efficiency, health and well-being as rural communities. As a direct or indirect result of inadequate local stakeholder analysis to ensure their participation, particularly in environmental decision-making processes of the GLTP project, the project cycle may be compromised if it is not done in an inclusive manner.

There is tremendous acknowledgement in this study that lack of local participation in the contemporary development discourses of the GLTP, is a recipe for project failures. As Mayoral-Phillips (2000) correctly points out, participatory development theory has not been part of project design in the first place, especially with respect to many conservation projects. It is unsurprising therefore that lack of local people's participation in the affairs of the GLTP governance, is a serious oversight. To this end, even though there is rhetoric of 'community' consultation, the reality differs completely on what actually is happening on the ground. In Southern Africa, centralized colonial conservation systems had little local consultations. That system was equally inherited and carried over time into contemporary post-independence period, prompting Mayoral-Phillips (2000) to argue that TFCA rhetoric is removed from reality as TFCA objectives in the case of the Kgalagadi, demonstrate protectionist conservation ideology. He further observed that there was lack of involvement and consultation with the Bushman communities who lived within and around the project during the planning and implementation phases by the Botswana Government. At one point, the Busman community received a backlash from the Government that issued disparaging remarks about the Kalahari Bushmen. In a British Broadcasting Cooperation interview, a government Minister argued:

"I don't believe you would want to see your own kid living in the dark ages in the middle of nowhere as a choice, when you know that the world has moved forward and has become so technological" (Survival International, 2010).

In the same context, the local Bushman community was criticized for their way of life and their traditional subsistence hunting methods with bows and arrows. They were accused of living a "life of backwardness', 'a primitive life of deprivation co-existing alongside wild animals', and 'a primeval life of a bygone era of hardship and indignity" (Survival International, 2010). These statements are indicative of the overarching misplaced assumptions that characterise conservation thinking by agencies, individual politicians and conservation stakeholders over communities general. For instance, in the wake of resistance from land, the Botswana government forcibly started evicting the Bushman community in 2002 from their ancestral lands, an act that was later declared unlawful and unconstitutional by Botswana's High Court, which also ruled that the Bushmen have the right to live on their lands part of the Kgalagadi TFCA. Despite the ruling, the government continued to prevent the Bushmen from living on their land, banned them from accessing a well of water for household use and further barred them from subsistence hunting for food as their sole livelihood practice. At the same time, the government of Botswana in partnership

with a private investor, drilled new wells for wildlife and allowed Wilderness Safaris to erect a luxury tourist lodge with a swimming pool on the Bushman's land (Survival International, 2010).

This study attempts to put across the fact the buy-in of the local communities is a determinant factor towards sustainable conservation collaboration. In any case, indigenous people's rights are as important as eco-tourism investments governments pursue with some private companies, through which government desire to enjoy tax. In this typical case, Mayoral-Phillips (2000) argues that TFCA rhetoric is removed from reality as TFCA objectives in the case of Kgalagadi demonstrated a protectionist conservation ideology and enormous corporate business expediency at the expense of the local people. An attempt to address that anomaly by both the Botswana Department of Wildlife and National Parks (BDWNP), and the South African National Parks (SANParks) to include community empowerment within their economic and tourism plans, faced another huddle since the local people resisted the move, despite use of force by the Botswana Government to remove the Bushman. Considering the above scenarios, one can safely argue that meaningful engagement of local communities, as strategic stakeholders by different institutions, be it international, regional and national institutions, work in favour of conservation and other environmental objectives. However, the same institutions or structures that people expect so to amplify local roles can actually frustrate them. The point confirms the challenges in conservation. Equally, policies and programmes that are implemented do not promote communities, and at worst, local resource needs become secondary. In that context, cross-examination of various institutions was seen as important in this study in the search for a paradigm shift of attitudes. perceptions and policies to orient them towards communities' involvement and participation in the governance of natural resources as well as creating an enabling environmental decision-making platform that is inclusive and participatory. Otherwise, the risk of having very pleasing transfrontier conservation objectives, but just with sectional or institutional interests, is farfetched from advancing a genuinely sustainable conservation process, especially when it is done at the expense of communities who are equally important stakeholders.

What comes out clearly in this stakeholder analysis is that the scales of governance in GLTP as a transfrontier conservation project is that it operates in isolation of the locus of community power, which this study considers to be the centrepiece of conservation collaboration. Whereas communities want to ensure that local processes to take precedence in the GLTP governance, principal donors and governments have their way of relationships that shape attitudes and policies, with serious impact on the people. For example, the shift of donor funding from Community-Based- Conservation Programmes such as CAMPFIRE in Zimbabwe to

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transboundary/transfrontier conservation undermined local capacities in continuing with their renowned conservation flagships, and equally it did the same with participatory resource management. This approach that favours governmental structures at high levels, leads to the 'centre-periphery' unequal operational relationships whereby all critical project decisions from conceptualization, design, implementation and evaluation emanate from the centre and channelled through to the people without consultation, resulting in the preponderance of government agencies delivering those projects to the local communities that are not appreciated locally. This led Ramutsindela (2007:105) to describe TFCAs in general as 'scale of marginality' because of its marginalizing effects on part of the periphery communities because of the hierarchical ordering, starting with the state agencies as the locus of conservation power and the donors supporting the processes. The processes are operationalized in a reverse manner from the top down to communities with the supranational institutions determining almost all decisions and processes. This is contrary to the much-lauded contemporary development discourse that is centred on bottom-up theory calling for all programmes to start from the communities. This is why in the case of the GLTP, high-level institutions operate away from the local people and Ramutsindela (2007:105) concluded that where these peace parks are established, communities have had little contributions to the construction of the scales of peace parks management.

4.8 Conclusion

In concluding this part, it is important to note that stakeholder analysis helps to understand institutional operational functionality in the governance of transboundary natural resources. Challenges that conservation institutions experience in the GLTP, mirror the painstaking complexities of the failed realisation of the importance of local stakeholders, hence the GLTP is grappling with enormous contestations in trying to balance biodiversity conservation and local communities' natural resource interests. As a result, use of case study communities was envisaged to provide comprehensive socio-ecological scientific analysis, particularly of the interplay of resource governance institutions and the impact thereof on the communities. In many cases, conservation of peace parks are proving to be predominantly bureaucratic, with decisions on environmental matters technicised such that there is direct negative implication on the local people from bargaining to participate in conservation of natural resources, hence this attenuate local processes. At the same time, communities complain of lack of representation at administrative governmental structures, particularly at the GLTP Joint Management Board echelon. The environmental decisions that conservation officials take, therefore, give an impression that they assume the role of the local people, despite the fact that they may least know local concerns and aspirations. Consequently, the tendency to make decisions that ultimately get

rejected at the local level, is a manifestation of poor scooping and appreciation of the importance of capturing local people's needs in the GLTP processes. These and other considerations give credence to a deductive field study of the communities in the GLTP. Quite clearly, as chapter 6 and 7 will show where empirical data is presented. There are clear alliances and preponderance of state agencies and multi-lateral conservation organisations in transfrontier biodiversity and ecosystems governance, and management, which leave little room for the local people to assert their claims in terms of resource governance and resource use.

CHAPTER FIVE

5.1 Introduction

This chapter takes the issue from chapter 4 in exploring research methods that were used during the study and the processes that were followed from two dimensions. The chapter will examine the conceptualization of the methods and application of various methods during fieldwork. The chapter further looks at the research context, methodological framework and research strategies used as well as the rationality for adopting approaches. It is critical to highlight that the researcher employed the qualitative methods largely. However, quantitative techniques were also used which resulted what is called 'mixed approach' techniques in research. It has to be stated from the onset that while both methods were used during the research, prominence in data gathering was given to the qualitative method. The research setting, design, sampling techniques and specific methods of data gathering that were used during fieldwork are addressed. Furthermore, the researcher explains how information-gathering techniques were linked with each research objective and this is presented in Tables 5.1, 5.2, 5.3, 5.4 and 5.5 of this chapter. Above all, the techniques used for obtaining information in this research have advantages and disadvantages, which the researcher briefly highlights.

5.2 Methodological Framework

The researcher deliberately took a holistic methodological approach ideal for studying interdisciplinary and crosscutting socio-ecological issues relating to natural resource governance, livelihoods and conservation. The approach that was adopted after taking note of the processes through which the impact of resource governance on communities had to be examined in the context of the GLTP discourse. This holistic approach helped the study in terms of:

- 1) Understanding the current and potential effects on communities' livelihood and sustainable conservation processes.
- Analysing local participation in the wake of the GLTP governance regime in terms of how the re-defined resource ownership and resource rights affect access to natural resources by the local communities.
- Analysing local natural resource conservation processes, their views and perceptions as they relate to various conservation players in the GLTP.

4) Understanding the discourse of natural resource benefits between communities and other agencies since this underpin the extent to which rural people can be motivated to participate in sustainable conservation.

In a study done in the Mid Zambezi Valley, Mtisi et al (2006:1-2) pointed out that a holistic methodological approach is important when dealing with environmental issues in relation to communities in many useful ways that helps to:

- I. Identify actual livelihood practices obtained in communities and how they are affected by the roles of various players.
- II. Examine livelihood practices and the effects they have on the environment.
- III. Identify key players in natural resource governance and locate them in the power matrix in order to cross-examine institutions and individuals who wield power, authority to influence directly or indirectly on natural resource policies, programmes and legislation in environmental representation processes.
- IV. Study institutional aspects surrounding environmental governance and the impact that environmental leadership have on the local people's participation in environmental management.
- V. Examine some of natural resource contestations particularly concerning ownership, environmental responsibility, accountability, authority and autonomy. These are important elements in mediating stakeholders' interactions at different levels of natural resource governance.

5.3 Study research strategy

Gravetter and Forzano (2009:148) postulated that every research should have a general approach to answer questions to the problem statement. As a result, the researcher relied on two processes of closely related ways in which information was collected from the study communities. These approaches are in two categories that are primary and secondary data gathering processes:

Primary data: This involved collection, processing and analysing of primary information and materials derived from the field research. This was gathered from experts, informative structured

and unstructured interviews, household surveys and focus group discussions across the two communities.

Secondary data: This process involved the collection, processing and analysing of existing literature and materials such as journal articles, research reports, the GLTP management documents and archival materials. Furthermore, the researcher relied on conference papers, workshop reports and participation in some of the key meetings that dealt with transfrontier conservation issues in the region to produce a comprehensive profiling of the issues. In summary, Figure 5.1 shows the phases that the study followed in building the scope of the study.

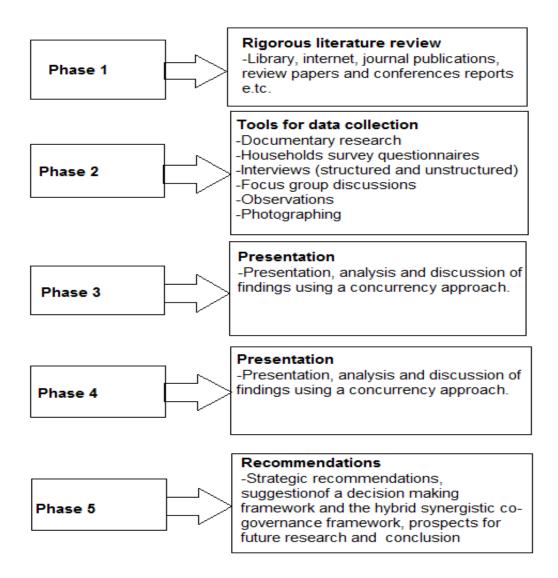


Figure 5.1 The five research strategies outlining the five study phases

By using the two-pronged strategy, this study relied heavily on mixed qualitative and quantitative approaches for data gathering. Findings were presented, analysed and discussed concurrently.

5.4 Rationality for a 'mixed' approach

There is a common understanding among researchers that no one best way of gathering research data is perfect, hence Creswell (1998:15) advocates for researchers to be innovative in applying approaches that yield the best results. As such, the researcher adopted a mixed research paradigm in which the qualitative and quantitative research approaches were found useful during the study. Of great interest, Creswell (2008) cited Creswell and Plano Clark (2007) by stipulated that:

"Mixed methods research is a research methodology with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research process. As a method, it focuses on collecting, analysing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches, in combination, provides a better understanding of research problems than either approach alone".

Further to that, Creswell (2008) stated that 'mixed methods research,' means adopting research strategies by employing more than one type of research method. These methods may be a mix of qualitative and quantitative methods constituting a strategy in its right, or may be subsumed in another research strategy such when adopting a case study design where a number of different methods are needed. Mixed methods research therefore, imply working with different types of data collection techniques concurrently, and this is often referred to as multi-strategy when one deals with a complex range of research questions and a complex research design (Bryman, 2001; Brannen, 2005:4). The above assertions primarily entailed mixing approaches either at data collection stages (Phase 1 and 2) or at all the stages of the research process where the two methods are applied in data processing. To start with, the qualitative method is defined as "a process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. The researcher builds a complex, holistic picture, analyses words, reports detailed views of informants, and conducts the study in a natural setting" (Creswell, 1998:15). This illustrates that the qualitative approach is a process and has parameters for inquiry.

The quantitative approach on the other side is defined as a technique of testing and verifying explanations from typically statistical information obtained in order to produce numerical scores (Creswell et al., 2003:18; Gravetter and Forzano, 2009:147). This distinction is central in the cross-examination of the GLTP governance because of the fluidity and complex nature of the issues, particularly regarding analysis of livelihood economic rankings, environmental and demographic issues in the study communities. As such, the application of the two approaches in yielded incredible data to capture holistically complex and fluid socio-ecological issues and processes in its 'social realities' (Neuman, 2004:41).

More importantly, in socio-ecological science, the human interface with the environment is inextricable and resource governance structures that operate at different levels of conservation processes have to be understood in their proper contexts in order to appreciate the effect they have on communities. Scientists therefore, view social ecological realities as fluid, constantly changing and hold that humankind construct, deconstruct and reinforce social realities (Neuman, 2004:41;42). Thus, Sengwe and Makuleke residents, with their experiences, traditions, cognitive values and indigenous knowledge about ecology in their areas and their environment, were more adept at using their deductive and inductive reasoning to contribute information of their socio-ecological relationships in their settings. This included the local people having an opportunity to describing resource governance interrelationships with the GLTP as it relates to their settings and suggests ways for fundamental changes that enhance both sustainable conservation and livelihood attainment. To capture this type of information, one method would not have been enough to do justice to the study.

Socio-ecological scientists therefore insist that quantitative data generates research evidence that works well when dealing with large representative samples, especially communities from which general conclusions on a range of statistical information can be drawn (Stenbacka, 2001:551; Johnson and Harris, 2002:101; Thomas, 2004:22; Struwing and Stead, 2004:4; Leedy and Ormrod, 2005:183). In the same vein, Johnson and Turner (2003) and Figurehosa (2009:128); argued that mixed methods demand that in any science, researchers should endeavour to utilize multiple methods that have complementary strengths and non-overlapping weaknesses to ensure valid information is obtained. Based on this observation, information gathered qualitatively and quantitatively was triangulated and simplified. Another advantage noted in literature is that the mixed approach can be useful to capture beliefs and motivations into account of the research. One can qualify and quantify the data, and extrapolate the results to the broader population

(Hennink et al., 2011:16). Ideally, such results can be generalised, and in the end to give correct outcomes of complex relationships in environmental governance.

To summarise this discussion, it is critical to highlight that the qualitative research approach looks at social ecological issues holistically by addressing specific scenarios that produce details when people respond to the 'why,' 'how' and the 'what' questions (Hennink et al., 2011:16). The choice for using the qualitative and quantitative methods is premised on the researcher's consideration of the interactive, humanistic and interdisciplinary nature of this research that made it critical to adopt the two-pronged approaches. Cognisant of the fact that social ecology is not a value free phenomenon as argued by Neuman (2004:42), it was important to avoid bias. Hence, the two approaches addressed those shortcomings to gain valuable insights into the GLTP governance processes and their impact on communities' livelihoods and sustainable conservation.

In fact, information gathered qualitatively, for example, the examination of Sengwe and Makuleke to understand livestock and wildlife use-value orientations and ownership, was classified as quantitative data. Transforming those measurements into statistical terms produce numerical values for computing household use-value on a Schuttee Scale ranging from 1-11 or into percentages to show how communities ranked each species. This allows for interpretation of the statistical data in terms of what value they attach to a particular species. However, the descriptions and analysis of the statistical information yield qualitative information. As such, Creswell et al., (2003:212) refers to this simultaneous use of the two approaches as concurrency or consecutive process. Concurrency means a combination of elements of qualitative and quantitative research approaches (Johnson et al., 2007 quoted by Figurehosa, 2009:22). This persuaded the researcher to introduce a framework that conceptualized the process as shown in Figure 5.2.

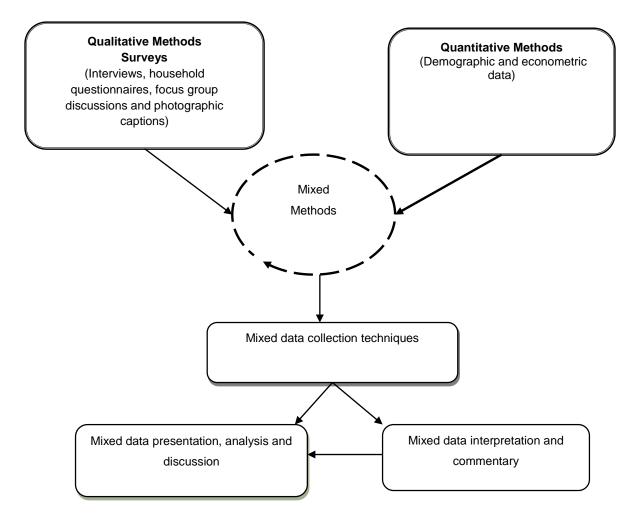


Figure 5.2: Mixed Research Methods Conceptualized

The multi-disciplinary nature of this study determined the need to use mixed approach, which Leedy and Ormrod (2005:12) argued that this facilitate the ultimate goal of research to lead to conclusions from a body of data and discover what was unknown. As such, this study was able to give explanations, descriptions and discussed issues from the experiences of the affected communities for clear understanding of the GLTP.

It is important to highlight that there exist abundant literature that demonstrate a long-standing debate on whether one should rely on one approach or both. Lincoln and Guba (1985) argued that the two approaches are incompatible. However, Reichadt and Cook (1997) put forward that each model is best suited to certain research questions. In many instances, a combination of the two approaches is most viable. In line with the mixed approach used in this study, Hussey (1997:55) buttresses this argument by advancing that it is possible for a qualitative paradigm to produce quantitative data and vice-versa. As noted by Patton (1990) and Bryman (1988), the nature and

content of the research determines the use and application of the approaches. Thus, this influenced the choice of the two methodologies. Further to that, Berg (1989); and Goertz and LeCompt (1984) concur with the idea to use the two methodologies because a combination of the two approaches offer considerable benefits since the strengths of one method counter the weaknesses of the other approach. Based on these arguments, the researcher adopted the two methods, infused them in data collection, and applied the concurrency approach in the presentation, analysis and discussion of findings. This would spur the reader to keep tracking the issues.

5.5 Mixed approach: Advantages and disadvantages

Clearly, the use of a mixed method has many advantages. It is argued that it allows researchers to gain a richer and contextual understanding of the phenomenon (Gray, 2009:204). More conveniently, they help one to analyse concrete cases in local particularity (Flick, 2006:13). In addition to that the approaches also help researchers to capture perceptions, views, actions, practices and the worldviews of stakeholders using a number of ways and techniques to capture generally complex issues, which Gray (2009:204) says are embedded in local contexts and should be investigated as such. To counterbalance information gaps in the research process, concurrency had the advantage of immediacy in revalidation of some of the issues arising during the research and enabled the bridging of the same gaps while complementing other techniques of data gathering.

5.6 The study research design

Researchers offer various versions in defining research design, but of interest in this study is the definition by Denzin and Lincoln (2005:25) who stipulates:

"A research design describes a flexible set of guidelines that connect theoretical paradigms first to strategies of inquiry and second to methods for collecting empirical materials. A research design situates the researcher in the empirical world and connects him/her to specific sites, persons, groups, institutions and bodies of relevant interpretive material including documents and archives".

The research design used in this study followed a properly planned procedure that identified the problem in the GLTP governance processes as it relates to Makuleke and Sengwe communities. Muboko (2006:29) stated that a research design is the actualization of logic in a set of procedures that optimizes the validity of data on a given research problem. In that perspective, a research

design is informed by the research purpose of a researcher with varying implications on the study outcomes. Accordingly, Babbie and Mouton (2001:205) put forward that the main types of research designs are experiments, surveys, qualitative designs and evaluation research. The experiments and surveys form part of a generic quantitative methodology, while ethnographic studies, including case studies and life histories are classified under qualitative designs (Babbie and Mouton, 2001:270).

Going forward, this study adopted the mixed methods, where literature reviews, surveys and interviews were employed within a case study framework. In this mixed methods approach, the general design included contextual detail, multiple data gathering techniques from the field and other secondary sources. The rationale for using multiple data sources is based on the ideas of triangulation, replication and convergence of information that consolidates one's arguments (Babbie and Mouton, 2001:282; Jankowicz, 1995:210).

The starting point for this study was the reviewing literature in order to grasp major conceptual and philosophical matters relating to the GLTP. The transfrontier conservation in the SADC region was addressed from an ideological perspective linking the global, regional and national imperatives as the socio-ecological inspiration behind the concept. The literature used in this regard helped the researcher to construct the background information, set a path to examine crosscutting issues of multi-level natural resources governance and to understand how stakeholders interact with communities regarding livelihood practices and sustainable conservation in the GLTP. This review set a tone to relate resource rights and ownership and most importantly, to understand what informs government actions and other conservation organisations to act in the way they do by using various framework of analysis including Don Beck's (1999) Spiral Dynamics.

Going forward, this study also examined interactions of state agencies and natural resource conservation organisations in terms of how the newly constructed GLTP governance regime affects rural livelihoods and the capacity of people to participate in sustainable management of natural resources. In that regard, the study relied on existing literature that Maree (2007:73), refers to as existing historical data, which became important to trace the historical development of transfrontier conservation in the region. This helped to trace unfolding power relations on resource governance, decision-making and policy impacts on the communities. The study hypothesis one (1) and two (2) assumes that the GLTP resource governance regime ignores major contemporary transformations that require moving away from simplistic "neo- liberal protectionism" (fortress park

concept) and the "tragedy of the commons" (Hardin, 1968) when dealing with Southern African communities. These communities traditionally have had their forms of conservation management and values mediating use and access to natural resources. This study views such communities and their small-scale community-based conservation programmes as centrepieces for rural development and sustainable resource conservation. This process, according to Spierenburg et al., (2008:87) derives from the idea of participatory democratic collective action, self-organization and self-governance of communities, which provide motivation for local sustainable natural resource conservation. As such, this study looks at the relationships of stakeholders in the GLTP as they relate to Makuleke and Sengwe communities to understand how institutions and the local people interact and affect each other in view of rural livelihoods and in meeting conservation objectives. In line with the above, household survey questionnaires were used to capture local concerns.

A further look at hypothesis three (3) and four (4), two critical issues is raised. These assume that withdrawal of incentives for conservation at the local level undermines collaborative spirit of the local people towards sustainable conservation. The concerns are that once incentives are withdrawn from the local people, and natural resources are subjected to market forces, this create a local sense of complex localised free riding that can culminate in the 'Tragedy of the Commons' as argued by Hardin (1968). As such, collaboration with the local people and their local processes in sustainable conservation become imperative to avoid unsustainable exploitation of natural resources because the local people would have lost a sense of ownership. Shambaugh et al., (2001:26), cited Hatton (2001), to argue strongly that when physical access to natural resources is foreclosed from the local people and opened up to private-sector without clearly defining community benefits and access, illegal extraction of the same becomes the norm and difficult to deal with that culminates in unsustainable use and therefore depletion of natural resources. Thus, insecurity and exclusion stimulate unsustainable behaviour and illegal over-exploitation of natural resources. Furthermore, hypothesis four of this study contends that natural resource conflicts are bound to escalate where communities find themselves side-lined from accessing natural resources. This is even made complicated when they realise that they can no longer participate effectively in its governance especially when the resources are also not shared and distributed equally among stakeholders. Joy and Thompson (2006) observed that in common pool resources where communities are not consulted, problems arise when communities find that resources are opened up to forces of markets in which communitarian governance systems are ignored. These local practices are manifestly important in promoting local livelihoods' sustainability. In the majority of cases, Joy and Thompson (2006) further put forward that environmental decisions made for the

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communities without their consultation create conflicts that are regressive to the local people's collective will to preserve and utilize natural resources. By using Makuleke and Sengwe as case study communities, it was envisaged that this would help in interpreting perspectives and understanding of how households relate and interact with specific stakeholders in critical situations (Maree et al., 2007:75). According to Yin (2003), the case study research approach is most preferred than many other research approaches when one asks questions such as 'how,' 'what' and 'why' when scrutinizing a particular phenomenon.

In this regard, 330 household questionnaires were distributed and completed in Sengwe community, accounting for 97.05% of the total sample target of 333. In addition, 211 questionnaires were distributed and completed in Makuleke community and the response rate was 100%. Residents responded by completing household survey questionnaires. They indicated their own views, perceptions, feelings and above all, their understanding of the GLTP governance, including issues of their participation in natural resources governance. The researcher also relied on field-based transect exploratory observations and photographs to capture some of the activities in the two study communities. Through focus group discussions, formal and informal interviews with officials in both Zimbabwe and South Africa, the study opened up an avalanche of rich information. A combination of these techniques helped to triangulate rigorously the field and literature data. The following tables give a summary of the study process linked to objectives, research design, characteristics of the data collected and the techniques relevant with each objective to have specific study information outcomes.

Table 5.1 A summary and analysis of research techniques for objective number one.

Objective 1	Type of research design	Characteristics	Data collection methods	Research data outcomes
1. Empirically investigate livelihood practices obtaining in Makuleke and Sengwe communities.	-Household surveys. -Field-based transect photographic caption.	-Obtained information on livelihood patterns and in addition, understood how these interrelate with the environment as interdependent variables.	-Household questionnaire, interviews, focus group discussions, field- based photographs of livelihood systems and state of nature.	-Data obtained provided insights in understanding livelihood profiling and patterns and environmental interrelationships. -The data generated was useful in documenting livelihood practices.
		-Pictorial representation helped to 'ground- truth' livelihood practices and brief state of wilderness in case study communities.		-Produced pictorial presentations of selected livelihood practices and environmental aspects (crop, livestock, wildlife and forests as rural economic assets) to interpret environmental relationships and the implications thereof in terms of biodiversity and ecosystems management in the GLTP.

Table 5.2 A summary and analysis of research techniques for objective number two.

Objective 2	Type of research design	Characteristics	Data collection methods	Research outcomes
2. Examine the impact of the GLTP governance on user community rights; how it affects environmental relationships among stakeholders.	 -Case study approach of the households of the communities. -Documentary and empirical analysis of the study communities' institutional and organisational functionalities in relation to the GLTP resource governance processes. 	-Data illustrated complexity of relationships and interpretation of correlations on resource governance in terms of current and potential impact on livelihoods and local conservation processes.	-The study used household survey questionnaires to gather local perceptions and documentary research to obtain data on various institutional arrangements on resource governance.	-Explored, documented institutional processes and their impact on livelihoods and conservation in the GLTP's Makuleke and Sengwe communities.
	-Expert views and expert data.		-Focus group discussions and use of the Schutte Scale to capture perceptions, community priorities and the levels of satisfaction or happiness of the local people.	

Table 5.3 A summary and analysis of research techniques for objective number three.

Objective 3	Type of research design	Characteristics	Data collection methods	Research outcomes
3. Examine the impact of multi-level resource governance on participatory natural resource planning and decision making processes in Makuleke and Sengwe communities.	-Institutional design study (community, local, national, regional and international institutions vis-à-vis participation of local people). -Review of the GLTP institutional regime.	-Captured the GLTP institutional regime's interactions and correlations with empirical local people's participation in environmental decision-making processes and natural resource governance. -Captured actor interactions, which either hinders or promotes collaborative conservation.	-Household survey questionnaires. -Targeted/key informant interviews (informal and formal interviews). -Focus group discussions. -Literature and documentary review.	 Achieved a deeper understanding of the complex impacts on participatory resource planning, governance and conservation. Obtained insights on current natural resource governance regimes, their marginalisation effects on the part of the local people against participation in natural resource conservation and realization of livelihood benefits.

Table 5.4 A summary and analysis of research techniques for objective number four

Objective 4	Type of research design	Characteristics	Data collection methods	Research outcomes
4. Examine resource governance institutional functionalities in the GLTP and understand how they 'enable' or 'disenable' communities to realise sustainable natural resource conservation and management.	-Historical review. -Institutional operational trajectories analysis	-Allowed comprehensive understanding of institutional interrelationships from an operational point of view regarding multi-level institutions vis-à-vis local institutional dynamics inorder to document contexts of how they affect community, sustainable natural resources, conservation and management.	 -Focus group discussions. -Key informants' interviews. -Household survey questionnaires. -Documentary research. 	-Documented the changes (impacts) obtaining in the GLTP in relation to its Makuleke and Sengwe communities in terms of conservation of natural resources.

Table 5.5 A summary and analysis of research techniques for objective five

Objective 5	Type of research design	Data Characteristics	Data collection methods	Research Outcomes
5. Analyse and suggest a possible environmental decision-making framework and a natural resource co-governance framework for the GLTP.	-Deductive institutional processes, analysis on their problems that offer possibilities for improvement.	-Natural resource governance problems, dynamics explored, and suggestions noted from the two communities. -Institutional frameworks suggested.	-Interviews -Focus group discussions. -Documentary analysis with a view to develop improved frameworks.	-Institutional flaws noted. -Two frameworks suggested based on empirical data from stakeholders.

5.7 The study sampling methods

In complex socio-ecological analysis, it is not possible to rely on one technique of gathering information. However, in this perspective, it was also not possible to collect data from all the people in Makuleke and Sengwe communities using one sampling technique. The fact that a mixed approach was adopted meant that more sampling techniques would be needed in data gathering. The researcher therefore used two sampling techniques that are the purposive and snowball sampling methods. Parameters of the two communities had to be determined by breaking the community down to villages and wards for purposes of focus group discussions. These wards are constituted by households and for purposes of data collection, the households were key to administer household survey questionnaires and locally selected individuals who were interviewed. The sample sizes from the totality of the households were such that survey questionnaires had to be easily administered from a truly representative sample. Authors caution against taking too large samples by arguing that usually that leads to failure to engage research issues effectively, and may result in the whole exercise becoming expensive (Neuman, 1997:201), while Babbie (1992:192) and Singh (2007:88) emphasise targeting of respondents that can give one the best results. However, the issue of representativity is key in getting generalisable data that helps to produce credible results, and some authors argued that the sample should be representative enough of the collective population one is studying (Jackson, 2009:94). What this means is that the data gathered from Makuleke and Sengwe communities extrapolated from a representative population sample such as households and individuals who participated during the research. In other words, the people and the selected households, as argued by Jackson (2009:94), constitute subsets of the population, and to achieve this, the researcher broke down the communities into sub-divisions in order to:

- a) Determine the wards or villages. These wards as they are known in Zimbabwe and villages as they are also referred in South Africa were identified in their proper geographical context as constituting communities mentioned in the GLTP Treaty on 9 December 2002.
- b) Determine the total number of households within the confines of the GLTP's Makuleke and Sengwe communities. This was done through analysis of community demographics, geographical boundary analysis from cartographic maps to in order to identify households for survey questionnaire distribution. For purposes of accuracy, it is important to mention that the researcher relied on the local leadership and locally recruited research assistants to avoid overlapping with other areas outside the defined geographical boundaries of the two communities.

The segmentation of communities into wards/villages and then breaking them further to households, made it possible to determine the number of respondents. The sampling unit used for surveys was the household based on Casley and Lury's (1981:188) definition that says:

"A person, or group of persons generally bound by ties of kinship, who live together under a single roof or within a single compound, and who share a community of life in that they are answerable to the same head and share a common source of food".

Using the non-probability sampling (Jackson, 2009:96), the head in each of the household at any particular time of administering the questionnaire was eligible to respond.

5.8 Purposive sampling

Purposive sampling was preferred in the selection of individual members from the two communities for interviews and focus group discussions. Biernacki (1989:420) noted that purposive sampling exemplifies target sampling. Other authors attempt to distinguish purposive sampling from target sampling. However, it is acknowledged in literature and this study would concur that two techniques co-exist in many respects and their differences are viewed as insignificant to cause distortions. Thus, they are used interchangeably. This is because Strydom et al., (2005:203) stated that purposeful sampling, in other words known as target sampling, is systematic way through which lists of specified populations' individuals in a geographical area are selected to obtain adequate information representing the whole that one is examining. The purposive sampling strategy therefore ensured that respondents from both Makuleke and Sengwe

were people who were directly resident in the area and could be stakeholders involved in the GLTP initiative.

Furthermore, Gubrium (2010:141) advocated the use of purposive sampling as it allows researchers to choose a particular case because it illustrates some features or processes, which would maximize getting specific type of information that serve the interest of the research. In this context, the conservation institutions, groups and officials who were identified to take part as respondents, were considered carefully based on their roles, knowledge and involvement the GLTP. This ensured that the target sample provided relevant information needed in the research.

5.9 Snowball sampling

The second sampling technique that was used is snowballing, which involved approaching single persons who are either involved or working on the GLTP to get in-depth insights. In the majority of cases, the researcher was referred to more persons for deeper information until sufficient data was obtained (Strydom et al., 2005:203). Snowballing was critical in this research, particularly when key figures involved in the GLTP from Makuleke and Sengwe communities were approached to provide information, and in many respects, the researcher was referred to some other people who were professionals or at least more knowledgeable on the issues. Through a referral system, the study reached out to other persons for interviews to get in-depth information. Accordingly, the identified individuals eventually constituted sample snowballs until sufficient and relevant data was gathered. In view of the number of actors involved in the GLTP, it is important to note that a chain of individuals referred to were key decision makers and also those who were affected by the GLTP processes

5.10 Data collection process and techniques

The reliability and validity of data is highly dependent on the chosen research techniques used in gathering information (Brace, 2004:43). This becomes particularly important in this interdisciplinary socio-ecological study. Selection of appropriate research techniques are very essential looking for answers to research questions in complex matters where one would be required to proffering suggestions. Stenbacker (2001:551) encourages that researchers be more careful on the data collection techniques they use since these affect the quality and validity of their findings. Consistent with the mixed methods approach as discussed above, this study adopted

techniques and data gathering processes (primary and secondary) that maximized valid results. Consequently, this study adopted the following data gathering techniques:

- Household survey questionnaires;
- Focus group discussions using guiding questions and the Schutte Scale in some instances;
- Structured and unstructured interviews; and
- Field-based transect exploratory observations and photographing some livelihood activities to ground-truth issues.

5.11 Primary data collection process

The collection of primary data, known as empirical data, involved consulting individuals and organisations as sources of information, and comprised:

- Conducting Interviews with some national park officials, conservation stakeholders and community members from both Makuleke and Sengwe communities who have interests in the GLTP. The researcher was able to obtain comprehensive understanding of the issues concerning resource governance processes in the GLTP in analysing impacts on community livelihoods and sustainable conservation.
- 2) Household survey questionnaires: These were distributed by the researcher with the help of contracted research assistants for completion to 551 households in Makuleke (211 household questionnaires) and Sengwe (340 household questionnaires) to obtain information.
- Focus group discussions: Nine focus group discussions were conducted in each of the two case study communities.
- 4) Transect photographs were taken during field visits to capture some of the current livelihood activities in the area, and others were obtained from previous researches done in the areas.

5.12 Household survey questionnaire method

The study covered 330 and 211 households in Sengwe and Makuleke respectively for the household surveys. In each community, household heads or a representative was the preferred respondent. If the head was not present, another adult member of the household was requested to complete the questionnaire. In Sengwe (Zimbabwe), 10 households failed to return completed questionnaires because they were not available at the time of collection of the questionnaires by the researcher. The response percentage rate in Sengwe community was 97.7% as shown in Table 5.9. In Makuleke (South Africa), the household response rate was 100% (Table 5.9). The 100% response rate is attributed to the proactiveness and social organisation of the households that are in linear settlements and easily accessible. One questionnaire was incomplete in Makuleke with some sections left blank by the respondent and it had to be redone with the assistance of a field research assistant. The final samples prepared for analyses thus comprised 330 for Sengwe and 210 for Makuleke. This gives an aggregated average of 92% response rate for the two case study communities. Sengwe community questionnaires comprised 112 questions, which were concerned with the following components:

Table 5.6 Sengwe comm	unity questionnaire cluster
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Res	earch questions cluster	N
1.	Household demographic profile	12
2.	Econometric data (livelihood practices and actual crops grown)/ Crop husbandry	10
3.	Land holdings and land-use (tenurial and rights issues)	14
4.	Livestock husbandry and grazing issues	9
5.	Household water use, sources, availability, accessibility and reliability	7
6.	Wildlife issues, conservation and benefit streams	17
7.	Forest resources accessibility and use rights	14
8.	Natural resource governance and local participation	14
9.	The Sengwe Corridor, GLTP effects, tourism development and general attitudes towards it	15
Tot	al	112

The questionnaires for Makuleke comprised 101 questions. The difference of 11 questions compared to 112 administered in Sengwe community arose from the fact that some particular questions on Sengwe community focused on the Sengwe Corridor development, which did not apply to Makuleke community. The questionnaire in Makuleke covered the following components:

Table 5.7 Makuleke Community Questionnaire Cluster

Res	earch questions	No of questions
1.	Household demographic profile	12
2.	Econometric data (livelihood practices and actual crops grown)/ Crop husbandry	10
3.	Land holdings and Land-use (tenurial and rights issues)	14
4.	Livestock husbandry and grazing issues	9
5.	Household water use, sources, availability, accessibility and reliability	7
6.	Wildlife issues, Conservation and Benefit streams	17
7.	Forest resources accessibility and use rights	14
8.	Natural Resource governance and local participation	14
9.	The GLTP effects, tourism development and general attitudes towards it	4
Tot	al	101

The guestionnaire was in two languages, which are Shangaan and English comprising a mixture of 'open' ended and 'closed' questions. Open-ended question amounting to 17 and 84 closed ones constituted the questionnaire administered in Makuleke with each question coded for easy data capturing. Due to time that had lapsed since the establishment of the GLTP in 2002, some of the questions required respondents to recall the processes of consultations and events. Thus, responses could have potential recall bias usually associated with time lapse subsequently affecting relating of events (De Vaus, 1991). However, as this process of enquiry also allowed respondents to consult household members in cases where one would have forgotten, it is assumed that information gaps were prevented and the outcomes in terms of the content was representative and reflected the reality of the situation. Brace (2004:9;10) emphasised the need to give enough time and space for respondents to answer survey questionnaires objectively. In this regard, the researcher and the research assistants agreed with the respondents on the time for collection of each household questionnaire. The time varied, averaging 2-4 days. In the end, the probability of recall bias was reduced by giving respondents enough time, space, and a degree of independence for each household respondent to corroborate responses to questions as much as was possible. The degree of collusion was also taken into consideration. The person in a household would go as far as seeking clarification on certain issues, but without relegating the responsibility to answer the questions to another person. Respondents had to agree to this before they accepted to answer the household survey questionnaire. Household respondents vividly remembered the events and the experiences they had gone through in view of the GLTP and expressed their views about how they want to participate in the governance of their natural resources. In trying to avoid misunderstandings, poor translation, and to ensure consistency, questions for both communities were in English and Shangaan languages. Translation into Shangaan was done by a proficient Shangani speaker and pretested before the research was conducted to ascertain its applicability. During the piloting process, a group of Shangaan and

English speakers answered the questions to verify authenticity, comprehension and simplicity of the translation. The questionnaire translation was done by a first year student studying towards a Master of Technology in Education at the Cape Peninsula University of Technology and he is proficient in spoken and written Shangaan language as well as English. The questionnaire was pretested from a sample of selected Shangaan speakers at the university. The ensured that the meaning of the questions did not lose their true meaning of what the researcher would be looking at in the field.

In the field, respondents completed the questionnaires independently. The role of the assistants was to facilitate the distribution and collection of the completed questionnaires. In cases where local leadership such as councillors, headman and kraal heads, were dealt with, the researcher opted to directly ask questions and completed the questionnaire as the discussion progressed. All the household questionnaire responses (with the exception of qualitative comments) were coded, entered into SPSS and translated across all variables by the researcher to produce interpreted information in logical sequence to write the thesis. While this proved to be hectic, it was a worthwhile exercise.

Literacy Levels: The questionnaire was in two languages, that is, the vernacular Shangaan - popularly spoken fluently in both communities and English such that respondents did not need translation. Where respondents had some problems with English, they resorted to the Shangaan version of the questionnaire in a consistent manner so that there was no mixing of the two when answering the questionnaire. Omissions identified during completion of the questionnaire were addressed upon collection. This ensured that no questions were left unanswered. The reasons for using household questionnaires in this study are summarised in the Table 5.8 according to and Johnson and Harris (2002:102), and Brace (2004:5;36).

Advantages	Disadvantages
Respondents were left with the questionnaires to have enough time to consider and answer them with little pressure exerted on them.	Lack of interaction between the researcher and the respondents may result in delays to complete the questionnaire, at times, taking longer time than planned.
Responses to open-ended questions allow people to use descriptive written answers provided there is enough space and no ambiguities.	Respondents can provide answers to questions presented to them only, in the process excluding other useful issues vital in capturing what the study seeks to achieve. The space or choices provided may not be sufficient for respondents to explain some issues.

Table 5.8: Household survey questionnaires: Advantages and Disadvantages

5.13 Timing and of households surveys

Household surveys in Sengwe and Makuleke coincided with the onset of the dry season when most people had finished their laborious work in their crop fields (April to October). The field study duration started from June to the end of November 2011. Data collection in Sengwe started from June to mid-August 2011. From the end of August to early November, the same data collection process was conducted in Makuleke community in South Africa, which is the other side of the GLTP. In addition, household surveys involved travelling to each household to distribute the questionnaires without having to bring people to a central place. This did not result in interruption of their day-to-day business as they were given adequate number of days (2 to 4 days) to complete the questionnaires, which were then collected by the researcher with the help from the research assistants.

5.14 The simple random method

It is important to mention that Sengwe and Makuleke communities are rural areas. Unlike urban areas where dwellings are arranged in blocks or clustered, rural households do not follow such structured settlement patterns with some households indeed isolated from the rest of households. This was complemented by transect walks and drives conducted during familiarization visits by the researcher. Roads and paths were identified during field visits for purposes of simple randomized distribution of questionnaires to households. The distribution was conducted in households following:

- 1) Major roads and small trails/paths.
- 2) Rivers and streams (particularly in Sengwe where some settlements are along river systems).
- 3) Household clusters/concentrated around business centres.

The distribution process meant that households, even the most isolated ones, stood an equal chance of getting a questionnaire along roads, paths and trails in cross the communities. One interesting advantage of this process is that it has widely become acceptable among researchers as an important method for selection of targets in that it provides locality, simplicity and robustness (Avin and Krishnamachari, 2009:1). In the case of ward 13 in Sengwe communal land, the starting point was Pahlela Primary School right through to Gezani business centre. In ward 15, the researcher started at Malipati Business Centre, went through Gonarezhou National Park to adjacent households across Mwenezi River. In ward 14, the distribution started at Chief Sengwe homestead throughout to Dhavata, Chinana, Kotsvi, Gezani Business Centre, Mpandle and

Muguvisa. Duplication of household visits was avoided by ensuring that the distribution exercise progressed in one direction from the starting point. On average, each ward had 113 household questionnaires distributed. The households that are located away from major roads were covered by following the paths. This ensured that remote households were covered as well by this study. Three hundred and forty household questionnaires were distributed in Sengwe and the response rate is shown in Table 5.9.

Table 5.9:	Sengwe	response	rate
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Questionnaires	N	%
Actual questionnaires distributed	340	100%
Actual target response	333	100%
Actual questionnaire returns	330	97.05%
Standard deviation	10	2.95%
Actual response rate	330	97.05%

In Makuleke, 211 household questionnaires were distributed. The settlements in Makuleke are linear and occur along roads starting from where the main road branches off from Punda Maria Entrance Gate into Kruger National Park. Further, into the Makuleke community, the settlements follow a systematic linear pattern along access roads and settlements in some cases, are clustered at business centres right through to Chief Makuleke's homestead located adjacent to the Makuleke Community Cultural Centre and Makuleke Community Property Association offices. This made distribution of questionnaires much easier, and with the help from research assistants who have previously worked with other researchers, the work was less laborious than in Sengwe community where households were generally far apart from each other. The distribution and response rate is shown in Table 5.10.

Questionnaires	N	%
Actual questionnaires distributed	211	100%
Actual target response	211	100%
Actual questionnaire returns	211	100%
Standard deviation	0	0
Actual response rate	211	100%

Table 5.10: Makuleke response rate

Perhaps one important observation is that the response rate was very high for both Sengwe (97.05%) and Makuleke (100%). The 100% achieved in Makuleke community is attributed to high social organization of the community and the fact that the people were very proactive and enthusiastic to participate in the study. They had high expectations about the study that it might translate into findings that translate into influencing policy changes, despite the fact that it is purely an academic research. It is important, therefore, to highlight that policy makers are free to or not to adopt observations and recommendations from the study. It also emerged during field research that the communities are effectively consulted GLTP resource governance process when it comes to the , and as such, this process was equally important to them in making their concerns captured

as they valued the research in case it might influence policy changes. Another set of questionnaires was distributed to institutions, both governmental and non-governmental for completion. These questionnaires provided a guide for interviews. However, the Department of Parks and Wildlife Management Authority of Zimbabwe (responsible for TFCAs programmes), the Ministry of Tourism and Hospitality Industry and the Zimbabwe Conservation Task Force, requested to complete the questions after holding discussions with designated officials tasked with responding to the study's guestions.

In Makuleke community, the researcher engaged South African National Parks (SANParks) official who was assigned to deal directly with my study issues and an a quasi-government environmental organization called Working for Water. Working for Water is very active in Makuleke community. At the time of the study, it was working in the community and Makuleke Contract Park. The head of operations at Working for Water preferred face-to-face interview. The table below gives a breakdown of components of questionnaires and the number of questions that targeted various institutions in the case study communities.

Stakeholder Category	Set of questionnaire	Number of questions	%
1.Parks and Wildlife Authorities of both Zimbabwe and South Africa	1 for SANParks 1 for ZIMParks	30	100%
2.Tourism Authorities	1 for each country	15	100%
3.Conservation/Environmental Institutions/NGOs	2 for each country	14	100%
Total	5	59	100%

Table 5.11: Conservation stakeholders' questionnaire clusters

5.15 Focus group discussions: Community priorities and participation

The use of focus group discussions began in the 1920s, and since then, the main use of focus groups has revolutionised research from market economics and health social action research, particularly in the fields of preventative health education, family planning, HIV and AIDS education (Silverman, 2004:177). As from the 1990s, Silverman (2004:177) attests that there has been 'resurgence of interests' in science research to utilize focus group discussions. In this vein, this study employed focus group discussions to get insights into the views of the local people on the GLTP governance and interrelationships with the people. The researcher also applied the Schutte Scale during the same process of focus group discussions, which proved to be innovative and creative in collecting the seemingly most fluid issues such as perceptions, feelings and attitudes of people in a relaxed interactive way in both Makuleke and Sengwe communities.

While people are familiar with the Likert Scale widely used in research to collect data on perceptions, feelings and measurement of preferences or priorities of people, however, it has

numerous limitations in providing adequate details on several issues since it limits individuals to pre-determined variables usually captured in a question (Leedy and Ormrod, 2005:185). In this instance, the Schutte Scale bridges that gap as a solution in assessing community priorities, feelings and perceptions (Schutte, 2000:11). The use of the Schutte Scale was important during this study because the researcher also looked at the attitudes, perceptions, preferences and behaviours of community members and stakeholders regarding the GLTP.

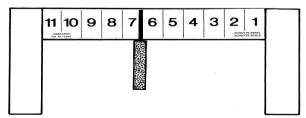
Through using the Schutte Scale, it was much easier for the study to assess specific community attitudes and interests on various environmental issues, gauging their needs in an interactive way concurrently during the discussions. This technique merged gathering views on processes of participation and prioritization of community needs, which are critical components in dealing with interdisciplinary community development issues, and it was found relevant in the GLTP socioecological governance dynamics in relation to communities. The Schutte Scale measure issues affecting a community capitalizing on discussion platforms during focus group discussions, then the perspectives are recorded in terms of community priorities forming what Schutte called the Priority-Index (Schutte, 2000). A combination of focus group discussions and subsequent application of the Schutte Scale was most appropriate because the researcher dealt with specific questions and sought clarifications simultaneously from the same focus group. It is important to note that the Likert Scale, while it is widely used, perhaps its prescribed choice of responses limit respondents from expressing their opinions beyond given range of responses that can be chosen by respondents. Thus, it would not be applied in focus group discussions because it is deterministic and would limited the choices that respondents had to make when eliciting information on complex fluid views of people concerning their satisfaction and attitudes towards the GLTP governance, representation and the value orientation over particular resources in the area. For instance the Likert scale relies on use of statements that measure people's priorities, desires and a perception ranging from "strongly agree" to "strongly disagree" from a ready-made list where respondents choose. Preferences have no further explanations from the stipulated choices, which the Schutte Scale, among other things addresses.

The Schutte Scale therefore, goes beyond prescribing a range of responses. The fact that the interviewer is in direct discussion with respondents provides interactive interface, which helps to gain more insights and information on issues that affect communities. Practically, follow up questions seeking clarification on issues under examination can be asked as well, which the Likert Scale does not provide for. It is essential to note that during focus group discussions, participants were free to express their views. For purposes of this study, people were organised into three

groups composed of twelve people constituting each group for purposes of focus group discussions as follows:

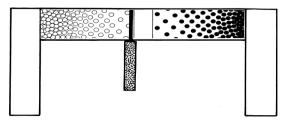
- a) Twelve people in the same age category from 45+ years (six males and six females constituting a group of 12 people into one group).
- b) Twelve people in the middle age category from 25 to 44 years (six males and six females constituting a group of 12 people into one group).
- c) Twelve people in the young age category from 16 to 24 years (six males and six females constituting a group of 12 people into one group).

From the three different age groups, nine focus groups were formed consisting of three per each age category, whose views were gathered during the study. In the case where the Schutte Scale was applied, the views were averaged and analysed in a scale rating of 0-11 and the data was presented in graphical terms. The discussion commenced by way of a brief training on how the respondents were going to use the Schutte Scale particularly on questions that needed the application of the instrument.



The side that the interviewer faces (1)

Source: Adapted from Schutte (2000:12) Figure 5.3: The Schutte Scale Tool



The side that faces the interviewee (2)

As was expected from the two communities, they were quick to know how to use the instrument. According to Schutte (2000:12), the instrument allows ranking of issues without having to weigh items against each other, which is a further advantage that enables community development practitioners and planners to obtain valuable qualitative data.

5.16 Schutte Scale application

The Schutte Scale is a flexible instrument malleable enough for use in interdisciplinary research to obtain community perspectives. It is designed such that one side with numeric calibrations faces

the interviewer and the other side that is dotes faces the respondent as shown in Figure 5.3 and applied in the field as shown in Figure 5.4 photos.



(A) Field application of the Schutte Scale during focus group discussion with young people in Makuleke community at the Makuleke Bed and Breakfast Lodges. Source: Researcher

(B) Field application of the Schutte Scale during focus group discussion with a group of community opinion leaders in Sengwe ward 13 at Headman Gezani Homestead. Source: Researcher

Photo 5.1: Focus group discussions in Makuleke and Sengwe communities

The respondent holds the Schutte Scale such that the dotted side faces the respondent when questions are asked. The more the level of satisfaction or top priority something is, the more the indicator is moved towards the denser-filled dots on the instrument. The less important something is, the more the indicator is moved towards the less dense-dot section of the instrument. The interviewer records the preferences of each respondent by simply tabulating numbers indicated on the side facing him or her from the respondents. The advantages of employing the Schutte Scale during the study were overwhelming. Schutte (2000:13) argued that applying the technique is relatively cheap, and presents a reliable picture of the actual needs of the target community. Essentially, on a comparative basis, less time and money is needed than in door-to-door surveys. Moreover, the procedure is so simple that minimal training is required. That the trainees immediately participated in the discussions using Schutte Scale no doubt authenticates the point; it also gave them a sense of ownership of the process and the exercise, and encouraged alertness such that individuals did not lose track of the discussion process.

Furthermore, Schutte (2000:13) summarized the advantages of using this technique by arguing that this instrument is suitable for data collection that helps to determine priorities of communities, which can be used as projective data of the overall community's perception. Respondents in the

same geographical proximity can express not only their own opinions, but respond on behalf of other people from the same neighbourhood. Ultimately, the technique, which is in resonance with the mixed approach adopted in this interdisciplinary study, produced statistical data, which was helpful in understanding local attitudes and feelings to complement household survey questionnaire responses, especially in these two communities where matters concerning the GLTP governance, local participation in natural resource management, and derivation of benefits are generally regarded as sensitive. In this regard, the researcher agrees with Schutte (2000) from a practical point of view that the instrument is advantageous, capable of dealing with sensitive issues where even interest groups like gangs create divisions within communities, rendering door-to-door surveys undesirable (Schutte, 2000:13). While the Schutte Scale proved to be effective, it requires a little more time in terms of mobilizing people of the same gender, age group and training, which can be a lengthy process especially where the literacy levels are low. In cases where the community members are not proactive, it can be difficult to bring these groups to one station for discussions. However, in this study those factors did not arise.

5.17 The interview method

The researcher carried out interviews with individuals from a wide range of backgrounds to gain a deeper insight into local patterns of environmental relationships with institutions mandated to manage natural resources; gathered local perspectives of such interactions and the underlying factors relating to resource governance leading to such patterns. Interviews were unstructured and the researcher had built a strong rapport with the respondents such that opinions could be expressed freely without reservations. These informal interviews were done during the spare time of community members. In the process, trust was built with the network of informants. During the course of the interviews, relevant qualitative comments made by respondents were recorded using a recording device to ensure that all the details were captured for quantitative analysis. Johnson and Harris (2002:102) argue that interviews spontaneously yield additional information that would have been left out by questionnaires. Struwing and Stead (2001:86) buttressed this point by further pointing out that interviews with a limited number of questions can be conducted on a sample size and yield valuable information. In this case, it was prudent that the interviews were conducted with targeted individuals involved in the GLTP from government departments, community individuals and conservation institutions.

The interviews certainly complemented the questionnaire technique just as Brace (2004:5) put it forward that respondents may have valuable information not covered in a questionnaire, which can be captured during interviews. Through engaging respondents "face-to-face," the researcher

was able to obtain crucial information from key persons in Makuleke and Sengwe communities by seeking clarification on important issues, which gave rise to effective interpretation of responses (Brace, 2004:5). Upholding of principles of confidentiality was crucial at this stage just as Leedy and Ormrod (2005:185) stated that respondents would need to be assured that their responses will not be identified by their names, and it was so treated in this case. Having assured them of this anonymity, they were comfortable to express their views. To this end, the following table summarises interview advantages and disadvantages.

Advantages	C	Disadvantages	
Respondents can of questions.	seek clarification	• Self-presentation bias can result from the way the researcher understands the conversation.	
 Interviews yield in- and concurrent fol questions posed. 		If respondents do not have sufficient time, getting deep insight is difficult.	
The flexibility of pl interest on the inter of view gives room what is considered.	erviewee's point n to bringing out	• The process is generally time consuming as many unrelated issues and events are brought into discussion potentially diverting focus from what the researcher requires.	
Interactions allow misunderstood qu		• Selection of respondents relies more on the researcher's choice and opinion, in which case, the researcher may miss most important issues from other people.	
Respondents can to provide deeper open up on more o probing questions	information and letails by asking	• The respondents may find it difficult to create ample time to entertain the researcher.	
Interviews are in a format with respor live and stimulatin	idents. They are	• There is a real risk of over-exciting respondents that may result in loss of valuable time.	
Allows difficult and questions to be ad referring them to a (snowball approac	dressed by nother person	• The referral process implies that there is need for more resources, and more time is required to travel to identify the person to be interviewed.	

5.19 Photographic caption

The birth of photography in 1839 marked a new dispensation in modern research (Prosser, 2008:9). It is out of this realization that images are regarded today as critical in giving pictorial understanding of what happens in the environments people live. In view of this, photographs relating to some of the livelihood activities in Sengwe and Makuleke were taken for use in this research from two dimensions. There are the researcher-taken photographs, done during field research and those taken by others. Those researcher-generated photographs were captured during transect walks and drives during field data collection and visits to some of the projects to ground-truth how people interacted with their environment in support of their livelihoods. Their iconography systematically tells a story of interrelationships between people's survival and the

importance of the environment. The materiality of these photos was meant to generate socioecological realities in the study area. In a show of growing support of this method, Weber (2008:47) outlines four important points that photographs can assist in, in understanding the phenomenon that they are:

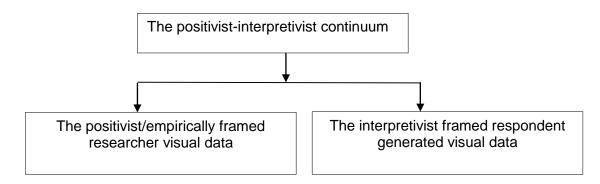
- 1) Used as data or as a starting point for theorizing;
- 2) Useful to elicit or provoke other forms of data;
- 3) Used to document the research process and capture key aspects under study, and
- 4) Useful to interpret and/or represent issues and environmental relationships.

Flick (2009:241) notes that photographs also allow detailed recording of facts and conditions as at when and give a pictorial understanding of how it occurred in particular circumstances. It is important to note that photographs need to be supported by explanations to give them a deeper meaning and representational value in understanding the phenomenon (Warren, 2002:233). One of the most important points that Burgin (1983:226) noted that makes use of photos, particularly in socio-ecological studies, is that photographs are not a purely "visual" way of showing subjects, but they are accompanied by writings to give more detail and clarity for the reader to derive meaning. In this regard, Burgin (1983:226) states:

"I am not only alluding to the fact that we rarely see a photograph in use which is not accompanied by writing; even the uncaptioned 'art' photography, framed and isolated in an art gallery, is invaded by language in the very moment it is looked at: in memory, in association, snatches of words and images continually alternate and intermingle".

The photographs were important not only for the sheer wealth of visual detail, but for the precise socio-ecological viewpoints that these would bring out in this study, in various ways local people's processes interrelate in the GLTP as seen from the researcher's point of view. In arguing for the use of this technique, photographs illustrate the state of wilderness, even some few aspects on how the local people are able to practise conservation and livestock production to ascertain the type of interdependence that exists with their environment in understanding environmental relationships. Otherwise, without taking advantages of photographs, environmental issues can easily be misconstrued and not well accounted for in theoretical aspects in terms of the community and the GLTP relationships. In other words, photographs, therefore, represent a narrated world, a world of the cause and effect of activities and consequences in the planet on which projections and conclusions are made. To conclude this part, it is argued that photographs give not only the

sensory stimuli, but also a 'pictorial representation' (Warren, 2002:234) of the study relationships of people and their environment through their activities. It is unsurprising to note that strategic combinations of photographic categories employed in this study as suggested by Gold, (2007:145) relate to the positivist-interpretivist framework upon which the generation of photographs can be understood in research processes as follows:



Source: Adapted with own additions from Gold, (2007:145) Figure 5.4: The positivist-Interpretivist photographic continuum

The empirically framed photos relate to what the researcher shot during the course of events or research, while the interpretivist framed are those taken or generated by other researchers as visual data that one can used in analysing a phenomenon.

5.19 Secondary data collection process

This refers to the collection and analysis of existing written, published and unpublished information. It included:

- Examining existing GLTP agreements and development project documents entered into by the governments of South Africa, Zimbabwe and Mozambique, involved in the GLTP initiative. The natural resource governance and the power dynamics that affect communities' livelihoods and conservation are informed by these agreements, strategies and conservation initiatives pursued by individual states.
- **2)** Review of official speeches, policy documents and legislation relating to the GLTP governance and natural resource conservation in South Africa and Zimbabwe respectively.
- 3) Published books on the history of TFCAs or Transboundary Natural Resources Management (TBNRM) in Southern Africa, which also provided valuable scope for the literature in this study.

- Published journals and articles on community involvement, participation and beneficiation in conservation of natural resources and environmental management, which will give more insight.
- 5) Official documents used by the Trilateral GLTP Management Committee.
- 6) Internet search engines that also provided valuable information relating to the study communities.

It is critical to mention as proposed by Leedy and Omrod (2005) an in this study that primary data consisted of data collected directly by the researcher for the study while secondary data was obtained from existing sources of information.

5.20 Research Limitations

As highlighted above, this study used a mixed approach, in which data collection relied on both qualitative and quantitative approaches. It is without doubt that these approaches have their challenges, particularly when dealing with rural communities where households are dispersed. Like any research process, there were a number of challenges that were encountered and these, simply put are into two categories:

- 1) A review of some of the key literature on the issue of resource governance, re-definition of natural resource rights, ownership, resource accessibility, usufruct, local people participation and understanding of competing interests was not an easy task. Bringing various global, regional and local views juxtaposed along local communities' interests in terms of institutional dynamics in analysing complex resource governance, sustainable conservation of the resources at various levels, and reconciling the discourse with local livelihood elements, was a difficult task pursued in order to provide a solid and coherent background against which the issues could be understood.
- 2) Survey of households, conducting focus group discussions, interviewing conservation organisations, national park authorities or their representatives in the TFCAs in partner countries (Zimbabwe and South Africa) and individuals with a view toward integrating their perspectives and experiences into the study, was not easy to get. This was compounded by the fact that the case studies are rural communities, which meant travelling long distances making appointments to meet officials were all difficult processes. At times, the respondents,

who requested the questionnaires first and then requested for a discussion before they responded, took a long time to attend to the researcher as they were busy with scheduled work.

5.21 Field research difficulties encountered

This research, being interdisciplinary in nature, experienced numerous difficulties in realizing its study objectives in both Makuleke and Sengwe communities. The problems are summarised by the researcher as follows:

- There was some delay in receiving responses from partner organisations after having had preliminary discussions and left the questionnaires with them. The idea of preliminary discussions before they responded was meant to develop trust between the researcher and the respondents.
- 2. Another difficulty arose from the number of household survey questions that were used. While the decision to use closed and open-ended questions was motivated by the need to generate good qualitative and quantitative data, it created difficulties in terms of the number of questions that respondents had to cover. As a result, an average of two to four days was allocated for the completion of the questionnaires, resulting in the loss of 10 household survey questionnaires in Sengwe community and one poorly completed questionnaire in Makuleke. Generally, there was a complaint from respondents that the questionnaire had too many questions. Ideally, the fact that it was in two languages put in one questionnaire, gave an impression that it was voluminous.
- Although the household questionnaire was pre-tested, the sample pilot study failed to detect the issue of limited space on open-ended questions. Consequently, a few respondents who had much to mention ended up extending their response space in clarifying certain issues.
- 4. A sense that far too often studies undertaken in these communities have not yielded practical results to the local people, led many people to question the relevance of research in terms of its contribution to rural development. In Makuleke, one of the local leaders who are also employees of SANParks encouraged the researcher to make research outcomes accessible to the local people, particularly recommendations. In fact, both Sengwe and Makuleke communities expressed a general impression that independent research yield

more objective and realistic results, which they would want to use as an advantage to improve their processes, development planning and programming.

5.22 Success of the study

Given the nature of the study and the information generated by households and organisations that responded, the conclusions drawn can be considered as indicatively representative of the views and concerns of various stakeholders (communities and organisations) with respect to natural resource governance on relationships with local livelihoods and conservation in the GLTP. Indeed some of the issues raised may be significant to other organisations working in the same area, and perhaps for future transfrontier conservation planning in the SADC region. The purpose of the study was to examine closely the GLTP governance processes interlinked to local livelihoods, local conservation and participation of communities in natural resources. This study at the end of concurrent presentation, analysis and discussion, offers some strategic recommendations for fundamental TFCAs or Peace Parks policy changes. Above all, the study developed some information for an inclusive decision-making process and natural resource governance framework.

5.23 Conclusion

This chapter afforded the researcher to describe the research design, approach, methodologies that were employed to gather information, and the sources of data used in the study. This began with the methodological framework, the research strategy, the rationale for adopting a mixed approach, research design and sampling techniques. The presentations of these techniques are grounded in socio-ecological considerations built into a body of knowledge for subsequent concurrent presentation, analysis and discussion of results in chapter 6 and 7. This chapter also presented the methods used for data collection. These include household survey questionnaires, interviews and questionnaire completion by officials and conservation organisations, use of field based exploratory photographs, focus group discussions and documentary evidence that were used to build comprehensive analysis of the philosophical foundation of Peace Parks; how it is evolving in the region and changes taking place within TFCAs community relations. The next chapters, present and analyse the field research data, and make recommendations, coupled with the suggested frameworks for consideration and possible implementation.

CHAPTER SIX

Makuleke Community case study

Presentation of Makuleke findings, analysis and discussion

"On a crowded planet...the hardest challenge is to preserve both species and the ecological services that sustain earth, will be to find room, and a profitable role for nature in managed landscapes where people too can live and prosper. The new idea is different. Its central study is not the limitation of rights and privileges, but rather the fostering of effort" (in Child and Lyman, 2005).

6.1 Overview

Chapter six present findings from questionnaires, interviews, focus group discussions, personal interviews and exploratory observations that provided the basis to ground-truth a plethora of socioecological activities in the two case studies. Furthermore, this chapter gives data on field-based research carried out for twelve months in Makuleke to explore the Great Limpopo Transfrontier governance processes juxtaposed with local systems as they relate to community livelihoods and local sustainable conservation. The issues are complex and problematic to integrate. By mentioning this, the study does intimate to fail, but tried to interrogate the issues and seeks to find solutions to the current biodiversity-ecosystems and socio-ecological problems communities face in Southern Africa. It strives to give insights in addition to accumulated knowledge by other researchers, hoping to contribute to resource governance, local institutional dynamics, community participation, rural livelihoods and the local conservation discourses. Critical as it may, the study findings provoke a re-thinking among conservation planners in transfrontier conservation and policy makers to revisit the governance regimes.

6.2 Introduction to Makuleke community

"We were removed to give space to the wild animals. We should be using that land to grow maize and to sell bags of mealie meal. This will enable us to establish co-operatives and export our products to other countries. We are living in poverty because we were dispossessed of our land. On our eviction, no compensation was paid for all the improvements that we had made" (A victim of forced removal, Ramutsidela, 2002:16 from a citation in Levin et al., 1997:97). The selection of Makuleke community in South Africa as a case study community was based on its role as a community to the GLTP project. It is the only community in the GLTP that won a land claim and managed to establish Makuleke Contract Park in the Pafuri Triangle. This park is located at the confluence of Limpopo and Luvhuvu Rivers, overlooking Sengwe community in Zimbabwe and Limpopo National Park on the eastern border with Mozambique. This region, popularly known in the Kruger National Park as the far north, is rich in pristine flora and fauna. Its geographical location made the area attractive for this interdisciplinary study as one of the best socio-ecological 'laboratories' for research. This study uses concurrent process where data presented is also analysed, discussed and in chapter 8, some strategic recommendations are made to re-orient the problems arising from the findings.

6.3 Makuleke community demographic dynamics

The Makuleke community is epitomised with a history of dispossession and alienation of traditional land (Spierenburg et al., 2008:90; Fabricius and Collins, 2007:87). Accordingly, this study established that 96.4% of the people in Makuleke are of Shangaan tribe constituting the majority, and 3.6% are Vendas as shown in Table 6.1.

Table 6.1 Current ethnic diversity in Makuleke

Ethnic group	Ν	%
Shangaan	203	96.4%
Venda	8	3.6%
Total	211	100%

The appreciation of ethnical diversity is critical in understanding internal cohesion and socioecological governance relationships in the community from its historical and contemporary epochs. The study interrogated these demographic dynamics and ecology to help in comprehending a combination of livelihood activities. To deal with the demographics of Makuleke, it is imperative to state this community is homogenous. In terms of gender, the study found that the females constitute the majority of the people in the community (see Table 6.2).

Table 6.2 Gender distribution from 211 Household Surveyed

Gender	Ν	%
Female	133	63.1%
Male	78	36.9%
Total	211	100%

Further to this, Table 6.3 shows the number of households in Makuleke broken down from the three Villages that constitute the entire area defined as Makuleke community.

Table 6.3 Households in Makuleke community

Name of village	N	%
Makuleke (main village)	1 443	42%
Maviligwe	1 124	32%
Makahlule	900	26%
Total	3 467	100%

Household survey data in Figure 6.1 shows age distribution. Those aged 36-40 years of age constitute the majority accounting for 25.3% of the surveyed 211 households. Those aged 26-30 years account for 23.4%, while those who are 40+ years in terms of percentage amount to 23.4% also.

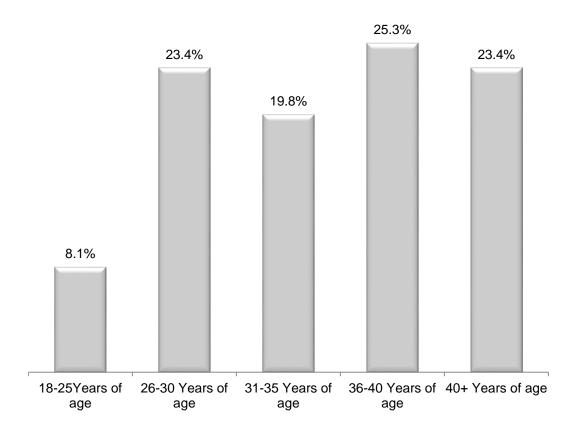


Figure 6.1 Age distribution in Makuleke from 211 households

Furthermore, people aged 18-25 years are in the minority occupying only 8.1% of the total 211 surveyed households, while those aged 26-30 years of age account for 19.8%. Perhaps, one general observation is that people aged 18-25 years of age and those from 26-30 years of age, generally are in the categories regarded as 'young people' being fewer accounting for just 31.5%

compared to those from 31 to 40+ years of age, who have a combined percentage of 68.5%. The 'young' people tend to be mobile; hence, this could explain their low percentage in the area.

Table 6.4 Occupation distribution from 211 household survey data

Type of occupation	Ν	%
Farmers	160	76%
Teachers	21	10%
Traders	23	11%
Housewives	7	3%
Total	211	100%

The predominant occupation in Makuleke is farming of crops and livestock rearing that constituted 76% of households having confirmed being farmers as a form of full-time occupation. In addition, 11% of the 211 household respondents stated that they were traders and 10% confirmed being in formal employment mainly in the civil service such as teaching in schools in schools and medical nurses in clinics in the area. Then 3% of the respondents stated that they were full-time housewives. It is important to highlight that during focus group discussions, some people in their various occupational categories considerably doubled in some cases, where some could be doing some farming, however, at the same time could be involved in trading at a spare time to increase revenue base. Equally, a teacher could be practising subsistence farming at very small scale to supplement earnings.

6.4 Makuleke Region: History of land dispossession and disfranchisement

Several authors and researchers have documented the story of Makuleke people in terms of what people lost, regained and at the same time, the paradox they are in, considering the Great Limpopo Transfrontier Park where they have been incorporated as a community. Authors such as Steenkamp and Uhr (2000:11) documented the Makuleke land claim negotiations. For that reason, this study will not dwell much on that subject because the extensive researched information available covering the procedural and complexities of the negotiation process, the contestation of stakeholders and the historical information was covered. Nonetheless, it is essential to highlight in perspective that the Makuleke history and their claimed Pafuri Triangle can be traced back to land dispossession and forced removal that took place in September 1969 when three countries meet, that is, South Africa in the South, Zimbabwe to the North and Mozambique to the East. This place is known as the Crooks Corner. The name 'Crooks Corner' is not clear in terms of where it originated from and there are a number of explanations that have been put forward. However, the most important point to take note of is that this area constitute what is popularly known as the Pafuri region. This region was incorporated to Kruger National Park and formed a strategic piece of land that became a military cordoned area as a unique ecological region (Stein, 2007:1). The

Pafuri Triangle thus lies at the confluence of the Limpopo and Livhuvu Rivers. Information gathered from interviews and available in literature, show that historically, it was used as a trade route for ivory. Locally, the area was popular for trapping of wild animals by the local people and operated as a route through which labour from the present day Zimbabwe and Mozambique was recruited to South Africa after the opening of the gold mines in Witwatersrand in the 1880s (Ramutsindela, 2001:16). Unlicensed recruiters executed recruitment of labour via Pafuri Triangle and the area became popular for traditional trapping of animals that resulted in the area nicknamed 'Crooks' Corner', a name that exists up to the present day. However, it no longer has its historical symbolism today. It is important to note that in his book, 'The Ivory Trail', Bulpin (1988:13) pointed out that Crooks' Corner was a secluded and sinister wedge piece of land known for lawlessness. It was a sanctuary, away from civilizations and 'was paradise to all those, whose deeds or inclinations made imperative retreat to some last stronghold of the lawless' (Bulpin, 1988:13).

Stakeholders could ascribe much of what happened to the Makuleke people at Pafuri to the history of the Kruger National Park expansion and competing interests at that time. The decision to remove the Makuleke people from Pafuri was highlighted by respondents that it was based on the need to extend the KNP. Resultantly, access to game and natural resources by the community was considered an obstacle towards the supply of the much-needed labour on farms and in mines following the discovery of gold in the Witwatersrand. Perhaps, one important observation noted from various respondents is a popular opinion that the use of game by the local people could have been destructive, although it was for subsistence purposes. It was considered that it would otherwise be better to substitute it by ensuring that the people supplied their labour for a fee to sustain themselves than subsistence hunting (Curruthers, 1995:31). Ideally, their use of flora and fauna were interpreted in conventional analysis as simply poaching, which then contributed partly to their removal. However, contrary to this argument, the Makuleke people were naturally conservationists. Through use of cultural practices and local environmental values, they were able then, to use traditional systems to mediate use and ecological interactions in the Pafuri region. As Ramutsindela (2002) argues, the Makuleke people were not only a target by conservationists, but unfortunately were caught up in apartheid territorial ambitions in which a policy and system of 'tribal' authorities and 'homelandisation' required the grouping of the tribal areas into Bantustans. In that context, the Makuleke were required to fit into the new dispensation of tribal jigsaw puzzle. Consequently, the Makuleke people were forcibly removed in September 1969 and resettled at Ntlhaveni, a newly established reserve about 70 kilometres away from their original homeland, the Pafuri Triangle that the Shangaan and Venda speaking people formerly occupied. According to the local respondents, arguments also buttressed by other body of information is that what made

their removal inhuman and morally bankrupt was that they were never compensated (de Villiers, 1999:4; Ramutsindela, 2001). This ultimately underpinned the strength of their land claim case in which their land was resituated to Makuleke community.

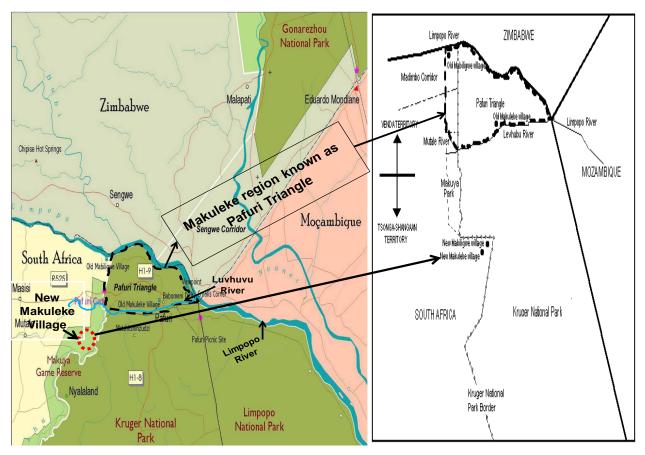


Figure 6.2 Makuleke community locations

Following the consummation of independence in 1994, new optimism was generated for the return of the land. In 1996, the Makuleke people started a process of land reclamation leading to them reclaiming their land. When the Makuleke community lodged their land claim in 1996 against the State for the 24 000 hectares of the northernmost land within the Kruger National Park, conservationists looked on it with great concern. This process culminated in an agreement that benefited the community, resulting in a Contractual Park being established. The Makuleke community had a legitimate land claim, since the apartheid government had forcibly removed them from the land they traditionally owned.

That portion of land is strategic for the entire Great Limpopo Transfrontier Park (GLTP), particularly its geographical connectivity to Zimbabwe through Sengwe Communal Land, where a transitory

'Sengwe Corridor' has been demarcated to link Gonarezhou National Park to the entire GLTP. The Makuleke community regard the Pafuri region as the heart of the GLTP due to this strategic location. It links three countries, and ecologically, positions itself as the primary focus for future success of the GLTP. In all fairness, it is important to highlight that though the area had to be reclaimed, the rights issues in terms of utilization of natural resources was cited by respondents to be in contention due to unequal benefits sharing as encapsulated in the contract that established the Makuleke Contract Park.



Photo by D. Muzeza (10 October 2011) Figure 6.3 Makuleke Contract Park Signpost

What is intriguing about Makuleke community is the fact that after a lengthy and contested restitution negotiation process involving numerous stakeholders, the community regained their land. However, the process was not an easy one, as it had to involve great compromises for the local people to have land rights back in 1998. At that time, the community decided to keep the region for conservation purposes managed under a Joint Management Board comprising members from Makuleke community and members from the South African National Parks (SANParks). Based on those negotiations, a historic agreement was signed on 30 May 1998 between the Makuleke community and South Africa National Parks (SANParks), together with various government departments and the provincial conservation department oversaw the

establishment of Makuleke Contract Park. The Makuleke Contract Park prides itself as 'The Heart of the Great Limpopo Transfrontier Park'. The GLTP Treaty, thus putting the community on the spotlight of the GLTP conservation process, proclaimed it on 9 December 2002.

6.5 Makuleke resource governance structures: Land claims and legal frameworks

Natural resource governance architecture in Makuleke can be understood from two dimensions. There are two levels of resource governance processes, all having significant social and economic impacts at the local level. There is the local and the national processes, that is, a combination of governmental structures cooperating in conservation closely with the community in the claimed land. In any scenario of negotiation, contestations around complex issues are bound to occur when negotiations take place, compromises have to be made for contending parties to reach some form of consensus. Consequently, South Africa having emerged from an apartheid past and instituted a democratically elected government in 1994, the new government set up a legal infrastructure to address problems of inequalities and imbalances in wealth redistribution (Spierenburg et al., 2008:90). Part of this entailed the issues of land ownership, upon which the Makuleke leveraged to reclaim the Pafuri region.

6.6 The legislative governance architecture

Any sovereign country has the right to put in place laws, policies and regulations that govern interactions of citizens, including their conduct within the geographical environment they live in. For this reason, the South African government promulgated pieces of legislation to achieve equity in the distribution and access to wealth. Hence, it set a framework within which fundamental claims for historically lost land was advanced. To understand the legal resources governance architecture with respect to Makuleke people's land claim and access to natural resources to enhance their livelihoods and effectively participate in conservation, the following pieces of legislation provide the basis upon analysis of the claims and restitution was achieved.

- 1) The provisions of Land and Assistance Act, 126 as promulgated in 1993.
- 2) The Restitution and Land Rights Act, 22 as promulgate in 1994.
- 3) The Land Reform Act, 3 as promulgated in 1996, and
- 4) The Community Property Association Act, 28 as promulgated in 1996.

Due to the existence of enabling legislative and policy environment created by the new government in 1994, Steenkamp and Uhr (2000:2) and Spierenburg et al., (2008:90) argue that communities such as Makuleke were able to reclaim land they previously lost. But, as noted

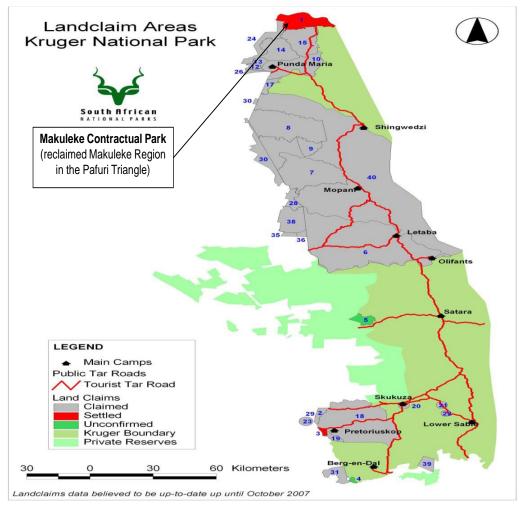
earlier, there were serious concerns from conservationists that this would set a wrong precedent for similar claims to be made in the park land, which would ultimately affect biodiversity and wildlife habitat in parks across South Africa. This was a legitimate concern considering the fact that some communities historically inhabited areas that were late carved for conservation purposes as national parks or private protected areas for game farming in and around KNP. Such claims by the local people had the potential to undermine conservation of biological and ecosystems in and around the GLTP. For example, there are sites whose claims were lodged in the claims courts in South Africa by communities, and the impact on biodiversity and ecosystems, if the all of their rights are restored, can potentially have enormous ecological consequences on conservation sustainability. Ideally, it can be argued that land claims have far-reaching ecological ramifications on biodiversity conservation through reduction of the landscapes that can be dedicated to wildlife preservation. It was also noted during research that there was realisation that government sustainable development policies today as argued by a SANPark Official, embrace the environmental economics discourse. The aim is to incorporate environmental assets into the economic system to ensure sustainability of the economic system, but at the same time ensure that the ecosystems and biodiversity are maintained in their pristine form. In that context, while there is need by communities once disenfranchised there that need to incorporate the idea of wealth creation, it does not need to be substitute for the loss of environmental amenity. Furthermore, the official observed that while land claims were and are still justified, emphasis should be on putting a price on the environment, which will help conservationist and communities to protect it unless land claims is more profitable; that community natural resource access aid businesses, and such decision should base their argument about local behaviour on environmental economic considerations. In that perspective, the land claims and the quest by the communities restoration of their land rights economic growth is necessary, but environmental protection and therefore should take priority over it, said the official (22 August 2011). In this discourse, interview with one of the community members was not at variance in terms of how the community perceive their role in the GLTP, justifying their claim as in harmony with conservation by stating that:

- 1) The communities regard the environment as also managed, controlled and dominated by humans for the long-term use of humans.
- 2) The community's environmental management generally is well meaning and have the knowledge and local value systems as resources to provide a stewardship role on behalf of the GLTP stakeholders. In that perspective, the local people's land claim is compatible

so that environmental management is about finding win-win solutions to harness the local people for environmental protection.

3) Traditional management tools can be utilised and extended in the GLTP conservation.

The possible reclamations around Kruger National Park as integral to the GLTP, is shown on the Figure 6.4.



Source: Adapted with modifications Mabunda (2008:68) Figure 6.4 Figure showing reclaimed land and cases lodged for land Restitution

	Table 6.5 List of land claims lodged within KNP with a bearing on the GL	TΡ
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Number	Name	Туре	Status	Area (Ha)
1	Makuleke Contractual Park	Settled	Settled	22372.01
2	Ntimane	Claimed	Gazetted	3541.26
3	Mdluli Safari Reserve	Settled	Pre Invest awarded	1369.19
4	Ноуі	Unconfirmed	Preliminary Investigations	982.02
5	Mnisi	Unconfirmed	Preliminary Investigations	5932.81
6	Ba-Phalaborwa	Claimed	Gazetted Notice 2554 of 2000	179069.25
7	Nidindani	Claimed	Gazetted Notice 794 of 2005	57631.15
8	Madonsi	Claimed	Gazetted Notice 849 of 2005	63524.78
9	Muyexe	Claimed	Gazetted Notice 794 of 2005	10162.62
10	Kama	Claimed	Gazetted Notice 2391 of 2003	32973.06
11	Tshihaheni	Claimed	Gazetted Notice 2391 of 2003	896.15
12	Tshipakoni	Claimed	Gazetted Notice 2391 of 2003	1794.74
13	Tshikokololo	Claimed	Gazetted Notice 2391 of 2003	3404.26
14	Magovhani	Claimed	Gazetted Notice 2391 of 2003	22617.63
15	Makahane	Claimed	Gazetted Notice 2391 of 2003	28090.07
16	Nkotswi	Claimed	Gazetted Notice 1753 of 2005	170.92
17	Marithenga	Claimed	Gazetted Notice 2391 of 2003	4544.60
18	Nkuna	Claimed	Gazetted Notice 1870 of 2005	92124.06
19	Pangane	Claimed	Gazetted	3000.82
20	Mrs Ngobeni	Claimed	Gazetted	2214.11
21	Mr Thuthana	Claimed	Gazetted	2216.01
22	Shishongunyi	Claimed	Gazetted	1703.27
23	Mr fana Elvis	Claimed	Gazetted	3480.53
24	Makuya Park	Claimed Land	Unknown	14138.84
26	Mhinga Reserve/Makahane- Marithenga	Claimed Land	Land Claims Court	1913.32
28	Mthimkhulu Reserve	Claimed Land	Unknown	7010.47
29	Ntimane Land Claimed	Claimed Land	Gazetted	3541.26
30	Mariyeta Park	Claimed Land	Unknown	29966.25
31	Mthethomusha GameReserve	Claimed Land	Unknown	8996.94
32	Baderoukwe 11 Lu	Claimed Land	Unknown	629.69
33	N'Dole 12 Lu	Claimed Land	Unknown	455.57
34	Sable 13 Lu	Claimed Land	Unknown	375.71
35	Pompey 16 Lu	Claimed Land	Unknown	2010.75
36	Genoeg 15 Lu	Claimed Land	Unknown	1984.62
37	Mdluli Reserve	Claimed Land	Unknown	1369.19
38	Letaba Ranch 17 Lu	Claimed Land	Unknown	21635.53
39	Mjejane (Lodwichs Lust 1732)	Claimed Land	Negotiations	5927.95
40	Figureindani	Claimed	Land Claims Court	695041.80
Total of land under possible restitution				13 41029.32 (ha)

Adapted with modification from Mabunda (2008:70)

The above scenario of land claims substantially paint a gloomy picture of potential threats to sustainable biodiversity conservation if one looks at it from a land claims perspective and the ecological consequences that arise in relation to the GLTP. There is logic in observing that if these claims are enforced and the rights of the communities restored, the impact on the landscape and geographical space reserved for biodiversity conservation could be reduced drastically. This undermines conservation of important biospheres that form the GLTP initiative. Thus, the institutions of resource governance both governmental and non-governmental (NGOs) as well as the private sector, are justified to make interventions to restrain further encroachment into conservation areas in order to protect biodiversity and ecosystem, particularly when such claims pose threats to the geo-ecological regions of rich pristine flora and fauna.

However, with regard to the Pafuri region (coloured red in the KNP Figure, Figure 6.2), shows that great compromises and negotiations had to be made towards restoration of land rights to the Makuleke community that was disenfranchised by political historical expediencies in 1969 through removal, land dispossession and land alienation. Throughout interviews conducted, it was established that Makuleke community attaches great importance to biodiversity and ecosystems management, which imply that they show due diligence to conservation of the natural resources and environment in general. This does not contradict earlier suggestion that mechanisms should be put in place to ensure that those communities adjacent to the GLTP are guided in conservation. However, the process of guiding then should facilitate deriving benefits in terms of compensation by restoring local claims in retrospect of losses that they incur in the past during land alienation. It is critical to give the local people means for sustainable livelihood options supported by environmental incentives to motivate local collaboration in biodiversity conservation.

As traditionally conscious of the importance of nature for livelihood, conservation alarmism against indigenous people's claims over natural resources, which they lost during the apartheid era, and their attempts for rights restoration, hypothetically is misconstrued to as leading to 'resource capture' and 'resource curse'. This argument is yet to be proved, and in the case of Makuleke, the people opted to use their reclaimed land for conservation purposes. This is an indication of willingness of the local people to contribute towards conservation of natural resources. Thus, Makuleke community has managed to meet conservation objectives, intentionally utilizing their region for rural development and supporting local livelihoods. The Makuleke community went to establish a Contract Park. Currently, the Makuleke community operate two projects, that is, running lodges (in partnership with Wilderness Safari) at Pafuri Triangle that offer bedding facilities, bed and breakfast, game viewing, game drives and photographic safaris in the Makuleke

Contract Park. Bedding, breakfast, lunches and dinners are provided at the community lodges, where household families rotate in providing food to visitors who stay at the community lodges. The proceeds go directly to a particular household with the turn to supply food to visitors. The community also runs an Eco-Training Centre in Mhinga. This specialises on training people on tour guide and hospitality related services. As such, the land has not been reclaimed for settlements and farming purposes, and stands out as a good example of how communities interests meet with conservation expectations. In that regard, it has provided an opportunity for the local people to participate in conservation. The challenge that always comes out is how the community and its activities fit and leverage on the GLTP dispensation to enhance livelihood gains and participation of people in the governance of the GLTP. This is further made difficult by the fact that the project is operating at a tri-nation level. According to Kruger National Park official, certain communities occupying land adjacent to the Kruger National Park (KNP) integral to the GLTP project (currently belonging to the Department of Land Affairs but under claim or utilized by communities), have always expressed the desire that parts of their land be included into KNP as natural resource use and ecotourism zones. This resonates favourably with conservation of natural resources. At the same time, communities will be guaranteed to derive benefits on a winwin situation. In addition, Mabunda et al., (2008: 69) put it clearly that chiefs of the concerned areas have already showed interest to proclaim and incorporate their areas into KNP as protected zones or as contractual national park land that will then be managed by the KNP. Ideally, this will have a positive impact in terms of instituting an inclusive resource governance process to enlist collaborative sustainable management of natural resources of the communities. This also helps to ensure that communities realize benefits from biodiversity and ecosystems proximate to their localities.

These observations help to tackle decisively the problem of alienation antagonism that was created when land was appropriated for exclusive wildlife conservation and tourism development, which also had a direct impact on livestock husbandry and agro-based activities practised by Makuleke community. This observation also raise questions about African wildlife and conservation policies. To buttress this argument, Okech (Undated, 65) in the paper 'Wildlife-community conflicts in conservation areas in Kenya' postulates that such policy thrust where the local people are not considered fully as integral to the natural resources, could lead to 'people versus animals' conflicts. In the case of Kenya, large areas of pastoral rangelands were expropriated for exclusive wildlife conservation and this was commonly justified on the basis that pastoralists overstock, overgraze and damage the wilderness/ranges (Okech, Undated, 65). This is contrary to the obvious truth in African ecological politics that wild animals exist in harmony with

their surroundings. This is so much that contemporary wildlife-human conflicts became an outcome of the problem of resource utilization in conservation areas (Okech, Undated, 65). The conflicts currently found in many parts of the continent regarding natural resources and communities, Okech (Undated, 66) further proposes, are not only peculiar to Kenya. In the case of the GLTP resource governance and management processes, it is a reality that the embattled relationships between the GLTP managers and the communities, adversely affect consolidating on existing local efforts for biodiversity conservation. The worst-case scenario that prompt the need for this collaboration, at least from the local communities in Makuleke, is the mere fact that the community endure the most of damage and harm that wildlife inflict on people and their property. As a comparative inference, in the case of Kenya, this has always leading to retaliatory killing of wildlife in 82% of the protected areas in Kenya.

Perhaps, one important aspect to take note of with respect to Makuleke is the conflict has not reached that stage. However, there are serious institutional frameworks that are key drivers, which should enable community resource equity and access to alleviate poverty. In this view, the restoration of traditional rights of the land in Makuleke is better understood from the Restitution of Land Rights Act, 22 of 1994, which makes provisions for Land Claims Courts to adjudicate land claims. These courts adjudicate and facilitate claimants in processes of proving a right to restitution to regain control of the previously lost land and its natural assets (Ramutsindela, 2001:107; de Villiers, 1999:1).

Essentially, the Community Property Association Act, section 28 of 1996 was promulgated to create mechanisms through which communities mutually benefit from restitution of land. The Provisions of Land and Assistance Act, 126 of 1993 and the Land Reform (Labour Tenants) Act, 3 of 1996, established juristic persons in the form of Community Property Associations (CPAs) that drive an inclusive and cohesive process to allow communities to derive benefits from their resources and compel them to conserve the resources. Taking the discourse from this perspective, the Makuleke Community Property Association (CPA) was born based on legal support, thereby instituting a robust locally based mechanisms to determine who gets what, when and how in terms of the acquisitive and distributive function of community structures for the people to derived benefits from their resources. More importantly, the Makuleke Community Property Association holds the land rights based on agreed terms by stakeholders in line with the constitution (Rural Development strategic Plan, 2011:10). The Makuleke Communal Property Association Act, 28 of 1996 (Thornhill and Mello, 2007:294). This establishment, signalled a bargaining process over

protracted negotiation process (Makuleke, personal interview 12/10/2011). Apart from the Makuleke Community, the above acts also empowered a number of other previously evicted and disgruntled communities to reclaim their land legally as indicated by Figure 6.2 and Figure 6.3 claims that are at different stages. However, the claims lodged since 1994 are only a few, and they have been settled, with the majority of them being cash settlements (Mngxitama, undated).

In its planning of Kruger National Park, Mabuda (2008:69) envisages in the strategic plan that sustainable resource utilization in the areas being reclaimed currently, should be managed under controlled conditions that will be captured in the agreements with the concerned communities. This ideally, will be done in a way that significantly helps communities to generate income from trophy hunting, which is one of the most lucrative businesses in the GLTP ambience. At the same time, utilization of renewable resources such as meat, Mopani worms and thatch will be able to be sourced at sustainable levels (Mabuda, 2008:69). In an interview with SANPark authorities, they envision that ecotourism enterprises in such communities would include community-owned and managed campsites, cultural villages, game-viewing transport, passenger services and community lodges. It is in this context that Makuleke Community Property Association in a positive way, have established such infrastructure both at the community and Contract Park levels to harness business opportunities from tourists who visit the area.

These projects are in line with the Regional Organization for Tourism of Southern Africa's (RETOSA) Community Based Tourism Enterprises legacy projects (Interview with RETOSA Official, 7 December 2011). This study further put forward that Makuleke, just like Sengwe community in Zimbabwe, is not a cash-based economy and the strategy of creating economic activities at the local level allow communities to have access to food sources, as well as to earn an income (for instance from trophy hunting, ecotourism ventures, crafts and sale of Mopani worms). This would go a long way in supplementing existing livelihood options in these rural communities as opposed to transforming their economies to migrate from nature-based livelihoods to a tertiary tourism based economy, which can easily be affected by social, political and natural factors leading to inevitable vulnerabilities of those communities. Media backlash tend to scare international visitors being reluctant to visit the park. The point this study makes is that tourism is a sensitive sector to various social, economic and political changes in any given environment and this goes on to show that over reliance on it as a livelihood, is problematic particularly when the sector fails to yield necessary livelihood benefits beyond communities' control.

6.7 Legal institutional safeguards and governance perceptions

Having looked at the legislative governance architecture above, it is prudent to examine the legislative institutional safeguards in terms of the impact this has had on the local people's rights to natural resources for livelihood purposes. One aspect that comes out clearly from the Makuleke story is that their case prompted the Land Claims Court (LCC) being established by the Department of Land Affairs (DLA) to decide on land claims and one outstanding characteristic is that it is a court of equity (de Villiers, 1999:12). Implicitly, it is not bound by strict evidence on legal rules normally applicable in civil courts. Hence, evidence not normally admissible in civil courts may be considered as valid. Thus, Makuleke community was able to make great exploits in their claim. One of the responsibilities of the LCC is to assess validity of a claim brought to its attention and once it confirms that validity, it orders that the rights of the claimant(s) be restored to a community.

Invariably, the LCC work(ed) with the Commission on the Restitution of Land Rights that was established to administer restitution. Their primary mandate is to seek settlement of claims by affording parties to negotiate, and if necessary, appoint a mediator to interact with disputants to come to an amicable compromise. Hence, it assists parties to settle claims, which, in the event of failure to agree, the case circumstantially is referred to a court for adjudication and final decision has to be taken. The Makuleke negotiations and mediation culminated in an amicable out of court solution under the auspices of the National Land Reform Mediation and Arbitration Panel, resulting in the Makuleke Community regaining its land from the National Parks Board (personal interview with a local expert on 21 August 2011). The National Parks Board granted transfer of title for 25,000 hectares of land back to the community, but on condition that conservation activities were to continue the land for 99 years with no residence or agriculture, being practiced (Roe et al., 2009:35). The land claim, thus, being managed by the Makuleke Communal Property Association (CPA) since 1999, has strict conditions and as it is now the 'The Heart of the Great Limpopo Transfrontier Park', making it a complex piece of land. The conditions in terms of governance processes and natural resources management that also constrain the community from exercising full rights and making decisions on their land and wildlife uses stipulates that the land would be under a 50 years lease agreement to the South African National Parks (SANParks) since 1999. The view of SANPaks is that there has to be some balance between restoration of rights on the land and development of national and the Great Limpopo Transfrontier Park (Ramutsindela, 2003:46).

All conservation activities are the primary responsibility of SANParks; however, SANPark does not pay ground rent to the Makuleke Community Property Association (CPA). The CPA has the rights is limited in terms of the extent of commercial and cultural activities, which are very valuable given the touristic activities in the area (Reid and Turner, 2004). More so, the Pafuri Camp Lodge is a culmination of an unequal partnership arrangement between the community and Wilderness Safaris that is running the lodges, game drives, photographic safaris and game viewing in the area.

Experience of this type of resource governance in co-management systems, revealed mixed perceptions particularly regarding decision-making on natural resource use that remain reposed in SANParks. Due to the integration of KNP in the GLTP, the community is left out completely in environmental decision-making processes despite the fact that their land claims are justified. The Joint Management Board at the local level involve the community, SANParks and the private sector has functioned fairly well. However, in terms of resource governance, access and utilization, the community is hampered by the power of SANParks and little attention is given to the local people as far as their demands for changes to wildlife use is concerned in the Pafuri region, which is part of the GLTP and Kruger National Park.

While outwardly the processes seem having generally functioned well (Grossman and Holden, 2009), there has been a conflict between the GLTP governance structures and the democratic CPA. This conflict pertains to issues of inclusion in the affairs of the GLTP. In an interview with one of the key advocates in the land claim, Lamson Maluleke (12 October 2011), he lamented the abolishment of the Community Working Group (CWG). The CGW had allowed communities to be represented in the GLTP. Equally, elsewhere in the minutes of the Conservation Working Group for the Kavango Zambezi Transfrontier Conservation Area five countries such as Angola, Botswana, Namibia, Zambia and Zimbabwe, officials rejected the proposal from the community representatives to be included in the TFCA governance and management processes, and suggested that community issues should be handled by partner countries internally (Chasara, 2012).

Perhaps, one conspicuous manifestation of the GLTP resource governance precedence is its apparently continued lack of community involvement in transfrontier conservation. This affect communities in terms of deciding on issues of benefits, use, biodiversity and ecosystem conservation planning, which fundamentally remain reposed in state institutions, government technocrats and technical cooperating conservation organisations like the Peace Parks

Foundation. Because of these serious governance oversights, it was revealed that there are problems of implementation than of concept, and that one of the key opinion leaders in Makuleke eloquently summarized the perceptions of the local people that the GLTP as a trilateral arrangement and its associated communities inside and adjacent should:

"Contribute much towards meeting conservation and development objectives, successful joint co-governance and management as a collective process, which must facilitate equitable power balance between communities and conservation authorities by ensuring social and economic objectives of the local people can are realized. The ecological, biodiversity and ecosystems objectives can also be achieved" (Interview with an informant on 8 October 2011).

This suggestion was supported by responses from 211 household survey questionnaires, in which 47.7% were dissatisfied and 16.2% were very dissatisfied as shown in Figure 6.5. The levels of dissatisfaction with the governance power asymmetries as far as deciding on resource control and accessibility shows growing discontentment. Their local resource governance processes and natural resource management are generally not respected and the dissatisfaction that obtains thereof as depicted in Figure 6.5.

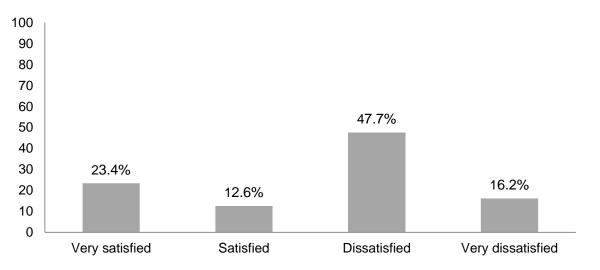


Figure 6.5 GLTP household levels of resource governance satisfaction

The 23.4% that indicated that they are very satisfied and 12.6% that are satisfied, are presumably have directly or indirectly benefited from the Makuleke Contract Park, and ideally, the euphoria created around the GLTP therefore would enhance their beneficiary processes. On discussing this issue further with three focus groups, it emerged that there is a simmering conflict of

perceptions between the general community members about the Contract Park and Makuleke community's participation in the GLTP. Concerns were that the CPA and the GLTP members benefit 'the different families and the politically connected in the village who play themselves out by using 'overlapping' development roles to suit their different individual agendas for personal benefit' (one discussant observed during focus group discussions). This observation resonates with research findings that traditional royal family received many benefits from the CPA, which, ordinarily appear as an example of 'elite capture' of benefits. However, some community members felt differently that the royal family and those who championed the process of the land claim deserved some form of a gesture of appreciation, thereby vindicating them from any perceived wrongdoing. In addition, it is imperative to note that many African societies where traditional systems are strong, what inform such local perceptions and conclusions when it comes to benefits-distribution and resource custodianship, is the simple fact that generally, traditional leaders and those associated with them are regarded as custodians and owners of natural resources. Therefore, it is for this reason that some of Makuleke community members regard the Chief's benefits as more of an entitlement rather than greediness.

It is important to indicate that the traditional leaders also ensure that people subscribe to various mores, customs and traditional practices in their community as natural resources management mechanism that the Chief has to take custody of as part of their culture. Thus, any benefit accruing to them is usually not subject to questioning. As such, 74.8% of respondents in Makuleke strongly felt that traditional leaders own the land and natural resources accompanying it, but this does not justify 'elite resource capture'. Unequal resource distribution in any society tends to antagonize generational relationships between the people and traditional leadership and their associates. In that light, there is always an attempt in Makuleke t balance competing interests of individuals and that of the community at large. The following table shows the trends of responses from household questionnaires regarding perceptions of the community over ownership of land, which also inform how these people view conservation and the influence thereof at local level when it comes to the broader GLTP biodiversity and ecosystem custodial matters, including the responsibility to conserve nature.

Ownership of land	N	%
Government	11.39	5.4%
Traditional leaders	157.82	74.8%
Community	41.77	19.8%
Total	210.98	100%

Table 6.6 Community perceptions about land and natural resource ownership in Makuleke

Clearly, households hold in high esteem that the land belongs to the traditional authority. This assertion is pervasive in African contexts, where culturally, traditional leaders are regarded as the epitome of culture, owners of land and all that is found in it. In chapter 3, it was noted during analysis on communal ownership that based on local cultural practices, normative values and beliefs, the traditional authorities construct and deconstruct mores that mediate community-environment relationships.

6.8 Local institutions and participation in resource governance

It is critical to highlight that there are no contradictions between the legal framework exigency, local sanctions and traditional authority when it comes to the governance of natural resources in Makuleke. The legal framework in the form of the CPA works closely with the Makuleke Traditional Structure's chairperson. This implies that when it comes to environmental decision making, the two structures functioning together and enhance collaboration in the Contractual Park management affairs. Naturally, one would envisage this as the basis upon which the community can input into the GLTP resource governance and management processes. While the GLTP governance process escalated ownership of natural resources to centralized governmental structures, it is a misnomer to ignore community structures both in legal and traditional terms, which the local people in Makuleke subscribe insofar as conservation of biodiversity and ecosystems management are concerned. In this regard, this study came up with a construct consisting of four variables for purposes of analytical understanding of how Makuleke people's rights and land claims. This complex matrix consists of both modern and customary contexts that were identified locally to have some bearing on the success or failure of biodiversity and ecosystems conservation. The various legislative and policy aspects above can be put together as shown in Figure 6.6 so that it simplifies how the local people understand the various variables that determine conservation of natural resources.

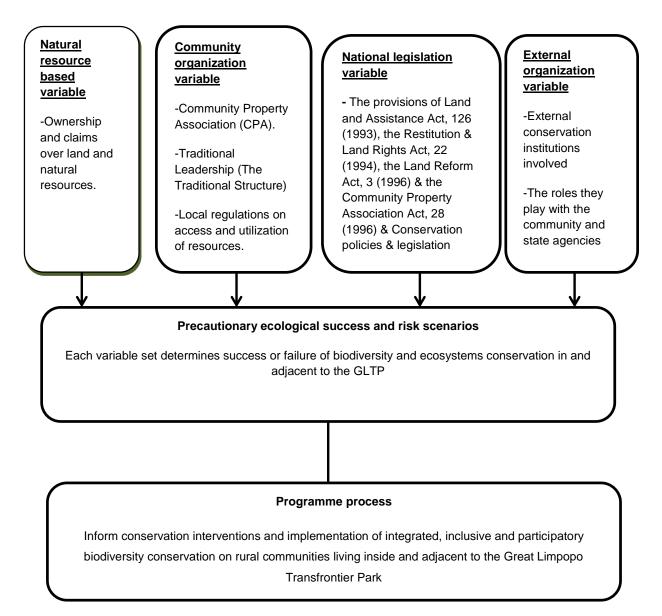


Figure 6.6 Complex contexts determining success or failure of transfrontier conservation

What is critical to note is that this study established that ownership of land and resources in Makuleke, including their claimed land is essentially embedded in their culture as a continuum of management regime from the traditional to modern, informal systems through to formal, and of course not precluding traditional management in a modern economy. Traditional hereditary authority and collective normative consensus if combined with modern civil governance systems at local level, can essentially promote and support state institutions and other conservation organisations mandated to oversee natural resources and are considered therefore to be durable (Roe, 2009:108). Accordingly, a number of factors, including internal cohesiveness of the local resource governance variable in the form of clarity on ownership, can influence this durability and effectiveness. It became clear from the above framework that the Makuleke community

organizational system in terms of resource governance consists of two structures and these are the Community Property Association and its subsidiary organs. The Traditional Structure consists of Chief Makuleke and his lieutenants. Perhaps, these structures both traditional and modern can become the basis upon which inclusion in resource governance could be predicated. However, it is important to point out that the communities are not involved at this stage in terms of the GLTP processes. On the other hand, SANPark official who was interviewed on 13 October 2011 said clearly that:

"We have worked and empowered this community to have access to natural resource and they have developed their community through upgrading of basic infrastructure such as roads, electrifying their homes and used some of the resource to start an irrigation scheme. We continue to do so even in the context of the GLTP, and we are working towards creating institutional systems for their empowerment".

However, these assertions were not collaborated by household and focus group discussions held in the area. Concerns were put across to the researcher that while some meaningful empowerment were achieved under the CPA negotiation process and in the early stages of the land claim in terms of the benefits accruing directly to the local people, more still needs to be done in terms of integration in the broader GLTP management.

This prompted a prominent researcher to caution against giving a lip service empowerment to local communities in transfrontier zones by saying "empowerment of local communities will not be enough to ensure functioning of large Transboundary Natural Resource Management Areas. The sheer scale of such a venture is also so large that, after achieving empowerment, it will be necessary to develop new institutions that enable a mosaic of communities to represent themselves in the higher decision taking forums and to coordinate their ecological management across a wide landscape. This requires both delegation of some authority upwards and strong degree of accountability downwards" (Murphree, 2000:1). The people base it on such observations that buttressed the demand by Makuleke leadership that the legislative, national and international organisations variables that matter fundamentally in the GLTP should have some converge at the local level of governance to ensure equity and access to resources. In an interview with one of Chief Makuleke advisor, he lamented that what they needed "is not charity in the governance processes, but parity" so that the community is able to move forward in leveraging on the resource for rural development.

6.9 The Community Property Association (CPA)

According to information gathered from the Makuleke Office, the Makuleke CPA was created in 1996. Currently it has about 17,000 members being those who were removed from the Pafuri Triangle and their children who reside in the three Makuleke villages. It also include the descendants of the original Makuleke community or those who have naturally been assimilated and integrated into the Makuleke community by virtue of living together in the three villages. The CPA, since it includes the entire community members, it managed to establish management structures tasked with responsibilities and obligations of running the business of the association on a daily basis through the secretariat. These structures are discussed below.

6.10 The Joint Management Board and the Joint Management Committee

The Makuleke Community Property Association (MCPA) has Joint Management Board (JMB) and the Joint Management Committee (JMC), which is a creation of the South African National Parks (SANParks). SANParks is tasked with the responsibility to assist the community to manage their reclaimed land in the Pafuri Triangle. It is tasked with preparing the community for the eventual management of the land under their control after 50 years as stipulated in the Agreement for biodiversity management. The JMB comprises six people, with three being representatives of SANParks and the other three are representatives from Makuleke Community. The JMB meet every three months and the chair rotates, but in between JMB meetings, the Joint Management Committee (JMC) addresses issues that may need immediate attention on a monthly basis (Thornhill and Mello, 2007:294). The JMB ensures that the interests and concerns of the community are addressed and taken into account for the park management plans pertaining to the contractual park, and that the community also knows the concerns of Kruger National Park officials. Having looked at this local resource governance structure, this study argues that the JMB and the JMC representatives, would have been, ideally included in the GLTP as community representatives. This inclusion would provide an opportunity for cooperation and integration in the GLTP administrative governance framework, thereby easing tensions and suspicion that currently comes from the community. In addition, this would also afford Makuleke people to have a two-way communication system, which is vital in efforts aimed at enhancing conservation collaboration and clarifying misconceptions. Thus, reducing suspicions among key conservation stakeholders in the GLTP.

6.11 The Executive Committee

For effective administration and management of its activities, the CPA established an Executive Committee (EC), which runs day-to-day activities of the CPA. The EC consists of ten (10)

members. These members are village representatives, while others are general representatives. Irrespective of the numbers, what is of substance in this study is that this committee is elected democratically by the Community Property Association (CPA) after every three years (telephonic interview with Baloyi, 5 May 2012:07:46 am), but this exclude Chief Makuleke, who by virtue of his traditional position, is an automatic member of the EC. The EC is the implementing agency housed at the Makuleke Tribal Office, and has employed two full time staff members who work in the office on daily basis. They are the main link to all partners and stakeholders. The EC reports to the CPA at an annual general meeting.

6.12 The Makuleke Development Forum

Apart from the EC, there is also the Makuleke Development Forum (MDF), which is a group of community leaders from all the three Makuleke villages. The mandate of the MDF in Makuleke is to act as an advisory body for the EC. They particularly deal with issues pertaining to availing benefits at a village level (Maluleke, undated: 4). Inclusion of village leaders from the three villages ensures that their respective interests are catered for. Implicitly, this is an inclusive process when it comes to decision making in Makuleke involving the three villages.

6.13 The Makuleke Development Trust (MDT)

The last organizational structure at the local level in Makuleke community is the Makuleke Development Trust (MDT), which holds and administers the main bank account, into which funds received from grants, through concessions and hunting in the Makuleke Contractual Park is deposited. The Community representatives and the Department of Land Affairs manage the funds. The community trustees are elected from the EC and their main responsibilities include ensuring that the community's money is well invested and spent wisely (Maluleke, undated: 4; Thornhill and Mello, 2007:295).

Local institutional assemblies such as the Community Property Association, the Makuleke Executive Committee (EC) and the subsequent structures such as the Makuleke Development Forum (MDF) and the Makuleke Development Trust (MDT) resemble local participatory democratic bases as they elect their committees that in turn supply their administration with representatives in terms of the human-natural resource relationships in the area. The Makuleke Executive Committee (EC) is accountable through an annual general meeting to the people. The traditional leaders' role relates to community mobilisation, oversight and regulation of local cultural and normative practises that ensure that the people work together, uphold the principles of respect of others and the environment. Where necessary, the traditional leaders provide arbitration to

resolve localised community conflicts. In governance terms, a key element of the system is the top downward and horizontal accountability process, which allows the traditional leaders' structure to relate to the members of the community, circumstantially giving room for transparency in the manner socio-ecological matters Makuleke.

6.14 Local participation and constraints in the GLTP governance

One of the objectives of this study is to understand how the GLTP governance processes 'enables' or 'disenables' local people from participation in natural resource governance to enhance their livelihoods and conservation. The study has alluded that although literature points out that community participation in conservation projects is taking place, the opposite is true. Government conservation officials also gave an impression that all is going smoothly. They emphasised that there is a gradual change, taking place in transfrontier conservation projects in trying to incorporate local communities. To the contrary, this research established through household survey that majority of respondents indicated that community participation has not improved. Policy makers have consistently not taken measures to ensure that they effectively involve the communities in conservation. As highlighted by a conservation expert from Zambia at the Kavango Zambezi Transfrontier Conservation Area meeting that the researcher attended (5-11 February 2012, Maun, Botswana), it was clear that involvement of communities has a long way to go. He state that any transfrontier conservation without involvement of the local people and that unfolds without carrying with it the people's aspirations, jeopardizes conservation success and will be viewed accordingly as against them. This correctly mirrors the view of people in Makuleke community regarding the GLTP process. In the interest of presentation and analysis, some key observations that are important emerged worthy interrogating at this stage. These are that:

- The Makuleke community, through its CPA and subsidiary structures, have some levels of juridical personality that clearly outline institutional operational functionality relating to biodiversity and ecosystems governance and conservation from which, they derive some monetary benefits, particularly with respect to their reclaimed land that is central to the GLTP project.
- 2) All members of the community are entitled to membership based on having been part of the group that was displaced from the Old Makuleke village in the Pafuri Triangle in 1969, or being descendants of those people and having been accepted and assimilated in the three Makuleke villages upon settling as well as subscribing to the Makuleke Chieftaincy.

3) Makuleke Community Property Association represents a decentralized form of resource governance, particularly looking at the Makuleke Contractual Park that they run and the rural development that the CPA undertakes in the community. Ideally, the integration of Makuleke region to the GLTP should have provided impetus for broader and effective local participation in the GLTP governance process for leverage achieve sustainable natural resource driven livelihood improvements, and enhancing the manner in which the people can conserve natural resources.

In terms of the GLTP resource governance, the broader legal rights of Makuleke community are not clear except that they have a Contractual Park, which is part of the GLTP. In fact, this study asserts that their legal rights in the context of inevitable integration to the GLTP by virtue of proximity and geography of their Contractual Parkland, needs to be set out in the broader historical and political contexts of their claim as the basis for their participation in the GLTP. Nelson and Agrawal (2008) noted that institutional reforms devolving rights to the local level have been relatively more successful in countries where public institutions are relatively efficient, and give the local people an opportunity to make decisions over natural resources such as Namibia, Botswana, and pre-crisis Zimbabwe. This would be one of the basis upon which transfrontier conservation legacy in the region, can create an interface and strengthen local communityenvironmental relationships regarding resource governance. This gives a chance for local institutions to play a critical role. This study acknowledges a situation where community structures are robust, but causations that they remain caught up in dispensed patrimonial relationships, which potentially undermine institutional confidence among local people for popular acceptance of conservation projects. This point was buttressed by the fact that devolution of valuable natural resources such as wildlife to the local level is fundamentally viewed as being at odds with the interests and incentives that dominate governance and resource management processes in transfrontier projects (Nelson and Agrawal, 2008). Considering that neo-liberal macro-economic tourism development envisaged in these areas are more private sector oriented in terms of investments, however still they are not linked coherently to local economies despite the talk of 'eco-cultural' tourism (Wolmer, 2003).

One other notable aspect is that there has been conservation rhetoric about having consulted communities to capture and include their concerns in the Great Limpopo Transfrontier Park's planning. However, this was not validated on the ground as people who responded to household questionnaires showed mixed perceptions about the whole process. In one research journal article, it is vehemently argued that:

"Almost everyone agrees that the degree of community consultation and participation in the implementation of the Great Limpopo Transfrontier Park has, to date, been inadequate. Although, as is now de rigueur, lip service is paid to the need for participation and benefit sharing, there are no mechanisms in place for decentralising Transboundary Natural Resource Management (TBNRM). Indeed, because of its bilateral (or in this case, tri-lateral) nature, involving formal collaborative agreements between governments at the highest level, TBNRM could potentially undo the meagre gains of Community Based Natural Resource Management (CBNRM) and recentralise natural resource management, thus further concentrating power in the hands of the state. The way the scheme has been shaping up so far runs directly counter to the dreams of the radical bio-regionalists. Those planning TBNRM processes in southern Africa would do well to revisit these ideals" (Wolmer, 2003:277).

It is critical to indicate that Transboundary Natural Resource Management (TBNRM) is another alternative term referring to transfrontier conservation. Lack of community consultation and the top-down approach used by the GLTP officials particularly in respect of Makuleke community has generated fears among community members. Key informants overtly indicated their displeasure and disgruntlement at the manner the GLTP governance and management strategies were implemented, and this was substantiated by the fact that the Community Working Group was abolished at the instigation of the Ministerial Committee after the signing of the GLTP Treaty in 2002. It is further argued that the various Working Groups transformed into Joint Management Committees. Such kind of actions prompted Wolmer (2003:278) to implore that:

"Those planning TBNRM processes in Southern Africa would do well to revisit these ideals. A more nuanced bioregionalism might go beyond the simplistic utopianism and reductionism of place-bound environmental identities and yet take the 'bioregional plunge' towards encouraging true local self-determination".

Furthermore, this study found that there was a change of plan in the GLTP project from being a transfrontier conservation area that would have meant incorporating communities and give them a meaningful role to a 'park' that entailed a change in the management process. From a resource governance point of view, the emergence of joint management agreement establishing the Makuleke Contractual Park, which is part of the GLTP, translate into inevitable community

involvement since their region by virtue of geographical incorporation, forms the heart of the GLTP project. Above all, they have decentralized structures for biodiversity and ecosystem governance, hence authority should partly revert to the community to make decisions and the empowerment of local communities should be easy to integrate (Thornhill and Mello, 2007:288). This gives justification for inclusion in the GLTP affairs.

Perhaps, one of the critical observation in this set up is that a shift in ideology is needed from the traditional western fortress conservation style that has been applied in the GLTP design to a new paradigm that embraces community participation so that they can realize livelihood benefits. In reality, the Makuleke Community Property Association helps the community members to participate effectively in local resource governance; therefore, it is less problematic to be incorporated in the GLTP process, as they are already a legal entity. The fact that the CPA has a Contract Park Agreement under its jurisdiction with SANParks and their subsequent robust community resource governance structures provides for a transparent and democratic selfgovernance and self-regulating local system to manage the land and natural resources successfully. Nonetheless, the brochure that the Peace Parks Foundation published in collaboration with the South Africa National Parks (SANParks) to celebrate the signing of the final treaty of the Great Limpopo Transfrontier Park by the heads of state in December 2002, shows how officials interpret the concept 'park' and the ensuing diminishing involvement of communities in the GLTP affairs. Spierenburg et al., 2007:5-6 cited SANPark/PPF (2003) brochure and put forward that "All a Transfrontier Park means is that the authorities responsible for the areas in which the primary focus is wildlife conservation, and which border each other across international boundaries, formally agree to manage those areas as one integrated unit according to a streamlined management plan. These authorities also undertake to remove all human barriers within the Transfrontier Park so that animals can roam freely".

The reluctant actions of state agencies such as Park Authorities and conservation organisations thereon communities concerning local participation and attempts to side-line them in resource conservation in the GLTP conforms to the earlier statements. This was supported locally where some key figures in the community have cited these statements regarding the thinking of the GLTP administrators. Ideally, this set a legacy of exclusion as informed by such suggestions and insinuations in defining the scope of community-biodiversity and ecosystems relationships. Such an approach, is highly dichotomous, and leaves little room for communities around the GLTP with little options, and ultimately being unable to participate, let alone deriving economic and environmental benefits. Furthermore, this prompts an observation that the statement does not

correspond with the initial statements about the importance of communities and benefits sharing, which further indicates increased side-lining of interests of residents (Spierenburg et al., 2007:6). In addition, this study established that all Working Groups were transformed into Management Committees, except the Community Working Group because it did not fit in the government structures at trilateral treaty arrangement. Thus, according to a local key decision maker who was involved in the GLTP affairs, it was reported that even the attempt to push the community to include in the GLTP through their representative to participate was met by resistance in the Joint Management Board (lamented Makuleke Lamson in an interview, 12 October 2011). Further engagements with some high level International Coordinators for the GLTP revealed that some organizational and structural disjuncture have been noted, but state actors are adamant to change their positions preferring that the community issues should be dealt with at the national level. However, this study notes with concern that power relations dynamics manifesting in such situations reveal dominant ways in which state actors assert their power on the local communities, with international conservation organisations also legitimizing state actions 'to forge new links with civil society in the wake of the crises of legitimacy and governance' (Thomson, 2000:240). This essentially, bestows natural resource rights, governance and resource management exclusively in the hands of government actors and not upon resident rural populations.

What is being witnessed in Southern Africa conservation process as far as the relationships with cooperating partners such as the Peace Parks Foundation is a recasting of state-environmental society relations, revolving around re-legitimizing the state agency actions in conservation regardless of what the community concerns are and the questions they have. This has created a situation where people are reluctant to support conservation, and literally do not question or refute government plans for fear of losing completely on envisaged and over-publicized galore of ecotourism benefits. They have remained patient on the promise to get benefits, but still they are powerless to change the way in which their integration can be achieved in collaborative conservation of transfrontier natural resources.

Going forward, valuable feedback on the same matter of community consultation and continuous involvement was obtained through focus groups discussions, in which a structured dialogue approach was employed using the Schutte Scale instrument. The Schutte Scale was used in this case to capture local perceptions in an attempt to get in-depth qualitative feedback about the community's involvement than it did from the questionnaire responses with limited options to make a choice. The field application of the Schutte Scale is described in chapter four and five. However, it is important to state that Schutte (2000) developed the technique that merges the process of

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participation and prioritization of community needs, which is very important when dealing with rural communities, especially when the research is interdisciplinary. It is a technique where measurements of issues affecting a particular community capitalize on discussion platforms with selected individuals to identify and capture community priorities, perceptions and attitudes and their views are recorded using a calibrated Schutte Scale shown on Figure 5.3 and Photo 5.1. It is critical to allude that the following analytical figures sought to measure important aspects in understanding whether the local people were being consulted and involved in the GLTP planning and governance process.

The first set of focus group discussions was conducted on 10 October 2011. Twelve (12) people constituted each focus group. Their perceptions on particular questions were measured with the Schutte Scale as a reflection of how the local people view their participation in consultation processes about the GLTP including resource governance. The first set of focus group discussions were people aged from 16-24 years old. These are generally regarded as the youths of the area, and then this was followed by those from 25-44 years of age, literally being old people (Focus group 2) and the last one were those from 45+years old. In total, nine focus group discussions were held during the field research, that is, three of each set per village. These sets of focus groups of the same age came from the same village for discussions at different times.

The researcher decided to mix them equally in each group between males and females (6 males and 6 females) to obtain a diversity of views across gender dimensions regarding their perceptions on whether they are consulted and involved in the GLTP planning as well as natural resource governance. The discussants were advised before the discussion started that their identities would not be revealed and their answers therefore, were not going to be associated to any particular individual. This is in line with part of ethical considerations of the study, and useful for respondents to open up to talk freely regarding the GLTP process and its vicissitudes on the local people. More importantly, the strategy also provided an opportunity to probe deeper on their responses in seeking to understand their perceptions. Figure 6.7 present the average scores of each group in Makuleke community.

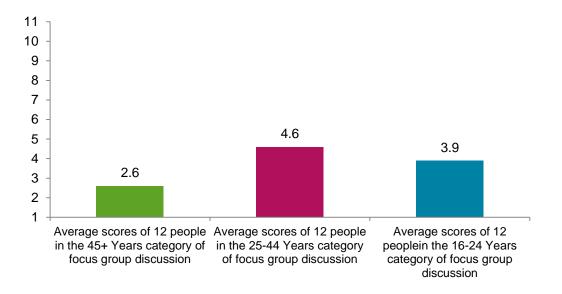


Figure 6.7 Makuleke perceptions concerning participation in the GLTP consultation process

Those in the category of 45+ years as shown in Figure 6.7 scored the least of 2.6 on a scale of 1-11. This indicates that they were least consulted about the GLTP process, thus their levels of participation is equally low. The group that scored close to half are people who are among the age of 25-44 years having scored the highest of 4.6 on a scale of 1-11, yet they fell short of reaching half (5.5) of the Schutte Scale score rating from 1-11. The youth scored very lowly too with 3.9 on a scale of 1-11. Ideally, the overall conclusion is that local participation is low in the community. This helps to introspect on future GLTP governance planning, now that these perceptions have shown empirically lack of participation. The results also means that there could be simmering resentment of the way the GLTP process is progressing since the local people are not part of it; hence, they may not have a sense of ownership of the GLTP, let alone its natural endowments. This study took note of one person who has been involved in the land claim and has been following the GLTP developments consistently, where upon discussion his individual score was 10. This meant that there are individuals who think they have been consulted because of their individual links with the GLTP, but this position cannot be truly representative of what the broad Makuleke people want. The respondent went further to state that not everyone was expected to be consulted. However, this was met with resistance by the rest of Group 3 (25-44 years of age) who insisted that a mechanism should be devised to ensure broad-based participation of the local members in the community. The majority of the group members on the overall indicated that the levels of engagements insofar as resource governance in the GLTP were low despite having a piece of land that is the 'Heart' of the GLTP. The second set of focus group discussions, was

constituted in the same way as the previous focus group, took place in Mavilingwe Village of Makuleke. The results are presented in Figure 6.9.

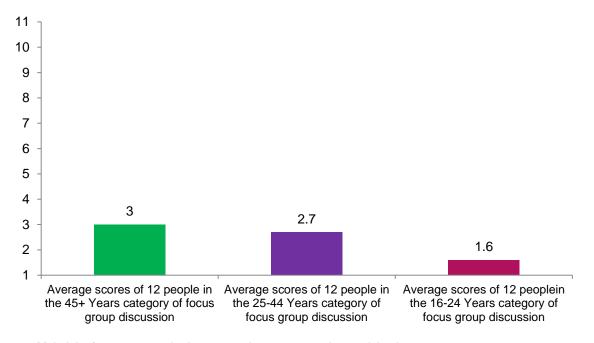


Figure 6.8 Makuleke focus group attitudes concerning representative participation

The most critical point to note is that in terms of their attitudes towards representative participation in the GLTP governance, again the overall average score on a scale of 1-11 indicated that the people were largely unhappy. The young people (16-24 years) scored a paltry 1.6 on a scale of 1-11, followed by 2.7 among those aged from 25-44 years. The last group scored an average of three. Implicitly, all the groups showed that they were negative about their representation. Upon noticing these trends, a follow up question revealed that there is a general thinking that their representatives are the ones benefiting most from the GLTP process. This impression derives from the fact that the individuals who were active at the formative stages of the land claim and subsequently actively participated in the GLTP process under the Community Working Group before the Ministerial Committee abolished the committee, felt contrary to the rest of the community perceptions. Although these people practically no longer engage in the GLTP business, they have been rewarded for their efforts, particularly in employment terms in the Kruger National Park and their relatives have been employed as well at the Contract Park. Coupled with their leadership roles in the community previously, it obviously generates elements of discontent and resentment against their dominance that manifest in the majority of the group members disputing the issue of representative participation. The general sentiments were that there has not been rotation of leadership. Thus, causing some people not having faith in the process. This has strained relations even in the Makuleke Community Property Association, with some highlighting that they needed the leadership to be transparent and accountable, and not to concentrate of personal interests. Ideally, this has affected, to some extent, local internal cohesion and consensus building in natural resource conservation.

The third set of focus group (Figure 6.9) shows that the young people (16-24 age group) scored the same as the 25-44 age group that averaged 3.9 on a scale of 1-11 in terms of levels of satisfaction with community involvement in the GLTP. The young people were aged from 16-24 years. However, they had the lowest average score of 2.4 on the scale rating of 1-11.

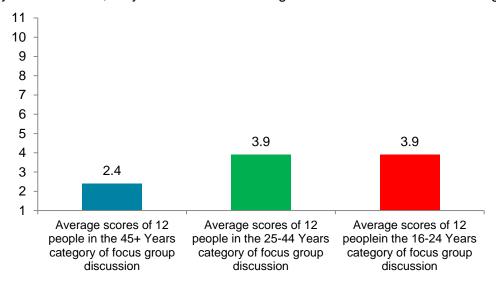


Figure 6.9 Makuleke levels of satisfaction/disatifacrtion concerning involvement in the GLTP

The overall analysis of the level of satisfaction during the discussion sessions provided participants with rare opportunity to speak freely about the GLTP project right from its inception, and the discussants raised important issues that affect them to involvement in resource governance to derive benefits. Although household survey questionnaire produced quantifiable information and were more cost-effective than focus group discussions, the focus group discussions coupled with targeted interviews, generated concurrence of information regarding involvement in conservation by the local people. Perhaps, one important point to note is that a combination of statistical measurement of the people's perceptions using the Schutte Scale, and further probing questions to follow up on their responses elicited valuable, revealing and enriching perspectives. Besides that, group discussions helped to test local knowledge about the existence of the GLTP, how it affects their livelihoods and locally based conservation of natural resources. An analysis of the above groups showed that there is a low level of involvement of the people, which can be described indeed not fair for the community as highlighted by one respondent.

Figures 6.7, 6.8 and 6.9, have demonstrated the low levels of participation and satisfaction with respect to the GLTP processes.

One respondent was quick to point out that they owned the Contract Park, therefore, they thought legitimately, this forms a strategic ecological region for the GLTP. Hence, they have the rights to be involved and be consulted. This argument is premised on their view that the Pafuri area was already being co-managed by the community and Kruger National Park. In line with this thinking, co-management between government agencies in transfrontier resource management can be the basis for collaboration with the community. As such, Spierenburg et al (2008:96) observed that such partnerships are increasingly being advocated for in conservation development discourses in general as well as in Community-Based Natural Resource Management (CBNRM) in particular. De Villiers (1999:73) further advises that depending on the land ownership, management options could range from informal consultation and information exchange to formal co-decision making about natural resources. This study therefore observes that such co-decision making arrangements can be experimented with in transfrontier conservation as a new form of transboundary joint management regime.

This study also found it prudent to make an inference to the experiences and success of Zimbabwe's Communal Areas Management Programme For Indigenous Resources (CAMPFIRE), Community Contractual Parks in South Africa's Makuleke community, Zambia's partial devolution through the Administrative Management Design for wildlife (ADMADE) and community based programmes in Namibia and Botswana. These achieved significant success (Twyman, 2000:325; Bond & Frost, 2002:8 and Cumming, 2008:61). As an inference to these, they show great potential for local collaboration that can be elevated to transfrontier projects and can incentivize biodiversity and ecosystem conservation in transfrontier conservation areas and parks.

As such, it is argued that consultations for co-governance and co-decision making in transfrontier natural resource governance between governmental and non-governmental conservation authorities is possible in amalgamated national parks or conservation areas. There is a precedence in the region for such programme as widely practiced (de Villiers 1999:75), thus, it can be replicated in transfrontier conservation programmes. In this regard, Whande et al., (2003:14) highlighted that the role of co-management regimes are premised on equal partnerships with the local people, which can help to avert natural resource related conflicts over natural resources simply because the local communities would be part of the conservation flagship rather

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than being spectators of the processes. In line with this thinking, Whande et al., (2003:14) called for deliberate policies that would protect communities if they are to claim their rightful place in the conservation of natural resources.

6.15 **Preferred consultation mechanism**

The researcher sought to understand the preferences of people on who should be consulted and Table 6.7 shows household data that reveal 55% of households prefer a broad based community participatory consultation process on natural resource governance and management as opposed to individual consultations that ranged at 3.6%. Perhaps, it is important to highlight that generally, representation by the local Chiefs came second in terms of preferences.

Table 6.7 Makuleke community preferences on resource governance consultation

Preferred Response	N	%
Community consultation	116	55.0%
Representation by local authority councillors	38	18.0%
Representation by the Chief	45	21.6%
Individually consulted	8	3.6%
Others	2	0.9%
Not involved	2	0.9%
Total	211	100%

The local preference for Chief Makuleke, accounted for 21.6% from the total household sample of 2011, while the local councillors constituted 18% that indicates semblance of confidence in the local leadership and their local councillors. Those who felt they could not be involved and others, who expressed reservations on their preferences for consultation, accounted only for 0.9% respectively.

6.16 Natural Resource Consultation Dynamics and Benefit Streams

In any society where people lay claims, contestations are inevitable. As such, resource governance relations therefore revolve around broad consultations to have multi-stakeholder buyin in defining cooperation in the way individuals would benefit from their resources. This study sought to understand how the community view and relate ownership of resources that further influence use of the resources such as land (for subsistence farming and grazing livestock), forest products and wildlife benefits as strategic natural assets underpinning local livelihood systems in Makuleke. It was found out from two hundred and eleven households that 83.3% of households strongly view natural resource, particularly the lucrative wildlife as belonging to Kruger National Park. These perceptions are based on wildlife such as the popular Big Five, which are the elephant, rhino, buffalo, leopard and the lion, which are found in both South Africa and Zimbabwe where this research was conducted in the two community adjacent to the parks. The results are as shown in Table 6.10. Table 6. 8 Differential resource ownership influencing accessibility and utilization

Type of perceived wildlife ownership	Ν	%
Community	25	11.7%
National Park (SANParks	186	88.3%
Total	211	100%

Those who are of the opinion that wildlife belong to the community constituted 11.7%. Because of that, the community felt that since the resources belong to Kruger National Park authority, they were least involved on consultations on strategic conservation and utilization matters despite having the Makuleke Contractual Park that is part of the GLTP. Basically, the deductive logic arising from these community perspectives confirm the generally held view that one who holds the rights of ownership influences three main aspects that are 'who access the resource; how to access the resources and when to access the resources.' Ideally, these dimensions go hand in hand with questions that sought to understand perceptions of the local people on whether they were benefiting and sharing resources from the Great Limpopo Transfrontier Park.

Table 6.9 shows 70.2% quite radically confirmed a 'No' response to benefiting from natural resources, particularly wildlife. Only 29.8% confirmed to be benefiting and this was with particular reference to employment opportunities created through eco-tourism projects such as the Pafuri Lodges, the Eco-Training Centre and the Makuleke Bed and Breakfast Guest Lodges. However, the GLTP's local benefits are coordinated and distributed equitably to benefit most people in Makuleke community.

Table 6.9 Household perspectives on benefit streams

Response to benefits	Ν	%
Yes to benefiting from the GLTP	63	29.8%
No to benefiting from the GLTP	148	70.2%
Total	210	100%

Focus group discussions individuals indicated that local claims and the exercise of their rights were yet to translate into tangible benefits to the broad local populace as publicized during the formation of the GLTP. Combining these low levels of consultations, lack of co-ownership, and the failure to realise the 'trickle-down theory' of benefits streams to the local community, all underpin the current frustration of the generality of the community members about the GLTP. There is a negative perception that the GLTP benefits park authorities and investors in eco-tourism projects. In fact, key informants cautioned that if the issue of involvement, community consultation and mutual benefits were not addressed, local collaboration would be meaningless and difficult to achieve. More importantly, the fundamental questions that arise are; will transboundary conservation using state controlled protected areas (parks) bring real development for the

neighbouring communities? Is this not another extension of state control while promising a "trickle down" of benefits to the local people remain a pipe-dream, while the state and private sector carve up the spoils? Citing her previous work in 1999, Metcalfe (2004:6) put forward that after having gained some authority through resource devolution through CBNRM policies and programmes, there is a sense that urban private and public sector elites are colluding at the expense of communities living on the periphery or inside transfrontier parks to appropriate the resources. It is ideal for this study to reiterate earlier observation that this precipitate 'elite resource capture' at the expense of rural communities who suffer the burden of predation, crop raiding and other vagaries of threat that obtain from wildlife, and the ever changing environmental and climatic conditions, but resiliently co-exist with nature.

Further to that, it is important to note that other influential individuals have substantial knowledge and were partly involved both in the CPA and in the GLTP through Kruger National Park administration, indicated that involvement in the planning phase was confined to selected community members, but the broader community consultation process was not done comprehensively locally. This was attributed to the fact that the GLTP operates under a tri-lateral treaty and mechanism had not been developed for the communities to be represented within its governance structure and framework. This is despite Makuleke having robust local institutional systems. Ideally, one would argue that since Makuleke has a prototype of local institutional systems for broad Community Based Natural Resource Management (CBNRM), participation of community members in natural resource governance in the Joint Management Board of the GLTP could be much easier for the local institutions to be included to contribute to the GLTP processes.

Equally, whereas the GLTP include the entire biosphere of the proclaimed areas, it would mean the need to review the GLTP programme to align inter-organizational structures with the current local community dispensation and change the governance of resources. Further to that, another practical reality as noted by King and Cutshal (1994:31) is that communities under CBNRM, and households in particular, have not had an opportunity to deal with natural resource governance directly as this has remained fundamentally the responsibility and preserve of bureaucrats. Thus, the process can be viewed as fragmented, falling short of the local people's expectations.

The question about the exclusion of local people in resource governance pragmatically has a strong bearing on accessibility and utilization of natural resources that support local livelihood systems. In the final analysis, the Great Limpopo Transfrontier Park-Community interaction is increasingly side-lining the local people. Renowned conservation researchers and writers Mehta

et al (1999:8-9), postulated that marginalization of the rural people through forces of globalization has brought in new forms of livelihood uncertainty and inevitable vulnerabilities, and increasingly rural practices and institutions are caught up within global processes of change. Because of the new thrust to commercialise and commoditise transfrontier parks, the centrality of natural resource as far as local livelihoods derived from their environments, are now linked to international trade markets and agreements on natural resource products, global commodity chains and global capital flows, without a viable alternative support to the local rural economies (Mehta et al., 1999:9). If anything, this study would argue that the communities inextricably are finding it difficult to integrate into these globalised cash-based tourism commodity economies linked to global capital markets they have no control over, especially if the sector is failing in some cases to perform to offset the cost of loss of traditional livelihoods.

As such, it is further argued that limited links in terms of defined conservation processes, changes in ownership and diminishing community rights over resource use for rural livelihood maintenance, coupled with diminishing wildlife claims, resource utilization and lack of application of local conservation practices, the Makuleke community is arguably and gradually facing the reality of marginalisation in the GLTP process. There has been also tremendous force to deconstruct local institutional process at the expediency of newly constructed multi-level governance systems. These new systems are defining new forms of resource ownership across the world. This marginalizes already marginalized rural folk. This prompted Dzingirai (2004) to describe the GLTP as 'disenfranchisement at large,' because rather than democratizing and decentralizing the GLTP, in the processes of distribution of benefits and governance of resources, it has promoted greater inequalities between governments and communities, particularly on resource ownership claims and lack of enhancement of local livelihoods. Linking this argument of 'disenfranchisement at large' with views on the existence of policies for commercial and domestic utilization of resources by the community and ultimately, how they prefer resources use in relation to the GLTP processes, Table 6.10 shows their results.

Varied response	N	%
Objection to existence of policies and programmes for community commercial natural resource use	199	94.4%
Agreement to existence of policies and programmes for community commercial natural resource use	12	5.6%
Total	211	100%

The results showed that 94.4% of 211 households surveyed are of the view that there are no policies and programmes facilitating the community to utilise natural resources commercially from the GLTP, while 5.6% think that there are such policies and programmes. On further inquiry using informal interviews, it was made clear that generally commercial use was not allowed particularly regarding exploitation of wildlife and forestry products. In fact, in terms of domestic use of the environmental resources, no any consumptive activities are permissible within and outside the park. Nevertheless, households do collect fuel wood during times of electricity blackouts in Makuleke village. When they do so, it is only confined to fuel wood collection near their homes, usually involving collection of dead wood and shrubs. The researcher observed that grass was a critical product in this Savanna land, which households use domestically for thatching their huts. Other households would use it for mulching their gardens including such materials as dead plant leaves as manure at times. The environmental impact of fuel wood use and grass for thatching was 8.7% since Makuleke villages are electrified. In addition, the majority of the houses are constructed using bricks, roofed by corrugated iron and tiles. The household survey questionnaire looked also at the policies and programmes that promote domestic use of natural resources and the results are shown in Figure 6.10:

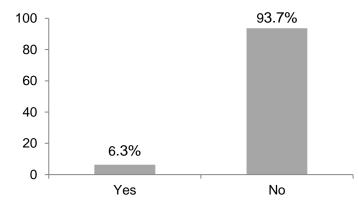


Figure 6.10 Confirmation of policies and programmes for domestic use of natural resources

Combining some form of commercial and domestic household perspectives, perhaps, one conclusion is that local use of natural resources is highly managed not necessarily by SANParks as the custodians of the GLTP and the Kruger National Park, but by the community plays an important role. This is done through the CPA that has always ensures that the community members do not degrade the environment in Makuleke village. Based on that, greater attention is needed in focusing on three critical aspects of the community, especially relating to local processes and institutional adaptation that enhance sustainable conservation of environmental

resources that the GLTP can take advantage. Agrawal and Gibson (1999:636) addressed these aspects in helping to appreciate socio-ecological and local institutional process when it was put across that multiple high level actors in the GLTP, with multiple interests, could be harnessed to realise conservation. In that spirit, local effort can be a huge opportunity as opposed to assuming that the local level institutional arrangements are not functional enough for purposes of sustainable conservation. However, before discussing that, this study tried to look at the views of people on how they ought to be engaged in as far as exploitation of lucrative wildlife resources are concerned. Currently, exploitation of wildlife resources is the preserve of park authorities who benefit from trophy hunting, earning millions of South African Rands (currency) annually. In this case, the survey sought to question household members' opinions over how they think wildlife resources should be structured in terms of sustainable exploitation, based on their peculiar needs juxtaposed to the current state of affairs where wildlife use is a preserve of SANParks even well before the creation of the GLTP.

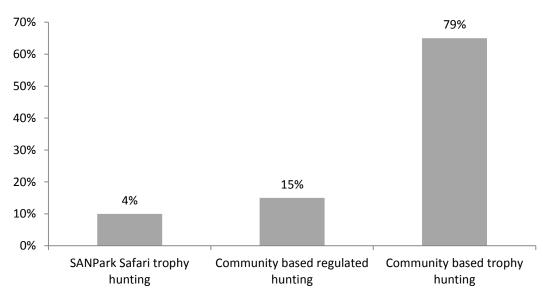
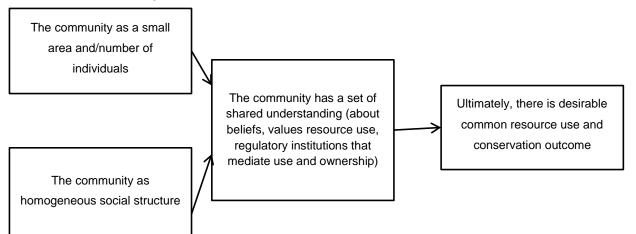


Figure 6.11 Household perspectives on exploitation of wildlife resources in the GLTP

Figure 6.11 simplistically reveal that the community has a strong inclination towards engaging in community-based trophy hunting accounting for 79% and some regulated community hunting accounting for 15%, both of which generated income for the community having done so at the initial phase of the Makuleke Contractual Park. There was also a strong perception that SANPark's involvement should be minimal as reflected by 4%. However, due to new governance dynamics prior and during the establishment of the GLTP, the community regulated hunting as well as trophy hunting programmes were stopped. The argument cited by respondents during interviews conducted as well as during focus group discussions was that they were told to stop any form of

commercial hunting for purposes of wildlife recovery. One respondent noted that this happened arbitrarily, when so many expectations from the local people were high that their needs related to poverty alleviation would be averted using proceeds from trophy hunting that had started to bear meaningful benefits directly to the community. In addition, the initial monetary benefits had seen Makuleke making significant improvement in basic infrastructure like schools, roads, water and sanitation were all being ameliorated-using proceeds from hunting. Currently, there is a strong impression that the governance and management process should revert to the old system, and the generality of the people want some form of community controlled trophy hunting. It is imperative to highlight that institutional analysis in Makuleke confirm well-knitted and established local resource governance process and structures for interactions that can easily determine and easily mediate use and access to environmental resources by the local people without interference from outsiders. Therefore, to imagine the Makuleke community being out of touch of the essence of sustainable conservation is an indictment on their local processes and zeal to conserve nature sustainably, while deriving benefits out of it.

The local institutions highlighted in the above discussion, offer robust ecological governance based on community conservation, and allow for a better understanding of the factors that are critical to the success or failure of efforts aimed at local-level conservation to aid the GLTP. In that regard, the study buttresses this by looking at the framework postulated by Agrawal and Gibson (1999:636) for purposes of demonstrating that Makuleke community local processes fit in the elements that are critical for local positive environmental collaboration and interrelationships, which the GLTP can take advantage of to enhance biodiversity and ecosystems conservation. This is illustrated in Figure 6.12.



Source: Adapted with own modifications from Agrawal and Gibson (1999:636) Figure 6.14 A conventional relationship of the community and conservation Looking at the above, it is important to indicate that Makuleke remains fairly homogenous, socially well-structured with a minimum number of people. In that regard, empirical observations also confirmed that Makuleke has elements of shared environmental values and local institutions that mediate their environmental and social relations, which gives high chances for sustainable biodiversity conservation. In this respect, some individuals interviewed confirmed that the community were working as a collective in their quest. It was also established that individuals negotiate use, management, and conservation of resources using their community structures such that illegal use does not happen or committed by the community members in Makuleke. As such, it is argued that the damage to the environment is exemplarily very low in the area, but concerns abound that the people are not deriving enough financial benefits from the GLTP as they were made to believe at its establishment that there were going to be immense benefits derived from the GLTP. More importantly, it is noted that Makuleke community is predominantly 96.4% Shangaan tribe, who constitute the majority, and 3.6% are Vendas as shown in Figure 1.2. Resultantly, it is assumed that this community is enjoys social cohesion since it is homogenous such that common understanding on collaborative sustainable conservation is achievable effectively at a local level in the area using existing community structures without complexities. Therefore, it is concluded in this study that where communities are homogenous, stable and properly structured, coordination of projects when implementing them is made much easier than where there are tribal diversities. One strong aspect of Makuleke community is that the local people have no differences in terms of conservation beliefs, culture and practices. As a result, the desirable outcomes of conservation in the context of the GLTP can only yield positive results in transfrontier projects, if the people are included in the governance and management of biodiversity and ecosystems, tapping of course, from local processes and structures. Ideally, the fact that people in Makuleke are conscious of the need to sustainably conserve their environment, the arguments by conservationists and other institutions that view rural communities pejoratively is challenged, considering that even the current resource use (grass and fuel wood) has not precipitated scientifically proven degradation in Makuleke.

Potential threats to land and the environment in general, perhaps, relate to population growth from 15 000 people in 2002 to the current 17 000 in 2012 (local statistical CPA data), which obviously would put a bit of pressure on the environment. It is imperative to state that exploratory observations in Makuleke revealed that the minimal environmental threats are confined to residential areas, and has not interfered with the GLTP. In this case, the issue of population growth remains a challenge to many developing countries and no policies have been put in place to control population growth. Unless one is in China, it is not possible to restrict people on the number

of children they can have per family. As such, this population growth has phenomenal influence on the available resources and poses practical environmental challenges as this puts pressure on available space, the natural resource that can sustain the community. Ultimately, there are increased demands that can result in people having limited space for habitation. However, no encroachment onto the GLTP boundaries or parkland has happened so far. The current land claims around Kruger National Park as shown in Figure 6.4 and Table 6.5, go a long way to demonstrate the extent of possible pressure that can be exerted by people competing for land as a natural resource. Therefore, there is a possibility of diminishing the amount of land designated for wildlife conservation. Having looked at that, what then are the impacts of transfrontier governance processes on local participation, benefits and the challenges and opportunities that exist? The next section looks briefly on these aspects and discusses them in trying to broaden the understanding the GLTP governance aspects to reach to a logical observations and conclusions.

6.17 Community participation: Challenges and opportunities

Research evidence presented above has revealed a number of challenges, particularly issues relating to natural resource ownership contestations and perceptions the community have over benefits (Figure 6.11) and constraints around domestic use (Figure 6.13), commercial use (Figure 6.12) and perceptions on local participation in resource governance (Figures 6.7; 6.8 and 6.9). It is imperative, therefore, to examine contemporary philosophical paradigms underpinning community participation in natural resource governance, which also help to understand the link on participation, benefits as they have evolved forth and back across certain paradigms in this conservation discourse. The matrix devised here, further looks at the challenges of each paradigm as it relates to the various aspects of analysis. To achieve this understanding, this study paradigmatically adapted Baldus (2009:16-17) assertions with significant improvements and contextualisation of the framework in a newly devised practical matrix of analysis for Makuleke to comprehend various aspects of the impacts on two major aspects in conservation that are:

- The paradigm's impact on local community participation based on the paradigms determinants in terms of processes and structure. This guides whether particular elements of participation and engagements encapsulated in the paradigm can apply to enable community integration in conservation.
- 2) The paradigm also looks at the impact on benefits sharing that fundamentally underpin local incentives to motivate the local people in realising true value of natural resource that accrue

directly or indirectly to the local people. Thus, position the local people to be motivated in achieving local collaboration in biodiversity and ecosystems conservation.

Having said that, the following matrix was formulated bearing in mind four major components that include the analytical paradigm itself, impacts on participation, impact on benefits (to the local community), the challenges associated with such processes and the opportunities to take advantage of in terms for collaborative and effective biodiversity conservation in the GLTP. Table 6.11, 6.12, 6.12 and 6.13 will help in the understanding of these complex facets of conservation paradigms that relate broadly to communities in relation to conservation of biodiversity and ecosystems governance approach in the SDAC region's country level or regional conservation initiatives. The implications on the community-environmental interrelationships between and among stakeholders also vary.

Conservation Paradigm	Impact on participation	Impact on benefits	Challenges	Opportunities
"Conservation Against the People" (Baldus, 2009:16)	 It is associated with 'parks' approach as pursued under the GLTP framework as opposed to TFCAs that enables multiple land use and incorporation of the local people. There is piecemeal community consultation. Controlled use e.g. in the form of licensed hunting and trade on flora and fauna products mostly regulated in a way that favours outsiders and discriminate against the local people, for example issuance of licenses, usually is inaccessible. 	-Manifest in environmental policing, legislation and law enforcement that bars rural people from being able to derive benefits from wildlife on their land.	 -Legislation usually is in place and is licensing done to access natural resources. -Possession of rights is a costly process. -Prohibition of rural people from deriving natural resources benefits, as they may not afford the costs of licence fees. -Results in 'elite' and urbanite resource capture' of wildlife. -Lack of local participation and lack of consultations work against local interests. -Policy restrictions on local people by bans and licensing environmental goods in many parts of the world compel local people resort to illegal wildlife use, with governments not able to control (Baldus, 2009:16). 	 -Conservation of threatened species and biospheres succeed on the ground based on legislation and environmental policing. -Promotes significant environmental restoration, flora and fauna specie recovery. -Governments get external collaboration and conservation financing.

Table 6.11 Analysis of "Conservation against the People" paradigm

Conservation Paradigm	Impact on participation	Impact on benefits	Challenges	Opportunities
"Conservation For the People" (Baldus, 2009:17)	-Communities receive voluntary contributions as incentives to tolerate wildlife or protect some areas in their neighbourhood. -No real participation of the local people, but the process is led by government agencies and their partners to provide the incentives for the loss of direct and indirect environmental benefits	-Conservation government agencies, international and local aid agencies finance water reticulation, schools, roads, and provide support for rural livelihood projects e.g. partnership in crop farming by Temo Agricultural Services in collaborates with Makuleke community to produce potatoes and maize.	-Communities are not involved in the management of the resource. Instead, outsiders who, at their own discretion, let the locals share some indirect benefits or give them some gratuities like financing improved social services manage the resource. -In fact, benefit sharing among the government, the private sector investors and the community is tilted against the local people and objective criticism of unfairness and inequalities remains rampant.	-Communities received voluntary contributions as an incentive to tolerate wildlife or protected areas in their neighbourhood.

Table 6.12 Analysis of "Conservation for the People" paradigm

Table 6.13 Analysis of "Conservation by the People" paradigm

Conservation Paradigm	Impact on participation	Impact on benefits	Challenges	Opportunities
"Conservation by the People" (Baldus, 2009:17)	 Broadly, community drive their own development schemes based on local consultations and consensus and projects are more likely to be successful. This applies equally to wildlife management regimes that are communally participatory using local structures like the Makuleke CPA. Enabling the communities to manage wildlife themselves on their land and they take decisions and full responsibilities as to how, when and what resources to use at a particular time. This is popular within the bottom- up development approach that is presumed to be more sustainable. 	-Local determinatio n of benefits and they are distributed equally through establishmen t of public infrastructure and social amenities of both social and economic value to the community.	-The Makuleke CPA as a local administrative structure was not integrated into the GLTP governance structures as is also with the case of Sengwe community in Zimbabwe.	-Community can leverage on collective action to demand re- structuring and reorganization of the governance architecture of the GLTP.

Table 6.13 Analysis of "Conservation with the People" paradig	gm
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Conservation Paradigm	Impact on participation	Impact on benefits	Challenges	Opportunities
"Conservation With the People" (Baldus, 2009:17)	-In accordance with Murphree, (2001:5) this entails that technical people facilitate the community in the development of concepts, provision of technical advice, assist in building governance structures, management plans and assist communities in practicing sustainable wildlife and other natural resource management and proper use. -Some of the good example under this is the CBNRM projects such as CAMPFIRE in Zimbabwe and Contract Parks in South Africa.	-Benefits shared on an agreed formula by partners and the community e.g. the Makuleke partnership with Wilderness Safari. Collaboration in alternative projects can be achieved also that lessen over- reliance on natural resources e.g. in Makuleke, Temo Agricultural Services produce maize and potatoes (350 households) while in Sengwe Gardening and Crafts projects are supported by SAFIRE benefiting more than 1000 households.	-Despite goodwill by government to support local processes, interference on the functioning of communities processes have continued unabated, increasingly marginalising the local people from effective participation and frustrating deriving enough benefits. The analysis of Sengwe in Zimbabwe will enlighten more on this aspect, and for Makuleke, Trophy hunting in their Park was stopped because it was viewed as consumptive use. -The stage in which the process is exclusively the people themselves who manage their wildlife has not been reached and with these communities incorporated into transfrontier zones, no one knows where the CBNRM projects will go and how do communities proceed from here since they are not part of the transfrontier governance structure.	-More research is needed to formulate structural integrative model to re-orient local institutions for the broad realisation of 'Conservation With the People' by harnessing local systems, cultures, practices and marshalling local efforts for collaborative conservation, which is envisaged here to be sustainable.

Perhaps some important aspects that come out of these matrixes are that the characteristics of each of the paradigm have limitations and affect the community in different ways. Key informants highlighted that since the Pafuri area of Kruger is owned by the community and part of the GLTP, the management and governance approach has not changed despite the Makuleke region having been reclaimed. The informants further observed that the participation of Makuleke community representative in the GLTP was questioned by other countries who raised concerns of his presence in some JMB meetings. He was eventually withdrawn, and upon interviewing him, he displayed displeasure at this as concerted effort to muzzle the local voice. This has generated some uneasiness and scepticism among the GLTP communities in Mozambique, South Africa and Zimbabwe. More essentially, the situation has been entrenched by increasing number of scholars having marshalled arguments and evidence about how humans manipulate biodiversity and influence species composition and structure around them. This has become the basis upon which local communities are caught up in contested relationships with park managers, resulting in exclusionary tendencies from transfrontier park conservationists. Consequently, this has led to restrictive and prohibitive conservation strategies that are fundamentally state-centric, epitomised by strict rules, laws and park policing for supposedly achieving preservation and conservation of endangered flora and fauna.

Given the above arguments, Agrawal and Gibson (1999:626) state hat this is supposed to foster interactions among conservation members that promote desirable conservation decisions based on strict control. However, there is also recognition of the limits to which the state and the private sector get involved, but in this case, it is at the expense of communities. This study is of the view that popular local participation is has to happen in the context of ensuring sustainability of conservation. This is the reason why the new revisionist ecology is questioning the coercive "Conservation Against the People" (Baldus, 2009:16) and "Conservation For the People" (Baldus, 2009:17) that is not sustainable as it cause the risk of resistance from the local people. This study further concedes with concern that there is a popular misplaced belief among conservationists that indigenous communities should relatively be isolated in conservation of natural resources. Close analysis of these issues, informed this researcher that such beliefs, the approaches and paradigms that are adopted basically gridlock communities in permanent contestation by literally portraying them as despoilers of natural resources. However, if communities in Makuleke and Sengwe communities have shaped and used the environments in sustainable ways for hundreds of years, it may as well be possible to establish partnerships with communities that accomplish the same results today. Furthermore, there is the realisation among researchers that have suggest that local informal, extra-legal factors such as personal or economic relationships, interests,

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kinships, ethnic ties and cultural norms, may play a greater role than formal and far removed bureaucratic conservation institutions (Roe et al., 2009:51). In this regard, these distinctions are critical, particularly when considering how the issues of rights over resources are determined and exercised by various users. This include when the local people frame issues relating to natural resource tenure reforms and institutional change in the context of the GLTP.

Clearly, the clarion call here is to reconfigure conservation back into the hands of the communities not as despoilers of the environment, but as authentic partners who can assist ecologists, conservationists and preservationists in reducing high levels of resource poaching. The biggest advantage in this discourse is the attended reduction of costs of policing the environment and achieving sustainable conservation oriented in the community and driven by the local people.

In addition, there is a recognition that pro-poor, pro-human rights and pro-indigenous voices are starting to alter conservation approaches, advocating for re-organization and restructuring of conservation. The main focus is directed on integrating protected areas with wider uses and values, including cultural assets, livelihood uses and ecosystem services with community processes. For example, an expansion of community conserved forests, coastal mangroves and pastoral ranges, including a growth in the number of transboundary parks such as marine parks in the Caribbean, have shown a shift in conservation policies and governance processes increasingly recognising the role that indigenous people play. This has enhanced their environmental participation, access rights and has seen management responsibilities being transferred to local people (Molnar, A. 2005: 57).

Going forward, those local governments, non-governmental organisations and the private sector taking a more active role with international conservation agencies and donors on the debate of human-nature issues, should remember that the new perspectives incorporate environmental education. It is for this reason that in an interview with Working for Water Project manager, the issue of giving local people rights was emphasised in addition to environmental education in Makuleke community. In as much as community claims and local rights are justified, their limitations are exacerbated by how conservation affairs are handled at the local level. In this regard, Metcalfe put forward that:

"The fact that communities have a strong claim to ownership, and both use and benefit from the natural resources in the areas they reside does not mean they can automatically manage the resources efficiently, equitably or sustainably (ecologically, economically or institutionally). Communities need assistance, facilitation and training, as well as supervision. This does not need to engender dependency on governments in perpetuity. Communities should be seen as public sector clients to whom the government assures service support to enable them to emerge as genuine resource managers and mutual landscape level partners" (Metcalfe, 2004:5).

In ending this discussion, personal interview with Livingston Makuleke on 13 October 2011, at Makuleke Bed and Breakfast Guest Lodge he had this to say:

"Governments and many conservation organisations have generally not established supportive partnership for communities in the Great Limpopo Transfrontier Park. They tend to take a leading role as formulators, implementers, supervisors and evaluators of the project. The GLTP success is somewhat skewed and exaggerated because you cannot be the player and the referee at the same time, while the affected communities' strong claims of ownership are ignored. The benefits streams are skewed in favour of some investors, while the communities in the abundance of their resources remain spectators. We have always advised, even to our South African side that they should look into the issue of involving the communities seriously as this underpin whether the GLTP will achieve its goals of development or not, particularly when you look at Makuleke community".

What this means is that communities is facilitation for a clear integration so that they are able to participate in transfrontier biodiversity and ecosystems management. For as long as this synergy is not in place, it remains a huge challenge for the GLTP to be viewed positively at the local level. This is because it is considered as a government and private sector driven process in contrast with community interests who should be taking the lead. As such, it is noted that the affected communities in the ambience of the GLTP view the governance regimes negatively. Above all, the over publicised hypothetical galore of benefits from tourism business had raised optimism about how communities would use the GLTP as a panacea for the development, transformation and uplifting of rural people's lives, but this has not materialised ten years after the launch of the GLTP. Communities are now questioning the importance of such projects if they do not address the ticking issues affecting their lives as intended. While Makuleke community appreciated, the jobs created through tourism enterprises in Pafuri and the Eco-Training, respondents hastily indicated that more could be achieved if their views were taken into account.

6.18 Community livelihoods, impacts and sustainability

One of the study's objectives was to establish livelihood strategies in Makuleke. However, before that is done, the researcher would want to highlight that in any rural area in Southern Africa, some common characteristics come out clearly about communities that most of the communities rely on a plethora and diversity of natural resource products. The concept of 'community' is viewed in different ways. One important image that habitually comes into mind when mentioning a rural community in Africa is a set of images often invoking concerns of nature, about the "indigenous people living in ways that are ecologically sustainable" (Adams and McShane, 1996; Dowie, 2006:12), and others differ as they view communities as posing environmental threats. Despite the fact that many indigenous peoples live(d) much more 'sustainable' semi-rustic and 'in harmony with nature' (Zimbabwe National Park Authority motto) in many rural communities in Southern Africa, the people in the 'developed' world, neither do understand rural community actions in Africa in relation to their natural resource. Local communities in Africa are diverse in their composition, status, occupations and the attendant livelihood activities that sustain them. Indeed, humans have an impact on the environment. These impacts vary from degradation to sustainability depending on the type of activities, enormity and frequencies of those activities that a particular community is involved. The other factors that usually underpin environmental impact are the socio-economic and political ecology factors considered at the resource governance level. In a way, a community has to be viewed in its internal and external institutional dynamics and contexts, such that one can be able to relate local actions to environmental aspects, which have a bearing on their livelihoods. Three institutional variables were identified as:

- a) Multiple livelihood (economic) interests involving different actors
- b) Local livelihood access processes, and
- c) Institutional arrangements to access livelihood opportunities

Local interactions may also prompt responses from macro level actors. Local reactions to conservation programmes can lead to the modifications in the shape of these programmes. Thus, although it is convenient to talk about the community and the state, or about the local and the external, they are linked together in ways that it might be difficult to identify the precise line where local conservation begins and the external where it ends (that helps construct the local). In fact, there should be a way that brings together those elements that connect the institutional governance aspects with livelihood needs of the communities. The obvious conclusion on these matters is that livelihoods of people can be as sustainable as is possible if the intuitional processes

in the GLTP support it. However, currently, Makuleke community has not been able to realise that, hence becoming a testament of the disconnectedness of the GLTP and the communities.

6.20 Livelihood activities

The livelihood or activities in Makuleke community revolve around a plethora of interests. While the community is largely homogenous, internally it is defined in terms of sub-groups of individual age groups with varying preferences and economic activities that relate to natural resource use and distribution in the area.

Recognising that there is multiplicity of individual group interests, this study objective was to look at specific livelihood (economic) activities in Makuleke were identified during research. These economic activities help in understanding of how they relate to the GLTP resource management dynamics and how central natural resources are, in the survival of the community. In essence how the GLTP resource governance processes affects the local processes to enhance livelihoods, are then situated in its proper context. Perhaps, it is important to indicate that the SADC Policy and Strategy for the Environment and Sustainable Development, lists as one of its objectives, the protection of biodiversity, and striving to improve the health of environment and livelihoods of the people in Southern Africa, particularly the poor. As such, four main livelihood activities emerge in the study of Makuleke such as:

- 1) Sedentary crop husbandry production for both subsistence consumption and commercial sale;
- 2) Livestock production around the GLTP;
- Horticultural production for subsistence and local sale to households, Manamulele District and Mhinga area;
- 4) Forestry products use, and
- 5) Cash remittances within and across the border to Zimbabwe and Mozambique.

6.20.1 Subsistence sedentary crop husbandry

Communal sedentary crop farming in Makuleke constitute the biggest component of their livelihood activities in the area, with maize farming rated as the highest. Maize production constituted 59.5%, while sorghum was at 5.4%. These are seasonally grown during the summer season (starts in November the same year to March the following year). The study further established that the maize crop, is produced by households under irrigation is for commercial sale. This is a project run between the community's households and a private company. It stands out

as a good example of how the land around the GLTP can be used intensively to reduce hunger and starvation in Makuleke. Figure 6.15 shows part of the fields under irrigated maize crop.



Photo by D. Muzeza (12 October 2011) Figure 6.15 Irrigated maize crop in Makuleke community scheme

In fact, interviews conducted by the researcher involving some key informants and field visits to the projects, established that out of 2 600 households in Makuleke community, 350 households were involved in alternate full-scale commercial maize and potato production in partnership with Temo Agricultural Services. At the time of the study, maize crop was at 1.5 metres in height that was planted. Potato production would then follow soon harvesting of maize crop. As shown in Figure 6.15, maize crop grown under intensive agriculture can equally do well in this region, particularly using the central pivot irrigation systems in Makuleke community. The agricultural plots are located less than 100 meters from Kruger National Park, and a fence separate Makuleke community with the rest of the GLTP boundary. Other household crops popularly grown are cotton accounting for only 6%, soya/beans was rated at 10.7% and other crops such as edible vegetables and tomatoes were at 10.4%. It is important at this stage to mention that some the households do not grow all of these crops and they indicated that their source of livelihood was formal employment in the area, which accounted for 8%, particularly those in white-collar professions, such as nursing and teaching. In many cases, almost every household confirmed that they were keeping some livestock, which is an important production system in the area since it is a source of livelihood and a symbol of wreath, particularly cattle, the goats, sheep and chickens were almost at each and every household.

6.20.2 Animal husbandry

Livestock, particularly cattle in the African context is a symbol of wealth status. To understand the centrality of livestock in the area, the study managed to establish two major things:

- 1) The types of livestock popularly kept by households in the area, and
- 2) The utility value orientations of livestock kept by the households.

As such, a household survey questionnaire made the following revelations about the average livestock popularly kept by people in Makuleke community.

Livestock species	Average number owned per household
Cattle	3
Goats	5
Sheep	2
Donkeys	2
Pigs	0
Chicken/Ducks	25

Table 6.14 Livestock species and the average on those who own livestock

On average, every household surveyed owned livestock as shown on Table 6.1. Cattle are the most valued and the mainstay of profitability and symbol of wealth status in the area in terms of economic value. The utility value of livestock was obtained using what this study termed 'attitude measure of livestock value orientations'. In this case, the researcher used the Schutte Scale to measure attitudes of the people to get a sense of value orientations attached to each livestock species by members of the community in Makuleke villages. The measurement in this regard covered many things. Value orientations tap into different domains like utility value of these animals. These included things such as consumptive values, the economic aspects, such as including saleability and profitability. Using the Schutte Scale rating of 1-11, the data from respondents was collected from focus groups, further collated and averaged to give a clear indication of the utility value orientation of each type of livestock as presented in Figure 6.15.

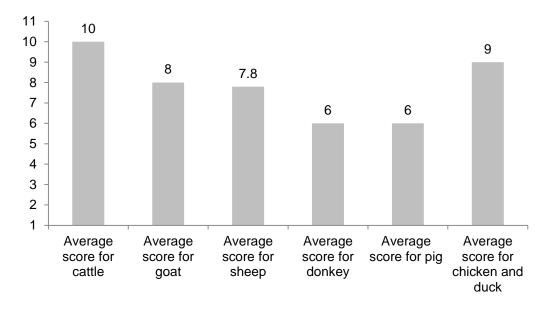


Figure 6.15 Household utility value orientations of livestock in Makuleke community

The questions that were asked here are based on the Schutte Scale methodology that was used to get an understanding of the value people attach to different livestock species. The questions posed relate to rather general and fundamental aspects of human utility value perceptions of the livestock they keep in their community to suit particular contexts of rural Makuleke community. They were posed as statements, where the respondents were asked to rate the value of each livestock specie and the statistical data obtained was averaged to plot it in terms of the utility value of each species as in Figure 6.15. All the livestock kept exceeded an average of 5.5 rating on the scale. Cattle had the highest rating of 10, followed by chickens/ducks with a rating of nine.

Generally, all the ratings showed a positive perception on the part of the community as demonstrated by above 5.5 average rating on the Schutte Scale of 1-11 scale rating. This indicates how much the people agree with the critical importance of those species to their lives, and as livelihood strategy as far as their survival is concerned. Even the lowly rated animals such as pigs and donkeys, which have fair ratings of 6, still managed to surpass the average of 5.5 on the scale. As Figure 6.15 shows, there is generally a positive utility valuation of livestock as they underpin their livelihoods in Makuleke. Related to livestock production, was an attempt to understand grazing/feeding of these livestock by the people. This was meant to appreciate how livestock production can affected or affect by the GLTP demarcations. As such, the study examined where people graze their livestock and sought to find out if they agree on adequacy of pastureland to feed their livestock. The cattle in the photograph in Figure 6.16 were taken while they were moving

along the fence searching for dry land grazing. The Kruger National Park fence marks the GLTP margin that separate Makuleke community from the entire Kruger National Park



Photo by: D. Muzeza (12 October 2011) Figure 6.16 Cattle walking along the GLTP Fence (Kruger National Park)

Since Makuleke community is in a new area, possession of land is mediated using customary systems. The land is communally owned and it is administered under the jurisdiction of Chief Makuleke, who plays an important role to determine allocation and distribution of land as a resource to his subjects. However, this has been diluted by the new local government administration that appear to be more powerful than the local traditional leadership. Hence, this has creating conflicts over overlaps and overstepping of mandates in the affairs of local administration and governance. In assessing where people feed their livestock, 62.2% of surveyed households indicated that they would graze their animals on community grazing land, which they believe belonged to the Chief as the custodian of the land in their community.

While access to land is open to the community members in Makuleke community, this study hastens to mention that this should not be interpreted as synonymous with 'open access' usually criticized for lacking regulatory rules for the prevention of the 'tragedy of the commons' propounded by Prof Hardin (1968). Use of the land in terms of grazing, residential homes and

cropping, is thus, confined to Makuleke people. Households with their pieces of land usually in the form of fields accounted for 5.4%, which indicated that they have to graze their livestock on family pieces land. This is usually after harvesting when they use the crop remains as fodder to feed livestock. Other households accounted for 0.9% having confirmed that they graze or feed their livestock using 'other' means, which could be seasonal pen feeding since there will be limited dry land grass to feed livestock in the area. During field visits, it was learnt that people also graze cattle at the GLTP boundary, particularly at the margins of Kruger National Park, and this accounted for 31.5%, having to rely on grasslands along the park boundary for grazing livestock. Figure 6.16 has shown some of the cattle that were captured by the researcher during field study of the area, which further indicates the wildlife-livestock interface in Makuleke community.

6.20.3 Livestock and crop production: Land use and land availability

The study would not have done justice without having to look at how the community view availability of grazing land or pastureland, and undertake crop production in their area in relation to those land uses and its availability. It is important to underscore that generally, Makuleke community has always faced a historical problem of shortage of land after they were displaced from the Pafuri Triangle during the colonial period. Post-apartheid systems did not restore the community to its land because of the reason that the Pafuri area had now been integrated into Kruger National Park. Ideally, the loss of Makuleke region to Kruger National Park during its expansion, also justify the claims of the community for land restitution as already discussed. Equally, the study examined the issue of land use, in which households indicated the amount of land they owned. This was linked to what size they use in terms of actual land requirements, considering that the population is growing.

Section A Amount of land owned before establishment of the GLTP in 2002		Section B Land demand after the GLTP after 2002			
Amount of land in acres	Ν	%	Amount of land demand in acres	Ν	%
1-5 acres	44	20.8%	1-5 acres	57	27.2%
5-10 acres	113	53.4%	5-10 acres	53	25.2%
10-15 acres	30	14.1%	10-15 acres	28	13.5%
15-20 acres	7	3.3%	15-20 acres	24	11.7%
20-25 acres	5	2.5%	20-25 acres	20	9.9%
25-30 acres	4	1.9%	25-30 acres	11	5.4%
Others	8	4%	Others	11	5.4%
Undecided	0	0%	Undecided	7	3.6%
Total	211	100%	Total	211	100%

Table 6.15 Household data on Land size changes, ownership and land adequacy

The study established that most of the activities in Makuleke relating to crop and livestock production primarily are for subsistence consumption. The type of crop use, therefore, determines the amount of land that could be used on average per household. This is the reason behind many households' demand for land, and it is important to highlight that it is concentrated to small pieces of crop production of land ranging from 1-5 acres that accounts for an average of 27.2 % from 211 household that were surveyed (Table 6.15 section B), which can be compared to 20.8% in 2002 (Table 6.15 section A). There is an incremental demand of the amount of land needed in the area ranging from 1-5 acres that people need mainly for small-scale farming in the area. The demand declines rapidly in terms of the number of households who expressed change in demand of land required for farming as the hectares go up.

It is critical to indicate that there are few households with large sizes of land ranging from 15-20 acres and 25-30 acres. These households have large herds of cattle and are in demand of more land than others are in the community. Generally, the Makuleke households prefer smaller pieces of land as opposed to large farming land for both crop and livestock husbandry. One reason for this is that those small pieces of land are used intensively under irrigation; hence, there is effective and productive utilization of land, which further help households to produce high yields, generate revenue for their families and prevent hunger.

Perhaps, one critical impact in terms of livelihood as shown in Table 6.17 is the fact that 82.9% of the 211 households that were surveyed expressed that land is inadequate to cater for their growing livelihood activities, particularly crop and livestock production when compared to 17.1% who responded that the land was adequate.

Varied response	N	%
Yes to adequacy of land for crop and livestock production	36	17.1%
No to adequacy of land for crop and livestock production	175	82.9%
Total	211	100%

Table 6.17 Household data on Land size changes, ownership and land adequacy

The variance could be the result of different needs that people have for livelihood, with the possibility that those dependent on crop and livestock farming expressed the need for more land. The population of the community rose from 3000 in 1969 to 15 000 in 2002 (Mahony and van Zyl, 2001:28), and this put some bit of demand for land as well. According to the correspondence with Makuleke CPA official, the population currently stands at about 17 000 people in the three villages of Makuleke community. As the number of acres of land increase, the percent of land owned and those who intend to use huge pieces of land particularly from ten acres, correspondingly decline.

The study established that as the trajectory of land size increases, the demand declines because few families have no need for large tracts of land or plots since they are satisfied with small plots for their subsistence crop production. The surplus they produce is sold locally at the nearby townships for cash. Ideally, the demand for land is bound to increase in the future should the population continue growing in Makuleke. Population growth from a Malthusian perspective, put pressure on available resources, and therefore a balance should be found to prevent degradation and hence arresting hunger and starvation.

6.20.4 The GLTP: Consequences on livelihoods and conservation in Makuleke

Makuleke community with its three villages lie in proximity to the Great Limpopo Transfrontier Park, particularly Kruger National Park fence at varying distances from each village. The shortest distance is about 100 metres from the current irrigation scheme. The longest distance is about one kilometre from the actual park border fence. Given the relatively short distances from the GLTP boundary, the park has varying impacts to the community in as far as their livelihood practices are concerned.

According to interviews conducted with key informants and focus group discussion members, respondents observed that there is not enough land for settlements, let alone farming in the area due to limitations from the park boundary. The restrictions that exist in Makuleke today are defined historically when people were removed from Pafuri Triangle, they lost land and this has not been compensated. They were settled in an arid, infertile land, a place without perennial rivers such as Luvhuvu and Limpopo where they used to have unlimited access to water for their crops, fishing, livestock and farming. It is a fact that their population is increasing in Makuleke, the demand for land for both crop and livestock production is correspondingly increasing. However, this is not matched with availing adequate land for the community can use. The community also cannot expand going further towards the park boundary, since this can start having negative impact on the available land for biodiversity conservation.

As such, there is apparent sense of food insecurity being a result of lack land and sustainable alternative livelihood options in the area. Even though agriculture is the mainstay of Makuleke community, food security and vulnerability assessment indicate that there is a long-term impact in terms of the human-GLTP relations with communities. This is the case not only obtaining in South Africa, but in Mozambique and Zimbabwe, which are part of the GLTP project as well. The geographical location of Makuleke community, and the attendant GLTP limitations, speaks to the uniformity of local attitudes and functional strong sentiments that suggest the need and their

demand for sharing the GLTP's benefits with government agencies and the private sector. This, according to local sentiments, provides a fallback position on food insecurity that prevails in the area since the people lost their valuable and productive land to the park when they were displaced. The study also established that the current exaggerated GLTP benefits are not averting the economic problems people face on daily basis. Failure to recognise the livelihood needs of the people can have negative relationships between the community and the natural resources in their neighbourhood, particularly the GLTP. In fact, they do not have strategies put in place through the GLTP processes to offset losses of access to productive natural resources that the community historically enjoyed, and these elements were not at all considered at the formulation stage of the GLTP. This has fundamental impact in terms of mistrust and conflicts that the conservation managers face with the local people, particularly in view of the GLTP governance and operational functionalities being exclusionary and fail to safeguard local livelihood interest. Rather, the strategies adopted in the governance and management of resources in the GLTP are restrictively in the context of rigid 'park' and 'protected area' approaches, typical colonial, which did not promote the human-wildlife interface, particularly in marginal areas inhabited by the Africans.

The other impact that people raised relates to predation of livestock by carnivorous animals such as lions. At the time of the research, two cases were reported having happened where a crocodile attached one person and another case involved a stray lion having killed one beast in the area. While the cases are not regular, however, the losses of human life, causing injuries to property and cattle destruction, were cited as not desirable in the area. The local respondents attributed this bitterly to the failure by the Park managers to arrest the problem. The human-wildlife conflict although minimized by the erected fence that separate the community and the GLTP, which is strong and inspected regularly, there are some stray wild animals that still can sneak out and prey on cattle in the area, particularly lions. Furthermore, wildlife carry many diseases that are dangerous to livestock. These diseases include malignant catarrh fever, a viral disease that kills livestock, foot and mouth disease that is a highly contagious viral disease, which reduces milk supply as well as body weight loss, is experienced rapidly.

The paradox is how the local people should still be expected to appreciate the significance of wild animals even when their livelihood interests are at stake from predation. It would appear that the issues were not being addressed by leveraging on wildlife and existence of the GLTP to create value of wildlife for the people. Due to carving out of Pafuri region initially meant for Kruger National Park, and now integrated to the GLTP, Makuleke community had hoped that this would increase their chances to benefit from the GLTP. However, the community continues to experience wildlife

problems as opposed to benefit more and develop their area. In this instance, local people bear the cost of crop and livestock loses, and because of the foregoing opportunity loss of their crops and livestock to wild animals, their perceptions about the GLTP are largely negative. Further to that, what makes wild animals in the parks usually move in and out to the community is mostly in search of fodder and livestock, they are is easy prey for lions. Giving the example of similar communities in Kenya, the rise in human-wildlife conflict could evolve into a major crisis if a solution is not immediately found (Ogodo, 2003).

Where as in Kenya, the human-wildlife relationships has had direct effects on livelihoods of the people, putting them stake, and the conflicts are complicated to solve. This adversely affect humans and biodiversity, and usually lead to the retaliatory killing of wildlife in 82% of the protected areas in Kenya (Okech, undated:66). Despite having cases of predation and crop raiding being experienced in Makuleke, officials from Kruger National Park alluded that there were no revenge or retaliatory killing of wild animals by members of Makuleke community. Perhaps, the radically inherent conservation culture among the Makuleke people as opposed to many communities in Africa who engage in retaliatory killing for loss of livestock and crops is their consistent consciousness to biodiversity conservation. Ideally, this is a positive impact in line with conservation practices. This study hasten to mention that since there are no compensation mechanisms in Makuleke for losses they experience, and an official from Kruger National Park clearly stated that once an animal strays out of the KNP it is no longer under their jurisdiction of the KNP. This shows how ignorant they are to problem animals as Kruger National Park. View gathered also indicated that the Park authorities could intervene only to ensure that the animal is captured back into the park, but at times after damage to property and human would have taken place. Munyori (1992:110;1992:16), Sindiga (1999) and Sindiyo (1992:76) observed in their studies that in Kenya, many conservation programmes are characterised by contestation between livelihood practices in buffer zones and animal corridors being at the centre of predominant wildlife-human conflicts over resource utilisation. Therefore, the negative impact on livelihood activities experienced in Makuleke are a common phenomenon, which can be corrected through conservation measures that ensure human-wildlife interactions are not antagonistic and retaliatory.

The fact is the GLTP covers protected parklands. It is difficult to create space for the growing population in Makuleke. The historical facts and circumstance that Makuleke has continued to battle with its yesteryear losses, particularly the fertile Pafuri land that they never got compensated for despite having reclaimed it, remains a thorn in the flesh to the local people. Regaining cosmetic

control without transferring absolute usufruct of the land is literally at cross-purposes with local livelihood aspirations. This is why the perceptions of the local people remain negative about the GLTP project. Whilst it can be applauded that in terms of conservation in Pafuri, the community showed positive stance as the area is still pristinely endowed with abundant wildlife, including the Big Five (Elephants, Lions, Buffaloes, Leopard and Rhinos), this is no solution to the contemporary concerns of real unfair relationship with the GLTP management. The main unattended long standing ecological complains relates to shortage of land for farming. Makuleke community and showed growing concerns of livelihood insecurity with no fertile land in their current area, goes on to show how poverty could easily be perpetuated under the circumstance where they could use the GLTP as an economic opportunity. The consequential keeping of their region for conservation purposes without deriving much in terms of livelihood activities, is a statement of compliance the local people towards the GLTP.

When one looks at Makuleke, the overall impression is that of a fast urbanising community considering the level of social and political organization, credit to its robust local institutions. This has seen the transformation of social service provision such as taped water, roads and electricity. Increasing population is putting a strain on social service provision and on resources. This point was further indicated during interviews that the productive systems in Makuleke, particularly food crops and livestock production, needed transformation from being subsistence to intensive production so that people can maximize production on their small pieces of land to cope with high demand for food that is not being met at the moment. Logically, this would address the issue of coping with population dynamics and its unmet livelihood needs, while at the same time reducing the impact of population increase on natural resources such as land, water and forest products and wildlife. Other suggestions, that came from the those from 16-24 of age, showed clearly that due to pressure on scarce resources, unemployment was high and they needed the community and the government to invest in education so that they can move out of the area for employment elsewhere. As a result, there is motivation for voluntary movement out of Makuleke. This is an opportunity to where individuals are willing to migrate to other areas. This can be a strategy in the long term to reduce environmental pressure caused by population, and at the same time enable environmental resource regeneration.

6.21 Makuleke people-wildlife relations

One important aspect that the survey household questionnaires sought to establish is an understanding of perceptions of the people's relations between the community and the GLTP wildlife in its entirety. This was done by assessing various aspects including the impact of the

GLTP governance on communities as they relate to wildlife and the benefits stream that accrue to different stakeholders. Wildlife, as this researcher heard from key informants, historically has had cultural dimensions as part of traditions. This included the local people's lifestyles, how they identify with the environment like sacred animals and totems in life practice of the community. Wildlife therefore, has much more significance in terms of non-intangible benefits such as spiritual aspects, communion with nature, use of nature for the well-being, recreational dimensions, existential values (enshrined in the culture of totems and the consideration that animals have therefore the right to be preserved as part of the human culture, and ought to exist independent of human beings. This translate literally to a conservation cultural values that is intended at preserving wildlife as a resource for the future, and indeed very important to the people of Makuleke. All of which, arguably, produced a set of values and cultural affinities that enhance biodiversity and ecosystem conservation. Ideally, if one closely analyse these important values, clearly, there is a basis to postulate that slowly and organically, the struggles of Makuleke community, from the bottom to the top, is anchored around entrenching cultural affinities as social process that are important for sustainable conservation.

6.21.1 Wildlife value orientations, perceptions and Livelihoods impact

Having looked at the value systems above, the questions that were asked in focus group discussions related to rather general matters pertaining to wildlife value orientations. However, fundamental aspects of human perceptions of wildlife were elicited comprehensively, and this complemented the survey questionnaires, which were more detailed. The household surveys addressed specific issues relating to wildlife ownership, threats posed by wildlife, benefits derived from wildlife, compensation of losses and hunting of wild animals. Other aspects that were addressed touched on existence of commercial and domestic policies and programmes. This would allow to assess community use of wild animals or at least access to natural resource services. This study also addressed discussions dwelling much on wildlife utility value orientations.

In this regard, it is critical to indicate that focus group members were allowed to identify the type of wildlife they perceive to be important and using the Schutte Scale rating from 1-11, they rated the utility value for each type of animal in the same way with livestock production. The individual scores were aggregated and averaged to have an overall utility value score for particular species of wildlife and/livestock. Figure 6.16 illustrates that the rhino is the most valued wildlife, with a score of 11 on a Schutte Scale of 1-11. The respondents pointed out that they attached high value to the rhino due to its commercial value as well as it is a specie that they are obliged by the law to conserve at all times. It was clear that the local people are conscious of the rhinos as part of the

ecosystems that is facing serious threats of extinction arising from poaching. The elephant, the buffalo and Inyala scored 10.5 and 10, respectively. The impala scored 9, while the wildebeest and the eland scored an average of 7 on the Schutte Scale score of 1-11. The hippopotamus had a low average score of 3 as much as the giraffe, because these are not treated in the area as very valuable species. Figure 6.16 shows the value orientations.

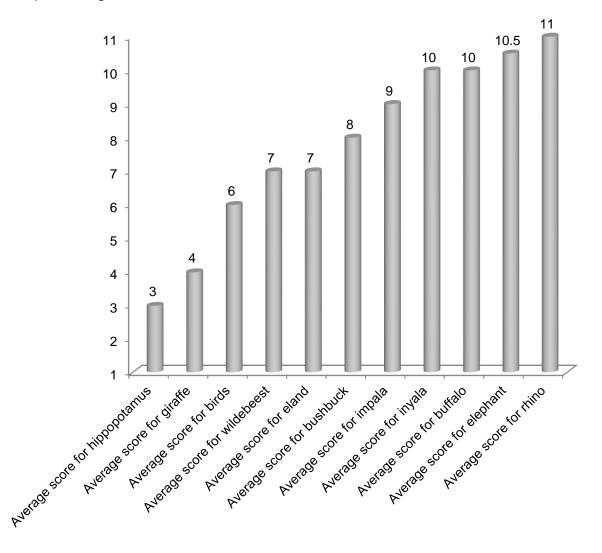


Figure 6.16 Household wildlife utility value orientation score in Makuleke community

The hippopotamus is regarded negatively because the respondents highlighted inherent conflicts with hippopotamus. The people in Makuleke community generally dislike it particularly because it is known for raiding crops, and at times threaten to kill people in the area. The giraffe is not popular and focus group members' value score was 4, which is bellow half of 5.5 on a score range of 1-11 of the Schutte Scale.

In addition, focus group discussions also indicated valuation of largely carnivorous wild animals with the exception of the monkey and baboon in Figure 6.17. The lion scored 1, which expresses the negative attitudes the focus group members showed over it. Perhaps, one critical observation pertaining to the low score of the lion is simply because the local people generally regard the lion as a problem animal that kills their livestock. The same score was recorded with respect to the crocodile and hyena. Generally, there were reports of crocodiles having killed two people in Makuleke in 2010, and focus group members also highlighted that hyenas were a big problem in the community that is known as a specie for usually killing livestock. The monkey and baboon are known to be in conflict with crop farmers. The community detests these hence; they were valued lowly at an average of 2 on a scale of 1-11. The cheetah, as shown in Figure 6.17 scored 2. This is not a popular wild animal in the area. In addition, the focus group members expressed their views that most of the carnivorous animals and the crop raiders such as the monkey and the baboon had low domestic and commercial value to them. Consequently, they are largely regarded as a threat to crops, livestock and the human beings in general.

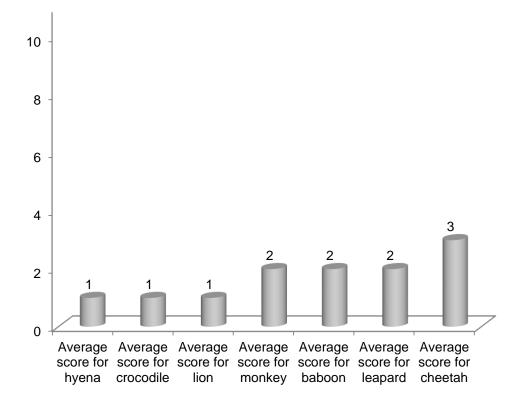


Figure 6.17 Wildlife utility value orientation perceptions in Makuleke community

Community value perceptions on wild animals show variations of value they attach to species of wildlife based on variety of reasons that focus group discussion members highlighted. In many cases, perceptions on the value of wildlife are diverse and relate to the local people's understanding of the socio-economic value of species from being commercially tradable to generate revenue for the community under the law by the Kruger National Parks. Wildlife as ecosystem goods, bring monetary benefits to the SANParks as a Department of the government through trophy hunting and tourist related activities such as game-viewing and photographic safari, just to mention a few examples of non-consumptive uses. For that reason, individual group members were upbeat that due to high commercial value of animals like the rhino, the elephant and the buffalo, which are part of the Big Five, their average value score were 10+ on the Schutte Scale rating of 1-11. This is considerably very high, which demonstrate high value that the community attaches to these species since they are regarded as income-drivers in the tourism and wildlife safari business. This high value orientation was linked to how commercially viable animal products are in real cash transaction on the capital markets.

However, the local people were quick to point out that they have not exploited the animals locally in terms of bush meat for domestic consumption or using animal products for the production of art-facts because the laws that regulate use and access protect do not allow them to do so. Ideally, the community therefore, is not the market for high value wildlife products like rhino horn and elephant tusks, which again raise concerns of the disadvantage they experience in accessing the proceeds from these profitable animal species' products. For this reason, 95% of the three groups indicated that they do not exploit the animals, even small game in the GLTP. They went further to highlight that those who needed the rhino horns and elephant tusks, were responsible for promoting using high-tech equipment in the area such as poaching using sophisticated silencerfitted guns in Kruger National Park that form the GLTP.

To understand the complexity of the community and park relations in view of poaching, this research to established the trends of poaching activities in Kruger National Parks section of the GLTP. This was done in order to understand and appreciate how the cases have been happening in the area, with a view to proffer solutions. Table 6.19 looks at the trend of rhino poaching as one area that has been reported in the media, and aroused the interests of global conservation unions around the world, and rhino poaching has been at the centre of conflicts between conservationists and communities in both South Africa and Zimbabwe sections of the GLTP. It is imperative to mention that South African having lost 473 rhinos in Kruger National Park between 2010 and March 2012 (South Africa's Department of Environmental Affairs, 2012). The impact of such

actions from a conservation point of view is very negative, and can have far-reaching ramifications for biodiversity and ecosystems in the GLTP. As such, one member of the group said:

"Those responsible were supposed to face the full might of the law. However, this has not happened because it involves at times park and government officials illegally dealing with rich individuals who always buy their justice, freedom at the expense of our resources. We have lived with these animals, and we rarely benefit from them. They stopped us from hunting in our park and yet poachers coming from far away kill our animals".

The fact that some local respondents lamented lack of benefiting from wildlife, it does not insinuate that they prefer a 'walk in and kill strategy' to take place in the GLTP. They are in fact concerned that those private operators within the GLTP's Kruger National Park do sell bush meat as biltong (special spiced and dried meat) and enjoy most of the financial benefits. Other issues that emerged from the discussions are that the usefulness of the animals fundamentally varied from potential consumption to cultural wellbeing. Factors such as how one relates to particular species of animals and the exposure one has towards it, define how humans interact with the animals and their general attitudes and perceptions towards wildlife. It is imperative to note that the community generally believes that these animals are a source of attraction in the tourism business. More essentially, according to discussion with an official in the Makuleke Traditional structure, it was highlighted that the community is cognisant of the fact that at the initial phase of the land claim, they were allowed to conduct trophy hunting in the Makuleke Contractual Park, and this brought a windfall of revenue directly to the community. That revenue was used to upgrade their social amenities such as schools, electrifying the villages, construction of Chief Makuleke's homestead, and part of the money was reportedly used to construct lodges for accommodation and the Cultural Centre provide entertainment to visitors and researchers who visit Makuleke community. There were reports also that the project benefited from a government grant the establishment of the infrastructure.

The other complementary high value of wildlife is due to tourism importance of wildlife since the presence of wild animals translates has positioned Makuleke community as a competitive destination of choice for the tourists to visit, particularly their Contract Park. They visit for a number of activities that include game viewing and photographic safaris. These activities earn the CPA some money apart from accommodation fees levied from visitors and the overall dividends they receive from Pafuri and the Outpost lodges they are running in partnership with the Wilderness

Safaris. At the community level, the CPA runs the Makuleke Bed and Breakfast lodging facility where researchers can stay, experience the exquisite local cousins and cultural dances. It is important to mention that during field visits to Makuleke Contractual Park, it became apparent that Makuleke community has achieved a lot in terms of conservation. The number of wild animals seen roaming in Makuleke Contractual Park supports, is a clear indication of how they have managed to preserve wildlife in their region. The following pictures illustrate some of the encounters by the researcher during field research.



Elephants

Bushbuck

Photo by: D. Muzeza and B. Baloyi (field visit on 12 October 2011) Figure 6.18 Wild animals encounter in Makuleke Contractual Park

There is generally positive attitude towards wildlife amongst the people in Makuleke community. This is important since it showed how the people regard wildlife as part of their everyday life in that community. However, as for the value they put on the wild animals, there were variations on average Schutte Scale scores, which means that for some animals, people do not put value to them and on others, they do. For instance, questions that sought to find out issues such as their 'liking' to have animals in the area where they live, including 'respecting animals as having rights' just like humans, and whether it was good to see animals in their villages,' the majority would agree to these questions. However, some few people strongly objected to having animals roaming around their community since they posed threats to humans and livestock, particularly the predators and crop raiders. Therefore, on some issues pertaining to these animals, there were elements of disagreements and polarization. It is important to observe that utilitarian as well as

experiential and cultural values are seen as salient determinant factors of the value disposition of people towards wildlife.

In intermediate focus group discussions, the study found a strong dislike of typical 'problem animals' in the sense that they are viewed as dangerous to humans, predatory to livestock and periodically cause crop damages. These were mainly in the category of carnivorous animals, particularly lion, hyena and crocodiles that averaged 1 on the Schutte Scale rating respectively. Others with a rating of 2 are baboons and monkeys that constantly raid crops particularly maize when it is ripe, and sometimes the local people allege that they eat vegetables in their gardens. The focus groups indicated further that their negative attitudes to these animals and their value thereof, at least from a community perspective, is very low as they prey on their livestock and raid crops. Perhaps, it is important to also mention that potential income is lost when community members lose cattle and maize crops to wildlife.

The human-wildlife relationships, particularly with respect to 'problem animals' is relatively antagonistic. In the case of Kenya, such antagonism has led to retaliatory killing of wildlife in 82% of the protected areas (Okech, undated:66), particularly where people do not get compensation in return to crop damage and predation. Generally, crop raids, predation, injury to people or even death were said to be rampant in Southern African especially among communities around national parks and conservation areas (Hulme and Infield, 2001; Coupe et al., 2002; Bauer, 2003; Magome and Fabricius, 2004). The study also used household survey questionnaires to find out if people experience any crop and livestock loses to wildlife. Above all, the understanding of whether people get compensation for the losses was also interrogated. In addition, the study further assessed how far people were happy and satisfied with wildlife benefits. If any, were they having permission to access wildlife resources for livelihood purposes? As a starting point, the responses showed community disgruntlement over crop losses, livestock predation and lack of compensation including also injury and/loss of life in the community to wildlife. The following tables show household perspectives regarding crop raiding and livestock predation.

Table 6.18 Household perspectives on crop raiding and livestock predation in Makuleke

Varied response	N	%
Yes to crop raiding and livestock predation losses to wild animals	116.05	55%
No to crop raiding and livestock predation losses to wild animals	94.95	45%
Total	211	100%

In terms of negative impacts, Table 1.18 clearly shows that 55% indicated that wildlife wee a big menace to the community. This was supported by focus group discussions were particularly lions,

crocodiles, hyenas, baboons and monkeys were identified to be the most culprit animals that usually escaped from the GLTP to raid crops and prey on livestock in Makuleke community.

Linked to this point is Table 6.19 in which 93.7% of the 211 households claimed that they have no access to utilize wildlife. Furthermore, they were of the view that the local community are not allowed to use wildlife resources in and adjacent to the park. If one looks at 93.7% in comparison with 6.3% of those who claimed to have access to use wildlife resources, indeed the margin is huge. Clearly, people demonstrated that they are not allowed to exploit wildlife resources. Ideally, this partly demonstrates ecological unfairness.

Table 6.19 Household perspectives on access and use of wildlife

Varied response	N	%
Yes to access and utilise wildlife resources	13	6.3%
No to access and utilise wildlife resources	198	93.7%
Total	211	100%

The study looked at the issues of human-wildlife relationship. While the problems with wildlife are reportedly sporadic, concerns are that there has been slow response by park authorities who apparently claimed to have no jurisdiction over animals outside the park. Ideally, it is noted that wildlife (defined as problem animals) raid and prey on crops and livestock respectively, which ultimately impinge on local livelihood strategies. This has always radicalised tensions between the local people and wildlife. Because of restrictions imposed on wildlife killing especially over problem animals, the communities are on the losing side. Over the years, the local people are not allowed to kill any of those animals they identify as causing hectic problems in the community and this has had a multiplier effect on the problem due to increased number of such cases of animals escaping from the GLTP and causing havoc in the community. Due to that, the human-wildlife conflict is on the increase, and putting wildlife-community relations on a collision path. The Makuleke communities do not have localised problem animal response teams or anti-poaching units, hence when it comes to dealing with the problem animals and poaching issues, they rely on SANPark exclusively.

In view of the significance of wildlife conservation, it is noble for park authorities and the government of South Africa to consider seriously the wildlife-human conflicts as critical matters that need attention, and should be addressed holistically. Looking at the responses, in Table 6.20, 93.7% of the household do not get compensation for crop, livestock and human injury or even life losses. Only 6.3% accounted for those who claimed to having received compensation, and the margin of era in this perspective could be the reason why they responded as such because group discussions confirmed that there was no mechanism for compensation. Further investigation

showed that usually, community members would help those who would have suffered some losses by voluntarily contributing in cash or in kind to provide assistance to households, which was mistaken to compensation.

Table 6.20 Agreement to compensation on crop and livestock loses in Makuleke
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Varied response	N	%
Yes for having received compensation over crop and livestock loses	13	6.3%
No for having received compensation over crop and livestock loses	198	93.7%
Total	211	100%

As such, the role of a compensation policy is crucial in transfrontier conservation communities to cover losses and at the same time reduce human-wildlife conflicts to tolerable levels, particularly compensating people who incurred losses to wildlife. If this is not addressed by setting up some protection units against wildlife, perhaps the park officials should eliminate the problem completely by fencing off the communities, including their repairing damaged park fence demarcating park boundary and communities so that no wild animals sneak out to the villages.

From a policy point of view, this study suggests that mechanisms be devised to allow local people to derive direct benefits from wildlife-based tourism as a compensatory strategy. Such approaches should include commercial trophy hunting that has always generated a lot of money for government agencies. This approach besides bringing the much-needed financial benefits directly to the community, it is likely to encourage the residents to conserve the fauna and flora in their vicinities, and the once regarded as problem animals can be turned into an asset by the community. With this in mind, household data from Makuleke in terms of satisfaction and happiness about benefits from the GLTP was also assessed. It is apparent that the levels of satisfaction and happiness with regard to the derived wildlife benefits is regrettably low, with only 7.2% accounting for those who claimed that they were satisfied. However, the majority of the households were dissatisfied and accounted for 92.8% as shown in Table 6.21.

Table 6.21 Levels of satisfaction and dissatisfaction over wildlife benefits

Varied response	N	%
Yes to satisfaction and happiness over wildlife benefits	15	7.2%
No to satisfaction and happiness over wildlife benefits	196	92.8%
Total	210.99	100%

Table 6.22 further shows the levels of tourism benefits at household being satisfactory with tourism employment accounting for 56.8% as compared to those who were dissatisfied at 43.2%.

Table 6.22 Levels of satisfaction and dissatisfaction over tourism benefits

Varied response	N	%
Yes to satisfaction and happiness over tourism employment benefits	120	56.8%
No to satisfaction and happiness over tourism benefits	91	43.2%
Total	211	100%

This is due to the fact that tourism employment in Makuleke is considered one of the most important source of livelihoods expected by the community. Although employment creation was gradual, it had started to bear fruits at the household level, particularly considering the enterprising nature of the community through Makuleke Bed and Breakfast (B and B) facility, the Cultural Centre, the Pafuri Guest Lodge and the Eco-Training Centre that are run by the community. The following photos show part of the delegates who visited the Cultural Centre during the study. The local lodges at the Cultural Centre resemble the traditional huts of the old Makuleke village at the Cultural Centre. Visitors are treated to storytelling drama of how the Makuleke people were forcibly removed from their land, lost their culture, kinship, heritage and sources of livelihoods. The drama and cultural dance performances are loaded with cultural and environmental meanings, since the performers narrate how important and good their lives were at the Pafuri Triangle before being removed by the apartheid system.



Photos by: D. Muzeza (10 October 2011) Figure 6.19 Makuleke Cultural Drama Group (A), community lodge (B)

One of the visitors (in Figure 6.19-A) danced with the local drama group members during a performance at the Makuleke Cultural Centre. Through drama and dance, the local elders narrate a story of how they lost their land, dignity, livestock and land during their eviction from Pafuri Triangle and they have not received compensation. The Makuleke Cultural Centre, represent the simulation of how life was in Pafuri Triangle, with the hut (B), forming the lodging facilities at the Bed and Breakfast of their historical lifestyles.

The Makuleke community embraced the concept of village and cultural tourism to ensure that the local people culture is taped into a livelihood benefit. These projects, particularly the Cultural Centre and the Bed and Breakfast facilities, generate income that goes directly to the households. For example, households rotate to prepare local cuisines for guests at the Bed and Breakfast facility, and payments for the supply of local food go directly to the household. The Makuleke Cultural Group also is paid for their performances and in turn, the proceeds are shared among group performers. During this study, the researcher stayed at the Bed and Breakfast facility and this approach is considered as ways through which visitors and researchers can contribute to the community. Generally, there is a positive attitude on tourism people directly benefit from particularly employment, make money from selling meals they prepare for visitors, and cultural performances also generate so bit of income to the members of the community. During interactions and interviews with key persons at the community local level, they indicated specific interest to leverage on the GLTP tourism to increase their earning from tourism. However, the challenge that Makuleke community is facing is that they have no mechanisms through which they can participate, and as such, their community projects are not as competitive as big operators in the Kruger National Park (KNP), which are aggressively marketed, and their products are superior to those of the community for the international market. As a result, disgruntlement between the GLTP protected areas and the community are pervasive. The private operators also fear community competition, and are largely reluctant to support community initiatives for product development for competitive community or village tourism enterprises. This partly affect the sustainability of community tourism enterprises, hence the local people do not see the importance and benefits of their contribution to conservation and collaboration in the GLTP, unless they are mainstreamed in the GLTP governance processes. This will also clarify on how they can also integrate their products and jointly market them as a collective to leverage on the robust international market appetite, and therefore broaden the benefit scope to the local community.

Ideally, this arrangement can be used in building bridges on how transfrontier conservation institutions can have a positive impact and meaning to the local people. In addition, it improves relations in terms of how people interact with communities. Sustainability may be thought of as efforts deployed to enhance both relations and benefits, with the consequential effect of minimising negative impacts on the local community, in consonance with the maintenance of biodiversity and resource base on which transfrontier conservation areas and tourism depend on. Multistakeholder involvement and joint planning even when dealing with problems animals also help to reduce local tensions complexity and the uncertainty that usually is generated, and remain unresolved in most protected areas (Clark et al. 2008). When problems persist, and are not

resolved by clear policies and institutional interventions, they may be viewed as 'messy' or 'wicked' (Allen and Gould 1986; Rittel and Webber 1973). The juxtaposition of transfrontier conservation parks and their conservation mandates with adjacent communities and cultural landscapes can turn out to be one such 'wicked' problem (Hoole 2008) if the pertinent problems are unattended to, especially where wildlife enterprises are dominated by government agencies, private companies and elites operate at the expense of surrounding communities. This creates mistrust with the local people. This is the reason why the Makuleke overall view on wildlife benefits is largely seen as not beneficial. However, they gave a positive nod to tourism because the 'trickle down' theory in terms of employment creation is felt at the local level, with earnings directly benefiting the households.

6.21.2 Forest products use and Ecological sensitivities

Forests are key components of biodiversity. They play an important ecological role particularly carbon sequestration, and equally so, they are important in the life of communities. Forest around the GLTP have various functions including an enhancement of local livelihoods. Forests products can be used for shelter. This study looked at the value of forests in Makuleke community and it was established that forests are regards as important environmental goods, which provide services that contribute directly or indirectly to the wellbeing of households.

6.21.3 Summary of forest use and impact on Makuleke

During focus group discussions, forest uses were identified to ascertain its value in terms of use in Makuleke community. From time to time, group members mentioned that people engage in harvesting of wild forest products for various reasons such as food, wild fruits and as vegetables. The following table shows the response from individual households about the value and use of forest.

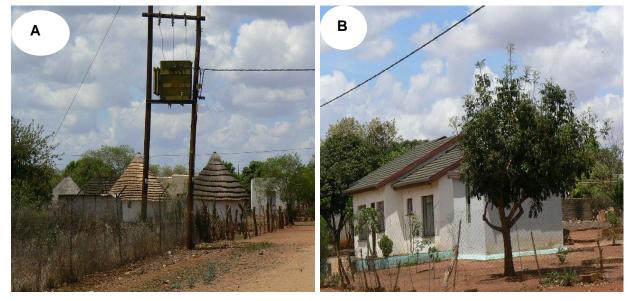
Class of species	Uses and value	N	%
Tree	Construction and handcrafts production	30.59	14.5%
Shrubs	Grazing livestock	28.48	13.5%
Fuel wood	Making domestic fire from dry dead wood	30.38	14.4%
Palms	Production of wine (Njemani) from ilalla	1.68	0.8%
Wild fruits	Production of jam and porridge mixture from adansonia digitata (baobab) pods	28.48	13.5%
Wild vegetables	Relish/food	73.85	35%
Grass	Thatching huts	0.42	0.2%
Medicinal plants	Treatment of ailments	17.09	8.1%
Total		210.97	100%

Table 6.23	Household	forest use i	in Makuleke
10010 0.20	11003011010	101031 030	

Forest products act as relish/food supplements, which from the research data accounted for 35% among the survey household sample of 211 in Makuleke community. It is interesting that an

aggregate of 8.1% plants are used for medicinal purposes to treat various ailments, while 14.4% and 14.5% of the forests are used as fuel wood, as construction materials and for the production of handcrafts respectively. Mature dead stems of trees are mostly preferred for wood fuel, and the green stems are used for construction purposes and producing handcrafts. Observation of shrubs in the area visibly showed signs of that some of the shrubs were being used to feed livestock, particularly the miombos and Mopani woodlands. Those shrubs that were used as fodder for livestock accounts for 13.5%. In as much as people use fuel wood, this applies only when there are electricity blackouts. Consistent use of wood exists among households that were not connected to electrical supplies. However, 80% of Makuleke community is electrified including grass-thatched houses. Thus, this reduces the amount of negative impact of poles and wood harvesting for purposes of constructing huts and making domestic energy supply in the community.

It is interesting to note that Makuleke is one of the few African rural villages where 80% of the homesteads are electrified. The streets too, in this rural community and paths ways have been lit with streetlights for safe movement of people doing their business. Individual homestead houses in Makuleke typify both rural and urban lifestyle outlook as illustrated by the Figure 6.20.



Photos by: D. Muzeza (11 October 2011) Figure 6.20 Grass thatched huts (A) and a tiled house (B)

The economic and social value of forests in Makuleke community was at an average of 0.2%. Grass used for thatching, and it accounted for an average of 0.8% in terms of contributing to household use. Use of grass for thatching and poles for construction of huts is declining due to people shifting forest use to solar and hydropower solar energy in the area. Building of houses

using bricks and roofing them with corrugated iron sheets and tiles is one of the landmark achievements in Makuleke, which has significantly reduced demand for poles and grass that can be harvested for building traditional houses. Because of these changes in Makuleke community in the use of forests, the environmental impact is has not had negative ecological consequences, and the fact that people have adopted modern mechanisms and technologies for energy supply and construction of houses, this has set a long-term path towards environmental recovery and sustainability. In addition, the community is also involved in environmental programmes. They are doing control of alien plant species in the community and in the Contract Park. These efforts are complementing conservation of natural resources in Makuleke community as part of environmental restoration programme initiated by the community working in partnership with an organization called Working for Water. On the other hand, Chief Makuleke is spearheading an environmental education programme of planting trees in schools and the community at large with assistance from Wilderness Safari.

These programmes considerably revitalize the environment to contribute to the development of connective forest buffer zones to the GLTP boundary and the community so that the community relies on plants they have grown for various forests goods and services. During field visits, evidence of environmental restoration programmes being led by Chief Makuleke suggested that the local people are paying attention to the importance of the environment. The local Chief Makuleke was captured on camera while on routine tree planting programme at one of the schools in the community as part of his initiative with some stakeholders who support environmental education and resuscitation. The community voluntarily undertakes these programmes with Working for Water members also dealing with broader environmental issues including dealing with invasive plants in the community and their community park. Figure 6.21. The following pictures show Chief Makuleke being assisted by one of the workers from Wilderness Safaris (photo A) to plant a tree and photo B shows members from Working for Water removing alien plant species in Makuleke Contractual Park. It is important to indicate that ecosystem restoration is an overarching and unifying.

Activity in the community that has seen forest improving through restoring from catastrophic natural and human induced disturbances such as fire and cutting down of trees from past land management practices that were not sustainable. Restoring processes and functions to ecosystems creates the resilience that helps sustain forests in the community and globally, the environmental movement is calling for communities to be at the forefront of environmental management. This also include adopting sustainable healthy ecosystems that produce multiple

benefits such as improving the forests, wildlife and fish habitat and large-scale watersheds; and reducing invasion of invasive plants that the Makuleke community is trying to address through Working for Water in the forest ecosystem. Working for Water and Chief Makuleke, are making a fervent effort to address the aforementioned areas at the local landscape levels through the development of relevant local programmes and practices. Such an approach will help us in this community's ecosystem restoration efforts will go a long way in improving environmental consciousness of the people as they apply scientific knowledge to biodiversity management problems. Figure 6.21 shows Chief Makuleke being assisted in planting a tree (Photo A) and some community members (Photo B) removing invasive plants from the Contract Park.



Photos by: B. Baloyi (31 May 2011) Figure 6. 21 Environmental education, restoration and partnership

Environmental activities in Makuleke community provide exciting insights regarding valuation of forests resources, which arguably shows how committed the community is in restoring environmental elements in the ambience of the GLTP. This affects positively on ecosystem regeneration and management. While biodiversity conservation is one of the agendas of the GLTP, researchers postulate that unless protected areas such as the GLTP take advantage of the local people and their local practices, conservation may be difficult (Higgins-Zogib, 2008:54).

To this end, Higgins-Zogib (2008:54) used India's protected areas as an example to further argue that thousands of sacred groves and sacred trees were restored through use of local people's revival of culture and local social organizational structures to lead environmental restoration process. All of these and more contributions from the local networks, add value to environmental conservation. However, Higgins-Zogib (2008:56) cautions that attempts to work with local

communities and traditional peoples in protected area is difficult unless conservationists start viewing the land or seascape as the local populations do in terms of practically including spiritual dimensions, local practices and involving local institutions for purposes of successful conservation. In fact, it is important to also mention that in the case of Makuleke, ecological restoration including reforestation and afforestation, and rehabilitation of degraded land, will be classic example of how rural communities that are looked down upon have transformed to include in their practices, an array of potential human responses to climate change. Therefore, using multiple sources of relevant local information provide better insight into what is occurring and may be the most reliable way to predict likely future environmental events in Makuleke. But now, given the increased complexity surrounding ecosystem restoration and the wide array of human dimensions that have to be factored in, particularly with respect to the GLTP, learning as coOnservationist go in biodiversity planning makes good sense when they consider the local environmental practices. This is especially relevant they increase their roles in fostering restoration of the local people's rights and helping out the private sector to leverage collectively on the GLTP forest and wildlife for purposes of mutual benefit. The key, however, will be to take what can be learnt and integrate the community into future planning and implementation efforts of the GLTP.

Informants interviewed during field research in Makuleke were quick to voice their concern that relatively secure property forest and ecosystems rights on the land around the GLTP, was pivotal to ensure that the people are motivated to make use of the resource sustainably. In all fairness, the informants argued, they have worked hard as a collective towards environmental restoration. One respondent indicated this during a discussion.

"If the GLTP Joint Management Board in its governance and management framework decides to use existing micro-institutions in Makuleke, to which we all belong as members under our Chief through the Community Property Association, mediating, regulating and policing the environment becomes easier. This should not apply to us, but also to Sengwe over there in Zimbabwe and Mozambique where we have friends and relatives respectively. We should demand those rights for inclusion, as we should be partners in the GLTP conservation. And only until that is done, then, a lot can be achieved through collaboration at local tri-lateral level such that negative sequential ecological effects on biodiversity and ecosystems inside, adjacent and outside the park can drastically be reduced" (Key informant interviewed on 13 October 2011, Makuleke community).

This observation shows elements of environmental governance and management disconnectedness in the GLTP. This is attributed to oversight over coordination of structures at local level that can potentially ameliorate some of the ecological and ecosystems problems that adjoining bioregions face in transfrontier conservation programmes. Evidently, there is concerted local effort in partnership with the private and public sector organisations, to implement environmental restoration and rehabilitation programmes that help in reforestation of degraded environments. To understand this subject further, household questionnaire sought to find out what structures do the local people preferred should be in place to assist them in environmental decision-making processes. The household views are captured in Figure 6.22

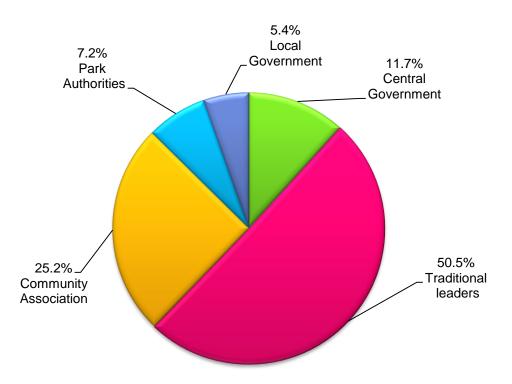


Figure 6.22 Household perceptions of environmental decision making structures

The above perceptions in terms of environmental governance indicated preferred decision making processes that household would want in respect of traditional leaders, who accounted for 50.5% and this was followed by a fair preference for community associations that accounted for 25.2%. The Governmental structures accounted for an aggregate of 23.9% (5.4%, 7.2% and 11.3% for central government, local government and park authorities), which is far less than the household views on community association and traditional leaders. Ideally, local institutions are more

preferred than government or bureaucrats dominated institutional arrangements for forest decision making. Deductively, households in Makuleke would also prefer synergies between community association and traditional leadership in environmental decision-making as shown by the high percent of the two variables, which provide a strong basis for cooperation in future broader conservation by the government. This effectively motivates the local people's desire to protect their environment.

One important observation and conclusion drawn through discussions with experts in Makuleke is that community-conserved or local environmental territories can function as key components of landscapes through which rural land can be zoned for biodiversity and ecosystem rehabilitation as already been confirmed by the local efforts in Makuleke, in which people are clearly supporting different local environmental management systems. They are conscious that environmental improvement held their livelihood activities. In an exclusive interview with an informant (13 October 2011), he indicated three main things that should underpin environmental conservation interconnections in Makuleke and the GLTP. He highlighted an element of integrative conservation, which focuses primarily on collaborative management. The second aspect is sustainable development that takes into account local natural resources conservation for rural development. The last component is research and monitoring. These aspects were contextualised in the following framework that was linked to the discussion outcome from a conservation, development and research point of view.

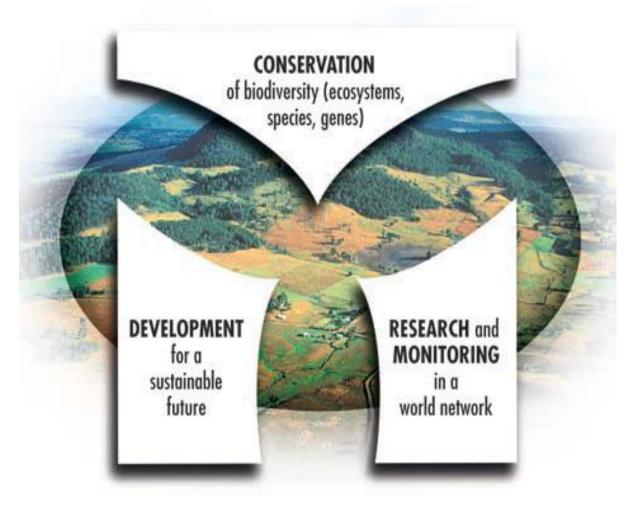


Figure 6.23 Integrated environmental conservation, research and sustainable development

The informant undoubtedly explained that the three components help to have a simplified transfrontier environmental conservation model that can assist the GLTP Joint Management Board (JMB) to integrate complex relationships with Makuleke community's local environmental restoration programme, using of course, the CPA governance systems. This would be achieved through mainstreaming the local processes by formally recognizing and integrating transfrontier conservation systems. In this regard, the informant argued that:

- 1) **Conservation:** biodiversity conservation has to involve the local people to reduce the cost that are associated with conservation of complex biospheres, particularly those cost relating to environmental policing, protection of wildlife and ecosystems in general.
- 2) **Development for a sustainable future:** It was stated by the respondent that this should happen in the context of elements of sustainability for posterity, rooted in people's culture,

values and sustainable exploitation of those resources using indigenous knowledge systems towards local transformation. Thus, in this case, it is most certain that holistic sustainable rural development that is underpinned by a health and supportive environment can be achieved. This will have to also involve local people's participation through their institutions playing a role in sustainable use and conservation.

3) Environmental Research and Monitoring: The last segment is constant environmental research and monitoring. This include collaboration and partnership with the local people to impart knowledge systems on the community members, and assist also in informing conservation policies and programme design locally. While guided by national plans in terms of ecological research and development, this organically should incorporate local knowledge processes. This resultantly creates social and intellectual efficiency and a host of capital networks that can contribute positively to help the community (interview with Livingston, October 2011). In that regard, Tapela et al., (2008:10) advised researchers who visit Makuleke to exercise principle of reciprocity, mutual benefit and equitable sharing of information with the community. More importantly, researchers are implored to impart useful skills to field assistants they work with such as offering them training on research as part of capacity building, teach them to use computers, and invite the assistants to join him/her in attending meetings or doing other fieldwork of interest give them exposure and new experiences (Tapela et al., 2008:10;13). This study conceived that side effects of this partnership would in turn inevitably have a positive impact on environmental conservation. with possibly quite serious ramifications for the community's vulnerable populations to gain skills to help them analyse their environmental problems critically and find local solutions applicable in transfrontier conservation zones.

In an important journal article published by the Secretariat of the Conservation on Biological Diversity (2008), Kothari (2008:58) observed that for over a century now, protected areas, including transfrontier conservation zones under government jurisdictions such as government-notified or proclaimed sites for wildlife and biodiversity conservation, have been managed through centralized bureaucracies in ways that totally or largely excluded local communities. Increasingly, most of these areas have traditionally had people living inside or adjacent to them, who subsequently depend on their resources. Often, with associated age-old beliefs and practices, governmental management agencies have tended to alienate communities. In this case, there is increasing evidence that the GLTP governance is exacerbating impoverishment of already economically marginalised communities through loss of access to livelihood income and

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resources, environmental physical limitations, and such related other impacts (West et al 2006; Colchester 2004; Lockwood et al 2006; Chatty and Colchester 2002; Policy Matters 15). Increasingly, though, it was indicated by a respondent in Makuleke that the basic human rights of people needed to be respected and their aspirations for sharing natural resource integrated. Failure to observe these utmost expectations can engender retaliatory action by disempowered communities. Environmental conflicts can easily arise with conservation managers whose inability to use the knowledge and practices of the local people obviously lead to contested environmental relationship. This study has noted that many factors contribute to violation of basic environmental human rights of people, and often backfires on conservation itself. This study therefore causations against any attempt that disenfranchise the environmental rights of the people. Whether this is done for political expediency for exclusive government conservation or other reasons, which in the case of the GLTP, it should not be accepted (indicated one of the teachers interviewed). Unfortunately, the local people and their processes have been ignored the voice of the local people absolutely going on unheard for their justified clarion call for increased collaborative and locally driven co-governance and co-management of the GLTP in Makuleke community. Redford et al (2008) buttressed this point in the analysis of protected areas by concluding that socially responsible, long-term approach to conservation is needed at every level of natural resource governance and management, which makes involving communities critically inevitable.

6.21.4 Cash remittances

All the livelihood economic activities have a direct link and impact on natural resources. For Makuleke community, social access to family and friends in working in Pretoria, Johannesburg and other parts of the country are a unique, yet important in terms of providing remittances. Many women interviewed and even the participants during focus group discussions, especially those in the twenty (20) to forty five (45) age groups, indicated that their husbands were working away from Makuleke. According to Statistics South Africa (2008:28), cash maintenance of family and/or remittances to family members and dependants living elsewhere including alimony/palimony paid to ex-wife/ex-husband and children, sending of gifts to persons who are not members of the household (excluding gifts-in-kind and cash gifts), were on the increase and playing an important role in sustenance upkeep of families. In fact, many African societies thrive on kinship remittances, particularly from those who go to work in towns and even abroad. In this regard, the diaspora support has been central to household reported that they have to rely on their relatives working in cities and towns in South Africa. More essentially, the remittances go across boundaries with people in Makuleke even supporting their relatives residing in Zimbabwe and Mozambique

side, and the vice versa. Thus, this highlights how the people along the borderlines are close to each other, which defies the 'artificial borders' as communities constantly interact to reaffirm their 'historical links' (Jones, 2005: 273).

6.22 Natural resources conflicts and conflict management

One of the study objectives was to understand natural resource conflict dynamics with a view to make strategic suggestions that minimise or eliminate natural resource based conflicts in both Sengwe and Makuleke communities. To address these issues, it was prudent to look at conflicts on a case basis. While conflicts have been reported in many parts of Africa where resource abundance has turned into a 'resource curse', still, there is still lack of understanding of the source of the problems, with hypothesises having been made, creating an impression that communities living inside and adjacent conservation parklands, protected areas and transfrontier conservation areas, are anti-nature. Most cases of conflicts relate to main things, which are equity and access to natural resources in which most critical allegations are made against communities in respect of natural resource poaching, especially of wildlife. Evidence in Makuleke with respect to poaching has clearly shown that Kruger National Park, which is part of the GLTP, is ridden with sophisticated environmental crimes and natural resource problems slowly becoming difficult to deal with in the entire GLTP. Many of the contentious poaching cases that are reported in the area are alleged to be committed by outsiders rather than the communities such as Makuleke. Empirical data has shown that there are no reported cases where the local people from Makuleke villages have been caught to be poaching animals in the GLTP, let alone Kruger National Park. According to interviews that were conducted with both Park officials and some community leaders, it was established that most critical conflicts fall into five categories. These categories pose challenges because of jurisdictional incompatibilities in dealing with the cases holistically as follows:

- 1) The problems of poaching and therefore the need by park authorities from each participating partner country (Mozambique, South Africa and Zimbabwe) is dealt with decisively in the GLTP from the perspective of that country's laws.
- 2) The problem of human-wildlife conflicts involving communities with consequential negative effects on human lives such as livestock predation, crop raiding, damage, human injury or even death, are not currently being attended satisfactorily in Makuleke community.
- 3) The disconnectedness and exclusion of the local people arising from lack of an inclusive and synergizing participatory platform in the governance of the GLTP, generally is creating

mistrust, suspicion, antagonism and undermines local collaboration in conservation of natural resources between park managers and the community members.

- 4) Bureaucratic communication on matters that relates to human-wildlife conflicts tend to take a long time to prompt actions to correct the problems. In many cases, where even the Makuleke community would have detected cases of poaching, crop raiding and predation or even veldt fires, reporting the issues is difficult and the response comes rather late when damage to nature through poaching would have done, or the damage to human livelihood would have happened.
- 5) The historical losses of land, and even loss of livelihood assets to wildlife without compensation, have always been a source of discomfort among Makuleke people. As highlighted by de Villiers (1999:4), members of the community claim that they were deprived of their land and natural resource rights in pursuit of discriminatory conservation policies and practices, and that they were removed from the Makuleke region forcefully with no compensation of their loss to property, livestock, fertile land and personal belongings. This problems and the attended GLTP governance regime seem not to recognize these local legitimate claims. In that scope of things, relations remain highly volatile, considering that the critical livelihood issues in Makuleke that relate to natural resource access, including land have not enabled the people to derive corresponding livelihood benefits with what they used to get in Pafuri region.

It is imperative to mention that the degree of poaching of the big mammals is not at all reported in Makuleke, despite few environmental dangers arising from subsistence activities. The subsistence activities are premised largely on livelihood practices such as fuel wood collection and population growth, which is potentially putting a strain on habitat land, and land degradation, which can lead to loss of rich soils for crops and loss of fodder for livestock. Thus, this increases the human-wildlife conflicts since domestic animals are forced to roam around the protected parkland to graze in the park. In other words, dispersal land becomes limited since it is affected and wild animals scavenging for food end up also encroaching on community fields, thereby getting into contact with livestock, people and in many cases raiding crops, and prey on livestock.

6.23 The GLTP and Makuleke community: Poaching conflict scenarios

Wildlife in many parts of the GLTP including the Kruger, Limpopo and the Gonarezhou National Parks, face incessant threats from high-tech poaching reported in the last 10 years. These cases involved use of guns and other hunting equipment fitted with high definition silencers. Until recently, it has not been established realistically on the complexity of the situation because the park managers were used to suspect the wrong people all together. It has been noted that the poaching problem was involving sophisticated syndicates spanning to global capital markets, particularly due to increased demand of the rhino horn, elephant tusks and other fauna as well as some of the floral products. As such, protected areas and the GLTP in particular, have been under incessant threat from poaching. Accordingly, Makuleke community is caught up in this complex matrix of conflict between poachers and park managers, had limited understanding of what was happening, thereby preferred to deal with the problems as they suspected. This increased tensions between the community and park authorities.

South Africa has experienced the largest wildlife losses, with Kruger National Park alone having lost four hundred and seventy three (473) rhinos (Department of Environmental Affairs, 2012). The Daily Sun (January 17, 2012: 6). It was reported that commercialization of wildlife products in Asia, particularly China and Vietnam, among other markets, are linked to the rampant poaching of the big game, particularly the Big Five (Lion, Leopard, Buffalo, elephant and Rhino). To this end, the commercialization and subsequent financial value attached to these animal products more than the local intrinsic and aesthetic value local communities culturally attach to the animals engender rampant poaching. This creates suspicion particularly over the local people. As one author once said:

"Decisions being made solely along financial lines are one of the biggest threats to the environment we have today. It is time to take off the economic blinders and look at the whole picture. Killing elephants for their ivory rather than seeing the intrinsic value of the species as a whole is an example of this tragic short-sightedness". (Jake Wall cited in Save The Elephants (STE) Annual Report, 2011:26).

To broaden the scope of this argument, it is further highlighted that continued loss of productive cows through poaching and hunting makes it easy to understand that rhinos in southern Africa, are entering a new phase of negative population growth rate (San Wild Magazine, 2011:11). More essentially, continued decimation of wildlife in conservation areas, protected and reserve areas, is leading to extinction crisis of some animal species unless some measures and concerted efforts

are employed from all concerned parties to stop the heinous slaughter of wildlife, be it legal hunting or poaching (San Wild Magazine, 2011:11). Based on these observations, there is growing concern about sustainability of the GLTP, and coincidentally, cases of environmental crimes have increased against the backdrop of diminishing community involvement in natural resource governance and management. There is an assumption that the demise of community structures to complement conservation has ultimately taken its toll on increased cases of resource poaching. The simple reason to this notably sad development was attributed by key informants to minimal participation of the community as arising from mere lack of involvement in the GLTP governance processes.

This study further noted with interest that while it is the responsibility of the government of South Africa, through SANParks, to preserve its heritage in the form of biodiversity, it is also important to highlight that financial constraints and human capital limitations to police large areas like the GLTP of approximately 35 000 square kilometres is problematic for effective monitoring without enlisting the support from communities around the GLTP. It is prudent therefore to revisit the GLTP administrative structures and incorporate communities as natural resource monitors to complement government efforts. The Star newspaper (January 17, 2012:5), reported that most poachers of wildlife such as rhino, elephants and other large game, were committed from Mozambique. This involved organized syndicates spanning from largely South Africa and Mozambique, and very few such individuals are cited as Zimbabweans in the poaching of animals. Perhaps, one needs to consider the point that unless communities are empowered, integrated in the governance structures and have some form of natural resource authority to participate in conservation and derive benefits from this mega park, the GLTP will continue to face huge problems. These problems are centred on complex management of the expanded dispersal areas of fugitive or migratory species that straddle across the three parks. The impact therefore is indeed negative, since the large areas are difficult to police hence this lack of environmental monitoring threatens biodiversity conservation in the GLTP. To this end, the South Africa Minister of Water and Environment Affairs, through SANParks, is now considering re-erecting the fence that had been brought down at the eastern border with Mozambique, to extend it to about 150 kilometres and put an additional 150 game rangers (The Star newspaper January 17,2012:5 and the Daily Sun January 17, 2012:6). These increases the costs of policing the environment, which would easily be circumvented should the GLTP protagonist change their governance approach by improving community collaboration on all sides of the GLTP as critical natural resource stewards.

As the re-erection of the fence is imminent, and seriously, under consideration by the South African government, it is assumed that, this further defeats the whole purpose and objectives of the GLTP as a facilitator to regional integration. By establishing this park, it was envisaged that it would enable the free movement of wildlife, and the possible environmental consequences due to wildlife concentration pressure would drastically be reduced. Wildlife pressure particularly in Kruger National Park was reported to having been inducing environmental degradation. More importantly, that process of re-fencing sections of the GLTP, is again ironic since discussions about transboundary conservation highlights the need to remove 'artificial borders' and restore 'historical links' in seeking to distribute benefits to communities (Jones, 2005:273). The issue of poaching and the apparent failure to manage it at this juncture shows how negative the GLTP natural resource governance system is disconnected and contributing to increase poaching never experienced before. In this regard, two important things became known during the study that includes:

- 1) Lack of a concise tri-laterally harmonised legal system that can be applied to achieve positive biodiversity and ecosystems conservation. For example, the SADC Protocol on Wildlife and Law Enforcement, Article 6.2, clearly states that SADC Member States collaborating in transfrontier conservation should endeavour to harmonise legal instruments governing the conservation and sustainable use of resources. Harmonisation of policies and laws, as this studies can authoritatively point out, includes, among other things, standardizing measures for the protection and conservation of wildlife and their habitat. It should go further to include regulating trading of wildlife products. It involves dealing with poaching and hunting, granting powers to wildlife managers to enforce laws particularly dealing with extradition of environmental criminals, and the application of appropriately punitive sanctions against environmental crimes committed by offenders in their home countries. This will ultimately discourage continued decimation of precious biodiversity and ecosystems. However, because of lack of harmonisation of laws in the GLTP and subsequent lack of collaborative local and governmental units, environmental crimes have continued to take place unabated in the GLTP, particularly poaching of wildlife. While discussions are proceeding at the GLTP level and are at an advanced stage in the Joint Management Board, the delays in concluding these mattes affect negatively on sustainable conservation of wildlife in terms of dealing with the poaching problem.
- 2) There is lack of a functional community collaborative mechanism, which explicitly means that the rate of poachers, even those individuals that the community may know are involved in

these illegal activities, will go unreported since the local people are not part of the conservation process. In fact playing a zero sum game to the process of conservation, has negative ecological consequences. The unanswered question is how can the GLTP take advantage of community structures and its entire population to arrest environmental crimes? The answer to this lies in governance institutional and GLTP governance reform through integration, which should see apportionment of powers and authority to the local level institutions in a genuine participatory manner for communities to deal with the problems.

To show how serious problems of poaching are in general in the GLTP with particular reference to Kruger National Park, Table 6.5 gives detailed statistics of the trends of rhino poaching in South Africa. Kruger National Park alone lost 473 rhinos from 2010 to March 2012. If unchecked and addressed, the prevailing situation has the potential to deplete the rhino population in Kruger National Park side of the GLTP, and South Africa in general.

Province/	Rhino Poached Arrested offenders											
National Park (NP)	2	2010	2	011	2012 2010		2011		20	12		
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
Kruger National Park	146	44%	252	56%	75	56%	20	22%	82	35%	67	41%
Mapungugwe NP	0	0%	6	1.3%	3	2%	0	0%	0	0%	0	0%
Gauteng	15	5%	9	2%	0	0%	10	11.2%	16	7%	10	6.1%
Limpopo	52	16%	74	17%	17	13%	29	33%	73	31.4%	16	10%
Mpumalanga	17	5%	31	7%	3	2.2%	0	0%	2	0.8%	7	4.2%
North West	57	17%	21	5%	15	11.1%	3	3.3%	34	15%	36	22%
Eastern Cape	4	1%	11	2.4%	3	2.2%	15	17%	21	9%	2	1.2%
Free State	3	1%	4	1%	0	0%	6	7%	0	0%	0	0%
KwaZulu Natal	38	11%	34	8%	18	13.3%	54	61%	2	1%	5	3%
Western Cape	0	0%	1	0.2	1	0.1%	0	0%	0	0%	2	1.2%
North West	1	0.3	0	0%	0	0%	1	1.1%	0	0%	0	0%
Total	333	100%	448	100	135	100%	89	156%	232	99.2%	165	88.7%

Table 6.24 Rhino poaching in South Africa

Source: Department of Environmental Affairs (March, 2012)

Table 6.24 shows that from 2010, 2011 and the first quarter of 2012, according to the Department of Environmental Affairs (2012), 916 rhinos were poached. Kruger National Park, which is part of the GLTP, accounted for 473 rhino poaching cases. Generally, these cases are on the increase. A SANParks officer attributed most of the cases to the growing market demand of the rhino products as well as other wild animal products in European and Asian markets. Surprisingly, the officer indicated that these cases involved largely government and park officials who were colluding with outsiders poaching wild animals including elephants. Three cases of poaching were reported the having occurred from 2010, 2011 and first quarter of 2012, involved community

members who colluded with some poachers to kill some wild animals in the park. However, the SANPark pursued them to Limpopo Province and were arrested.

Although government conservation agencies laid blame on communities in and adjacent to the GLTP, these could not be confirmed. Accordingly, specific poaching cases that involved the local people were raised during discussions with one of the KNP officials in Makuleke. Two cases that occurred in 2010 were of poachers who entered Makuleke Contract Park, having been shot dead by game rangers. The study noted that there is habitual suspicion from the park official that insinuate some obvious allegations on community members that they might collude with outsiders poaching wildlife resources from Kruger National Park, but this was not substantiated with evidence. On further probing, the conclusions by the SANPark officials were informed by the generalized historical mistrust and antagonism between communities and parks that entrenches rigid dichotomous conservation approach demanding a complete separation of humans from the environment. Interestingly, some park rangers have been arrested for colluding with outsiders to commit heinous environmental crimes in the GLTP, particularly on the Kruger National Park side (AIKONA, 2012). SANParks Chief Executive Officer, Dr Mabunda intimated the same sentiments when he said:

"I am personally saddened to discover that some of our own would so callously abuse the confidence and faith that we have entrusted upon them" (AIKONA, 2012).

What is critical perhaps, is to also realize that in a scenario where wildlife-induced damages to human property and life are neither controlled nor compensated, negative local attitudes towards conservation and wildlife resources develop and become entrenched (Okello and Wishitemi 2006:90), and the propensity of people to be corrupted by poachers becomes high. It was found during research that Makuleke sometimes experience problems with wild animals, particularly predation and crop raiding, but they are not compensated for losses. This is made worse when local communities do not benefit from wildlife resources and are alienated from wildlife-related economic enterprises such as the lucrative tourism industry. To this end, there is tension in the community that mirrors a simmering conflict based on them, are no longer practicing hunting that earned them a lot of money in the early days of the Contractual Park, yet the private sectors enjoy such benefits from the GLTP. This appears to contradict the rights of communities as Mabunda (AIKONA, 2012) argues:

"Everyone has a right to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that promote conservation; and secure ecologically sustainable development and use of natural resources, while promoting justifiable economic and social development".

The community concerns are that private sector tourism infrastructure being developed will change the status of the park, but this is without clarification on how benefits will be shared with the community. To buttress that point, this study proposes that when local communities feel that both government and conservation stakeholders value wildlife more than their lives, and their livelihoods, or their development aspirations, opposition to conservation initiatives can be swift and uncompromising. One solution to this is to empower communities to manage the resource and allow access to benefits from wildlife resource exploitation to reach the local people found adjacent to these conservation hubs and protected ranch dispersal areas. It is ecologically intelligent to collaborate with the local people adjacent to transfrontier parks a means to make conservation self-sustaining. At the same time, allowing them to participate in natural resource governance has far-reaching positive implication in curbing poaching and piracy of biodiversity products.

Going forward, it is apparent that an issue relating to the GLTP eco-tourism development as a livelihood and a way of adding value to the lives of people has completely ignored the following fundamental points:

- 1) It has not recognized local processes and build awareness about local conservation values and their importance to society as well as to modern conservation processes.
- The GLTP has not defined clearly how it provides direct benefits and empowerment for the local people as integral destination, without retrogression on environmental, cultural or local living standards.
- 3) The GLTP has not demonstrated respect for the local people, their customs and culture as potential areas to leverage for sustainable conservation.
- 4) There is a failed realisation by GLTP planners to support sustainable development of local economies through direct involvement and participatory decision-making.

However, it is frustrating to Makuleke community to experience wildlife-induced loss and generally never compensated. It is obvious that controlling human encroachment and associated activities is a difficult endeavour (Osemeobo, 1993), however managing migration to Makuleke, helping them use natural resources to improve livelihoods and poverty reduction, can help reduce human

impacts and motivate collaboration in sustainable natural resource use and conservation. No ruralbased education about the use of such resources will succeed if local community needs and opinions are not met or taken into account in conservation and environmental planning, with Kothari (2009:57) suggesting that this can be achieved through innovation of participatory or community based governance of natural resources or protected areas.

6.24 Strategies for minimizing poaching: community perspectives

A high proportion of respondents in Makuleke reported that conservation-oriented meetings should be coordinated by SANParks, which accounted for 64.9% (n = 137 households). However, 35.1% of the people suggested that some form of collaboration with community leaders (35.1%, n = 74 households) is necessary since this was envisaged that it would play important role in the reduction of illegal hunting activities in the GLTP ecosystem from the South African side, particularly the Makuleke community. This type of coordination and collaboration was also supported by outcomes from focus group discussions in which it emerged that the people preferred community involvement using local structures. They went to the extent of suggesting that the park authorities can coordinate communities in Mozambique and Zimbabwe to start working together anchored on the local leaders as a structure, and then come up with an integrated communication system to alert each other as communities on matters to do with conservation and dealing with poaching in the GLTP.

The above assertions were directly linked to responses that also sought to understand participation of the local people in the governance and management of the GLTP as a mechanism to curbing environmental crimes. In that regard, 65.8% of respondents from Makuleke reported that they were not participating and 34.2% acknowledged participation. Ideally, the success of conservation and conservation sustainability, hinges on the amount of participation of people. Other mechanisms of reducing poaching highlighted by respondents in the study during focus group discussions, included existence of penalties that they said should be a deterrent across all countries involved in the GLTP (Mozambique, South Africa and Zimbabwe).

More importantly, they further suggested that those investing in the GLTP should consider using employment of the local people to managerial positions so that they also enjoy the accompanying benefits from the GLTP investments so that individual people can improve their livelihoods. It was also noted with concern that some of the people lack skills, and the respondents were quick to suggest that training and capacity building was pivotal, particularly the Community Property Association. The respondents suggested that availing bursaries as recently done would go a long way in creating adequate local capacity for eco-tourism and hospitality management. Buttressing this point was a strong recommendation for community based anti-poaching patrol training, having a pool of resource monitors and recruiting local rangers to collaborate in conservation. Perhaps, one important output that come out of discussion with Makuleke households was the issue of holistic and comprehensive environmental education and locally based policing that they suggested should be recognized and merged with national structures with a clear delineation of mandate for each structure so that there are not overlaps of functions.

6.25 Implications for communities and biodiversity conservation

Historically, the establishment of protected areas occurred with little regard for residents or surrounding human populations. Resultantly, conservation has long excluded local communities, criminalising traditional livelihood activities as an anathema to natural resource sustainability, and in that regard the tends has been abolishment of communal resource rights and at times, enforcing involuntary removals of people in the quest to create wildlife buffer zones, animal corridors and expansion of conservation areas. (Hoole, 2008; Uddhammar, 2006). This heightens the humanenvironmental conflicts, particularly where benefits fail to trickle down to the local people. This is despite the fact that the Makuleke community has justified custodial claims of natural resources that also underpin their livelihood. Economic, social and cultural implications are typically not afforded enough consideration (Adams, 2003a; Fortwangler, 2003; Turner, 2004), resulting in profound equity issues (McShane, 2003). It was highlighted during the discussions that in terms of local endeavours, communities are seeking parity in advancing their livelihoods and at the same time participating in natural resource conservation. The dichotomous elements in the GLTP governance, coupled with historical complications persist today in the form of continuing marginalisation and impoverishment of the community. The disgruntlement locally manifest in low interests by the community to collaborate because they do not feel to be part of the GLTP process. There is a recognised need therefore, to address these disparities in ecological institutional reengineering so that there is equity (Worboys et al., 2005; Adams and Hutton, 2007; Chape et al., 2008; Kothari, 2008). In the spirit of conservation of complex biodiversity and ecosystems, officials alone would not achieve much if the local people are not involved, lack support towards their livelihood practices, or fail to offer the community reliable livelihood alternatives. No longer is the case to strive to achieve national and political ecological expediencies without balancing it with local interests. It was noted that local demands are seen as ethically or politically unacceptable in 'Peace Parks,' governance and their management (McLean and Straede, 2003). Furthermore, it has been noted that Makuleke community's support towards sustainable conservation is perceived as essential locally, but this has not been appreciated at the GLTP level. Thus, it has not guaranteed long-term sustainability of protected areas (Michaelidou et al., 2002; Borrini-Feyerabend et al., 2004; Worboys et al., 2005; Shadie and Epps, 2008;).

Without local support, conservation efforts may be deemed difficult and can easily be compromised. For example, contravention of park regulations and degradation of natural resources can be the ultimate outcome of this neglect of communities in the management of natural resources. Some would contest this view arguing that conservation agendas can still dominate and the state agencies can still manage the problems regardless of local oppositions (Brockington, 2004; Brockington et al., 2008). However, this can be done at a huge conservation cost especially the resources that are needed for law enforcement in the absence of local collaboration. It is noted that in the majority of cases, many developing countries have inadequate financial, material and human resources to tackle effectively ubiquitous biodiversity and ecosystems conservation. Because of this problem, governmental and non-governmental structures can ecologically leverage on existing local people such as the Makuleke Community Property Association for broad-based biodiversity and ecosystems conservation in the GLTP. The ripple effect under those circumstances is drastic reduction of costs for environmental conservation, giving hope again for recovery and restoration of flora and fauna in the GLTP. More essentially, protection of local livelihoods or their enhancement by supplementary livelihood options can then act as local incentives to motivate the local people to conserve natural resources because there will be clear benefits derived from biodiversity and ecosystems management.

This study also suggests that there is need for strengthening of local institutions or their integration with governmental structures. This is based on the realization that governance of natural resources and law enforcement are multi-stakeholders process issues that entail getting on board those who live adjacent to the 'Peace Parks' as resource stewards. In addition, increased environmental awareness and environmental education are critical components that result in biodiversity sustainability. In addition, the problem of resource poaching poses enormous threat in the GLTP. Hence, the need to include the local leadership to assist conservationists, which manifest in grassroots support being harnessed as the local leadership ordinarily, works with their entire community.

6.26 Conclusion

Data presentation and analysis of Makuleke community show important features, complication, inevitable complexities and niceties regarding the GLTP resource governance and its subsequent impact on local livelihoods and conservation of natural resources. Quite clearly, this study

acknowledged existence of robust local institutional systems that can easily be mainstreamed in the broader GLTP 'Peace Park' project, only upon recognition of the local structures as important facets that help the community to play its part in sustainable conservation. Unfortunately, traditional livelihood practices and their knowledge systems are being eroded due to dichotomous and exclusionary transfrontier governance processes such that nature is locally perceived as wholly owned by government through SANParks. Complicating this matter is the fact that the much-publicized galore of benefits that the local people expected from the GLTP, have not yet been realized. Perhaps, one conclusion drawn from Makuleke results and sentiments raised by people is that transfrontier conservation strategies have restricted indigenous people's access to natural resources through imposed land tenure system and natural resource restrictive arrangements (Langton et.al. 2005). This has seen environmental management literally being government dominated in terms of resource governance power at the expense of the local institutions. For conservationists, global biodiversity preservation has taken precedence over livelihoods needs (Langton 2003), but one would be quick to question its sustainability especially when the same resources are expected to be used by the local people for poverty alleviation. It those resources do not translate into adding value to the life of the people, the chances of actual resource capture and environmental abuse is likely. More importantly, one would guestion on what has happened to the objectives of sustainable development and poverty alleviation through use of locally available natural resources. What comes out, as Bucher (2009) would argue, is the triumph of neo-liberal market forces in a globalized world, upsetting local livelihood productive systems and complete disregard of the local level institutions of natural resource governance. Ramutsindela (2007:105) branded Transfrontier Conservation Areas and 'Peace Parks' as having created a 'scale of marginality' due to its supranational governance scale that operate at regional level without taking cognisance of the local platforms. This tends to have a marginalising effect of local stakeholders such as communities living inside and adjacent to 'Peace Parks'. This prompts the need to have new institutional arrangements. In this case, of the GLTP outcome is unsatisfactory putting Makuleke community in the jigsaw puzzle of a hot contest between traditional local structures and modernisation development theory in terms of governance of global commons that apparently has legitimized state agencies in and around the GLTP at the expense of the communities.

In this context, understanding the livelihood complexities of the poor, powerless, and their coping measures, and subsequent inclusion in the governance and management of biodiversity is of great importance, which challenges the thinking of the ecologists, conservationists and park managers' prospect for local involvement in the GLTP. Conservationist will also have to realize that

exclusionary conservation is simply not sustainable even if it manages to stave off some extinction of some species, and saved a number of crucial habitats for a time. In fact, the unanswered ecological rhetorical question is, is it ethically justifiable when those who have adequate means of livelihood and luxuries, impose restrictions on those who are already living on the edge, surviving only on what their environment is able to provide. This calls for striking a balance between sustainability and ensuring the local people are not impoverished. Lastly, and perhaps one important point to make is that state and community institutions, need to find a common denominator, particularly by devolving authority of the GLTP governance and conservation to communities so that participatory decision-making and resource governance can take place at the local level being part to the multi-tier resource management system.

CHAPTER SEVEN

Sengwe community case study

SENGWE COMMUNITY PRESENTATION OF RESULTS, ANALYSIS AND DISCUSSION

"Go to the people Live among them Learn from them Plan with them Work with them Start with what they know Build on what they have Teach by showing Learn by doing Not a showcase but a pattern Not odds and ends but a system Not piecemeal but integrated approach Not to conform but to transform Not relief but release"

Credo of Rural Reconstruction (From Dr. Y.C. James Yen's Vision in Singh, 2006: 61)

7.1 Overview

Chapter 7 presents and discusses findings from Sengwe community. Sengwe community has three villages that are located in an area designated for the establishment of the proposed Sengwe Corridor, which is yet to be gazetted by the Government of Zimbabwe. The proposed animal transitory animal corridor enhances fugitive wildlife movement across from Gonarezhou National Park in Zimbabwe to Kruger, and Limpopo National Park of South Africa and Mozambigue respectively. Perhaps, it is important to highlight that the data presented in this chapter is a culmination of a research process using various data gathering techniques that included household questionnaires, focus group discussions, personal structured and unstructured interviews, exploratory observations and pictorial caption of various activities to ground-truth livelihood issues in the study areas. Field-based results from Sengwe have shown varying impact of the GLTP on socio-economic activities and participation of the local people in resource governance. The study further noted that institutions governing natural resource in Sengwe are embedded in local government systems. Thus, Sengwe community technically faces challenges when it comes to environmental or biodiversity mainstreaming as far as natural resource governance is concerned, let alone for the local people to exercise their autonomy, particularly on environmental decision-making processes in an attempt to determine benefits streams under the Communal Areas Management Programme For Indigenous Resources (CAMPFIRE). Generally, Sengwe community is lacking in coordination on how people can participate in the GLTP and

noticeably so, there is fragmentation and disconnection between what happens at the national and local levels. This fragmentation coupled with lack of Ward based conservation leadership, lack of cohesion and absence of robust social organization, impede the possibility of harnessing local collective action on resource claims and in articulating local people to demand their participation. These specific demands go hand in hand with the need for inclusion in conservation and natural resource governance in the GLTP project. As a result, government strong presence means that bureaucrats dominate biodiversity and ecosystem planning. This study observed that Non-governmental Organisations (NGOs) have been trying to assist the community to exploit their resource in a manner that is sustainable and to improve on their livelihoods through various projects using natural resources in the neighbourhood. However, these organisations are limited in terms of civic engagements to the community level, with no mechanism put in place that interface them with the GLTP planning process. In that regard, no mandate has been bestowed on these organisations to act on behalf of the community despite having the expertise and the capacity to support government development efforts. Ideally, there is nothing on the ground that amplifies local resource rights and claims. Going forward, it is apparent that advocacy on sustainable resource use that these organisations have long been working on in support of sustainable rural livelihoods, is caught up a complex matrix reluctance from the government to give them the space to advance community interest and facilitate environmental practice, particularly in the advent of the GLTP. Given these circumstances, biodiversity and conservation decisions are taken with limited consideration of local resource interests and again without effective consultations being done from the local people to inform environmental policy decisions and actions that governments can take with respect to natural resource governance in an interlinked ways to local resource needs.

7.2 Introduction

The greater scheme of things is that transfrontier natural resource conservation in its broadest developmental sense is premised on promoting a win-win situation on a variety of expectations from improving conservation, biodiversity sustainability, bringing economic benefits to communities and most importantly, improving rural livelihoods (Jones, 2011, 1 citing Braack, 2000 and Theron, 2007). Furthermore, the transfrontier conservation concepts also seeks put heavy emphasis on eco-tourism enterprises development, which, in terms of the UN Millennium Development Goals (MDGs), is the driver for economic growth and poverty alleviation. It is against this background that any process therefore in the GLTP has to position the GLTP as the flagship to provide economically sustainable livelihoods to the people living inside and adjacent to this mega park. The results and the discussion in this chapter, demonstrate conservation quandary in

which questions abound on transfrontier governance, which is overtly multi-faceted and multilayered to the extent that it has dispelled synergistic elements that would have connected economic growth brought about by the GLTP with an improvement on the local people. This could be done through improving local livelihoods and enhancing local resource governance. In Zimbabwe and Community Based Natural Resource Management, and CAMPFIRE programme, are lauded for having achieved significant transformation of rural development. Ideally, research has shown that while this is the basis upon which collaboration and GLTP-Community governance synergies could be found, but reaching this typology in transboundary governance that guarantees local resource interest, remains elusive and has not been envisaged by the GLTP planners. While collaboration has been achieved at the trilateral level, there are limited livelihood gains derived at the communities. The local people in Sengwe, part of the GLTP, are questioning this neo-liberal conservation, which is essentially a top-down government initiated, private sector driven and tourism market led process. At the same time, the GLTP governance architecture raises concerns among households with the majority of respondents expressing disapproval of the current resource governance and they allege that it typifies superimposition of a new era in conservation. Clearly, it disturbs local environmental values and temper with the way people would conceive how to use and tempers with resource ownership structures at the local level, a process largely dominated by national, transnational technocratic elites and institutions to the extent that the whole process exclude the local people. Arguably, Sengwe Wards (13, 14 and 15), have not had significant buy-in of the GLTP project let alone, representation of local interests in the GLTP governance structure. Thus, the mere lack participation by the local the people restricts people from claiming ownership of the resources while bureaucrats crowd out the local scale along legal representational technicalities. It is the view of this study that by so doing, this undermines local natural governance and conservation decision-making. This prompted Wolmer (2003: 268) to highlight that since 2000 when the GLTP was launched there was next to no consultation of local communities during this process by the Zimbabwean government, and the Department of National Parks and Wildlife Management (DNPWLM) appeared to have a limited idea of what they had committed themselves to. The current disjuncture in the administrative governance of the GLTP in which community natural resource interests are seemingly at stake, is a structural administrative governance misnomer that potentially precipitate natural resource conflicts between those who govern (state agencies) and the governed (community). This study therefore noted locational interdependence of Sengwe community as the defining link for positive human-biodiversity relations in the three Wards. It is only logical that those communities such as Sengwe and their resource claims, are justified in terms of their fundamental right participate in contributing to the GLTP processes in order to enhance their local livelihoods and collaborative conservation.

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Discussions with the local people individually and through focus group discussions, informant interviews, exploratory surveys and household questionnaire responses, clearly showed that there is a narrow set of interest, and not those of the communities inside and adjacent to the GLTP being advanced at the moment. Lack of involvement has therefore direct socio-economic and conservation implications, which can jeopardize prospects for the success of the GLTP. It is also noted that the impact of conservation governance power imbalances manifestly result in elusive mix between numerous paradigms wanting to address economic issues, achieve conservation on one hand, and at the same time, the need to improve rural livelihoods based on natural resources as key economic assets. The paradox can be understood by the deliberate failure to find a synergistic resource governance system that combines the local processes and government, conservation agencies and the private sector tourism enterprises. Community institutions such as the CAMPFIRE could be a big opportunity to start working with in a long terms strategy that bridges the gap of relations between government conservation agencies and the communities. Simply put, this suggestion would call for an elevated co-management strategy. If anything, due diligence was not given on the integration of various players from the local level to the national, regional and international level. Officials are again not yet prepared to go in that direction, thus local natural resource interests, local resource rights and conservation collaboration is far from being achieved, which directly affect relationships that can be fostered by the communities in relation to biodiversity conservation in these mega parks.

7.3 Juxtaposing institutional systems in the GLT

Sengwe community stands out as one example of a community that exercise limited autonomy as far as natural resource governance is concerned because of constraints that the local institutions face. In Zimbabwe, local institutional processes are largely subject to Local Government regimes. This has direct consequences on how environmental decisions and resource claims can be made. The fact is that communal land in Zimbabwe is partly under the jurisdiction of Local Government, but legal niceties exist in the Traditional Leadership Act (Chapter 29:17) subsection 29, which confer some powers to traditional leaders to deal with land administration in accordance with the Communal Land Act (Chapter 20:04). Any allocation and distribution of land is vested in the Minister who has the approval authority, and this is the Minister of Local Government. Thus, even though there is conferment of powers to traditional leaders and powers remain cosmetic and constrained when it comes to land upon which natural resource are found. In that regard, it also implies that even on matters of natural resource governance and management, particularly exercising acquisitive and distributive powers over land and its ancillary resources, the local leaders do not enjoy autonomy.

One central study of institutional dynamic in Sengwe community is the Communal Areas Management For Indigenous Resources (CMPFIRE).CAMPFIRE in essence was premised on community involvement and granting proprietorship on the local people to earn direct economic benefits from wildlife. This at the inception of the programme provided effective incentives for wildlife conservation (Murphree.2003:4). However, in the last ten years, the programme literally collapsed because of the debilitating underfunding and donor withdrawal, coupled with economic sanctions that were imposed on Zimbabwe.

The CAMPFIRE organisational dynamic that was adopted in mid 1980s, and was set under the Parks and Wildlife Act of 1975, which devolved authority over natural resource governance and management of wildlife to Rural District Councils in Zimbabwe (King and Cutshall, 1994:2). Arguably, the functionality of CAMPFIRE at the local level is highly dependent on local government administration systems, policies and legislation especially as enunciated in the Rural District Council Act of 1988. The CAMPFIRE structures, as robust as they were then, have not found practical expression down to the communities, which institutionally mean that the power to enhance local livelihoods in the context of the GLTP process is limited. Murphree (2004:23) discussed the "Vertical Compartmentalization in Legislation and Agency Responsibility" in which he argued that the administrative disjuncture in that vertical compartmentalization in legislation and agency responsibility as far as governance and management of natural resources is concerned, most likely lead cause intense centre-periphery conflict.

This prompted Metcalf (2003:9) to postulate that devolution of natural resource in the framework of CAMPFIRE in Zimbabwe was far too long stuck in government bureaucracy over the years, and has been exacerbated by the fact that the state, community and private sector partnership has been disturbed lack of funding. Indeed, with donor support having dwindled since the inception of land reform in Zimbabwe, donors chose to support development initiatives through non-governmental organizations and not through government structures. CAMPFIRE as a government led programme was caught up in this jeopardy.

Sengwe community overlooks Makuleke region. The three wards are located in the greater part of a piece of land that has been proposed to establish Sengwe Corridor, and the community is yet to negotiate its integration with the Department of Parks and Wildlife Authority (ZIMParks). This study found that there are long processes to be accomplished with the Zimbabwe authorities in terms of community negotiations. The community position is that the Government should support an arrangement, which gives the local people more powers over natural resources, taking a cue from Makuleke community. It is their conceivable idea that the CAMPFIRE programme offers that room if resuscitated as the starting point going forward for further community engagement. Realistically, some great strides were made during the time when CAMPFIRE was very active, particularly as a community based programme for the management of natural resources. However, the history of CAMPFIRE has clearly shown that the programme gravitated to vest more ecological governance powers in the hands of government institutions. The outcome of this process, for unknown reasons, lacked clear understanding of the importance of communities as the conservation processes move towards transboundary programmes. Identification of communities as key stakeholders can never be taken for granted. It is therefore alarming to learn that there is piecemeal funding towards communities and little benefits are trickling to the local households, and at times, it is zero. Ideally, the programme has not performed satisfactorily and residents view it negatively.

The institutional issues and their impact on local livelihoods and conservation are problematic and complex. However, by mentioning this, the study does not intimate to avail itself as a panacea to all the current transfrontier biodiversity, ecosystems and socio-ecological problems that Sengwe community faces or indeed that of Southern Africa in general. It will strive to give evidence from empirical research and provide as much insights as is possible in addition to a plethora of accumulated knowledge by other researchers, hoping that this will bring clarity on resource governance, local institutional dynamics, community participation, livelihoods and local conservation discourses. Critical as it may be, the study findings provokes re-thinking among conservation planners in transfrontier conservation to review the GLTP governance so that the objectives of conservation can be achieved in the atmosphere of mutual local participation and collaboration, without which, biodiversity is bound to suffer the tragedy from degradation and poaching, which impacts negatively on natural resource sustainability.

7.4 Sengwe ethnic dynamics and history

Household survey data revealed that Wards 13, 14 and 15 of Sengwe community are ethnically diverse. The Shangaan tribe constitutes a predominant group averaging 70% from sample of 333 households followed by the Venda tribe that constituted 19%. The Shona accounted for 7%, while the Ndebele were at 3% and lastly, the Ndau speaking people accounted for only 1% from household survey data. The houses vary in size, but the majority, as observed during field visits live in small to medium sized quarters not more than three huts made from locally made bricks or pole and mud thatched houses. On average, each family lives in about 1–5 people per household.

There are few cases where families go from 6–10 people. Slightly, 15% of the surveyed households live in families comprising more than 10 people. Almost 88.6% were born and have lived in the same area since their birth while 9.2% confirmed having come to the area as a result of marriage and 2% are teachers and 0.2% indicated were in the category of the civil service (as nurses and police officers) with majority having worked in the area for more than 5 years. Clearly, majority of respondents were born in Sengwe communal land and they have still live in the three villages since birth. Most of the teachers were deployed to the area by the Ministry of Education, Sports, Arts and Culture. During informal discussions with informants, it was brought into perspective that children born in the area were more likely to migrate to other cities, towns and most of them would go to South Africa and Mozambigue in search of employment. This raises the possibility that with education, chances are high that people can voluntarily migrate out of the area of birth in pursuit of a better future and employment opportunities. With that in mind, this ordinarily depopulates some communal lands that may be facing enormous population pressure. Essentially, this helps significantly in reducing pressure on natural resources and land for cultivation. Generally, the households surveyed showed relative stability in terms of geographic location and attachment to the local environment, despite most of the young people migrating to South Africa, Mozambigue and some other parts of Zimbabwe looking for jobs. Table 7.1 illustrates details of the entire ethnic diversity in percentage terms from 300 households that responded to survey questionnaires during field research in the three Wards (13, 14 and 15).

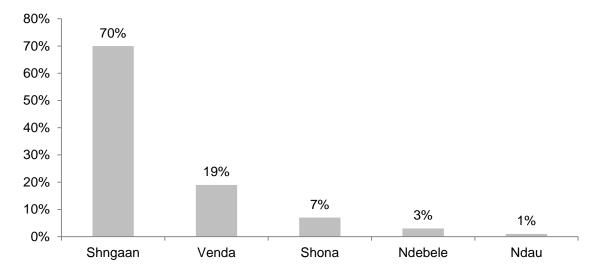


Figure 7.1 Household ethnic composition in Sengwe community

The Shangaan people in Sengwe communal constituted 70% of the surveyed sample. It is not surprising therefore that the Shangaan people constitute the majority of the population. More

critically, they are closely related to the Shangaan people in Makuleke, particularly former inhabitants of the Pafuri Triangle in northern Kruger National Park. The colonial artificial boundaries separated these two tribes, but they remain bound as one by tradition, culture and social practices. In addition, historically, the Shangaan people migrated from South Africa during the turbulent Nguni uprisings before the 18th century during the reign by King Shaka's (Manjengwa, 2010:16 cited Hlambela and Kozanayi, undated). The Shangaan people on both South Africa and more importantly on Zimbabwean side have deeper relations, ethnical homogeneity, cultural similarities and identical ecological practices that span geographical boundaries of their individual countries. This also includes the Hlengwe Shangaan tribe in adjacent Chicualacuala District of Mozambique, whose relations transcend geo-political boundaries to Zimbabwe and South Africa respectively. It is important to mention that the Shangaan and the Venda ethnic groups in the three Wards represent significant family ties. Consequently, such commonalities provide a basis for mutual co-existence, interactions and cooperation along borderlands of the three countries, which people only vies as having been set by the colonial systems.

7.5 Understanding people and the GLTP relations: Implications for livelihoods

As highlighted from survey data that 88.6% of the 333 survey households responded that they were born in Sengwe. It is important to indicate that their ancestors were removed forcibly away from the eastern part of Gonarezhou National Park (GNP) during the Rhodesian government (colonial government) when they expanded GNP on its proclamation as a protected area in 1975 (Muboko, 2010:168). The relocation of people to place called Sengwe communal land that is mostly regarded as the fringes of the GNP, had considerable socio-economic consequences on the local people in terms of access to natural resources for livelihood purposes. It is not coincidental that the current GLTP governance process in which the local people are not part of shows the degree of uncertainty that characterise Sengwe households arising from the mere fact of impudent and intransigent history that had negative implications on their livelihoods, coupled with loss of control over their natural resources. It is a fact that the GNP incorporation into the GLTP has been proposed to include the establishment of Sengwe Corridor, which inevitably shall cover greater parts of parts of the three Wards. Based on the GLTP 2002 Treaty that espouses boundary demarcations of the GLTP in Zimbabwe (GLTP Treaty, 2002, 7-subsection c), it is stated clearly that in Zimbabwe, the GLTP shall include the areas known as:

- i. Gonarezhou National Park.
- ii. Malipati Safari Area.

- iii. Manjinji Pan Sanctuary.
- iv. The community areas, which constitute the biodiversity corridor linking Gonarezhou to the Kruger National Park further south.

Implicitly, the Treaty, makes it clear that Sengwe community (see also Figure 7.1) in one way or the other, will be part of the GLTP since it mentions areas including the 26-kilometer corridor option as proposed, which extends to Malipati Safari Area and Manjinji Pan Sanctuary (Photo 7.2). Whichever way the location of the corridor will be, there are conceivable direct and indirect consequences on livelihoods and local conservation particularly potential arbitrary restrictions on resource access, use and displacements of some households.

Assuming that the 26-kilometre corridor option is succeed, several households will be affected. The three wards under study all lie in the strip of land that has been envisaged for establishing Sengwe Corridor to connect Gonarezhou National Park (GNP) to Kruger National Park (KNP) of South Africa. Zimbabwe and South Africa geo-politically are separated from the two national parks by Limpopo River. The distance from GNP to the boundary with KNP, is approximately 26kilometer. Ideally, this can be considered as a buffer zone for the GLTP on the Zimbabwean side, although officials from the DPWMA were evasive to inform the researcher of this inexorable interface with communities. From the GLTP Treaty that was signed, Sengwe communal land it is formally designated as part of the area that will be incorporated to the GLTP via the Sengwe Corridor. Given the relatively long history (approximately more than 50 years) of being neighbours to a very large protected area, the everyday lives of most of the people living in Sengwe today are influenced in one way or another by their long-standing relationships with the ecology of the area. Two major institutions that include the traditional leaders, and the CAMPFIRE programme, interact and intersect directly with the communities. Since the main objectives of CAMPFIRE programmes is supposed to improve the relationships of the communities, the protected areas and the associated natural resource as well as helping the local people to improve their livelihoods using natural resources and its proceeds. It was critical therefore to assess the views of people on the anticipated relationship with the GLTP boundary proposed scenarios.

The local councillors acknowledged that the CAMPFIRE programme was defunct in terms of bringing tangible benefits to the community despite having made considerable contributions at its inception and early days of implementation when communities would participate. Some of the achievements attained during that period included monetary and material benefits such as buying building materials for building public infrastructure such as schools, dip-tanks, clinics and paying

school fees for the needy students in schools. However, this is no longer the case since CAMPFIRE has been facing problems of funding and it has not been generating much income from sales of game. Besides that, some rations of meat would be distributed from animals that were killed as trophy. Their hope is that the GLTP should broaden the scope of benefits that should accrue directly to the community.

In understanding the GLTP relationships with the people, the study explored knowledge of the local people on the park's proposed Sengwe Corridor, the existence of a local GLTP Working Group and if they desire it. It also analysed the selection process of representatives in biodiversity conservation, decision making and articulating their livelihood concerns. Above all, the study also tried to understand the consultations process that have been done or currently being done on the proposed Corridor and essentially assessed whether the people want it fenced to keep away wild animals or not. The household respondents professed that they were not aware of the park's demarcations and they have no much knowledge on the specific location of the Sengwe Corridor boundary (Table 7.1), which account for a considerable 80.3%. However, it is significant to note that 19.7% agreed to be aware of the proposed Corridor. Furthermore, random inquiries among households to verify if this awareness was authentic, particularly from some households who mentioned knowing the demarcations, it became clear that they did not actually know it, although the data is somewhat showing 19.7% as having confirmed knowledge about the proposed Corridor. In the end, some informed the researcher that they heard such information from their councillors, but without full knowledge of where exactly the boundary is located in relation to their community and how it relates to their community in terms of affecting livelihoods.

	Table 7.1 Levels of	household knowledge/aw	vareness of Sengwe Corridor
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Varied response	N	%	
Household knowledge/awareness of Sengwe Corridor	65	19.7%	
	No	265	80.3%
Total		330	100%

As such, the 19.7% needs to be treated with caution to avoid inaccurate impression of the knowledge levels of households about the Sengwe Corridor since those who claimed to know it, could describe neither the direction nor possible demarcation of where it passed through in practical terms.

Table 7.2 Perceptions of existence of a community working Committee in Sengwe

Varied response	N	%
Confirmation of existence of a Community TFC Working Committee	6	1.7%
	324	98.3%
Total	330	100%

It is evident that there is no working group or a committee spearheading conservation issues at the community level. Ideally, the Sengwe community leadership are planning to set up a structure, taking the example of Makuleke as a model, but they would want effective representation through this local structure in the affairs of the GLTP governance process.

Table 7.3 Functionality of CAMPFIRE in the GLTP

Varied response	N	%	
Confirmation of CAMPFIRE functionality rate in relation	19	5.9%	
to natural resource conservation and GLTP governance	311	94.1%	
Total		330	100%

From a conservation governance point of view, 94.1% expressed high levels of the nonfunctionality of CAMPFIRE in relation to allowing communities participating in conservation and the GLTP governance processes. Interviews conducted buttressed this perspective. It was made clear that CAMPFIRE was under funded and remained stuck in government bureaucracy. In fact, there is no budget control since this is regulated at the local level for CAMPFIRE administration since budgetary matters are handled Chiredzi Rural District Council. Perhaps, one important conclusion from these revelations is that poor performance of CAMPFIRE has created some gaps when it comes to implementation of conservation projects at the local level. Further discussions with CAMPFIRE Association at both district and national levels clearly showed that the local people were allowed to contribute towards budget issues through Councillors at the District level. However, local people are of the view that this was not enough. The Ward representatives come up with their budgets, set hunting quotas with the help of the District officials, but some members of the community questioned the competence of the representatives since they claimed that majority of them were subject to manipulation. Generally, CAMPFIRE, just like any other sector of the economy in Zimbabwe, was cited to have been affected by harsh economic realities in the last 13 years. In addition, the officials also confirmed that there was no clear structure in place linking communities and the GLTP process. This has equally created problems when it comes to mainstreaming the local people in the GLTP governance. The resolution of the Ministerial Committee has manifestly affected this process to happen and most decisions taken remain the responsibility of the national government in line with the Ministerial Committee's decision to have community issues dealt with at a country-specific level. From a strategic operational institutional functionality point of view, the fact that CAMPFIRE is reportedly defunct as well as crippled by underfunding, it explains how disconnected the local resource governance scale has been affected negatively in Sengwe. Looking at the local people in Sengwe, it is imperative that for people to be part of the GLTP, it is absolutely necessary for the local people to have clear mechanisms that facilitate their participation.

Furthermore, conservation literature pointed to the fact that wildlife and other natural resources in communal areas, belonged to the government and are governed by distant government systems, and not the local communities themselves. In most cases, the resources are controlled and managed by bureaucrats at the expense of people living in communal areas. This has seen little incentives accruing to the people, let alone motivating people to preserve wildlife or use it sustainably (Babcock, 2010, 205). Consequently, the absence of a link between the GLTP countryspecific Technical Working Committees or TFCA Localised Coordinating Unit, directly undermine and attenuate collaboration that could possibly have been achieve if people were facilitated for environmental planning and sustainable conservation. This limited interface between governmental and local conservation structures affect managers and decisions makers on one hand and the people in the villages on the other hand in terms of the support that could be achieved in conservation development initiatives. Ideally, the local scale of natural resource governance is an important part of the people-park relationships. In order to appreciate this relationship better, the study looked at consultation process towards establishment of Sengwe Corridor in the GLTP that also directly determine the magnitude of impact of the park-people relations. As such, 88.3% of the 330 households reported that they were not consulted about the proposed Sengwe Corridor (Table 7.3).

Table 7.4 Household agreement to Sengwe C	Corridor establishment

Varied response		N	%
Household agreement to have been consulted on the establishment of Sengwe Corridor	Yes to have been consulted No to have been consulted	5 324	1.7% 98.3%
Total		330	100%

Interview with informant individuals helped to describe the absence of an interfacing structure as regrettable, and it has tended to affect realisation of environmental benefits from their resources.

Furthermore, Table 7.4 illustrates local people's preferences of whether the Corridor should be fenced of not. In that regard, 96.8% showed that they want the Corridor fenced as opposed to leaving it as an open park, which in this perspective accounted for a paltry 3.2%.

Table 7.4 Household preferences to/not to fence Sengwe Corridor

Varied response			%
Household preferences to fencing of not to fence the	Yes to fencing	11	3.2%
Sengwe Corridor	No to fencing	319	96.8%
Total		330	100%

The preferences for a fence was informed by current human-wildlife conflicts such as crop raiding, predation and spreading of diseases to livestock to the extent that people want nothing less than complete prevention of wild animals from invading their communities and interface with their

livestock. The challenge of lack of the fence has not been attended to for a long time, leading to loses of both crops and livestock. The community members' attitudes towards predation, crop raiding and fear of wild animal diseases transmission to livestock are extremely negative. This is being exacerbated by the fact that the GNP fence that separate wildlife from entering parts of ward 13 and 15, is porous and on both ends, big game sometimes can pass over and encroach to households as shown in Figure 7.2.



Photo by D. Muzeza Figure 7.2 Slack fence separating the GNP and ward 15 in Sengwe

The study has thus argued that management of wildlife and livestock diseases within transboundary landscapes remain unresolved in Southern Africa and generally pose a threat to livestock agriculture production. As a result, great diversity of wild ungulate species with which many pathogens such as foot and mouth disease virus have co-evolved, and Southern Africa is burdened with more economically significant wildlife disease that affect livestock than any other part of the world.

Submissions from a questionnaire that was completed by an official from GNP described this question on the boundary demarcation to prevent wildlife disease as 'sensitive'. On the overall, 98% of household respondents indicated that they were not going to accept relocations should the need of the boundary require moving people from their current areas of residents in the three Wards. This proves politically to be unwise, indeed undesirable and highly emotional issue where people perceive that they stand to lose their property, livelihoods and cultural sites as well as losing personal relations when people are moved to different places. The GLTP in relation to the Sengwe Corridor is at the crossroads diametrically opposing each other at the confluence of local

livelihood expectations of the traditional resource users, realities of people wanting to participate in resource governance of the GLTP and the agencies on the opposing end superimposing the transboundary conservation values, demarcations and processes. These potentially create conflicts with the local people. There are foreseeable serious negative economic consequences on households should the government of Zimbabwe decides to remove the people, which it has been hesitant to do. The obvious restrictions culminate in changes occurring in land-use patterns and practices, loss of property, limitations on access to livestock grazing land and above all, breaking of social relations and connection to their cultural sites and practices due to relocations. These socio-economic and ecological impacts are real and can affect several households. In fact, the framework for compensation on livestock, crop and human life loses, have not been honoured in the past.

Generally, Sengwe residents are in a dilemma on the direct and indirect consequences of the GLTP Corridor. One informant indicated that uncertainty was rampant among households because people were unaware of what would be their fate considering the GLTP Sengwe Corridor that is likely not to be stopped. Ideally, this adversely affect their livelihood security at household level. This has affected prospects for personal social planning and development such as construction of permanent brick-walled houses with corrugated iron roofs. Concerns have been that communities are likely to deplete natural resources if they were included as part of the Corridor. This argument seems to be far-fetched and contestable, particularly if the government agencies proceed with the proposal of its preferred demarcation of the Corridor. Despite occurrence of abundant natural resources, the principal livelihood activities in the area (Sengwe) are independent variables, not necessarily linked to forest and wildlife resources, which the GLTP project principally seeks to achieve in terms of biodiversity and ecosystems sustainability. This study established that key activities such as crop production, livestock rearing (goats, cattle, chickens and donkeys), employment outside and within the villages, and brewing of traditional beer for sale, are some of the key activities that people ranked highly, which ideally give leverage for sustenance rather than depending on biodiversity alone.

In summation, local support for transboundary conservation depends on a genuine voice of the local people in decision-making and ensuring that the communities receive tangible benefits from any conservation initiative. From a reductionist perspective, the household responses and interviews that were conducted repeatedly stressed that the people-park relationship as obtaining in Sengwe communal lands, does not engender collective action towards transfrontier natural resource conservation. While some benefits such as community projects in the form of

construction materials for schools, money for the underprivileged to pay school fees, building diptanks, raising awareness for conservation, supporting basket weaving and so on, these were long achieved during CAMPFIRE's hey days when proceeds would directly benefit communities. No doubt, the community members appreciate the projects these projects then, and they highly valued the CAMPFIRE programmes. However, the current GLTP has closed out the space for the local people to continue enjoying those benefits. Consequentially, the desire of the local community remains hopeful that the GLTP shall one day enhance their livelihoods, improve their living standards and create mechanisms through which they can participate in the GLTP governance in co-governance arrangements.

7.6 Sengwe demographics

The population census data from the Central Statics Office, which is now renamed as the Zimbabwe Statistics (ZIMSTATS) in 2010, showed significant growth trends of population in Sengwe since 1962. This is shown in Table 7.1.

	1962	1968	1982	1992	2002	Area (km²)	1992 Population Density (km ²)
Sengwe Communal Land Population	8 570	10 490	14 169	20 890	22 140	2 445	8.5

Table 7.6 Population Data of Sengwe Communal Land since 1962-2002

Source: 1962, 1968, 1992 AND 2002 population data and (CESVI and Central Statistical Office)

Sengwe ward 13, 14 and 15 constitute large part of Sengwe Corridor. Ecologically, that strip of land as highlighted is critical in connecting Gonarezhou to Kruger National Park. The people who reside in these areas exhibit clan heterogeneity across the three Wards. They also do show great social cohesion, bound together by common Shangaan language despite being multi-lingual. The population distribution in Zimbabwe is approximately 75% being those concentrated in communal lands and resettlement areas (Mazambani and Dembetembe, 2010:52).

Other communal land in Zimbabwe, however, have peculiar socio-economic activities and the concentration of people per square kilometre differs from one area to the other depending on a variety of factors including proximity to source of water, fertile soils and public infrastructure such as roads, rivers and shopping centres. These influence settlements patterns that range from linear settlements (along rivers and roads) to clustered settlements (around shopping centres/growth points service centres). It was established that the settlements in Sengwe conform linear (along rivers and roads) and clustered (around business centres and service centres) in places such as Gezani, Davhata and Malipati.

More essentially, Sengwe community is geographically adjacent to Mozambique and South Africa and it is separated by Limpopo River in the South. Thus, over the years, there has been continuous migration of people to and from South Africa and Mozambique in search of employment (Sola, 2001:251). The gender diversity as shown in Table 7.7 indicates that there are more females who accounted for 53% while males are 47% from the 330 households that responded to questionnaires as illustrated in Table 7.7.

Table 7.7 Household gender distribution in Sengwe community

Gender	Number of households	%
Female	175	53%
Male	155	47%
Total	330	100%

The population density was 8.5 per km², with an average of 5 people per household. Perhaps, one important observation is that the demographic dynamics mirror general national outlook where previous census statistics revealed that there are generally more females than males across the country (Central Statistical Office, 2002). Frequent migration trends, particularly of males to South Africa and Mozambique in search employment and trade purposes, is the reason behind such demographic characteristics in Sengwe communal lands (Sola, 2001: 251; Manjengwa eta al., 2010, 14). Household survey data considerably reflected these trends. Further, Figure 7.3, illustrates disaggregate household data according to ages of people in households from three wards of Sengwe communal land located within the GLTP project. This data excludes Tchipise under Beitbridge Rural District Council, which are proposed part of the GLTP, but were not included for purposes of this study despite being under the GLTP project.

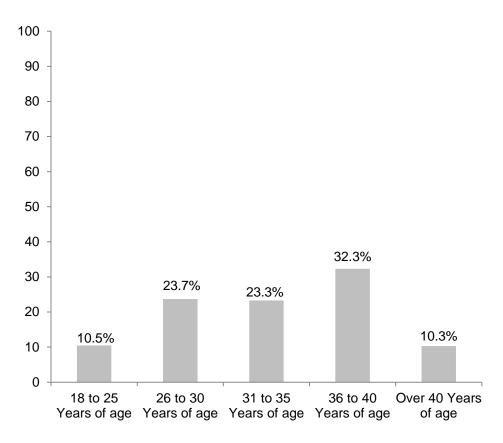


Figure 7.3 Age distribution in Sengwe

This data give generalised characteristics of concentration of various age groups in the area. The data reflect that the middle-aged people, who are between 36-40 years of age, constitute the majority of 33.3%. The young categories from 18-25 of years of age, constituted 10.5%, while those aged from 26-30 years are at 23.7%. Those aged from 31-35 years, constitute 23.3% as shown in the pie in Figure 7.3. The age distributions also show that the young people collectively constitute 57.5%. Those over the age of 40 years make up only 10.3%. The hypothetical deduction in this regard is that the population can be regarded as largely young, cognisant of the fact that females constitute the majority (as in Table 7.1 at 53% over males who constitute 47%).

7.7 Biophysical characteristics and livelihood connectivity

Sengwe community is categorized under agro-region Five in Zimbabwe. It is usually dry and not very suitable for crop production in the absence of irrigation because it is usually a drought prone area. In its environments, it is home to a diverse of flora and fauna, with a wide range of indigenous plant and animal species. The size (dominance) of individual trees and shrubs was not part of the scope covered in this study to estimate the number of species since the process is complex and would require a separate study to establish plots to measure units of stems per hectare over time

and obtained regular census statistics of tree population from fixed plots (Chenje, 1998:227). Forest resource use by community members particularly the Mopani (*Colophospermum Mopani*) trees, underpin its economic value and importance especially as a source of harvesting Mopani worms, and its rich tender leaves of young Mopani trees in times of extreme dry conditions act as fodder for livestock. Those in Malipati, at times graze their livestock in Gonarezhou national park, while the risk of predation from lions and hyenas is high. Above all, the people also use forest resources for a variety of things. For instance, poles are used for construction of houses, the grass is used for thatching the huts and wood is used for making domestic fire. In other cases, some plants are used as supplementary food and other people use some pants for medicinal purposes. Resultantly, forests resource availability shape the general local hopes for a better future in a community that depend on forests so much for their livestock and for food hence, they are part of their thriving production system.

According to questionnaire responses, livestock is among the major economic activities with 95% of respondents having confirmed to be keeping goats, cattle, donkeys and chickens. Remarkably, there is a correlation between abundant browse forage with the high quality of livestock, particularly cattle. Forest resources are as a result fundamental to local livelihoods. Overall, 90% of questionnaire respondents reported that grazing was adequate. However, individuals raised concerns that the restriction by the GLTP park managers ultimately reduces access to browse forage. This is being worsened by increased competition from wild animals. Some concerns were mentioned that chances of spreading diseases due to wild animals-livestock interface, particularly along Sengwe Corridor were high, which has the potential put both human and livestock lives at risk. The central notion is that there is economic link between available forest resources and community's livestock production system.

Relatively, the biophysical characteristics are diverse with forest and wildlife resources best described as plentiful in the area. In terms of soil types, studies by Chenje et al., (1998:227) describe the rock type found in the area as ranging from cretaceous formations covering approximately three percent of the country, mainly in Gonarezhou National Park and therefore its environments. In addition, alluvial soils are found along river valleys, particularly in Mwenezi and Limpopo Rivers, occurring due to periodic annual alluvial soil deposition during flooding. Basalt, and in some cases sand soils are present in Sengwe communal land. Observatory satellite imagery and transect field pictures taken during fieldwork, indicated that ward 13, 14 and 15 are densely populated with a variety of plant species. However, Mopani (*Colophospermum Mopani*)

woodlands dominate the environment with some of the areas having strong presence of Purplepod terminalia woodlands as shown in Figure 7.4.



Mixture of **Purple-pod terminalia** (*Terminalia prunioides*) woodland and shrub land (ward 14)

Homogenous stands of *Mopani (Colophospermum mopane)* largely found in many parts of Sengwe

Photos: by D. Muzeza

Figure 7.4 State of forest resources in Sengwe communal land

Purple-pod terminalia *(Terminalia prunioides)* woodlands to shrub land, occur largely in basalt soils (Chenje, 1998:277). Illala plant species are found in greater parts of uplands and are used locally for basket making and extracting a local wine *(Njemani)*, while the riverine vegetation particularly *Acacia* woodlands punctuate valley terrains along Mwenezi and Limpopo Rivers. Mwenezi, Limpopo Rivers and some small stream valleys, comprise of alluvial soils, which are favourable fertile soil for cultivation of crops. Dry land fields and dry crop stocks were seen in the fields during data collection. It is important to mention that river valleys are susceptible to flooding during the wet season when heavy downpours are experienced. This usually causes catastrophic destruction of crop fields, culminating in households experiencing food vulnerability. Because of the problem of low lying flood areas, cultivation of crops alternates between uplands and low lands, usually during the wet season when flooding is most likely the people move to uplands (November to March annually). They revert to the river valleys and stream valleys during the dry season (April-September) when households grow supplementary maize and cultivate vegetable gardens along the valleys. Quite significantly, the GLTP, which includes Manjinji Pan Sanctuary and Malipati

Safari Areas, are adjacent to Malipati Business Centre. The Manjinji Irrigation Scheme, which is critical for household livelihood in terms of vegetable production located close to the ecologically sensitive wetland that is illustrated in Figure 7.5.



Photo (left) by D. Muzeza Figure 7.5 Manjinji Pan Sanctuary and location of the irrigation scheme

Google Eye satellite imagery (right image: co-ordinates 22°06' 11 .03" S and 31°24'. 32", Elev: 236m) showing Manjinji Pan Sanctuary in relation to Manjinji Irrigation Scheme location

Manjinji Pan Sanctuary (Figure 7.5 Photo and Google Eye satellite imagery) is a significant hydrographic feature that offer leverage for tourism development and adjacent to it, is a community irrigation project scheme that is being funded by SIFIRE with 68 household beneficiaries (from Malipati Ward 15)currently undertaking vegetable production on this important irrigable land.

7.8 Occupational Distribution

One major characteristic of types of work people are largely doing in Sengwe Wards 13, 14 and 15, reflect a lot on the main livelihood activities. Household data demonstrated farming as the major occupational activity accounting for 81.8% as the dominant livelihood practice. Household data also showed that subsistence farming and livestock rearing dominate economic activities

Figure 7.4 shows the breakdown of activities in percentage terms, which different people are involved in as livelihood economic activities.

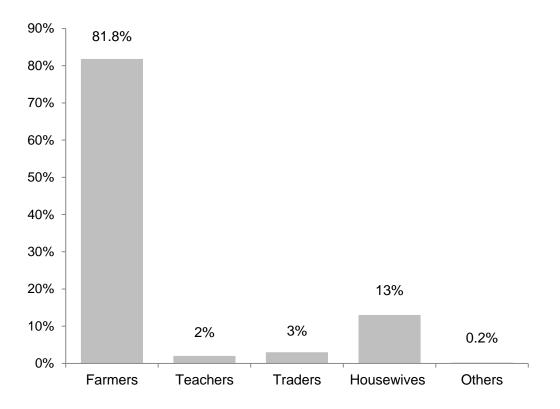


Figure 7.4 Household respondent occupation distribution Sengwe Wards 13, 14 and 15

Teachers account for only 2% of the survey sample. Those who stated 'others' as their occupations accounted for 0.2% and ordinarily, they were either serving as police officers and health workers in the Wards. In addition, 3% of reported that they were traders who usually go to South Africa and Mozambique for trading purposes. They in turn bring groceries for resale to Sengwe community. This is common characteristic in terms of economic activity in Sengwe community. The reason behind being the geographical proximity to both South Africa and Mozambique. In addition, 13% reported that they were housewives. They further indicated that they are relatively involved in farming, but do a lot of trade locally on produced goods such as vegetables and crafts materials.

7.9 Relationship of employment and household headship

Household questionnaires respondents were required to specify their type of employment based on three variables (full-time, part-time and not employed). The data showed that 85% indicated to be on full-time employment in their mentioned professions while 14% were on part-time employment. As Figure 7.5 illustrates, only 1% of the 330 households indicated to be 'not employed'.

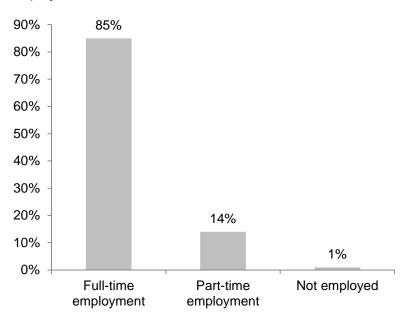


Figure 7.5 Household employment relationship

The following Table 7.5 shows household respondents in terms of place of birth from 330 questionnaires respondents from the three wards (13, 14 and 15).

Varied response	N	%
Born and live in Sengwe	326	98.7%
Born outside, migrated to work and live in Sengwe	4	1.3%
Not stated	0	0%
Total	330	100%

Table 7.7 Proportion of household respondents born within/outside Sengwe community

Based on the sample of 330 of household sample, 98.7% of the respondents were born in Sengwe communal land, with only 1.3% of household indicating that they were born outside Sengwe. They migrated to the area for work purpose and ended up living in the area. Some of these are mainly civil servants, particularly teachers, who constitute 2%.

It should be noted that household headship implied all gender dimensions and ages, which comprised either male or female-headed households that entailed a father, mother, son, daughter, or a relative generally considered to be the one in charge of the household. Survey data showed that 79% of the three hundred and thirty respondents answered in Shangaan and 21% responded in English. Interaction with teachers, revealed that they were generally unwilling to establish permanent homes in Sengwe, opting to return to their rural homes or move to towns such as

Chiredzi and Masvingo, which is the Provincial Capital for Masvingo Province. Some women also moved to Sengwe area for marriage purposes. This was not quantified separately in terms of determining the number of those who migrated due to social factors such as marriages. Generally, when asked as regards to intention to move out of Sengwe, young people from the ages ranging from 18-35 years indicated their willingness to relocate. Their major reason for possible relocation is to search for a better life such as employment in urban areas. The theory therefore of voluntary migration can be a motivating factor to reduce population pressure on natural resource such as land and natural resources, should the incentives at the destination of one's choice are outside Sengwe is attractive.

7.10 Level of education and implications on environmental conservation

Levels of education in the three Wards showed that 68% had attained primary education (grade1-7). More importantly, it is critical to mention that Zimbabwe's literacy level is considerably the highest in Africa and the people are able to read, write their mastery to conceptualize things is very high (UNDP 2010, 195). Among the sample (three hundred and thirty households that responded), 12% indicated to have progressed to secondary education (forms 1-4), 0.2% indicated to have attained a diploma qualification and 0.01 qualified with degrees. A 19.21% indicated having not attended formal education. The variation in levels of education of respondents from questionnaire respondents does however illustrate that generally there is considerable high levels of literacy rate in Sengwe community. This also gives an overall understanding on how the people treat their environmental and conservation issues. Interactions with households during the survey demonstrated rich indigenous knowledge systems embedded in local beliefs and cultural practise of totems and respect flora and fauna based on their traditional mores. Consequently, environmental and wildlife conservation is indeed sound and clearly, the state of wilderness was so telling of this evidence on how livelihood practices and environmental consciousness are tremendously contributing to biodiversity and ecosystems sustainability. The Environmental Management Agency (EMA) has not undertaken any environmental education leveraging on existing knowledge systems to enhance conservation and environmental management. To buttress the point of the importance of local knowledge systems, one official in the DPWMA, which is the custodian of wildlife and conservation, echoed the compatibility of local livelihood practices and knowledge systems as in sync with the GLTP conservation objectives. The official had this to say:

"Community based traditional knowledge systems must be driving the local economy, which implies that the local people's livelihood practices are in tandem with conservation objectives, otherwise the natural environment would not have survived to this extent as the community members are not importing any major ingredients to sustain their lives in their economy. They are sustainably utilising the natural resources around them".

In furtherance of this argument, contrary to some worldviews on the scientific complexity of biodiversity that is often cited as lacking in many rural communities in Africa towards sound conservation of flora and fauna, the official had went on to clarify that:

"The community may not have sophisticated western world development models to demonstrate successful livelihood strategies dependent on their natural environment. However, they have voluntarily maintained the environment in a sound state that allows sustainable regeneration of nature despite the very harsh climatic and environmental conditions that apply to their agro-ecological region. There are many examples to demonstrate that there still exist, in the area, viable natural forests sustaining healthy animal communities, collectively constituting a successful and vibrant ecosystem that supports a thriving tourism industry".

The overall conclusion is that with clear indigenous knowledge, conventional education can add value towards environmental conservation. As such, it is important to look at opportunities for environmental education around ecologically sensitive areas where flora and fauna endemism exists such as Sengwe's Manjinji Pan Sanctuary, the Mopani stands, shrublands and the park itself where local knowledge systems can be applied.

7.11 Local Institutions: Contradictions in Transfrontier Governance Devolution

Sengwe communal land is located 170 kilometres South of Chiredzi town. It borders with Gonarezhou National Park to the east and it is separated by Limpopo River to the south (Manjengwa et al., 2010:14). Administratively, Sengwe communal land falls under Chiredzi Rural District Council (RDC) jurisdiction. The RDC is subdivided into Wards represented politically by elected councillors in terms of the RDC Act. Ideally, the Ward in terms of devolution constitute what is known as the Ward Development Committees (WADCOs) through which residents participate in development programmes and biodiversity management under the CAMPFIRE programme. In a way, both the WADCO and CAMPFIRE programmes are somewhat devolved structures that enable local level engagements of communities in environmental matters. What is critical to this study in the context of the GLTP process is the examination of institutional interfaces

in relation to facilitation of the local people for environmental engagements in transfrontier resource governance. Before that, it is critical to highlight what constitutes devolution. According to Shyamsundar et al., (2005: 3), three main aspects generally characterize devolution and decentralization in wildlife communal areas in many respects such as:

- a) Devolution of management powers to local government agencies.
- b) The creation of new local conservation institutions.
- c) Greater authority to traditional leaders.

Zimbabwe's well-known CAMPFIRE programme, for example, authority is devolved to lower levels of government known as Rural District Councils down to the WADCOs, forming Wildlife Committees that work hand in glove with conservation authorities at the RDC and national levels. Therefore, CAMPFIRE programme is a good example of a devolved resource management and governance structure, which recognised as an antidote to rural poverty and a mechanism to address socio-economic problems of outlying areas in Zimbabwe (Logan, et al., 2002:2). However, despite its celebrated success, there are institutional weaknesses concerning its administration. Apparently, it has not been integrated in the GLTP programme to attain full local involvement. For all its intended purposes, conservation of natural resources remains largely coordinated by the RDC. Admittedly, while the local communities are expected to come up with their local environmental management plans, define their project priorities and agree on benefits distribution from natural resources in their areas, these have not been addressed within the context of the GLTP governance framework. From six unstructured interviews conducted in Sengwe with key opinion leaders, it was revealed that the overall perception of the community is that they are being relegated to the periphery of conservation and resource governance. However, the DPWMA believe otherwise by insisting that local processes are consistent with government policies that enable user communities to participate in conservation and exploitation of resources based on their claims. The official said lack of involvement of Sengwe people is misleading. Close reality check on local perspectives contradicted the official's claim. The local sentiments highlighted that institutional scales were constraining them from effective participation since most things to do with ecology governance processes were not only taking place at the district level, but also at the national and sub-regional GLTP governance levels where the people are not represented. The devolved legislative safeguards for participation generally appear to be cosmetic leading Murphree (1993:3) to observe that:

"Legally, these communities still do not have appropriate authority. This has been granted to councils, which are large, heterogeneous administrative units rather than units of production. Wildlife production comes from their sub units".

Since 1993 when Murphree published his work, Sengwe community has not witnessed any significant turn in the manner local resources are governed and managed. Although government officials in the DPWMA would insist that local committees are in charge under the CAMPFIRE Programme, the practicalities of the administrative processes clearly indicate a very different situation especially over control of natural resource, which is predominantly government through arrogating substantial conservation and environmental authority to RDCs rather than to CAMPFIRE, Ward Development Committees and local customary rulers. The implementation of the GLTP therefore, finds itself constrained by country-level legislative contradictions, and no attempt has been made to address these complexities.

As such, communities that are dependent on natural resources have to battle for space ecologically, and in that regard, they have had the luck of relying on the benevolence of NGOs who have been raising their issues when making claims for genuine participation in the political ecology of the GLTP. Surprisingly, the operating environment in Zimbabwe where issues of sovereignty and territorial integrity punctuate political ecology discourses, it is hard to extrapolate best institutional practices from other countries or to intervene directly when so many players have been caught up in pursuing political agendas as opposed to local development advocacy. The obvious political sensitivities around interference with local processes always feature prominently especially when this appear not augur well with the local and national political expectations. As a nation that has emerged from 'fortress conservation' of the colonial times, the state still maintains strong presence in all aspects of conservation, and in fact, wildlife is treated as state property. In an open-ended questionnaire response from the DPWMA, two critical aspects were reflected: the preponderance of government structures on local conservation process and the political ecological sensitivities around observing sovereignty and territorial integrity in the execution of programmes that justify state control as it was stated that:

"The PWMA collaborates with the communities through the RDCs and local TFCA Steering Committees that comprise local level stakeholders. The Sengwe-Tchipise Wilderness Corridor Management Committee effectively represents the two RDCs when it comes to the management of the Corridor, the same institution that the PWMA will enter into an Agreement with for the administration of and discharge of

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certain functions of the GLTP, to implement the GLTP Treaty. The Ministry of Local Government, Rural and Urban Development are an active member of the National, Regional / Provincial and District TFCA Steering Committees which coordinate the planning and development of TFCA projects and programmes".

While it is recognized from this governmental point of view, in terms of what the GLTP Treaty and the Tri-nation Agreement provisions entail about community participation structures mainly through conservation partnerships alongside the states, private sector and non-governmental organization, there is no compelling policies that bind states. One notable problem institutionally and legally is that most of the conservation collaboration espoused in that regard is characteristically dominated by government structures and this was left as out to allow country-specific interventions based on their national consideration as the official observes:

"Each GLTFCA Partner State has internal arrangements to manage community issues. In Zimbabwe the Ministry of Local Government, Rural and Urban Development has mechanisms to manage community matters. These include the Rural District Councils (and Urban Councils where these apply), traditional leaders (Traditional Leaders Act), CAMPFIRE structures and TFCA institutions. Of late Constituency Offices have also been added to the list of options. In the TFCA Programme, the issue of sovereignty and territorial integrity is given priority despite all the high level of collaboration and cooperation practised across the board. Where lower levels of community structures are well defined and organised, these can be effective and instrumental in articulating issues and influencing decisions by other institutions. Mahenye ward in Chipinge District, which is also part of the GLTFCA, is an example of successful a community championing their own cause in CAMPFIRE and TFCA governance issues".

Quite clearly, while the ideas are valid, one surprising aspect in this discourse pertains to the fact that there are no defined indicators and binding provisions against which conservation agencies can be judged to determine whether or not they have relinquished their conservation authority and given autonomy to communities for purposes of participation. Further to that, it is compelling to assert that the much-lauded partnerships are not measurable in ascertaining delivering the intentions of the Treaty, which among others talked about improving community livelihoods by ensuring they derive benefits from natural resources. For example, it is unclear on how the important role of Sengwe community in the promotion of sustainable use of natural resources is going to be implemented and the indicators against which success can determined.

While the GLTP and its ancillary development policy documents make provisions for involvement of communities in theoretical terms, local structures remain suffocated by inherent weaknesses. There are no definitive and explicit regulations that provide for coherent empowerment of local processes so that there is avoidance of ambiguities, which is being taken advantage by state agencies and conservation agencies to marginalize communities from participating in transfrontier conservation. For example, the cited issues of 'sovereignty and territorial integrity' become a political ecology issue that poses difficulties in insuring effective devolution of authority and autonomy for Sengwe people to make their environmental decisions. Technically, consideration that the GLTP Treaty left these open shows how difficult it is to integrate conservation bioregionally, especially natural resource dependent communities such as Sengwe and Makuleke using their local structure. While cognizant of the independence of individual member states in this project, it is of paramount importance to make provisions that gives Sengwe community a clear and defined mechanism for environmental governance autonomy. Above all, according the community, some measure of authority at the local level in terms of environmental governance will help to translate local decisions into tangible deliverables within local contexts as opposed to having conservation decisions made by state agencies and sector ministries alone. Congesting state agencies consequently tends to crowd out local people's space to participate effectively in conservation. Perhaps, one of the main reasons for the problems facing community based programmes and manifestly, transfrontier conservation, is the failure to devolve natural resource governance and management systems to lower levels of the communities. This is due to bureaucratic manoeuvring, in which case there is concerted effort to continue controlling of resources for material and financial benefits that come from wildlife and does not get to the communities. Murphree (1991:141) observed that some of the administrative bureaucracies require special attention for programmes involving devolution of proprietorship to local levels since there is an in-built tendency at any level in bureaucratic hierarchies to seek increased authority from levels above and resist its devolution to levels below where communities play a critical role in natural resource management.

Ideally, the role of the government agencies and that of conservation NGOs should be that of facilitation of the local people in conservation. It is from such assertions that state institutions, conservation agencies and rural communities, can forge ahead productive conservation relationships. Given the administrative power imbalances, coupled with lack of capacity at the

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local level, technical issues regarding biodiversity remain complex to the extent that the RDC always find ways to intervene in trying to assist the local processes. Consequently, the local governance processes become dominated by bureaucrats, giving lack of local capacity as an excuse. This study established that there is a generalised assumption that local inputs do not always matter in insuring community benefits and participation in natural resources governance. This was confirmed through discussions with local leaders in Ward 13, 14 and 15, who collectively gave an impression that while local structures are not yet robust for effective advocacy on user rights on resources, they at least would want to be consulted regardless. They further raised the concerns that there has been reluctance by government to capacitate local institutions for the simple reason that they might become too powerful in championing local resource user rights and natural resource interests.

Ideally, a stronger local structure is perceived likely to act in competition with the district or even the national structures. As a result, reluctance is simply directed at ensuring that central government continue to have a lot of influence and control through the RDCs. To be able to understand some complex relationships, it is important to highlight that ideally, sustainability of this approach described by DeGeorges and Reilly (2009:752) as 'Wildlife Management for the people' (stage 2) is conspicuous by its presence in the administrative ordering of the GLTP governance in practice, contrary to the theoretical assertions that it is community focused. This process alienates the community, with the attended benefits largely monopolized by state agencies, the district administration and close to nothing trickling down to the community. Consequently, the connectivity between the community and natural resources remain largely weak and the perception of the people in Sengwe remains negative about the Chiredzi RDCs. In this view, DeGeorges and Reilly (2009:751) observed that in many communal areas where CBNRM (such as Sengwe) is practiced, communities are imposed upon and dictated to over what resources can be harvested and required to take all kinds of middlemen partners. This for instance, confirms the concerns raised by the local leadership that alleged that the leasing of Malipati Hunting Safari area that covers parts of Ward 13 and 15, was being dictated to by the technical team at Chiredzi Rural District Council. Whether one would doubt this, there is concurrence with DeGeorges and Reilly (2009:751) observation in this regard. The appointment of Safari Operators, as the case with many District Councils in Zimbabwe, does not follow a broad based consultative process. While the issue of costs involved are genuine, but the fact that citizens are not furnished with information and do not participate in the appraisal process of a prospective Safari Operator, deprives communities to contribute in the appointment. Usually, the few Councillors and District officials make decisions to a point that the local people complain of little

value accrues to the local level. In this regard, DeGeorges and Reilly (2009:751) argue that the dismal failure to bring devolution to producer communities is a major reason why land uses under CAMPFIRE are viewed as incompatible with wildlife. Furthermore, government is reluctant to let the resources go in terms of governance and management, especially in these protected areas adjacent to communities having a fair legitimate user claims for philosophical, political and monetary reasons (Martin, 2003:57).

Apparently, in Sengwe community, this contradicts real devolutionary empowerment of Ward Development Committees (WADCOs) and the CAMPFIRE programme, because the RDC retains the rights over management decisions and revenue distribution from wildlife proceeds. By so doing, the local lower tiers of governance are limited on the amount of autonomy and authority that local Councillors and traditional leaders can exercise at any given time, resulting in enormous gaps vitiating against delivering participatory development to effectively reduce poverty, enhance local resource governance and achieve a broad based or inclusive sustainable conservation. A more or less comparable type of devolved resource governance structures is Zambia's ADMADE programme, where decentralization is at two levels (Shyamsundar et al., 2005:3). First, each wildlife area is managed under a wildlife management authority headed by the district governor and the areas is then divided into wildlife management sub-authorities, which are controlled by traditional chiefs at a local level. In this model, traditional leaders hold wide-ranging powers including environmental decisions taken from a broad involvement of communities (Shyamsundar et al., 2005:3). A third type of interest is the Namibian case. Communities can establish conservancies and gain exclusive user rights to commercial tourism operations if they define a geographical area, demarcate membership, develop operating rules, and so on (Jones, 1999). One good example is the Caprivi Strip communities at the border with Botswana, Zambia and Zimbabwe in the Kavango Zambezi Transfrontier Conservation Area.

Looking at these perspectives and varied arguments from government to local views, it is noble to acknowledge the absence of an explicit statement of principles defining ecological power dynamics in terms of environmental authority, autonomy in natural resource governance, transparency and accountability of the GLTP process. While the GLTP Agreement and the Treaty (the founding documents establishing the GLTP) leave most things to country-specific interventions in dealing with their communities, it has led to agencies interpreting scenarios differently. They are applying varying methods and strategies in dealing with community resource rights in ways that the study conclude to be institutionally disenabling local processes for

participatory natural resource planning and environmental decision making, which meets objective 1 of the study.

Perhaps, it is important to indicate that while there are glaring prejudices accountability in terms of community devolution of environmental governance that is conspicuous by its disconnection with multi-level GLTP governance processes. Its implementation, management and governance of the GLTP (GLTP Treaty and the Tri-nation Agreement) and the policy documents (the Joint Monitoring Plan, the SADC Protocol on Wildlife Conservation and Law Enforcement); make explicit provisions that recognize devolving of power to user communities. In essence, the question is even where community structures exist as is the case with Sengwe; do they really wield power, authority and autonomy to have sound biodiversity debate at the local level? The results and simple ecological reality check prove otherwise, and that there are checks and balance as to what the GLTP founding documents say and the implementation on the ground. This disjuncture, as Logan (2002, 2) argues with respect to CAMPFIRE, shows in general that there are failures in legal transformation in relation to state resources and communities, and this is compounded by administrative bottlenecks that undermine local autonomy in undertaking natural resource management/governance. Resultantly, the community can arguably fail to realize its livelihoods and conservation objectives, because the policy and legislative environment is explicitly disenabling. Figure 7.1 shows the various boundary options discussed from the perspective of their varying implications on the community.

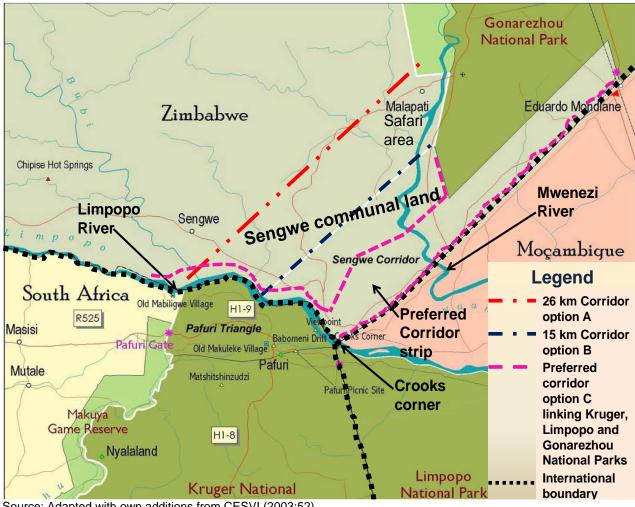
7.12.1 Sengwe Corridor: The confluence of conservation

As already highlighted, the study was conducted in three wards that cover the greater geographical and ecological zone that has been designated for various corridor options. The Corridor is expected to officially link Gonarezhou National Park (Zimbabwe) with mainly Kruger National Park of South Africa, and ultimately Limpopo National Park in Mozambique. To understand the various Corridor options, the contestations around it and the implications thereof on communities, Figure 7.6 shows the demarcations and the ensuing discussions of the various options of the designations brings to the fore, how communities view these developments in their area.

7.12.2 Corridor Option A

Assuming that the GLTP Treaty is followed in terms of its specified geographical definitions, the 26-kilometer (km) proposed Sengwe Corridor option (Figure 7.1 red line) is seen by the GLTP planners as the most appropriate. This implies covering the entire Sengwe Ward 13, 14 and 15.

This extends to the international boundary with Mozambique (southeastern direction) and South Africa (southern direction) forming one contiguous bioregion. This option according to CESVI (2005, 30) assumes that the GLTP initiatives has to focus on developing the Limpopo/Sengwe/Mabalauta sector and Gonarezhou National Park. To accomplish this, there is consideration of development of linkages between KNP and GNP, and the area embedding the proposed Sengwe Corridor as well as associated Limpopo Strip (Corridor option C with pink line) create a connecting Corridor zone for the GLTP's three parks.



Source: Adapted with own additions from CESVI (2003:52) Figure 7.6 Sengwe Corridor Options

7.12.3 Corridor Option B

This scenario of a proposed boundary Corridor B entails dissecting Sengwe community using a 15 km length along a strip of land that connects North-eastern GNP with Kruger National Park to the South. Just like option A, several households would be affected.

7.12.4 Corridor Option C

This proposed Corridor is much smaller strip of land and running parallel (pink line) to the international border with Mozambique in the north-easterly direction. According to CESVI and Cunlife, this strip of land provides a strategic zone for migratory species. This option is the most feasible that households prefer as opposed to the 15 and the 26 kilometre Corridor, which would entail resettlement or reorganization of some households to create a Corridor. The rationale for this is to form a physical linkage between GNP and KNP along Limpopo in the south-western direction. About 81% of households that responded indicated that should the boundary affect their households requiring them to move away, they would resist atavistically. Figure 7.8 summarizes overall responses from households regarding their feelings towards removal of settlements from where they currently reside and lay legitimate claim to land and other natural resources for their livelihoods.

Varied response	N	%
Positive	7	2%
Strongly positive	7	2%
Negative	49	15%
Strongly negative	267	81%
Total	330	100%

As regards to those who expressed positive and strongly felt they can move, accounted for 2% each respectively. Consequently, combining those who are negative (15%) and those strongly negative about their removal, clearly shows that the issue of moving people is emotional and can be contested by the local household. This is important for the DPWMA's scenario planning to consider gazetting Corridor option C as feasible, and less problematic when dealing with communities. Those living too adjacent to the GNP usually suffer both crop and livestock loses from wild animals, hence their interest to move. Discussions with those located too adjacent to the park, however, revealed that they would want to be moved away from the park boundary, settle within Sengwe community and not out of their communal land completely. It was apparent that the overwhelming response from household indicated desires to stay put, was informed by various reasons as in Table 7.9.

Varied response	N	%
We own the land	162.7	49%
We have nowhere else to go	12	3.7%
Have an emotional and cultural attachment to the land	142	43%
Would move to another area	14	4.3%
Total	330	100%

The trends therefore are that two most important points define the resoluteness of people to remain in their areas. They responded that they actually own the land that constitutes 49% of the 330 surveyed households and they have an emotional and cultural attachment to their homelands, which accounted for 43%. The importance of land goes as far as their livelihood practices such as subsistence agriculture, livestock production and obtaining woodland products such as medicinal plants, vegetables, poles and grass for thatching. Figure 7. 6 shows some huts at a homestead in ward 15 in Gonarezhou National Park taken during field research showing how people use local grass and poles for building mud huts.



Photo by D. Muzeza Figure 7.5 Thatched huts at a homestead in Malipati (ward 15)

In concluding this part, it is critical to indicate given the relative importance of claims on land and enjoyment of natural resources derived from their vicinities; households are uncomfortable with any attempt to move them out of their current homelands. As such, the best option would be pursuing the free strip of land running parallel to the border with Mozambique down to Crooks Corner and connecting with Kruger National Park. That that strip of land regardless of landmines still being cleared, would be the best option (option C) to avoid litigations from the communities and engendering natural resource based conflicts. The government and the DPWMA is aware of this, and is quite aware of such problems to arise, hence it would proceed with caution. More essentially, Wildlife Conservancy can be developed along the rich Corridor to create tourism employment so that the local people at least realise some benefits.

7.12.5 Ecological connectivity and implications on the community

Perhaps one important observation made from the above analysis is that without a connecting Zimbabwe's Gonarezhou with Kruger National Park, Zimbabwe ceases to be part of the GLTP initiative. An interview conducted with ZIMParks official clarified the fact that the proposed Sengwe Corridor was not being done within broad consultative processes and consent of the surrounding communities in scenario planning processes, and it is therefore ambiguous. An answered questionnaire by the DPWMA asserted the point that government had the sole obligation as encapsulated in the Tri-lateral Treaty signed by Heads of States and government that established the GLTP to take a leading role in the process of conservation and the GLTP governance. While there is recognition in the Tri-lateral treaty for community involvement, which implicitly entails local consultation and actual participation in resource planning. However, on the ground realities show little evidence of participatory consultations involving broader community members in the area. Rather, in the language of biodiversity governance, the government of Zimbabwe worked with councillors for consultations as community representatives, who in a big way, are undistinguishable from government structures as they act within defined mandates by the Rural District Council Act. In the words of Wolmer (2003:268), he postulated that:

"There was next to no consultation of local communities during this process and the Zimbabwean government and Department of National Parks and Wildlife Management (DNPWLM) appeared to have a limited idea of what they had committed themselves to".

It is important to allude that not much has changed since Wolmer made his observations in terms of community consultations and the attended consequences on environmental planning are simply exclusionary and dichotomous rather than being an inclusively participatory process. This study explored varying implications the proposed Corridor would have on the community on one-hand, and conservationist expectations on the other hand particularly livelihoods and sustainable conservation. The importance of the proposed Sengwe Corridor(s) vary depending on a plethora of needs and expectations as follows:

- 1) It is a strategic connectivity to the entire GLTP project. The Corridor links Gonarezhou National Park with Kruger Park in South Africana creating a contiguous bioregion.
- 2) Ecologically, the Corridor is critical for migratory species, particularly wild animals moving in old routes to and from one country to the other in search or forage. The fact that the Corridor

is strategic for wildlife movement and as a dispersal route, it is conceivable that it is important for the national economy, either for life-sustaining processes such as revenue generation through wildlife related tourism development or aesthetic natural national values that the government may consider as important.

3) Sengwe communal land's interconnection to the GLTP inexorably makes households integration into the design of the GLTP project, a priority. Resultantly, the designated corridor, whichever way (option A, B and C) sits strategic at the confluence of conservation and livelihood options. This is because it provides both a migratory corridor for fugitive wildlife moving across the three parks (Gonarezhou, Kruger and Limpopo National Parks) and potentially generates revenue that can give a fall back-support for communities around it for livelihoods purposes. Its biodiversity and ecosystems value, which evolves, create a solid habitat corridor to a broader the GLTP. However, it is observed that this is a complex connectivity that needs be examined separately over time scales in future research to determine compatibility of various ecological components and prospects for support that it can render to communities. As a critical transitory corridor for migratory wildlife to the GLTP, Sengwe communal communities become the bulwark of the conservation process of the GLTP on the part of the Zimbabwean side. Generally, the DPWMA stated clearly that they are currently at an advanced stage of a 'Draft Agreement' with the community in terms of the management of the corridor that stipulates that the Corridor, will be managed in line with the GLTP goals and objectives, which basically point towards natural resources conservation and tourism venture. The question that comes to mind is the historic tendency of hunting concessions and tourism development enterprises done by either the DPWMA or private partners accruing benefits to some distant individuals and institutions at the expense of the community. As this study has already demonstrated, such resources are prone to and opens communally claimed rural natural resources to neo-liberal conservation enterprises development and market based forces that do not benefit local communities effectively under the current regimes in Southern Africa. In the absence of clear local integration mechanisms is more attuned to 'elite resource capture' that households are concerned with in terms of depriving them from deriving benefits. In many developing countries, such as Zimbabwe, natural resource extraction and commercialization take place under two typical arrangements, which generate revenues for state agencies:

- a. The government issues a concession to a foreign company to extract and sell the resource.
 The flow of royalties is in normal circumstances a proportion of the value of the sales, and usually the proceeds are appropriated by the state and its agencies.
- b. A resource-rich country exploits its revenue through a government owned company; for instance, the DPWMA has exclusive custodial rights over all wildlife resources in Sengwe be they from the protected GNP or adjoining areas. This also applies to land which Manjengwa et al., (2010:14) noted that communal land is wholly state owned, and the communal people have usufructs. In both cases, government agencies and the elites face two choices: They can use the revenues for their programmes and own enrichment, or for investment, that improves the growth and development prospects of the community. However, considering the problems that the DPWMA faces in funding conservation, the proceeds are more likely to be used for conservation operations that community development due to lack of treasure support to the Parks and Wildlife Management Authority. There is precedence of Save Conservancy where 25-year leases were issued to those who were said were politically connected and government officials. This attracted disgruntlement from local communities. In that regard, there is a presumption among people in Sengwe that they might stand to lose wildlife proceeds, particularly given the fact that the GLTP is premised on neo-liberal market principles that open them to outside markets in which wildlife and other resources are commercialized and commoditized.
- c. For example, the operator for Safari operator on the Malipati Safari hunting concession is from Chiredzi, which is outside Sengwe community. There are no community share ownership Trusts that harness local natural resources to ensure that communities derive benefits. As wildlife is lucrative, the proceeds are largely shared between the operator and the RDC. Looking at these important points, concerns abound that even the officially sanctioned instance of resource usage through leasing of hunting areas for commercial wildlife hunting through the CAMPFIRE programme does carry some significant dangers in general and these were identified by Murphree and Mazambani (2002:37) that it may:
- 1) Stimulate overharvesting and unsustainability.
- Shift intra-local control over the resource concerned from poorer to more wealthy households, or from women to men.

- 3) Shift control from local to external actors.
- 4) Encourage corruption and nepotism at communal and high levels.
- 5) Create market chains in which "middle men" rather than local producers are the main beneficiaries. (Murphree, 2000).

In a study carried out by Robinson et al. (2006), they found out that natural resource rents alter the behaviour of political elites and agencies. This is done by increasing the value of being in power and institutional strength, leading to an increase in spending for power-preserving or institutional control activities through amassing more resource and consolidating hold onto the resources by all means necessary. Robinson et al., (2006) further suggest that accountability in the use of resources is, as a result, key to avoiding the resource curse. It is important, to acknowledge that in some cases, commercialization under the right conditions, may accrue socioeconomic and institutional benefits to communities, government agencies and conservation stakeholders as well. What is critical in this case of the GLTP, is to engage in a process that strikes a balance of benefits distribution such that no part or section of society shall feel disadvantaged. Rather, it should be a fair win-win situation. If that is achieved, or at least the local people realize that they are going to benefit, it motivates the local people as catalytic for collective action and collaboration in the management of transfrontier parks. More so, this may become a training ground for communities to master partnership and gain by way of transfer of skills from operators to groom local talent for conservation, wildlife marketing and negotiation with external actors. In terms of population dynamics Sengwe community with it human settlements that spread in the three Wards and beyond. There are two thousand, eight hundred and fifty nine (2 859) households. Ward based statistics are shown in Table 7.10.

District	Wards and its Name	Population	%	N N	%
Chiredzi	Ward 13 (Chibavahlengwe)	2 267	10%	265	9.3%
Chiredzi	Ward 14 (Sengwe)	7792	35%	1 122	39%
Chiredzi	Ward 15 (Maoze)	12 081	54%	1 472	52%
Total	3 Wards	22 140	100%	2 859	100%

Table 7.10 Ward	population in Sengwe	communal land
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The households practice a variety of livelihood activities. The major ones include crop, livestock production and wildlife conservation in an observably sustainable manner. They also harvest forest products. Edible woodland products constitute important resources for food in communal and resettlement areas. Several studies have been done in Zimbabwe's communal areas that provide extensive lists of the species that are central to rural livelihoods involved. Among these

are Gomez, (1985), Blench (1998) and Muir (1993). Muir who also included in the analysis, an instructive wild food calendar across time scales when particular edible woodland products are available. The species include fruits and forest seeds, tubers, leafy plants used as vegetables and shrubs, fungi, edible caterpillars (Mopani worms associated with Mopani woodlands), crickets and flying ants. The nutritional qualities of these woodland products are now recognized as "important source of dietary minerals and vitamins and, in times of stress, a significant supply of proteins, carbohydrates and fat" (Bradley and Dewees, 1993:80). Other services that forest products provide are ilalla leaves that are used for making baskets, mates and crafts, poles and grass used for constructing huts and thatching. In addition, the local people also harvest medicinal plants. The amount of forest products used was not determined since it was not part of this study. However, some use value of selected species was done during focus group discussions to obtain general overview of the importance attached to the various species to households in Sengwe community.

Unlike their Makuleke counterparts who rely on non-consumptive wildlife use through tourism such as photographic and wildlife safari in Makuleke Contract Park, Sengwe community practice significant consumptive wildlife use. In written responses on economic benefits to communities, the DPWMA official stated:

"Chiredzi Rural District Council is currently enjoying a Safari hunting concession of the Malipati Safari Area because the DPWMA recognises the community as a partner deserving a fair deal in the natural resources management matrix. The Community, through the RDC, sub-leases the Safari Area to a private operator".

This alludes to unbalanced ecological benefits sharing power dynamics that are tilted in favour of the RDC as opposed to supporting the community, which live in harmony with nature. The issue of economic benefits accruing to the community is negligible, and this has always been a major concern to households and focus group discussions raised constantly because even under CAMPFIRE, besides being defunct, the unequal benefit sharing formula is a common characteristic. While there was indication to the fact that the community sub-leases the area to a private operator through the RDC, this creates uneasiness among community leaders since they were obstinate that most benefits go to the operator and the RDC. This again reinforces the negative perception the local people have about the DPWMA and the RDC. The general conclusion is that the benefits are skewed in favour of government. Perhaps the huge wildlife value of Sengwe Corridor and its entire ambience that include Malipati Safari Area and Manjinji Pan Sanctuary is the reason why the DPWMA and Chiredzi RDC would not easily let go the natural resource to the communities in terms of local governance, exercising autonomy and surrogating

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full authority to local institutions. These institutions include WDCOs and traditional leaders. The same official further mentioned and acknowledged that benefits to communities were not adequately meeting human demands in Sengwe, which further reinforces how skewed and unfairly distributed the benefits are between private operators and the community when he said:

"Natural resources are limited and human demands are ever increasing. Individual households have different needs from those of the collective community and this is a potential source of conflict. The Parks and Wildlife Authority has jurisdiction over the GNP where wildlife management takes precedence over any other land use practices. Some members of the community have historical traces of ownership of the land before they were relocated to create space for the establishment of the protected area. Some feel short-changed, perceive the Park as underutilisation if not a waste of resources, and view the Parks management with resentment as a result. Most households in agro-ecological region five depend on livestock for their livelihoods".

It is perhaps important to indicate that the above assertion addresses the question of skewed benefits arising from wildlife and the determination to insist on government control of the resources in communal areas. To buttress this point, interviews conducted with an official from Malipati Safari Concession highlighted that trophy hunting was lucrative, and earning the private operator undisclosed sums of money. Contrary to resource scarcity, in fact, trophy hunting is a major source of income from which the RDC and DPWMA also make money through the sale of wildlife.

Sengwe communal land offers regional passage to both South Africa and Mozambique. In fact, historically, the three countries (Mozambique, South Africa and Zimbabwe) are interconnected and the national boundaries artificially separate communities. Makuleke people, who were evicted from the Pafuri Triangle in 1969, have strong social ties with the Shanghaan and Venda in Sengwe, thus, people from Sengwe capitalize on easy access for cross-border trading with businesses in South Africa and Mozambique across unofficial border crossings. The proximity of this area is therefore strategic to support a plethora of livelihood business across nations. In terms of the GLTP Joint Management Plan, infrastructure development such as access bridges to enable tourist movement across borders is in the offering, although the process is saddled by lack of funding (interview with DPWMA official, 7 July 2011).

The second centrality of the Corridor is that echoed by Murphree, (1993:2) that sound management of natural resources improves biodiversity and ecosystems, and can potentially affect positively on the conditions of livelihood of people in the area if user rights are enhanced and guaranteed. These two components are symbiotically important. From a developmentalist perspective, the two aspects seemingly coexist, but conservation takes precedence, creating divergent views in the manner resources should be used in the area. This has given rise to conservationist and government agencies championing market based biodiversity and ecosystems development more than they are giving prominence to local livelihood. This tends to antagonize conservation relations at local level since the pre-domination on human livelihood gives an impression that local needs are less important.

7.12 Sengwe community and contested resource tenurial rights

At law, communal land in Zimbabwe is state owned, however, Manjengwa et al, (2010:14) postulate that communal people lay usufruct claims and rights over small pieces of land they have. The essence of this debate is to understand if rural people, through their various governance institutional entities, legitimately have rights that give people the advantage access and use natural resources, particularly land, forest, water and directly making claims on wildlife dividends. In addition, it is argued in this study that ecological assumptions that reject the logic of communal property rights are far from reality. Murphree (1993:2) further puts forward an observation that give credence to this assertion advocating for observance of communal people's resource rights, and he argues the natural resources can be held under any one of four property rights regimes that were identified as 'Open-Access; Communal Property; Private Property; and State Property'. These, formally, should therefore help to determine who the managers would be of those resources that also include communities under the communal property regime.

Survey data from Sengwe illustrated that NGOs operating in the area proved that people are conscious of their resource rights and ownership, hence placing their resources under an 'open access,' regime that is assumed would lead to resource depletions, which is delusionary. Open access, which is a condition where resources have no defined property owner and are available to everyone, does not describe their understanding and practices as a community concerning land and other such natural resources in and around Sengwe community. In other words, contrary to some scholarly views and scepticism thereof about 'open access', respondents overwhelmingly place more emphasis on their traditional leaders (45%) as credible custodians of land and wildlife resources and the community at large having significant ownership claims or rights (35%). However, they also agreed even during discussions with groups and individuals that government

owns natural resources (19%) and give policy guidance on land, but they do so on behalf of the citizens to enable them derive benefits. The results about their understanding of ownership regimes are as shown in Figure 7.5.

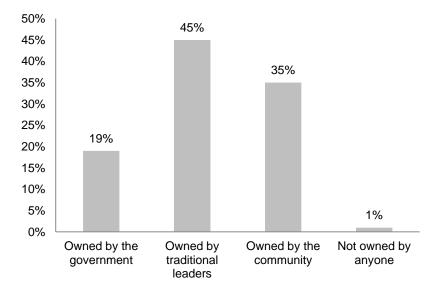


Figure 7.6 Households perceptions on land and natural resource ownership

One common reflection that emerged from the questionnaire responses is ample evidence resonating with discussions held that there is a thin line distinguishing between land and natural resource owned by the community and that owned by the traditional leaders who control natural resources on behalf of the subjects. Given that, traditional ownership is viewed as an entrustment for the community, and one Headman of the area confirmed this during discussions that they regulate resources on behalf of their people. Consequently, he believes that as traditional leaders have entitlements to them despite citing erosion of their authority and powers by elected structures of government. Further, it was highlighted during informal discussions that there are taboos as part of indigenous knowledge systems determining use and the type of resources used by people with punishments meted out to defiant individuals. While this study acknowledges the difficulties of enforcement of indigenous knowledge systems and sanctions that accompanies wrong use, it remains viable in these areas where there is vacuum of state institutions involved in sustainable natural resource conservation. State institutions, especially in view of the GLTP, were usually ignoring the local people and neglecting their culture, institutions and resource interests in their planning processes. A local Member of Parliament lamented that if only they could exchange the rights to own, use and have the responsibility to govern and manage abundant natural resource, the local people would broaden their benefits streams.

In addition, community (common/communal) ownership regime is associated with the local people's involvement through various mechanisms such as traditional leadership, which form strategic institutions at the local level. Generally, this institution has strong conservation competencies complementary to other forms of ownership regimes such as state or private ownerships. In other words, the technocratic perspectives obtaining in the GLTP holds the view that biodiversity and ecosystems are largely complex technical issues that require special treatment for sustainable management of the resources through state agencies and private companies. One government official from ZIMParks, argued that given the bilateral matters involved in the GLTP, communities in and around it have little say as this pertains to governmentto-government relations. Gradually, the government officials also determined who own, who use and under what regimes should those resources be held. Consequently, this has seen ownership of resources graduating from community oriented into a political ecological process dominated by government agencies and NGOs officials. This study noted with concern the gradualist political ecology approach that facilitates more inflexible macro socio-economic and ecological (environmental) considerations, which undermine local ownership and generates administrative governance structures that alienates the local people. These are so widespread phenomenon among transfrontier conservation projects in SADC, confirming the perception of the ascendency of a 'one size fits all' regarding transfrontier natural resource solutions when dealing with local communities. It is further argued in this context that ownership of resources around transfrontier zones, ideally, have to ensure equitable balance between state to private and community ownership by various communities, long marginalised from mutually benefiting from natural resources in their vicinities. Tenurial or ownership rights therefore, should be held also locally in order to motivate and facilitate sustainable collaborative resource management processes, social equity and poverty alleviation (Rihoy, 2003:7). In recognition of this perspective, Berkes and Farvar (1988:10) commented regarding rural communities saying:

"Use rights for the resource are controlled by an identifiable group and are not privately owned or managed by governments; there exist rules concerning who may use the resource, who is excluded from the resource and how the resource should be used".

Repeatedly, respondents and informant interviewees in Sengwe highlighted their plea for this recognition and largely, they were concerned that their social and economic rights were potentially being short-changed by mistakenly subsuming them at national level in terms of planning, natural

resource ownership and governance of the GLTP. To this end, Bromley and Cernea passionately lamenting that:

"Unfortunately, most state property regimes are examples of the states reach exceeding its grasp. Many states have taken on far more resource management authority than they can be expected to carry out effectively. More critically it sets the government against the peasant when, in fact, successful resource management requires the opposite" (Bromley and Cernea, 1989:25).

One observation that comes out clearly is the acknowledgement that wildlife management practices exist at local level guided by specific common property ownership regimes, rules on access and exclusion from proprietorship of natural resources that rest with the community and their traditional leadership as resource management institutions. It is however, intriguing to note that this environmental governance practices and ownership regimes at the implementation level of the GLTP substantially changed. The local people who were interviewed and some NGOs that contributed to the research, highlighted their expectations that ownership regimes in these areas require balancing of national economic and environmental objectives and should strive also to recognize the fundamental rights of the local people over the resources that support local livelihood needs. Ecological discourses around TFCAs in general and the GLTP governance in particular, showed deep disgruntlement of communities together with their local leadership. This clearly suggests failures to locate transboundary resource rights definitions within legitimate claims of disenfranchised rural people. Consequently, it is noted in this study that the GLTP process in Zimbabwe's context, the administrative governance architectures have introduced redefined tenurial reform system that escalates or entrenches state of natural resource ownership at the expense of communal (common) ownership.

Looking at it from the same angle, this indicts the successes achieved under CBNRM as a form of decentralization and devolution of natural resources management that gave the local people more autonomy and authority over their natural resources such as CAMPFIRE in Zimbabwe. However, in the last ten years, this programme has gradually become weak as funding has been dwindling due to over reliance on donor support and the RDCs shifted to state's support in conservation since 2000. This has fundamentally changed ecological relationships and perceptions thereof are negative between the state and communities (Tyler, 2000:4). The community leaders like the local traditional leadership in Sengwe, who are regarded to be custodians of culture and owners of the resources, fear that this approach impacts negatively on

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their authority and access to resources as their powers have literally been abrogate by government.

Such resource ownership reform measures adopted by the government of Zimbabwe largely inspired by the state's regional integration initiatives and the need to create a framework for expanded conservation of natural resources, create challenges as communities are left out. As communities lose control in terms of tenurial changes, the possibilities of 'elite resource capture' become apparent in such areas. There is, for instance, a legitimate concern from the communities that since they no longer have solidly defined claims over their resources, outsiders and political elites are likely to benefit more at their expense. These perceptions can be confirmed with what has just happened in Save conservancies in the North Eastern part of Gonarezhou National Park. Political elites have been allocated 25-year leases by the DPWMA of Zimbabwe to collaborate with the private individuals in Save Conservancies. This is contrary to locally proposed Save Valley Conservancy Community Trust, incorporating five neighbouring rural district councils that were supposed to be the basis of a broad local people participation in the conservation and wildlife sector under the indigenization and economic empowerment framework. In fact, there are simmering contradictions regarding this matter with top government officials issuing divergent statements in that "it is a unilateral action from the line ministry concerned and it's implementing agency, the National Parks," said Minister of Tourism and Hospitality Industry (Kawadza, 2012:3). To demonstrate the concerns that local people have with regards to ownership rights and subsequent policy inconsistencies, particularly on wildlife based enterprises that may slip off the local people's hands, Kawadza (2012:3) went further to quote the Minister asserting saying:

"To the best of my knowledge, in the life of the current Government, no such policy as Wildlife-Based Land Reform and Empowerment has been tabled in Cabinet. It promotes greed and alienation of our masses who are the legitimate broad-based empowerment partners in community share ownership and empowerment trusts as currently being applied in the mining sector. This business of empowering people who are already empowered severally in other sectors, such as farming, ranching, sugar cane farming, mining, etc, will not pass the moral test nor will it endear us to the people except to ourselves".

Further to that, the same Minister was candid to note some of the fundamental challenges posed by lack of a proper definition and classification of who have to own, derive benefits and to have

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authority over resources such that officials and the politically privileged individuals and officials are able to advantage themselves from natural resources as he said:

"It is wrong to have minority ownership of conservancies, but it is even more unpardonable to replace that minority white with a minority black, in the face of a crisis of expectations and thirst for empowerment from our black majority," said Minister Mzembi. "Environment (ministry) is the custodians, and our mandate is to market, and we can only market value not a threat. Wildlife management and conservation are also investment and philanthropic areas, in some instances protected by BIPAs (Bilateral Investments Protection Agreement), which are a sincerity test of trade goodwill between nation states".

It is critical to mention that discussions with the local people confirmed trepidation among the local people in Sengwe community over the shift in natural resource development paradigm, emphasising state control and private entrepreneurship in tourism opportunities without clear mechanism for their integration and participation. The people are sceptical that this reduces their role as a community in development, and their local leadership's role in transfrontier natural resource governance has diminished over the years. This further stimulate the debate on the strength and weaknesses of unguaranteed local ownership rights of the rural communities in terms of resource tenure, which, in any case, creates opportunities for outsiders deriving more benefits at the expense of the local people. One, would therefore, challenge this ecological governance process on its sustainability given the fact that it makes no difference with the colonial and immediate post-colonial periods that vested more ownership and authority on the state and private privileged individual control, largely viewed as progressive and economically efficient than community ownership (Rihoy, 2003:6).

7.13 The GLTP and Sengwe struggle for resource co-governance

As far as the GLTP governance is concerned, it contradicts a plethora of local resource governance processes. It is conceivable that the multi-level scale of governance that give power to the CRDC, the DPWMA and the GLTP TFCA national structures potentially discourage grassroots participation and accountability, thereby failing to live up to the expectation of improving the lives of people. Sengwe community is caught up in a paradoxical situation in terms of dealing with how the community can be involved in the GLTP governance processes. This paradox arises in the sense that Ward 13, 14, 15 and some parts of Beitbridge District (in the West of Sengwe Corridor), are inhabited by agro-pastoralist households, who supplement their livelihoods by trade

and harvesting of forest products. It is critical to highlight that there are contradictions between the legal and policy framework exigencies with local sanctions, traditional institutions and community expectations with regards to the governance of natural resources. Sengwe community, particularly Ward 13, 14 and 15, are so important that any development of the GLTP on the Zimbabwean side should be cognizant of the interest of the local people. Without recognizing this critical collaboration in conservation, it jeopardizes prospect for sustainable conservation as negativity to the objectives of the GLTP. To understand the complexities of natural resource governance and its impact thereof, this study commences with a framework of analysis to assist examining different variables in the functioning of institutions and structures as they relate to different scales of resource governance, how this affects negatively or enhance collaboration conservation. The following Figure 7.3 summaries variables as they relate to other sub-areas in natural resource governance dynamics.

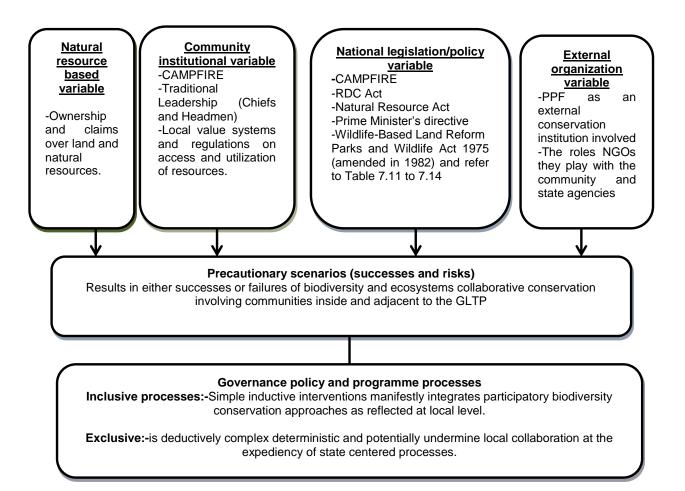


Figure 7.7 Context of environmental, policies and institutional variables

Table 7.11 to 7.14 cover discussions of governance institutions, legislation and policies. The existing GLTP governance structures are not enabling enough for community participation at local level. In terms of the variables, scenarios analysis and governance, it can be deduced that negative consequences on both local livelihoods and sustainable biodiversity conservation are likely in the GLTP where the administrative governance structures exclude the local people.

7.14 Sengwe community: Leadership and the GLTP Governance

Sengwe community is one of the areas that falls under some communities in Zimbabwe that are designated for the CAMPFIRE programme. However, as already noted in this study, campfire has not been active in the last ten years, such that the wildlife benefits that used to accrue directly to communities in terms of financial dividends equally dwindled. Information gathered from an interview with the head of campfire confirmed that generally, campfire as a locally based institution had become weak, and therefore it was hard to effectively deal with a plethora of environmental problems that communities were facing. Further to that, the way CAMPFIRE has been operating, showed that it is constrained by numerous problems as a government programme, particularly the dominance of officials in decision-making. Perhaps, once concern mentioned was the local households concern that the local people do not participate. To understand these issues, it is imperative to look at CAMPFIRE as a legislative safeguard for Sengwe community to enhance their livelihoods and participate in sustainable conservation as well as the contradictions that exist in the discourse.

7.15 The CAMPFIRE-CBNRM: Legal institutional safeguards

The CAMPIFIRE (Communal Areas Management Plan For Indigenous Resources) programme as a governance structures, was developed, adopted and implemented in Zimbabwe as part of its first forays into the field of CBNRM (Community Based Natural Resources Management) approach (Grundy and Breton, 1998.17). Generally, CBNRM was meant to address poverty reduction in rural communities rich with wildlife in Southern Africa (Jones, 2004). Initiated by the Zimbabwean Department of National Parks and Wildlife Management, CAMPFIRE programme sought to decentralize and devolve the management, governance and use of natural resources, particularly wildlife, to rural communities (Grundy and Breton, 1998.17). Since the 1980s, it was lauded internationally for its successes in enabling communities to derive sustainable livelihood from wildlife management. In the context of CBNRM initiative, it has seen mixed success over the last 20 plus years (Berkes et al., 2009:133). CAMPFIRE programme ensures that the rights to use, benefit from and management of natural resources fundamentally rested on the central study of 'collective proprietorship' where the local people jointly enjoy regulated use rights over land and resources, which they would manage according to their own rules and strategies (Jones, 2004, 4). Ideally, views from interviews conducted in Sengwe, illustrated that local leadership is of the view that the GLTP governmental managers' definition of use rights does not capture their local interests. One prominent local traditional leader interviewed (13 June 2011), lamented that the GLTP governance should derive and integrate CBNRM as an existing concept for communal property regimes where, a defined group of people can have collective managerial and use rights over land and other resources under "common property resources within a defined jurisdiction" (Jones and Murphree, 2004). Implicitly, the local sentiments highlighted that there has to be institutional convergence between local institutions involved in wildlife/environmental decisionmaking with those of the GLTP administration. In essence, it is prudent to attest the argument that CAMPFIRE, which is a sub-set of CBNRM concept, would offer a form of focused integrative intervention in transfrontier park governance, had managers considered it at the conceptualization stage. This rests on the central notion that if resources are valuable and communal people have some form of rights to use, benefit from and manage the resources, sustainable use is likely to ensue (Jones, 2004a). From this vantage point, it emerged from interviews with a local councillor (29 June 2011 at Davhata) and one member of the CAMPFIRE Association local Committee member, that Sengwe communities conceive the GLTP governance and the current natural resource structures such as CAMPFIRE more focused on entrenching state and private sector control of resources. This arises because in the first place, as shall be seen, CAMPFIRE operates as quasi-government, dominated by the district administration, park and CAMPFIRE district officials. The individuals companies that are then awarded leases and hunting licences in these wildlife rich areas, which the interviewees noted that do not include the local people to derive substantial benefits. It is not surprising therefore, those natural resources, such as wildlife in Save Conservancies in the South East of Gonarezhou National Park, are a scene of political ecological contestations. Kawadza (2012:3) reportedly quoted the Minister of Tourism lamenting bitterly regarding the awarding of 25 year conservancy lease agreements by DPWMA, giving commercial hunting trophy rights to top officials and politicians (including ministers) saying:

"It promotes greed and alienation of our masses who are the legitimate broadbased empowerment partners in community share ownership and empowerment trusts as currently being applied in the mining sector. This business of empowering people who are already empowered severally in other sectors, such as farming, ranching, sugar cane farming, mining, etc, will not pass the moral test nor will it endear us to the people except to ourselves". The tragedy of this situation lies in the fact that communities have little options to manoeuvre even within the current CBNRM under CAMPFIRE or the economic empowerment through indigenization that has been extended to the wildlife sectors, including communal areas where conservation and wildlife hunting takes place under specific regulations. The natural resource policy and institutional governance myopia therefore, do not viably address problems of rural people beset by a plethora of livelihood vulnerabilities under the greatest environmental conditions such as droughts, diseases and hunger, of which, natural resource assets potentially provide the greatest hope for their livelihood if they were to be used efficiently for their mutual benefit. As the local Member of Parliament of Chiredzi South puts it:

"If only the roles would be exchanged to have communities as owners of hunting concessions inside and adjacent to the GNP part of the GLTP just for ten years. Be allowed to make decisions over use of their resources, while current decision makers and the hired private owners do subsistence farming, the lives of people would be transformed completely" (interview conducted with the Member of Parliament on 7 June 2011 at Zimbabwe Parliament Building, Harare).

The contradictions highlighted above in community resource governance with those of the GLTP, show potential pitfalls regarding transfrontier governance, and the impact thereof on community livelihood benefits is enormous. It is also important to indicate that, as one of the objectives of the research, community perceptions were gathered to ascertain if the current legislative frameworks around natural resources incorporated into the GLTP enable or disenable local participation in support of local people to derive livelihood benefits. Further, it was critical to examine the local institutional safeguards in Sengwe that facilitate resource governance by the local people and examine how they relate to the GLTP governance process.

7.16 Exploring legislative safeguards

The frameworks in Sengwe community in terms of natural resource governance takes the form of different pieces of legislation and natural resource policies that were noted to impede potential for the local people to adequately derive benefits. Firstly, the local people are not fully informed of these laws and views gathered from the Environmental Management Agency (EMA) showed that there is limited interaction with rural communities such as Sengwe community due to its remoteness. Secondly, the people in Sengwe are not informed about the laws governing their natural resources; hence, ambiguities exist regarding their rights. Legally, communal lands and resettlement lands since independence in 1980, are managed under a formal proprietorship of the

state, and in the legal provisions, the lands are "vested in the President," with the presumption that the state is the custodian of these lands. Resources such as wildlife, aquatic and forests are equally managed directly through various line ministries and indirectly through units of elected representative local government structures for the benefit of their inhabitants (Murphree and Mazambani, 2002:44). As already noted, these rural people exercise some usufruct rights to use the land, resources and to participate in planning for this usage of the resource through their representative structures such as the Ward Development Committees (WADCOs). Councillors represent the WADCOs as elected officials, while the village heads in terms of the local government regulations espoused in the Rural District Council Act represent the Village Development Committees (VIDCOs). The Traditional leaders have less meaningful roles to play, despite making claims, in terms of having authority and powers over resources under their jurisdictions. The local people, however, do not have the right to act, individually or collectively, as a *legal persona* at sub-district levels in respect of ownership of land and resources.

Ncube (2011, 89) argues that the confusion permeates right to the local administrative levels, usually characterized by a lack of role clarity. The functions between traditional institutions of chiefs, headman and village heads, with those of elected leadership, particularly developmental structures such as the VIDCOs and the WADCOs, are conferred with mandates to deal also with land and natural resource governance matters. This conflicting dualism of power at grassroots level, precipitate a crisis of communal leadership in areas rich in natural resources of Zimbabwe, whereby the elected rural institutions have real governmental legitimacy but the traditional leadership is less appreciated when it comes to dealing with natural resources. At the local level, traditional leaders are acknowledged and respected as a cultural practice in the political discourse of Zimbabwe; the formal state's government modernization initiative gives more power and authority to elected councillors.

In an attempt to understand the legal and policy niceties impeding on local resource claims and disenable participation by the local people, the study examined legislative and policies in existence. These include the Communal Lands Act (1982), the Natural Resources Act (1942 as amended in 1988), the Forest Act (1996), the Communal Land Forest Produce Act (1987), the Parks and Wild Life Act (of 1975 as amended in 1982), the Traditional Leaders Act (1998) and the Rural District Councils Act (1988). Deriving from analysis of legislation found in Nhira et al. (1998: 36-37), the Land Tenure Commission (LTC) Report of the Commission of Inquiry into Appropriate Agricultural Land Tenure Systems by Rukuni (1994, Vol. II: 141-176) and Chitsike, (2000: 8-14).

Tables 7.11 to 7.14, present explanations on the legal and policy policies that affect communities with regards to resource claims and participation.

Kay lagislation/nalisy			
Key legislation/policy	Summary of main provisions	Implications on communities' resource relations	
Land Apportionment Act and Land Tenure, 1930	Created the Native Reserves/Tribal Trust Lands, later on was renamed the Communal Lands. This marked the translocation of indigenous people to highly concentrated settlements areas on marginally less productive land.	 Alienation of communities and subsequent loss of viable livelihoods and access to natural resources. 	
Natural Resources Act, 1942	 Provided for highly interventionist regulation of natural resources use on Native Reserves (communal lands). 	 Appropriation of resource rich areas and confers authority and powers to make decisions on government structures. 	
District (Communal Land) Councils Act,1982	Control over communal lands was placed under the Presidency, through the Rural District Councils (RDCs) rather than chiefs or headmen as local institutions. RDCs are empowered to make orders and control natural resources. Elective institutions were created at Ward and village levels to govern natural resources.	 Bureaucratic establishments combined with political imperatives have led to observable state custodianship, thereby alienating the local people. 	
Communal Land Forest Produce Act	Restricts use of forest products in communal lands to "own use" or "household use". It provides for RDCs to grant commercial timber/forest harvesting licenses; prohibits use of forest products from protected forest areas and reserved tree species and prohibits clearing of vegetation within 100m of riverbanks.	 It is not clear on empowering local people to exploit the resources commercially without restricting them to "own use" them. 	

Table 7.11 Legislative safeguards on resource exploitation

Key legislation/policy	Summary of main provisions	Implications on communities' resource relations
Rural District Councils Act, 1988	Provides for RDCs to enact by- laws to regulate natural resource use, issue licenses for commercial extraction of wood products, declares Natural Resources Management Committees (NRMCs) to enforce the Natural Resources Act. Enables the Minister of Local Government to confer upon a council in respect of its whole area or any of the powers conferred upon a conservation committee under the Natural Resources Act. A notice gazette of 1980 conferred upon all district councils this power. This means a 'Natural Resources Committee' is a statutory committee of the DC.	Cosmetic 'decentralization' and devolution of power. The bureaucrats still maintain authority over environmental decision-making. The NRMCs presumed to be vehicles for local 'involvement' and 'participation' were cited by interviewees as implying co-option of local elites, the leadership and those politically connected for derived programmes from the Chiredzi RDC, hence stifling broad local participation of people in environmental governance matters.
Traditional Leaders Act, 1998	• Empowers chiefs, headmen and village heads (sabhukus) to execute duties that include ensuring that land and other natural resources are used and exploited in terms of the law and, in particular, controlling over cultivation, over-grazing, the indiscriminate destruction of flora and fauna, and the general prevention of degradation, abuse or misuse of natural resources in their areas. Chiefs can charge environmental offenders on smaller cases. It also establishes village assemblies and mandates the demarcation of their boundaries.	 The roles of chiefs were divested to more of observatory function. Rather than incorporating and co-opting traditional institutions into state institutions, the government sought to marginalize them by denying them, among other things, the power to make decisions over governance of land in terms of allocation land and making environmental decisions as this is the prerogative of a respective minister dealing with land and natural resources respectively. In the long term, this introduced profound changes in natural resources and land administration, hence impacting on tenurial situations of communal people and left the traditional with little more than a spiritual and symbolic function (Communal Lands Development Plan, 1986).

Source: Nhira et al., (1998, 36-37)

Key legislation/policy	Summary of main provisions	Implications on communities' resource relations
CAMPFIRE	 CAMPFIRE provides major support to the empowerment of RDCs since in many districts it provides the single greatest source of funding outside central government. The receipt of the funds and the need to make environmental decisions over the programmes producing and expending these funds is empowering to district councils (Peterson, 1991). 	• Inherent conflict over governance of natural resources between the RDCs and local communities, particularly the control of the CAMPFIRE programme. Despite the programme conferring wildlife governance and management to the local people, the basis upon which transfrontier park synergy could be predicated, it appears the RDCs hold onto and use CAMPFIRE for income generation to support their operations as government funding remains erratic.
Prime Minister's Directive in 1984 on local government	Established a system of localized development committees; Village and Ward Development Committees (VIDCOs and WADCOs). The purported objective of this Directive was to define the administrative structures at provincial and district level and the relationships and channels of communication between all participants in the development at provincial and district level in order to achieve the coordinated development of provinces and districts.	Centralized power over natural resources on Provincial and District authorities. The developmental, including environmental decision making therefore rest with elected structures for effective coordination of development, which creates problems with local traditional structures. Local participation was assumed that it would be achieved through VIDCOs and WADCOs, however, the committees have not been robust.
The Parks and Wildlife Act 1975 as amended in 1982	The Parks and Wildlife Act (Chapter 20:14) make provisions for community participation in conservation. The Act declared local owners or occupiers of alienated land as appropriate authorities over the wildlife resources under their jurisdiction. This acted as an incentive for investment in wildlife management. However, the Act devolved tenurial rights over wildlife that places emphasis on government control and benefits tilted in favour of government agencies	• The devolution of ownership and management rights over wildlife in Zimbabwe is weak in establishing a good platform for effective community participation in conservation. Instead of devolving appropriate authority in practice to communities, it was devolved to RDCs to manage and benefit from wildlife found within the communal areas of Zimbabwe. The aim was to have the RDCs to devolve the wildlife management authority further down to communities. However, over the years, whilst devolution to communities has occurred it has not been at the anticipated pace. The RDCs regard wildlife as an important income stream because of a poor national economy that has seen the erosion of other sources of income. This has resulted in RDCs being accused of recentralising management authority rather devolving it to communities.

Table 7.14 Legislative safeguards on resource exploitation and governance

Key legislation/policy	Summary of main provisions	Implications on communities' resource relations
Wildlife-Based Land Reform Policy- a product of the Land Acquisition Act of 2006	• Seeks to indigenize the wildlife sector by transferring shares, granting 25-year leases and granting wildlife hunting permits to the indigenous people (Kawadza, 2012: 2). The policy approved three basic models of indigenizing the wildlife industry.	 No consensus on the policy within government and the policy is caught up in controversy of manifesting 'elite resource capture' through awarding of leases and hunting permits at Save Conservancy to top government officials and politicians at the expense of
	• The first option involves a partnership between the current farmers, the Parks and Wildlife Management Authority of Zimbabwe and local communities.	communities, including Save Conservancy, which is adjacent to the GLTP.
	• The second option involves a joint venture between sitting farmers and the local communities. This option involves the ceding of 10 percent shareholding to a local trust in a manner to what foreign-owned mines are doing.	
	• The last option, which was chosen as the model of choice for the 25 black lease recipients in the Save Valley Conservancy, has been the source of all the recent brouhaha.	

It is certainly arguable that natural resource legislative and policy manifestations in the Zimbabwean contest, pose enormous challenges, as they appear to be fragmented thereby negatively constraining rural communities and their foregoing traditional institutions from effective participation in environmental decision-making. This resonates with the pre-colonial state government that also supplanted the responsibility for natural resources into state agencies such as RDCs, Forestry Commission and the DPWMA, and this was deliberately meant to take control of valuable flora and fauna from local people so as to retain benefits for itself (Mohamed-Katerere, 1996).This trend continues in the GLTP governance process.

The manifestation of this situation lies in various dimensions of resource governance that emerged from the field data collected. Firstly, when households were asked about whether they agreed to being involved in natural resource decision making that affect their livelihood following the establishment of the GLTP, their responses in percentage terms are as illustrated in Table 7.15, shows that they are largely not involved.

Varied response	N	%
Agreed	4	1.3%
Strongly agree	1	0.3%
Disagree	169	51.3%
Strongly disagree	84	25.3%
Undecided	72	21.7%
Total	330	100%

The simple deduction of the response is that they attest to the fact that 51.3% of households disagreed with the assertion of being involved in decision making regarding their natural resources, part of the GLTP and 25.3% vehemently stated that they strongly were not involved. A combined response of those who agreed (1.3%) and those who strongly agreed (0.3%) accounted for only a meagre 1.6%. The 21.7% are those who were undecided, however, it is quite revealing that the majority (76.6%) generally, confirmed non-involvement in decision-making. Linked to this, was an attempt to get an understanding of how households in Sengwe community regard current environmental representation in the GLTP political ecological power dynamics and their responses were quite revealing as illustrated by Figure 7.8.

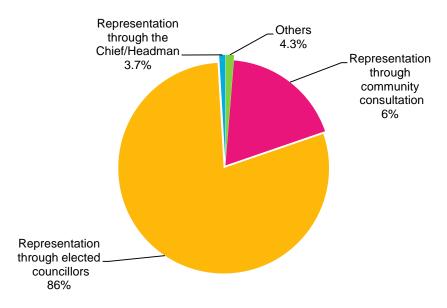


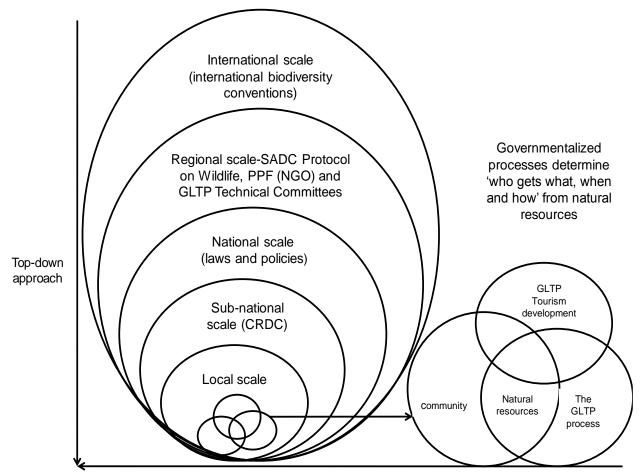
Figure 7.8 Household Natural resource decision making representation perceptions

The results show pre-eminence of councillors in terms of representation of environmental matters accounting for 86% against broad participation of communities and traditional leadership as an

institution accounting for about 6% and 3.7%. Serious consequences therefore abound that there is negation of community consultation. Interaction with some councillors of the three Wards, it was further confirmed that resource governance and accompanying allocation of rights is the preserve of bureaucratic administrative structures such as Chiredzi RDC Administrator, the DPWMA and the CAMPFIRE Association. The councillors revealed that it was difficult to oppose government decisions and those of specialized government agencies, particularly the DPWMA that play an absolute role in the GLTP decision making processes on natural resources at both district, national and sub-regional levels.

Looking further at the involvement and representation of natural resource issues in Sengwe, one important cross-cutting issue emerging is participation that is arguably a critical component for Sengwe community members having the right to be involved, consulted and effectively represented in environmental decision-making. They also yearn to have prior informed consent on decisions taken regarding natural resources in the GLTP adjacent to their communities. This so critical to the extent that GLTP would have required the full acceptance of environmental initiatives and programmes by the local people as this has enormous impact on the community at large.

Unless there is a paradigm shift in readjusting, the GLTP governance processes in terms of policies and legislation to recognize communally based involvement of people in natural resource decision-making and there is little serious reason to overstretch ecological optimism about the success of the GLTP in both achieving conservation objectives and enhancing livelihoods of the local people. Ecological participation is linked to deriving environmental benefits through use of resources for poverty alleviation. The belated involvement and post-project design representation of the local interests, has already been overtaken by events of the GLTP governance, hence creating insecurity over ownership of resources. One interviewee lamented that the strategy used regarding the GLTP is environmentally government top-down intervention, and indicts on natural resource rights claims, and bringing people on board lately is tokenistic (interview with a respondent at CAMPFIRE meeting at Davhata, 29 June 2011). Because of this, the study conceptualized a framework to comprehend this allusion as follows.



Interactions in environmental governance

Figure 7.9 Conceptualization of deductive top-down environmental governance

7.17 Top-down approach versus the participatory bottom-up approach

Overtly, Figure 7.4 illustrates a comprehensive framework that interprets local assertions that the GLTP biodiversity governance process remains deductively a rigid top-down approach that however, contradicts the devopmentalist theory of an inductive bottom-up approach in project conceptualization, design, implementation and evaluation in which issues of local interest can be captured. The central notion is that bottom-up approach involves stakeholders, including those who manage the resources (game park officials) and the communities near those resources, must be included in problem identification, priority setting, and identification of research alternatives (Krebs, 2012,2). It is noted in literature that the top-down approach attempts to overcome poverty in developing countries by centralizing development in mostly welfare manner, transfer of technology and economic development, but bottom-up approach shifted the focus to involving the community in development with an integration of beneficiaries' skills, participation. This gives

leverage to localized knowledge and institutional competencies as a means towards sustainable strategies to overcome poverty (Warburton 1998, 20). In practical terms, bottom-up processes even in complex natural resource governance relationships, are perceived as more functional and democratic than top-down approaches and are closely related to decentralization of governmental functions (Lane and Corbett 2005:141).

To further support these assertions, the 1992 United Nations Conference on Environment and Development became the point of reference in development discourses at which the Local Agenda 21, which is the outcome of that conference, gave significant support to processes at the community level as highly critical (UNEP 2003:3) by unequivocally stating that the activities at the local level, should contribute to the integrated promotion of sustainable livelihoods and environmental protection through covering a variety of sectorial interventions involving a range of actors, from the local to the global level, as well as recognising the essential role of stakeholders at all levels, especially the communities (UN 1992, chapter 3.5).

Therefore, the paradigmatic transformation at the international level towards bottom-up approach also has consequences for development work, and ideally, should have significant impact on global conservation patterns as they relate to local communities. To this extent, it is further postulated that rather than outside programme managers and policymakers unilaterally defining environmental programmes, the stakeholders have to be empowered through a process of group learning and consensus-building, particularly the communities to create and manage their own programmes (Kapoor 2001:271). In addition, it is further proposed that local communities should be encouraged to develop their environmental participatory process on their own, or if required, with the help of outsiders such as the government, the international agencies or NGO staff act as catalysts or facilitators of the process for the local level processes to be effective in enhancing livelihoods and conservation (Kapoor 2001:271).

While the critiquing of the top-down approach is problematic in development and conservation debates as shown, it is important to note that in the case of the GLTP, the above scales (Figure 7.4) functions in one direction of biodiversity governance as the local respondents who interacted with the researcher perceive it. More particularly, the scales operate manifestly through laws, policies and administrative structures as stated in Table 7.2; 7.3; 7.4 and 7.5. It is observed from this framework that there is preponderance of higher scales in terms of bureaucratic/governmental pressure over the community, which apparently, has little role to play either in defining the structures for resource governance, access, ownership and utilization rights. To this end, one

councillor argued that even when it comes to investment in tourism, there is usually partnership with the government, and contracts, are resultantly concluded as such (interview with a local councillor, 13 June 2011). The government, through the DPWMA entered into Safari hunting concessions in the GNP, and the benefits that accrue to the local people is seasonal employment of some few people. In that regard, it is noted that government maximizes its administrative innovation to retain its heavy handedness in controlling natural resources, particularly for the simple reason that wildlife is a lucrative business especially trophy hunting.

The dominant notion in terms of the impact all these processes have on Sengwe should worry conservation experts, because conservation development discourse has moved away from participatory approaches. This case study, as reflected in the framework and the Zimbabwe laws, policies, management strategies and actual practices, show that Sengwe people are at the epicentre of a deep seated ecological natural resource rights contestation and frustrations, indicative of the shortcomings in the conceptualization and implementation of transfrontier projects in Southern Africa. Although the conservation rhetoric is on paper inclined to community participatory conservation to alleviate poverty of these, however, this has not found empirical expression in bottom-up approaches that enable communities to take advantage of the GLTP opportunities to uplift their life styles. While the Makuleke case is presented as a model or local empowerment, significant strides they made were achieved before the GLTP came into place, and currently, they are yet to experience the galore of promised and meaningful benefits from the GLTP. Further to that, while debating community conservation: limitations and opportunities, King (2007,209) highlights that many advocates of community conservation have been effective in asserting the need for greater local control of environmental resources, and at the same time challenging environmental mandates that privilege state, and realistically so, the private tourism sector, some few individuals and international agencies over communities. The concept of 'elite resource capture' is one element that local leadership in Sengwe fear that could happen over their resources as this had also taken place in some areas such as the Save Conservancy.

To add on to that, Chapin (2004) in his popularly provocative assessment of the scales of conservation and the attendant governance processes, asserts that leading international conservation agencies are generally less willing to work with local communities, and usually, use science and sophisticated technologies such that they pushed for larger-scale conservation projects, including hot spots, eco-regions, and living landscapes. Chapin (2004:21) further laments that although this is not publicly mentioned publicly, the attitude of many conservation is that they have the money and they are in charge in determining the course of conservation policies

and programmes. As Chapin (2004:21) put it, "they have cordoned certain areas for conservation, and in their own minds they have a clear idea of what should be done".

It is also true that the collapse of CBNRM, particularly CAMPFIRE in Sengwe, just like other parts of Zimbabwe, was cited by a senior CAMPFIRE Association official (28 July 2011) as largely due to donor funding withdrawal and changing of funding priorities from small scale community conservation initiatives to larger scale government led bioregional projects. It is therefore not a coincidence that the GLTP has been largely funded by international agencies, chief among them is KfW (German Development Bank), IMF (International Monetary Fund) and World Bank, through the Peace Parks Foundation) as a technical sub-regional partner with the governments. Informal discussion with PPF official indicated that the organization is prioritizing Sengwe community in terms of embarking on tourism infrastructure development that should assist the community, but this has to be done through the DPWMA, which also has vested tourism enterprises development. This position in which the DPWMA is the regulator, and champions investments in which it is also a critical player, is explicitly contradictory and normally takes away opportunities meant for the community. Consequently, Ramutsindela (2007:105) describes the current TFCAs situation as nothing less than "scale of marginality", and borrowing from Dzingirai (2004), these TFCAs have a disenfranchising tendency, surprisingly though; this has not aroused protests by the disenfranchised (Ramutsindela, 2007:103). From its administrative hierarchical ordering, policies, laws and administrative configurations, the GLTP processes have arguably moved away from integration of locally based conservation processes that recognize a development model that maximizes local ecological competencies. These observations challenge the astounding GLTP governance practices accompanied by concerns about the underlying assumptions and implementation of initiatives that exclude the communities or reducing them to mere spectators of the processes. Although there is a growing awareness even in research of the importance of the community participation as the point of departure towards ecological management sustainability, there is still need for the GLTP to proceed with caution and scrutiny to specific environmental needs within each local context. Engagements with ZIMParks officials, revealed that there is a widely-held position in government of Zimbabwe's DPWMA and CAMPFIRE Association that it is their responsibility to provide an enabling policy environment and champion conservation development processes (top-down approach), which in turn are also influencing the gradual erosion of community-level capacity toward natural resource self-governance and self-action regarding complex GLTP relationships. This dominant and expanding ecological role of government, while prudent in order to leverage skills, resources and gaining conservation projects legitimacy in the development of TFCAs, it also lacks local interface, and has continued to

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generate a wide simmering negative perceptions at the local level. On another dimension, it is critical also to presumably revisit natural resource management and governance 'decentralization and devolution' looking at the challenges and opportunities with a view to stimulate peoples' capacity for natural resource collaborative governance and local self-action for the development, particularly of the GLTP. Ideally, this would imply adopting the bottom-up approach involving communities, their institutions and traditions of resource tenure as a flexible framework for the GLTP in providing guiding principles for benefits. By so doing, this collaborating mechanism with the community empowers its members to make them capable to tackle future environmental problems themselves, and it is a constructive way for a community to respond to issues of their localities. As Terre des homes puts it, a community approach as an important way of working in partnership with communities and "recognizes people's resilience, capacities, skills and resources, builds on these to deliver protection and solutions, and supports the community's own goals. One goal of a community-based approach should be to empower all community actors to work together to support different members of the community in exercising and enjoying their rights"(Terre des hommes 2010:36, citing Action for the Right of the Child, Resource pack, 2010).

Furthermore, it is noted in literature that a community is closer to the environmental problems than a government (Lane and McDonald, 2005:711). Since the local community has to solve environmental problems and/or need to manage its natural resources, it has a more direct motivation for undertaking environmental tasks, cognizant of the negative consequences on the local people if they were to be reckless with their biodiversity in the vicinities. Pursuant to that, it is observed in this discussion that by harnessing the bottom-up approach, tapping into localized institutional governance processes and ecological knowledge systems of the local community, there is an expectation of a greater efficiency to be achieved in the GLTP project. Furthermore, from a proximity natural environmental learning perspective, a community lives with its natural environment, and its members consequentially amass concise local knowledge over time, which might be helpful to identify solutions to the GLTP transboundary environmental problems. Resultantly, this enhanced ecological democracy, recognition of an appropriate approach (bottomup) enhancing equity in the access to decision-makers, decision-making forums as well as to resources, can go a long way in realizing sustainability (Lane and Mc Donald, 2005:717). In a questionnaire response, one expert from a development NGO operating in Sengwe clearly buttressed these perspectives and further expounded that sustainability of the GLTP has to be adjusted to local capacity and key areas of concern is the general lack of coordination among governmental agencies with local institutions, traditions and research recommendations from Sengwe. This could seriously impair the sustainability of the GLTP, particularly the current state

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where local facilitation and dispensing of information and receiving feedback for continuous refinement of the GLTP project, including policy improvement according to times, local demands and ground realities have not been happening leading to unnecessary anxieties locally. Clearly, given the complexities of the GLTP governance and its apparent ecological ramifications on both the community's role and the scientific sophistication of biodiversity in the GLTP bioregion, not a 'one size fits all' approach can tackle the problems. In chapter 8, this study theorizes governance framework by suggesting detailed hybrid classic inductive bottom-up and deductive top-down framework that can be deployed in modernized transfrontier park administrative systems, congruent to local institutional processes and value systems for transfrontier governance interactions leading to deterministic environmental outcomes.

7.18 The GLTP Governance: Contextualizing the top-down process in Sengwe

As the GLTP administrative structure stands currently, it does not only crowd out the community from effective participation, but undermines the rights of the rural people to make legitimate claims regarding involvement and ensuring that their local livelihoods are not jeopardized in the process of newly defined natural resource ownership regimes. Consequential to the GLTP process, people mentioned that they are insecure as they fear substantial natural resource benefits derived through tourism development, which is largely government-led and private sector driven, excludes them, hence the dividends accrue to outsiders contrary to local interests be they material and monetary. This study recognizes local consultation and involvement of traditional leadership and their associated local environmental value systems as central to making significant changes in environmental sustainability. In other words, the central study here is for the process of representation in decision making to be inclusively participatory. To buttress community concerns, the majority of households demonstrated dissatisfaction with the manner in which the GLTP is governed. According to NGOs experts operating in Sengwe area, the administrative architecture of the GLTP did not delegate proprietorship over natural resources to communities to superintend such that authority and the responsibility remains in the state in making all critical decisions and environmental policing. As clearly pointed out, ownership of natural resources, which from legislative and policy, perspectives as shown in tables 7.2, 7.3, 7.4 and 7.5, are skewed in favour of governmental agencies. Local institutions ostensibly have little role to play in natural resources governance. The household data therefore reflected largely dissatisfaction among households from those strongly dissatisfied accounting for 66% and those dissatisfied scoring 31.3%. A negligible Very satisfied (1%) and Satisfied (1.7%), cumulatively accounted for only 2.7%. This confirmed on how disillusioned the households are about limited control over and access to natural resources to derive both material and monetary livelihood benefits from natural resources found in their areas adjacent to the GLTP. The responses are as follows.

Varied response	Ν	%
Very satisfied	3	1%
Satisfied	6	1.7%
Dissatisfied	103	31.3%
Strongly dissatisfied	218	66%
Total	330	100%

Table 7.16 Household levels of GLTP governance satisfaction

A combination of lack of involvement in environmental decision making, tokenistic representation of community natural resource interest, resource rights insecurity owing to change in ownership and access rights, coupled with pervasive dissatisfaction regarding resource governance scales cantered on government and some remote environmental agencies, have the twin evil of undermining cost-effective local collaboration in natural resource management practices. This happens through negation of local people's involvement and actual ownership rights claims by the people. It becomes conceivable therefore that the policy of state custodianship, subsequent globalizing of the commons, commercialization through hunting concessions granted to individuals for spot hinting in Safari areas in Malipati, centralizes and commercializes natural resource stewardship and benefits more to outsiders than the Sengwe community. In this regard, it is noted that there are fundamental characteristics illustrated by this process as it emerges that:-

- 1) Natural resource governance around Sengwe community that is adjacent to the GLTP and is fundamentally technicist in its design, approach and implementation such that it has led to negative perceptions at local level due to its marginalizing effect on the part of the local people. The issue of benefit sharing is skewed in favour of the state, despite the challenges the wildlife sector faced in the last 12 years of economic meltdown in Zimbabwe that affected the functionality of CAMPFIRE. The local people, therefore, indicated a high sense of isolation to contribute meaningfully to the GLTP governance processes, make inputs and participate effectively in the decision-making arenas of the park in protection of their interests.
- 2) Another critical observation is that due to the hierarchical nature of the span of control and decision making web, there is clear bureaucratic red tape. This creates practical problems complicating further, environmental planning and implementation of programmes lacking local people's buy-in, hence any intervention no matter how good ecologically it might be, is doomed to fail.

3) Legislative and policy fragmentation observably crustal clear, and potentially lead to uncoordinated and inefficient implementation of programmes. Table 7.2, 7.3 and 1.4 show that there are 10 pieces of legislation and policies administered by different ministries, and government agencies relating to governance of natural resources issues. These have varying consequences on the local people. Generally, the propensity to relinquishing environmental authority and accountability from the local institutions and conferring upon RDCs and centrally controlled entities in natural resource governance and management shows the extent at which the local space has been crowded out in transfrontier environmental governance from a national and local scale level.

For instance, the District Councils Act (1988) Chapter 29:13, section 61 on Environment Committees and Sub-Committees in terms of natural resources/environmental governance, enables the Minister of Local Government Rural and Urban Development (MLGRUD) to confer upon a council in respect of its whole area, all or any of the powers conferred upon an environmental conservation committee under the Natural Resources Act and the Environmental Management Act. This means Natural/Environmental Committees as in Table 7.3, become statutory committees of the District Council. Its composition is determined by Section 61 subsection 3 of the Rural District Councils Act, which states that the Minister shall:

I. determine the number of members to be appointed into the environmental committees;

II. Approve the terms and conditions upon which the committee may appoint sub committees.



Photo by D. Muzeza Figure 7.10 Chiredzi Rural District Council Offices

Section 61, subsection 5, clearly states that only persons authorized by the Minister shall be entitled to attend any meeting of an environment committee but shall have no vote on any question to be decided at the meeting. Table 7.4, talks of the Prime Minister's Directive of 1984, which was translated into reality by section 59 setting up WADCOs and VIDCOs. In the case of a Ward where there is neither a village development committee nor a neighbourhood development committee, the Minister appoints persons to the Ward development committee from a list of names prepared by the councillor for the Ward. Although VIDCOs and WADCOs were formed, particularly in the Rural District Councils to assist in planning and management of common property, including natural resources, this study has observed that they are politicized such that they have limited capability in the sphere of natural resources decision-making and management. As a result, traditional institutions, which are generally expected to be apolitical, which is not the case, retained some semblance of confidence of the local people to perform functions such as distribution of land for cropping and ensuring that local people conserve natural resources (Emerson, 2000).

In 2000, when the GLTP MoU was signed by heads of states and government, new governance structures were introduced in Zimbabwe under the Traditional Leadership Act (Chapter 29:17), setting up village assemblies comprising inhabitants within villages. Among the significant functions of the village assembly relevant to this study is "to consider and resolve all issues relating to land, water and other natural resources within the area" (Chapter 29:17). However, this delegation and devolving of natural resources authority in this case, has not manifested itself in actual exercise of power at the local level, because the minister of Local Government retains the power to regulate the village assemblies. In that regard, this demonstrates a centralist approach characterised by bureaucratic ordering through Ministerial directives.

This has considerable negative impacts on local ecological democratic participation of community members as environmental authority in important natural resource decisions and development, rests with the RDC and ultimately, with the Minister/Ministers concerned. Resultantly, it becomes easier to understand that the Ministers of Environment and Natural Resources, who hold such authority, therefore disbanded the GLTP Community Working Group. The implications therefore are that it is not conceivable to have broad based democratic environmental governance participation by the local people such that sustainability of transfrontier park conservation may not be positive. Ideally, there has to be correlations among four variables of broad-based positive ecological voluntary participation of the local people in environmental governance, the magnitude of local livelihood benefits on one hand, and collaboration in transfrontier conservation and achieving quality sustainable biodiversity and ecosystems management.

7.19 Participation and synergies in the GLTP resource governance

Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) in Zimbabwe is part of the Community-Based Natural Resource Management (CBNRM) programme that represents an innovative and once promising approach in conservation and management of wildlife, protected areas as well as conservation zones, including Sengwe communal lands located adjacent to Gonarezhou National Park. CBNRM approach originated in the 1960s from Zimbabwe (Schuerholz and Baldus, 2007) and was formalized through CAMPFIRE. CBNRM, it the bulwark upon which the CAMPFIRE concept is predicated, and fundamentally enables "community empowerment, which manifests itself through providing communities with legal rights to the sustainable use of wildlife on communal lands, and would gradually lead to community "ownership" in conservation management" (Schuerholz Baldus, 2007, 9). Taking notice of this argument, Ngwerume and Muchemwa (2011, 75) further expounded that the CAMPFIRE programme was initiated by the DPWMA and sought to empower local communities consistent with CBNRM by granting the local people custodial rights over natural resources, particularly wildlife in their areas. This was done with an intention of arresting rapid decimation of wildlife species within and outside National Parks, as well as protected areas. It is argued from this vantage point that during the colonial period, land was appropriated from the local residents for the establishment and expansion of national parks, protected and Wildlife Safari areas. This had the negative results of removal and movement of people to areas like the lowveld, South Eastern Lowveld and created a situation of crowding people in communal lands such as Sengwe Ward 13, 14 and 15.

7.20 Local participation and constraints in the GLTP governance

One of the objectives of the study was to understand how the GLTP governance processes 'enables' or 'disenables' local people to participate in natural resource governance to enhance their livelihoods and conservation. The starting point to understanding participation is the Bali Declaration of 1982, which stated that parks should serve human societies or put differently communities, which were identified as part of nature, and their spiritual and material well-being depends upon the wisdom applied to the protection of living resources (Carruthers, 1997; Wells, 2003). In addition, the Bali Declaration (1982) also acknowledges that development needed for the betterment of the human condition, requires conservation of living resources to be sustainable. The World Bank (1996:3) for example, further defines public participation as "a process, through which stakeholder influence and share control over development initiatives, decisions and resources which affect them". Mohamed–Katerere (2001:2) give further details about participation

that "the international law framework recognizes the need for local participation that is proactive and that creates opportunities for individuals and groups to participate in the formulation of management strategies as well as the implementation thereof".

These explanations are mainly based on the concept of good and democratic environmental governance with the aim of achieving sustainable development (Tamburelli and Guillet, 2003). What do exist therefore at international, regional and national levels regarding conservation are policies pronouncements and conventions supportive of community participation concerning natural resource management to meet the needs of the current generations without compromising the needs of future generations. In the words of former American President, "conservation means development as much as it does protection. I recognize the right and duty of this generation to develop and use the natural resources of our land; but I do not recognize the right to waste them, or to rob, by wasteful use, the generation that come after us" (Theodore Roosevelt, 1910). The concept of establishment of TFCAs such as the GLTP, resonate with both sustainable conservation goals for posterity on one hand, and policies and rules at international and subregional levels are also cognizant of the importance of involving communities. However, there is conspicuous lack of specific compelling legal instruments for TFCAs in general and the GLTP in particular to embrace community participation and this has implications for local livelihoods and conservation as there is no legal basis explicitly compelling implementing agencies to empower them through their integration in conservation. At a Kavango Zambezi (KAZA) Transfrontier Conservation planning Joint Management Planning meeting in Maun, Botswana, that the researcher attended (from 4-12 February 2012), it was interesting to note that paradoxically, the Community Working Group was composed of government officials. The request by the traditional leaders to establish a KAZA Traditional leaders' Forum representing the communities to discuss and contribute in the TFCA, were dismissed on the basis that community issues be left to countryspecific interventions.

This study clearly recognizes that community participation is an integral component of conservation efforts in Southern Africa, however, the paradigm shift that has been ongoing on in conservation instituted a new form of resource governance and at worst curtails community participation in the management of natural resources. This paradigm shift is widely reflected in the concept known as Community Based Natural Resources Management (CBNRM), of which in Zimbabwe, the CAMPFIRE programme stands out prominent as once an acclaimed success story in terms of facilitating the local people involvement in natural resource management and governance. Ideally, laws, policies, rules, regulations and institutions were propagated to facilitate

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community participation in conservation, enable deriving of benefits such as infrastructure and social development and for households to get dividends directly in the form of cash allocations. The case of Kanyurira Ward in the Zambezi Valley (Mbire District, formerly Guruve) and Nyaminyami District in Kariba are good examples where households would participate and accrue benefits in the form of household dividends. For example, the case study of Kanyurira Ward tracked local allocations of wildlife revenue over five years, and it was established that household dividends were high in years of food shortage, accounting up to 78%, while in good years allocations were used mainly for community projects up to 80% (Murphree and Mazambani, 2002:38). In other words, the community is said to have "shrewdly used their wildlife revenues flexibly, in good years for collective development, in years of crop failure as food security" (Murphree, 1996:173; 174). Perhaps one important argument repeatedly reiterated in this study is the conspicuous absence of integration of local institutions in the GLTP, raising serious concern about the power imbalances that exist in the governance architecture of the park. Resultantly, community participation of the local people in the GLTP given the current administrative disjuncture is thus complex and at worst excludes local communities. However, this study sees the GLTP offering an opportunity to introspect and understand local perceptions regarding local participation and what lessons can be drawn at the local level to effect legal, policy and institutional changes to broaden local participation in transfrontier conservation. The study emphasizes participation because it believes in IUCN's argument that:

"Properly mandated, empowered and informed, communities can contribute to decisions that affect them and play an indispensable part in creating a securely-based sustainable society" (IUCN, 1991).

It is conceivable that sustainable natural resources management in transfrontier conservation areas or parks such as the GLTP requires collective action, collaboration and integrating a plethora of values and interests of a wide range of actors and stakeholders from all levels, which include the local, national and international agencies. It is argued in conservation literature that integrating values and interests of diverse actors and stakeholders requires participation from all levels (Byers, 2003:4). Consequently, Byers, (2003:4) went further to argue that poor, rural people often have the most direct interest in local natural resources, but at the same time noted that they are often the most politically and economically marginalized of any stakeholder group, despite the fact that their active participation is especially important. Perhaps, it is important for this study to highlight that in the most conceivable conservation prospects the centrality of the local people is premised on a three-point argument that they often have:

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- 1) Custodial and customary rights to local natural resources.
- Indigenous or local knowledge about how to manage local natural resources sustainably based on their mores.
- They have local will power to collaborate in implementing and sustaining natural resources governance and management activities over a longer period with minimum costs going towards environmental policing.

But before discussing the complexity of participation and unmasking Sengwe community views about participation in the GLTP, which is juxtaposed with how the governance process affect local conservation and livelihood systems in line with objective two, it is critical to understand participation in its context. To begin with, community participation in conservation can be understood in a broad sense or narrow contexts. In a narrow context, community participation entails limited input into decision-making processes and control of the systems, while in a broad sense it is understood as an all-encompassing, broadly inclusive and extensive input into the decision-making processes with the ultimate aim of at least joint control, co-management, co-governance and collaborative stewardship of natural resources (Biodiversity Support Programme (BSP), 1993). The rationale behind community participation is the realization that community collaboration, cooperation, participation and management are prerequisites to achieve sustainable conservation development goals in a manner that ensures sustainable use of natural resources in different environmental scenarios (BSP, 1993). Interviews were conducted in with local opinion leaders as shown on the following Table 7.8 responded:

Category of opinion leaders who contributed	Number of councillors	Guide questions about their views on participation
1.Local headman	1	1. How do you regard the GLTP processes in facilitating local participation?
2.Councillors	3	2. How are people's concerns represented in policy
3. Headmasters	3	processes concerning land, wild resources in the GLTP's local, national and regional arenas?
4. NGOs	2	3. How do the emerging institutional processes of the GLTP affect local people's participation in natural resource governance?

Table 7.17 Opinion leaders' participation perspectives

These opinion makers contributed candidly regarding the GLTP process. Guided by the three questions in separate discussions, there was convergence of thoughts that the GLTP had potential to open opportunities and unlock benefits value for Sengwe community in the form of job creation, infrastructure development and improvement of livelihoods as promised by the officials during technical meetings. Each leader narrated that a number of promises including undertakings to establish tourism and conservancy enterprises were never fulfilled in the last ten years, and since

they were not involved in planning of these projects, they are not aware on how far the projects have gone. This slow pace, coupled with poor local participation has over time created anxieties. To support this, the DPWMA official did acknowledge this challenge, when he said:

"My observation from interacting with them is that they would be keen to be involved in practical project planning and implementation, with tangible benefits accruing to them as a result of solutions that come out of joint efforts in tackling practical problems and issues that have always been confronting them. Some of them are now apparently frustrated that a long time has lapsed with many consultations still happening at high level but with not much tangible benefits accruing to them, so those high-level governance structures become too distant to have impact on them".

The opinion makers, however, informed this study that they were alarmed by the current GLTP legal, policy and institutional frameworks under which conservation is evolving, which conceivably is reversing the gains Sengwe community had made in general through participation in conservation at the local towards conservation and deriving benefits under CAMPFIRE. Indeed, it is noted that great strides had been made and significant contributions achieved towards local development and sustainable conservation through participatory CBNRM (Wolmer 2003; Thayer, 2005), particularly the CAMPFIRE programme in Zimbabwe despite its power imbalances, current funding problems and its unequal benefits sharing between the local communities and government agencies. There is absolute consciousness on the part of the leaders based on their assumption that the GLTP, to some extent is largely operating at high regional scale far removed from their scales in terms of institutional processes, which is described by (Ramutsindela, 2007:105) as 'scale of marginality' because of its marginalizing effect of the local people. Other authors paralleled transfrontier processes to CBNRM at the regional level (Dzingirai 2005; Singh 2002). However, it will be incorrect to equate transfrontier conservation to CBRNM. The fact of the matter is that the two are not necessarily the same in terms of scale. However, it is argued in this study that the only critical issue connecting the two is that CBNRM can be used as a synergistic thread to integrate local institutional processes. Programmes such as CAMPFIRE in the case of Sengwe in Zimbabwe and the CPA in Makuleke community of South Africa as the bridge to allow broad participation of the local people in transfrontier natural resource governance and decision making if it is structured at local, national and regional levels.

The main challenges that the leaders also cited relates to the issue of scale at which the starting point of the GLTP conceptualization, design and implementation of programmes have been and still remain fundamentally at district, national and regional levels. The Sengwe leaders and even an official for SAFIRE, an NGO that is supporting sustainable rural livelihoods options in Sengwe expressed surprise of the lack of invitation to be involved, as they have been working in Sengwe to address issues of poverty alleviation through sustainable livelihoods. The leaders therefore, lamented that they are only called to endorse already developed technical documents brought by the DPWMA, the RDC and collaborating stakeholders. In fact, it must be bone in mind that there is no compelling policy in the Treaty to ensure that community participation takes centre stage in the GLTP. This is so to the extent that the Community Working Group was abolished at the instigation of the Ministerial Committee after the signing of the GLTP Treaty in 2002 (Spierenburg et al., 2007:6). Spierenburg et al. (2007:6) further argue that the various Working Group was literally abolished and this prompted Wolmer (2003:278) to postulate that:

"Those planning TBNRM processes in Southern Africa would do well to revisit these ideals. A more nuanced bioregionalism might go beyond the simplistic utopianism and reductionism of place-bound environmental identities and yet take the 'bioregional plunge' towards encouraging true local self-determination".

The leaders cited the experience of Makuleke who run lodges in partnership with Wilderness Safaris and lamented if the same arrangement could be replicated to Sengwe to enable the community to derive benefits from wildlife. These assertions are buttressed by researches done by Hanks (2003), Pimbert and Pretty (1993) who challenged governments and conservation stakeholders to put `Participation' at the centre of conservation discourses. The reverberating desire of the local leaders and the generality of the people is their desire for a broad participation. However in both Sengwe and Makuleke communities, Park authorizes and government agencies dealing with the GLTP have sustained a top-down development approach, basically viewed locally as undemocratic and lack harnessing local environmental competencies in enacting conservation development programmes that are participatory, protects local livelihoods fails to exploit local acknowledged and sound local conservation existing in Sengwe.

Constantly, it is argued that the governmental interest in such a scenario is informed by cognitive perceptions of a scientific/bureaucratic establishment of centrist, technicist and proscriptive in its basic dimensions (Murphree and Mazambani, 2002) as they pursue lucrative tourism development

in which through taxation, government earn money. For Zimbabwe's DPWMA, this presents an opportunity following a decade of underfunding of conservation. In light of this, it gives credence to argue that management of natural resources in the GLTP conforms rather than reforming neoliberal resource governance principles obtaining within the entire GLTP process for purposes of supplying market demands for safari hunting and tourism investment to the detriment of local communities. This has had the effect of the GLTP planning process and implementation of conservation programmes that ultimately marginalizes local inputs and participation in Sengwe.

The Ministry of Tourism and Hospitality Industry of Zimbabwe confirmed that because segmented planning and implementation, leading to fragmented and uncoordinated interventions in Sengue, it was difficult to identify community needs, and planning had to be done in Harare. Further to that, it is also claimed that some significant achievements were made in the past to engage communities with the former CAMPFIRE, continuous lack of a structured administrative institutional interfaces, coupled with lack of compelling policies to integrate communities in the GLTP makes involving Zimbabwe's CAMPFIRE difficult. Therefore, the local claims to participate rest with the benevolence of the DPWMA and the RDCs, which are not prepared to let go both the power and benefits that come with having control over natural resources. This is a demonstration of the fact that there is a lot of work that needs to the done to ensure community participation. Again, the administration of CAMPFIRE is fundamentally a government department operating from Harare without much autonomy from the parent Ministry of Environment and Natural Resource Management. To reiterate Murombedzi's (2001) point, the treatment therefore meted out to local communities (in terms of participation) by CAMPFIRE managers is indicative of the contempt with which local people are regarded. Even under the influence of the generalized acceptance by government's DPWMA of new policy thrust towards popular communal participation and decentralization of resource governance through setting up committees, it is noted from experience that the command and control approach that conform to the top-down resource governance regime, has not essentially changed in the case of Sengwe community.

To add more, in a study of four cases conducted by Keeley and Schoones concluded that in two of the District Environmental Action Planning (DEAP) processes in Zimbabwe, it was highlighted that as much as local participation is instrumental, it only succeeded in reiterating earlier narratives and technocratic approaches, which consolidates state dominance over communities (Keeley and Schoones 2000:1). In that regard, it is important when dealing with communities in and adjacent to transfrontier conservation zones such as Sengwe and Makuleke, to acknowledge local norms, values and institutional processes, which those communities rely on when interacting with natural

resources. It has been demonstrated in literature that such an approach help to build trust that usually smoothen interrelationships between park management of protected areas and the relevant communities for sustainable conservation (Zeka, 2008:5). Therefore, it is imperative that in all these TFC projects, governmental and conservation agencies tasked with managing protected areas and local communities should engage in partnerships, founded on conservation trust in order to ensure that there is balance in meeting local livelihoods, motivating local conservation and realizing sustainable conservation. Where environmental differences emanate, it would be easier to resolve amicably the differences among environmental actors.

In theory, the GLTP decision-makers and stakeholders have always shown 'concern' with regard to emphasizing involving local communities, they talk of creating jobs through tourism employment and ensuring that benefits accrue to these communities. However, the reality if that participation of people in mainstream conservation despite this rhetoric is not as effective as currently is happening in the GLTP. Going forward, valuable feedback and insights on local participation to consult them on the GLTP were obtained through focus groups discussions. The study adopted a structured dialogue approach using the Schutte Scale instrument that captured local perceptions to get in-depth qualitative feedback about the community's involvement than it did with questionnaire responses, which had limited options to make a choice within prescribed responses.

The field application of the Schutte Scale is described in chapters four (4), five (5) and partly in chapter 6. In summary, Schutte (2000) developed the technique that merges the process of participation and prioritization of community needs, deals with rural communities in an interdisciplinary research is of this nature. It is a technique where measurement of issues affecting a community, capitalize on discussion platforms with selected individuals to identify community priorities, perceptions and attitudes and their views captured using a calibrated Schutte Scale shown on Figure 5.3 and Photo 5.1. In Sengwe, focus group discussions were conducted at Dhavata, Gezani and Malipati during field data collection.

Place	Number of group members	Some guiding questions during focus group discussions using the Schutte Scale
Dhavata Gezani	12	1 What is your perception about local participation in the GLTP consultation process?
		2 What are your attitudes (positive and negative) about the GLTP representative participation is concerned?
Malipati	12	3 How is your level of satisfaction concerning community involvement the GLTP's governance?

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7.21 Perceptions on resource consultation and governance

Three groups were involved in discussions. The individual participants were randomly selected to avoid having only a network of friends in the requisite groups. They were categorized according to their ages, gender and mixed them in equal numbers of both males and females. This was done to ensure that that there was balanced gender representation in the composition of each set of focus group respondents. The table above reflects some of the questions that constituted some of the group discussion issues this researcher tackled using the Schutte Scale in gathering views, perceptions and feelings of the people.

Table 7.19 Focus group age categories

Age categories	Number of people by gender
16 -24 years of age	6 males and 6 females (12)
25-44 years of age	6 males and 6 females (12)
45+ years of age	6 males and 6 females (12)
Total	36 people

7.22 Segmentation of group respondents by age and gender

The study also examined broad community perceptions about local participation in the GLTP past and present consultations. On a Schutte Scale rating of 1-11, average group perspectives showed that levels of participation in consultation processes are low. It is important to highlight that the middle average of the rating of the scale is 5.5. Where the average rating is above the 5.5 average rating, shows that levels of satisfaction in general, hence the issue might not be a problems. The lower rating would show there is a problem. Figure 7.11 shows the average scale rating from the groups (each made up of 12 people) with a recording of half in the averaged score rating of 1-11 on the Schutte Scale.

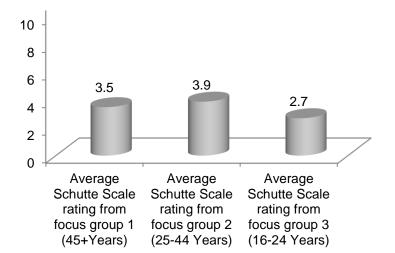


Figure 7.11 Average local perspectives on participation in the GLTP consultation

The role of local participation was explored in focus group discussions. In line with objective one, the study attempted to establish participatory natural resource governance to understand how local people feel about the GLTP relationships from participation and consultation point of views. In answering the question "What is your perception about local participation in the GLTP process?", on the average rating for group 1 was 3.5, group 2 scored 3.9 and group 3 scored 2.7 on a Schutte Scale of 1-11. The aggregate score of 3.3 of the three groups shows clearly that there is a problem of lack of broad participation and lack of broad based consultation in the planning and governance of the GLTP. This study further took note of some group members claiming that most consultations were done with the councillors and the traditional leadership. The question that became critical was to understand their attitudes towards representative participation as a consultative strategy and their satisfaction concerning community involvement in the GLTP governance and Figure 7.12 results were quite revealing as follows:

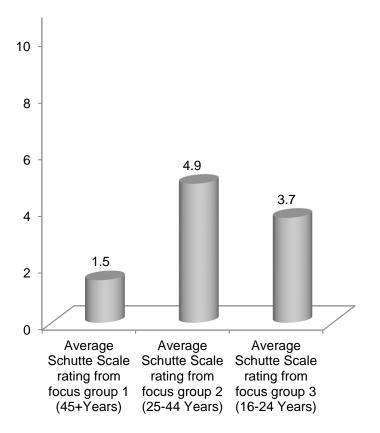
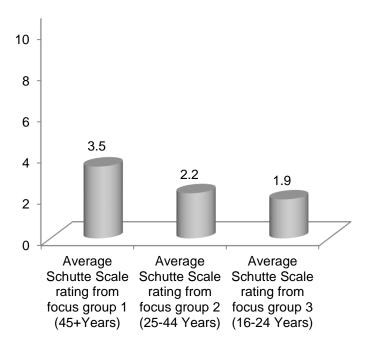


Figure 7.12 Community attitudes to representative participation



How is your level of satisfaction concerning community involvement the GLTP's governance?

Figure 7.13 Levels of satisfaction about involvement in the GLTP governance

The average local attitudes (Figure 7.12) from group 1 rated 1.5 on a Schutte Scale of 1-11. Group 2 rated 4.9 on the same scale, which was slightly less than half on a scale of 1-11 towards expression of some semblance of satisfaction. However, it still fell short of being satisfactory. Group 3, also was dissatisfied rating 3.7 on the Schutte Scale of 1-11. An aggregate score of 3.3 (which is the total sum of aggregate/overall scores, then divided by three (the number of the groups), by any standards is a negative score rating of their attitudes towards representative participation in the GLTP governance framework.

Combining the negative attitudes to representative participation with low local levels of satisfaction concerning community involvement that scored 3.5 for Group 1, 2.2 in group 2 and 1.9 for group 3 on a scale of 1-11 shown in Figure 7.13, with an overall all group 2.5 on a Schutte Scale of 1-11, suggest that the community is dissatisfied.

The salient issues that the study picked from local engagements with the grassroots during focus group discussion is that the local people acknowledged that their leaders represent them in key decision making processes, however, their attitudes are substantially negative (2.5 on the Schutte Scale rating of 1-11) since little is being done to educate and interact with the people at the

grassroots level. It was highlighted that the local leadership do not necessarily act in their interest. However, this was not implying that they need not representation, but they want more transparency, accountability and to be broadly informed on what will be happening. Further questions on the same, illuminated that they want a broad-based participation approach in which the local people are involved as they reasonably consider the process would allow comprehensive inputting into the GLTP process rather than having a few individuals deciding important issues not reflecting adequately community needs.

Further evidence from discussions with traditional leaders and councillors, indicated that they have no formal powers to conduct the GLTP business such as conservation and environmental planning, let alone entrepreneurial tourism activities. They have no resource to do that since the budget provided for conservation activities managed by the District Administrator in Chiredzi for all their local plans and development. Local participation in such activities can conclusively be regarded as highly constrained, minimal and uneven between government and community structures. Ideally, this reinforces bureaucratic dominance in environmental decision-making when it comes to deciding on the GLTP issues, leading to planning and implementation of programmes, which marginalize local inputs and participation. Adams and Hulme (2001, 13) caution that conservation goals should be pursued by strategies that emphasise the role of local residents in decision-making about natural resources. This entails embracing strategies such as consultation (Adams and Hulme, 2001, 13), hence effective participation of communities in democratic environmental governance is central to achieving local collaboration and not to entrench state retaining decision-making authority and nature protection, which usually is costly especially if there is no popular support from local communities. It is noted in this study that participation of the local people is essential in unlocking beneficial and locally supportive interrelationships in biodiversity and ecosystems management. It comes with creation of equity and parity regarding the manner resources is shared in co-governance and co-management of natural resources between stakeholders and communities. Therefore, Sengwe community members who participated in focus group discussions expressed desire for situations where the local people have sufficient authority to take their own decisions regarding natural resource management with a minimum of state regulation, control and dictation.

The study would further argue that community participation in conservation has to be treated as a process that should be designed to deliver tangible benefits to communities through reducing negative effects on natural resource on one hand and achieving sustainable livelihoods using the same resources. There is also on the other hand the need enhancing access to resources and

creating opportunities for the local communities for their participation in environmental governance since this is critical for sustainability of conservation if it is supported locally. Some of the benefits resulting from participation are empowerment, equity, and representation in resource governance institutions on conservation, sufficient recognition of community resource rights and access, consultation and management for sustainable use of natural resources. In the end, a diversity of these aspects give motivation for participating communities to treat biodiversity and ecosystems as part of their lives worth conserving, especially when they see natural resource benefits improving their quality of life.

From a GLTP natural resource governance perspective, CAMPFIRE would be an ideal opportunity for synergizing natural resource governance framework rooted in community processes, particularly in Sengwe where people are already familiar with its past operations in biodiversity and wildlife management. In addition, the local people regard CAMPFIRE as having been key in facilitating deriving of benefits from natural resources in their areas, although in the last ten years, very little has been coming from the CAMPFIRE programme. Household questionnaires were distributed to households sought to find out whether households were participating in natural resources governance using their local structures. Their responses were captured in closed questions with two variables in which households were required to express a "Yes" or a "No". It was established that those who agreed to be participating accounted for only 1% and the majority of the households (99%) disagreed to be participating in the GLTP governance processes as shown in Table 7.20.

Response variable	N	%
Those who mentioned "Yes" for community participation	3	1%
Those who mentioned "No" for community participation	327	99%
Total	330	100%

Table 7.20 Needy for participation (GLTP governance and management)

Perhaps, it is important to indicate during informal discussions that were concurrently conducted with informants such as ward leaders, it was highlighted that there is a collective sense that evolution of community participation is understood as a process that needed time for authorities to consider bringing it down to the communities. However, local people expressed disappointment that after ten years of the GLTP, little has happened to create an interface enabling the community to get involved. The informants further expressed their preference and reiterated the need to consolidate co-governance and co-management of natural resources based on local processes, values and practices, which they want recognized within the GLTP governance framework. In

general, engaging local communities and legitimizing their participation motivate communities to collaborate in sustainable conservation of transboundary natural resources Katerere-Mohammed et al., 2001). This obviously depends on the willingness of state agencies and conservation organisations to make a sudden turn to provide a new pathway that gives room for the local people to participate.

The obvious conclusion from a lack of local participation is that decision making still remains in the hands of the government. This situation is pervasive with many protected areas in Africa, with Saito (2007:10) citing the Ugandan where local government entities play a more important role than the communities in protected areas, and their role being that of supporting and consolidating central government policies. Saito (2007:10) further argue that the central government still largely define what benefits accrue to the public, resulting also in conservation. In a similar way, the GLTP Sengwe community is caught up in these 'community participation' in environmental affairs, although some NGOs like CESVI and SAFIRE supporting local communities in enhancing livelihoods and advocacy for their resource rights through negotiating with the Zimbabwean government. However, discussions with Chiredzi Rural District Administration Officer (17 July 2011), it was made clear that if NGOs would want to work with communities in Sengwe, the Local Government as a custodian of the 'public' and local governance, expect the NGOs to play a facilitator's role in dealing with communities. Therefore, the general conclusion is that local participation in environmental governance is dependent on the bureaucracy. The effect of this is that there is no genuine contribution people can make towards biodiversity conservation and this contradicts Singh (2006:61), who cited the clarion call by Dr. Y.C. James Yen's Vision on the Credo of Rural Reconstruction of Philippine in which he called to:

> "Go to the people Live among them Learn from them Plan with them Work with them Start with what they know Build on what they have"

Credo of Rural Reconstruction

(From Dr Yen's Vision (Singh, 2006:61).

Taking it from these assertions as a point of departure, the most important aspect is to be cognizant of understanding communities, building development programmes based on their local

institutional systems, values and social mobilization in partnership as an adaptive bottom-up participatory approach to transform communities. In that view, it is argued by community leaders in Sengwe that participation does help to expand their livelihood options through exploiting opportunities from the GLTP, and above all, it ensures that issues of resource ownership are safeguarded to improve human security. Thus, participation would build equity in terms of Sengwe residents having a fairs share, equal opportunity to utilize their resources as natural assets for social and human development.

Table 7.21 further illustrates the deductive logic regarding their participation in which the people indicated that their claims to land hinge on the people's common belief that they have the basis to have a share of the ambience of Gonarezhou National Park, which is part of the GLTP. There is legitimacy in these claims since in terms of Zimbabwe's laws, the Malipati Safari area and hunting in the communal lands, accrues benefits to the community. As such 75.3% of respondents believe that they own the land and 19.7% concluded that they are part of the park, hence their indication for effective participation. The Table 7.21 shows the variables of their perceptions:

Table 7.21 Logical claims for participation

Response variable	Ν	%
The community believes they own the land adjacent to the park	248	75.3%
The community believes sections of the park partly belongs to them	65	19.7%
The community believes they do not own the land adjacent to the park	7	2%
The community believes they have no claim over part of the park land	10	3%
Total	330	100%

The study also sought to gather household views on the reason regarding their quest for participation in the GLTP. The majority accounted for 75.3% and 19.7% expressing that they own the land adjacent to the park and sections of the park belong to the community respectively. Consequently, they would want to be involved at community level in participation in decision making so that they collaborate to conservation of resources in the GLTP. Interviews conducted by the researcher with some councillors for ward 13, 14 and 15; prefer CAMPFIRE structure as a mechanism for allowing the local people to participate. In addition, one community leader bemoaned the abolishment of the Community Working Group by the Ministerial Committee of the GLTP. Investigations through informal discussions with the local headman and councillors revealed that Sengwe residents have strong attachments to their environment for various reasons, and fear their non-participation send a sense of livelihood insecurity. Their exclusion from decision-making is assumed that it undermines collaborative GLTP natural resource conservation. Local residents making suggestions that favour creating local conservation committees or improving CAMPFIRE as the most preferred option buttressed community participation, which was

rated very low by respondents. By contrast, the respondents did not favour the Rural District Council being the lead institution. The District Council officials seem to be the least preferred because of the failures to empower the local community. Councillors interviewed argued that proceeds from wildlife are believed to be shared unfairly. Interactions with an official from SAFIRE demonstrated that the local people's access rights, ownership issues and the rights to utilize them were changing and doubted if people were not involved then, the local households' chance of benefiting from the GLTP were slim, hence this expose them to livelihood vulnerability.



Photos: by D. Muzeza (29 June 2011) Figure 7.14 Focus Group discussion at Davhata (Sengwe ward 14)

Furthermore, it was highlighted during focus group discussions that neither the community members nor community-based organisations are involved in the GLTP process to define benefits streams, tourism investments and how communities can derive benefits that can develop their local infrastructure such as schools, clinics and dip tanks. The application of restrictions equivalent to those governing protected areas on the local communities along the demarcated Sengwe Corridor would manifest at different livelihood activities. For example, it was mentioned that dependence on natural resources within Sengwe by dwellers is a reality that cannot be ignored. There are concerns that activities likely to be affected range from land available for crop cultivation, livestock grazing, harvesting of forest products such as wild grass for thatching, firewood, use of ilalla and other critical local uses including medicinal plants. The most critical concern raised is that households are likely to be affected by relocations to pave way for a human-settlement free ecological corridor.

Schuerholz and Baldus (2007:4) give the example of the Selous-Niassa Transfrontier Conservation Wildlife Corridor between Tanzania and Mozambique and the households located in the Caprivi strip in Namibia (part of the Kavango Zambezi Transfrontier Conservation Area covering Angola, Botswana, Namibia, Zambia and Zimbabwe), as highly depended on natural resources products. These are collected regularly from their ambience that also includes "poles for house construction, grass for thatching, reeds, firewood, wild fruits, mushrooms, traditional medicines, and fish and bush meat" (Schuerholz and Baldus, 2007:4). Considering the geographic proximity of Ward 13, 14 and 15 to Gonarezhou National Park and its centrality in the GLTP project as a connecting corridor, the resource dependence by various households for subsistence use and consumption, fundamentally connects them so much to their environment. Capitalizing on existing structures for community members' inclusion in the GLTP governance framework could offer renewed optimism against the existing frustrations. In fact, effective collaboration can be achieved as this secures not only their local collective collaboration in environmental policing, but culminate in actual realization of benefits by effective representation of their livelihoods needs from the areas that link between the GLTP zones, rich in resources. More essentially, their involvement in the GLTP can easily become a global example for community engagement and can escalate the GLTP status to international importance in terms of according local people rights to their resources for mutual empowerment and sustainability of conservation, than allowing few concession owners taking away from disadvantaged communities.

It is imperative to highlight that the dominant underpinnings of the GLTP conservation has been that people are bad for natural resources. Policies and practice have, therefore, sought to exclude people and so discourage most forms of local participation using local structures such that their involvement was questioned resulting in the Community Working Group disbanded. This style of natural resource governance and conservation neglect local people, their indigenous knowledge and management systems, their institutions and social organization, and undermine the value to them of wild resources. The cost to conservation in that perspective is likely to be high. For instance, Zimbabwe's DPWMA has not been attracting funding for conservation, making it very difficult to monitor and police the environment in the wake of significantly increasing environmental crimes. Simmering conflicts, coupled with suspicion are growing given the local sentiments that showed negativity in terms of how they detest current governance of the GLTP. The central challenge is to find ways of putting people back into conservation and ensuring their effective participation as strategic partners and not as a threat to biodiversity and ecosystems in the GLTP. Such participation would not be easy since the term is interpreted in different ways and would imply creation of institutions that define operational trajectories of individual stakeholders. Only

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certain types of participation will lead to sustainable conservation. Alternative systems of learning and interaction will help this process of participation, and lead to a new vision for protected area management that builds strongly on local process, local environmental values that defies the deductive logic of scientific criticism against local mores and vernacular conservation. The new thrust and vision will call for redefining conservation professionalism, new supportive policies, innovation, creativity and inter-institutional collaboration cognizant of the complementary role that each stakeholder plays in the conservation discourse. The proximity of Sengwe community and the strategic survival dependence on natural resources of the households cannot be wished away. Ideally, the policies, legislation, agreements and the institutional arrangements in the context of the GLTP as a conservation initiative should, beyond theoretical recognition of communities, and reflect the interests and aspirations of the communities through its governance process of the GLTP. Furthermore, this study observes that Zimbabwean laws, policies and institutional arrangements may not be understood and not east to be used to leverage rural communities making inputs, support and collaboration in conservation as they have fundamental constraints. Ironically, decisions that are made using the current national and tri-lateral processes are far removed from these communities in terms of scale. It is again observed that without local participation in the form of clearly enabling policies, laws and the resultant institutional arrangements that govern and determine interrelationship between stakeholders in relation to natural resources, the imagined success of the GLTP is potentially in jeopardy. This situation of remote sensing of conservation policy formulation and distant decision-making processes, create uncertainty among local environmental actors about their natural resource governance roles, responsibilities, accountability, authority and it is postulated in this study that it has the potential to lead to complacency in conservation agencies with regard to community participation. It is also propounded that conservation partnerships involving communities are an indicator of community participation in conservation and should be emphasised to be localized rather than overgovernmentalized.

Currently, the GLTP administrative governance framework is not clearly defined in terms of indicators against which conservation agencies can be judged to determine whether or not they are facilitating community participation and whether the partnerships being fostered are delivering tangible benefits to the communities in keeping with the GLTP Treaty objectives, goals to alleviate rural poverty and facilitating economic development. For example, it is ambiguous on how the fundamental role of local communities in the promotion of sustainable use of natural resources is going to be executed. The benchmarks against which success can be determined, remains subject to any interpretation. While the GLTP Treaty mentions about community participation, the

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weaknesses found in the Treaty is that it is not definitive and explicit so as to avoid ambiguity, which has become an its folly used by governmental conservation agencies to marginalize communities from participating in transfrontier conservation. It is imperative therefore to argue that provisions for community participation and how that can be translated into tangible deliverables that benefit the local people within a clear timeframe should be made to guarantee local livelihood interests and motivating sustainable biodiversity and ecosystems sustainable conservation. It is from this vantage point that this study advocates for a revisit of the GLTP governance framework and put more clarity that state and non-state conservation agencies need to understand the inexorability of making a commitment to leverage the GLTP processes for local livelihood attainment through participation and motivating them towards transfrontier sustainable natural resource conservation.

7.23 Elusive GLTP consultation and local ground preference realities

Having examined community participation, this study addressed the issue of preferred mode of consultation processes regarding ecological issues in Sengwe community. Surveyed households and informal interaction with various members of the community, gave illuminating insights about local expectations the form regarding consultation. Generally, household questionnaire responses showed perspectives that favour a broad community oriented environmental consultation process (55%), representation by the traditional leaders (21.6%) and by the local councillors (18%). The dominance of the CRDC was only 0.9% as illustrated in Figure 7.22.

Response variable	N	%
Community consultation	182	55%
Representation by local authority councillors	59	18%
Representation by the Chief	71	21.6%
Individually consulted	12	3.6%
CRDC	3	0.9%
Not involved	3	0.9%
Total	330	100%

Table 7.22 Household preferred consultative process in Sengwe

The fact that representation by the CRDC (Chiredzi Rural District Council) accounted for 0.9% shows how lowly preferred this institution is despite claims of having devolved environmental authority and responsibility to lower tiers of the community. Locally, residents voiced their concern and frustration with RDC's bureaucrats for not according them a chance to run their affairs pertaining to conservation planning since this was not supported by allowing local decision-making, and even the village committees operated without any budget. One person reiterated that:

"We are tired of people coming from Harare and Chiredzi telling us what to do here. We have our systems that are no longer recognized. They tell us to do this and what not to do without hearing our needs. Now we have heard of this transfrontier park and they want to take our land to make a corridor but they never told us or asked us what we want".

Perhaps it is important to indicate at this stage that consistently, results from discussion groups and household responses point to a broad community involvement in environmental governance as confirmed by 55% in favour of community consultation. In the case of the government superimposing its natural resource governance on Sengue, clearly, this is leading to people having little confidence in the Chiredzi RDC. The community leaders also indicated that the RDC does not support local institutions to enjoy respectable entitlements on their resources upon which people advance their livelihoods. As such, those who are involved, the process is more co-optive rather than empowering to the local communities (Murombedzi, 2000). Typically, Murombedzi (2000) further laments that "informed by a centralizing and modernizing ethic, even when decentralization shifts, the nexus of this perspective to lower tiers of state governance" Zimbabwe's CAMPFIRE programme, which is supposedly a community initiative, representative participation of the local communities remains stuck in the bureaucracy. Thus, "in such cases the top-down preferences of central government on communities have merely been replaced by the top-down preferences of local governments" (Murombedzi, 2000:6). Since the establishment of the GLTP in 2002, not much change has happened in the balance of power in terms of representing interests between key stakeholders (government/conservation agencies/tourism private sector and elites) and those of the people of Sengwe community or its local leadership in its environmental representative capacity. As early as 2001, some researchers had to cast doubt in the whole process and argued:

"As long as the powerful and influential dominate the TBNRM process then the very legitimacy of TBNRM initiatives is likely to be contested in the medium and long-term. The big question is whether the regional governments actually see TBNRM as an opportunity to begin to tackle re-distribution of rights and benefits including in many contested protected areas" (Katerere-Mohammed et al., 2001:26).

Since this study was done and these observations concluded regarding transfrontier conservation programmes in the region, it is noticeable that little effort has been deployed to change both the

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governance architecture in the balance of power with the communities in and adjacent to the GLTP. Therefore, whereas people are said to be participating in transfrontier conservation projects, the state and its associated conservation agencies retain a large measure of direction, decision making and control (Murphree, 2000, 6). Resultantly, the governmental agencies still provide leadership and ideally, fail to allow the local people to contribute meaningfully in environmental affairs concerning their livelihood and resource management. From a decentralist perspective, it is important to note these contradictions and postulate that ecological governance in which participation of people does not come with environmental authority and responsibility, is meaningless, unless the rural people enjoy the privilege to articulate their issues and make decisions. Only then, sustainability of transfrontier biodiversity and ecosystems management would be guaranteed through local popular support and environmental collaboration. Equally, the cost associated with policing conservation is likely to be reduced drastically due to local voluntary collaboration.

The implication of this situation where people do not have a sense of effective representation is largely negative, particularly loss of trust in the RDC in championing local livelihoods interest and supporting conservation. Respondent community members and local action groups portrayed loss of trust, which in itself defied the logic that the GLTP is in any way helpful to Sengwe community. The households, the local leadership and individuals, indicated grossly diminishing trust in the manner Chiredzi RDC handle the GLTP project affairs with 85% expressing that even the socalled community leased Malipati Hunting Safari area is not accruing meaningful benefits to the people. The general sentiments were that "elites" and influential individuals have benefited at the expense of the community. Consequential to this point is the observation that the GLTP project is viewed increasingly as more of a project for the government and some individuals than it is for the community as it lacks practical community ownership, disconnected from households in terms of not supporting their livelihoods and broad participation in natural resource governance. Interviews and informal discussion with ordinary people, culminated largely in people citing the case of their counterparts in Makuleke, whom they think have a better participatory model through Makuleke Contractual Park from which they derive community benefits than they are in Sengwe community. Indeed, the Makuleke Community Property Association (CPA) that is in partnership with Wilderness Safaris, run two lodges in the GLTP's Pafuri Triangle and Makuleke Bed and Breakfast in the Makuleke Village run directly by the CPA. In that regard, they envisage similar support towards their claims over resources, but this is yet to see the light of the day as the current resource governance framework in Zimbabwe is conspicuously by its dominance by the CAMPFIRE Association based in Harare working closely with the RDC and the DPWMA.

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More importantly, there have been institutional learning and exchange of experiences from Makuleke that compels Sengwe community members makes some significant and logical ecological proposals. One headman in the area indicated that the Makuleke Contractual Park could be replicated in Sengwe through securing their communal land rights and securitizing their natural resources for possible investments in the Sengwe Corridor and Malipati Safari area for the community to derive maximum wildlife benefits. However, the current concern remain that ten years after the GLTP process was formalized, community natural resource rights are far from being attained to provide motivational incentives for community conservation, and the criticism against the GLTP as 'scale of marginality' (Ramutsindela, 2007:105) and at worst 'disenfranchising' the local communities (Dzingirai, 2004) is difficult to counter. Michler (2011:56) citing Colin Bell, one of the founding partners of Wilderness Safaris and The Great Plains Company, two of Africa's most highly regarded ecotourism operators who have supported communities, gave insights towards wading off the existing fear as Bell (in Michler, 2011:56) believes the answer lies in sound partnerships of stakeholders and argues:

"When the roles between rural communities, governments and the tourism industry are structured fairly, these three entities become wildlife's best guardians. When the relationship between the entities is poorly structured, wildlife's long-term potential looks grave".

Sengwe residents therefore, have always anticipated that the DNPWMA would take advantage of CAMPFIRE to do more in partnership with the communities to develop wildlife enterprise as reward for long term-collaborative natural resources good stewardship. In this regard, taking the Makuleke example that inspires Sengwe community, it can be argued that greater local learning, respecting local institutions, granting some *usufructs* to rural people and observing local environmental preferences, can ecologically be helpful in guiding national, sub-regional and global actions for transfrontier biodiversity sustainable conservation, governance and management. Usufructs are rights of enjoyment that enable a holder to derive profit or benefit from a property that either is titled to another person or one held in common ownership as long as the property is not damaged or destroyed (http://en.wikipedia.org/wiki/Usufruct).

7.24 The GLTP wildlife benefits views and impact dynamics

In any society where people lay claims on natural resources contestations are inevitable. As such, resource governance therefore revolve around claims and counter claims, but the most important steps that are critical is to ensure that stakeholders should seek to achieve collective buy-in in

defining cooperation in the way individuals support conservation initiatives and deriving benefits from the resources. This study sought to understand how the community view ownership of resources that further influence use of the resources such as land (for subsistence farming and grazing livestock), forest products and wildlife benefits as natural assets underpinning local livelihood systems in Sengwe community. Of the three hundred and thirty households that responded, 76.3% strongly believe that natural resource, particularly the lucrative wildlife belong to the Department of Parks and Wildlife Management Authority as shown in Table 7.23 in percentage terms.

Table 7.23 Household wildlife ownership perspectives

Response variable	N	%
Ownership by the DPWMA	78	76.3%
Ownership by the community	252	23.7%
Total	330	100%

In general, the community owns the 76.3% as compared to 23.7% who believe that wildlife. This high response (76.3%) is an affirmation by household respondents' understanding of wildlife ownership as largely belonging to the DPWMA because Gonarezhou National Park is known to be state run National Park in Zimbabwe, and the community appreciate that. Nevertheless, households are also conscious of their share of ownership accounting for a significant 23.7%, and they believe that they have a role to play, citing the campfire programme giving them those rights of ownership of wildlife in their areas. Further in an interview with the DPWMA it was said that:

"In terms of the Parks and Wildlife Act, natural resources, defined as indigenous resources, belong to the members of the community collectively, that is those legitimately resident in the area over which they have shared jurisdiction. Their decisions are made and implemented through the RDC of that specific area endowed with the resources in terms of the Appropriate Authority status bestowed on them under the same legislation".

Perhaps it is important to highlight that this illusion also reinforces resource ownership and use rights imbalances in which case there is an entrenched governmental control through the RDC. In a way, this justifies the argument this study has consistently raised that the governance interrelationships between GLTP systems and the community are imbalance and potentially curtails local people from deriving meaningful livelihood benefits, let alone their effective participation in natural resource governance. Resultantly, the study examined two intertwined

aspects of how households view the issue of wildlife benefits and household views on satisfaction with proceeds and benefits from wildlife. These are shown in Table 7.24 and Figure 7.25. Table 7.24 Household wildlife benefits flow perspectives

Response variable	Ν	%
Yes to receiving benefits	96	29%
No to receiving benefits	234	71%
Total	330	100%

Table 7.25 Wildlife benefits satisfaction perspectives

Response variable	Ν	%
Yes to satisfaction on benefits	92	28%
No to satisfaction on benefits	238	72%
Total	330	100%

The deductive logic arising from community perspectives about wildlife benefits accounted for 29% (Table 7.24) of households confirmed having received benefits. It is important to highlight that this was with particular reference to historical views on wildlife benefits that was used for infrastructural projects like purchasing of materials for constructing schools, building dip tanks for livestock and supporting construction of Dhavata Clinic in Sengwe during the initial phases of CAMPFIRE. However, the households refuted having directly benefited from their resources as reflected by the majority 71% (Table 7.24). Further discussions during focus group discussions revealed that 80% of the people cited constraints in which they mentioned lack of rights over wildlife resources since the rights holder is the DPWMA, which subsequently influences three main aspects that are 'who access the resource; how to accesses the resources and when to access them.' Ideally, these dimensions go hand in hand with questions that sought to understand perceptions of the local households on whether they were satisfied with wildlife benefits accruing from the Great Limpopo Transfrontier Park. The household responses showed that 72% (Table 7.25) of the households were not satisfied compared to 28% (Table 7.25) who were satisfied with the benefits trickling to them. Those who confirmed satisfaction (28%) need to be treated with caution as random interaction with households stated that some people confused direct households benefits to overall infrastructure developments achieved when the CAMPFIRE programme was active. For the avoidance of confusion, it is important to indicate that there was no correlation between direct household benefits in the form of dividends and support towards community development.

Again, those who indicated to be satisfied did so from historical benefits received in their areas since currently there is not much accruing to Sengwe community in terms of wildlife benefits.

Discussions with local councillors revealed that the District Council was spending most of wildlife financial resources on administration and they could not account on how much came directly to the community. Additionally, an official at Chiredzi District Council mentioned that currently funding was a problem such that the communal area resources were facing challenges in terms of ensuring that sound conservation was sustained, highlighting one of the most serious constraints that can have adverse consequences on biodiversity and ecosystems management. However, the official also acknowledged that there was significant resilience of sound local conservation abilities in Sengwe, which he attributed to natural resource sustainability in the area. Considering that little has been done in defining benefit mechanisms from the GLTP project, it is misleading to believe that as it stands, people are benefiting. There are unresolved issues with CESVI (2005:25) arguing in its tourism strategic planning document that the overriding risks here are that the economic potential of the GLTP has been grossly overestimated, and that the expectations of the stakeholders, especially at the community level will not be achieved. Secondly, there is also a lauded risk that if the tourism and investor confidence in Zimbabwe continues on the decline due to socio-economic and uncertain political environment, the much anticipated community benefits in the short to medium term remains a pipe dream.

Currently, the indigenization policy implementation in which 51% of shares have to be reserved for the local people for any investment involving foreign companies is viewed pejoratively such that tourism investors have been cautious to partner with the Sengwe people to start business that subsequently would provide monetary benefits. The political contestations around 25 year hunting leases granted to beneficiaries in the Save Valley Conservancy, adjacent to GNP, places the overall economic viability of the tourism investments on the hold as potential investors adopt a wait and see attitude, putting Sengwe people's prospects for investment partnership in jeopardy. CESVI (2005:25;29) further postulates that the real risk exist in that the processes required to develop the tourism product are overtaken by the land use systems currently being implemented, and thus foreclosing options since "pockets" of land are under numerous levels and categories of tenure in South Eastern Lowveld (communal, resettlement, private sector, and government parastatal). Resultantly, convincing communities that they are going to benefit does not appease the local people particularly given the fact that the GLTP initiative has not demonstrated inclusion of the local people that consequentially ensures they derive benefits. For the GLTP to be sustainable in the long term, it is contended in this study that greater emphasis is placed on local broadening beneficiary participation of the local people, while regional resource planning concentrate on infrastructure development to ensure there is connection of the three parks in the

GLTP. More details emerged when this issue was discussed with a tourism official in the Zimbabwe Tourism Authority (ZTA) who stated:

"The potential benefits to the Sengwe community are foreseeable and would require establishing Community Based Tourism Enterprises (CBTEs) to attract the critical mass of visitations to Sengwe area. However, there is need for the necessary infrastructure investments upon which tourism is dependent, which are issues outside the influence of the ZTA and the Ministry of Tourism in the GLTP to ensure that the local people realize benefits and become happy".

Considering low levels of benefits (71% in Table 7.12a) and coupled with 72% (Table 7.12b) high levels of dissatisfaction, serve to show that the GLTP is far from being tenable. There is also the most painstaking issue of contestation looming to rupture at some point from the community who always (rightfully) claim custodianship and ownership of tangible and intangible resources within the ambience of the GLTP. Accordingly, some local opposing arguments are that selling wildlife done by private operator of Malipati Hunting Safari leased cosmetically by the community, buyers has not guaranteed that the local people derive maximum benefits that meet their development needs at various levels, hence hunting is perceived to be used to benefit the elites and the DPWMA. In the midst of this discourse about the sale of wildlife, one notes the missing voices of local communities because the administrative governance systems at both local, national and GLTP level, does not afford the local people to engage and make decisions that best meet their interests.

Ideally, because not much tangible is obtaining at the local level and no one has educated the communities on the state of affairs of the GLTP, households are worried about their land uses and livelihoods practices that the GLTP ultimately foreclose local livelihood options, making the talk of transfrontier conservation less appealing locally in terms of economic benefits. Zeka (2008, 1) positing vehemently that local communities should be legitimate beneficiaries of natural resources which exist in their land and adjacent to their areas. To buttress this argument, Zeka (2008:2) elaborated this by lamenting that local practices have been replaced by western-oriented practices such as lucrative trophy hunting for sport purposes while emphasizing non-consumptive use on the part of the community. In fact, eco-tourism ventures are being parroted as the flagship for community development, yet the local communities are not benefiting from the most lucrative trophy hunting. These divergent and often contradictory norms, values, and assumptions as regards to use of natural resources, have to a greater extent fuelled animosity between local

communities and government-led conservation agencies. Consequently, the overall sentiments from focus group discussions in Sengwe community provided insights that generally, the people regarded the GLTP in its current governance form potentially precipitating dispossession of their rights to natural resources. This was confirmed by the fear expressed by SAFIRE official (a community development NGOs that supports rural livelihoods in Sengwe) that there is real danger to foreclose people from participation. The official went on to highlight that this potentially temper with local livelihoods and eventually collapses them in the process if there is no clear strategy in a short to medium term process to partial or full transition from agro-pastoralist economy to the charm of the buzz concept of eco-tourism in these communities. As a result, I has been observed that despite the exclusion, and in other instances the forced removal of local communities in areas designated for such similar conservation, the communities are lauded to continue to be critical role players in the conservation of natural resources, unfortunately, decision making, and ultimate benefits from conservation continue to elude local them (Zeka, 2008:2).

Further to that, there is strong basis to suggest that an unplanned graduation of rural natural resource based livelihoods into a tourism tertiary economy has possibilities of leading to an accelerated poverty spiral and insecure livelihoods increasing if it fails to generate sustainable revenue for the households. This study took note of the fact that the households are reliant on an agro-livestock based land use systems coupled with forest products benefits without signs of overutilization. Due to the ecological region of the area that is classified under region Five, the households struggle to fulfil their basic social and economic needs requiring that any change needs clear and comprehensive planning. As CESVI (2005:29) document notes, there is little coordination between the various stakeholders and the tourism industry with their interrelationships existing in an *ad hoc* fashion in trying to tackle local issues. Meanwhile, there is call that the government of Zimbabwe will continue to play a significant role as the custodian of the natural resources in developing livelihood infrastructure and in creating an enabling livelihood policy environment for local communities.

It is important to argue that benefit flows to local communities in the GLTP framework, are currently not defined, yet the households in and adjacent to the project are dependent on the natural resources that stakeholders have interest in terms of conservation. Resultantly, it is perhaps important to mention that informal discussions with councillors revealed local leadership consensus that Sengwe community be given some form of preferential treatment in hunting concessions and enter into joint venture agreements with investors directly in a community share ownership trust arrangements like that obtaining in the mining sector to leverage community benefits from natural resources.

7.25 Human-wildlife interface

As noted in chapter 6, communities in and adjacent to protected areas habitually experience problems with wild animals resulting in bad relations between the community and wild animals. For example in Kenya, such human-wildlife relationships where livelihoods of people are at stake, such as predation and crop raiding happening unabatedly adversely affect humans and biodiversity, and usually lead to the retaliatory killing of wildlife in 82% of the protected areas in Kenya (Okech, undated:66). This study explored household perspectives regarding human-wildlife relations. This is in line with objective five of the study that calls for an exploratory analysis of the GLTP human-wildlife interrelationships and the conflicts that arise in order to proffer conflict management mechanisms. In natural resource studies, particularly where there is abundance of wild animals, conflict between humans and wildlife is inherent at times leading to negative consequences such as human life losses, crop raiding and predation of livestock in communities surrounded by protected areas.

With respect to Sengwe, perhaps it is vital to understand that wildlife in Zimbabwe is regarded as state property in terms of the Wildlife Act of 1975. In areas where appropriate authority has been granted to local authorities such as the Rural District Councils, they further grant such authority to user communities through programmes such as the CAMPFIRE programme that provides for local involvement in natural resource governance. It is critical to mention that where communities have jurisdiction over natural resources in their areas, they do not have ultimate decision-making powers such as to determine commercial hunting. This is because natural resources remain subject to regulation by the RDC as the rights holder on behalf of the state and RDCs have the mandate to make take decisions at the directive of the responsible ministry through the Minister of Local Government, Rural and Urban Development. Thus, practically, there is reasonable ground to postulate that this shows the manner in which government centralises control over the governance and management of natural resources decision-making processes.

The big game found in Malipati Hunting Safari area being leased to a private operator have wild animals such Elephants, Buffaloes, Leopards and Lions, highly valued for their economic benefits. These animals are restricted and regulated in terms of utilization by national and international wildlife laws. Table 7.26 and Table 7.27 shows household responses on two questions that sought to find out if household were incurring crop and livestock losses, and if they were receiving

compensation for the losses. Relatively 90.7% (7.26) indicated that they were incurring losses against 9.3% (7.26) that were not at the time of the study. In addition, only 0.9% acknowledged having received some compensation against 99.1% who had lost some crops and livestock to wild animals with no compensation (7.27).

Table 7.26 Confirmation of crop and livestock loses

Response variable	N	%
Yes to crop and livestock losses	299	90.7%
No to crop and livestock losses	31	9.3%
Total	330	100%

Table 7.27 Perspectives on compensation for crop and livestock loses

Response variable	N	%
Yes to having received compensation	3	0.9%
No to having received compensation	327	99.1%
Total	330	100%

The huge losses incurred, which interviewees highlighted mainly due to predation on livestock by lions and hyenas being the most notorious in the cat family. There was also rampant crop raiding across the three Wards. This poses huge perennial threat to local livelihoods that are predominantly agro-based (livestock and crop production). Looking at this anomaly, the losses are not supported by commensurate compensation since 99.1% of the three hundred and thirty household that responded refuted awarding of compensation. Just like in Kruger National Park where the Makuleke experience problems with predatory lions, an official with the DPWMA clearly stated that once an animal is out of the Gonarezhou National Park, it is not easy for them to deal with it unless it is reported to the Park authorities. They therefore can deploy for scaring away wild animals if declared a problem animal and they also kill the animals to control them from incessantly roaming around the community. However, local sentiments from interviewees highlighted that the people in Sengwe had received a row deal from the DPWMA. One respondent said:

"We have problems with hyenas. When we report that their hyenas are eating our goats, cattle and dogs, they tell us that we should make use of them. We are not witchdoctors here to use these animals. They terrorize us, eat our livestock and we are tired of them. They should take their animals away from us" (Interviewee response at Headman Gezani's homestead lamented during a focus group discussion, 26 July 2011).

Culturally, hyenas are regarded as animal 'tools' for those who practice witchcraft, hence locally, these do not have any domestic value at all and they have been increasingly causing problems in

Sengwe community. In addition, these hyenas have less commercial value and usually, the DPWMA has not been proactive to respond to problem animals. Thus, there exist substantial conflict between households and wildlife particularly over predation, crop raiding and contestation over lack of compensation for the losses. It was also noted from these results that the mechanisms to resolve such wildlife related conflicts are slow, and communication of the problem animals have been traditionally slow, thereby affecting negatively on local livelihoods and straining human-wildlife relations.

As Munyori (1992:110; 1992:16), Sindiga (1999) and Sindiyo (1992:76) observed in the case of Kenya, contestation between livelihood practices by resident communities, their environment, buffer zones and animal corridors, just like Sengwe community that is at the heart of yet to be proclaimed Corridor in the GLTP, generate human-wildlife conflicts. Therefore, the negative impact on livelihood activities experienced in Sengwe arising from predation and crop raiding is a common phenomenon, which requires some interventions by the DPWMA to control the 'Problem Animals' and also compensate for those who incur losses. Whilst there is provision for compensation through the District CAMPFIRE Association, there is none such benefit that was reported at the time of the study, despite having heard cases of households having lost goats, cattle, dogs and donkeys to wild cats as well as some crop field having been raided.

The overall conclusion from the above facts is that with opening of boundaries of national parks, it potentially increases the risk of predation, crop raiding and with meaningful mechanism to deal with these conflicts, serve to exacerbate negative attitudes between local residents and wildlife. It is inherent that in many instances where wild animals are found, and can escape across the park fences, worsen the problems of predation and crop raiding. There is evidence that the Gonarezhou National Park fence is porous as shown Figure 7.15 and this is a cause for concern by residents suffering losses of their livelihood crops and livestock.



Figure 7.15 Slack fence Gonarezhou National Park

The losses and dissatisfaction of local shown by households was further exacerbated by their exclusion in the governance and management of Gonarezhou National Park, let alone the GLTP. For the avoidance of conflicts and worsening environmental conflicts in this community, the inculcation of an integrated natural resource governance and management through building on local skills, value systems and local forms of cooperation that could promote not only voluntary participation but enhances sustainability of biodiversity and ecosystems in the area. Accusations of inaction to address human-wildlife problems from Sengwe residents are an indication that they are not only concerned with hostile interrelationships with the manner the DPWMA handles issues of environmental conflicts, but are to a greater extent, an expression of dissatisfaction about the governance process. Zeka (2008:3) thus cautions that the failure in African conservation to gain support and cooperation from local communities has resulted in ceaseless poaching that has not only destabilized the management of parks, but has also led to the adoption of behaviours that are inimical to norms and values prevalent in these societies. As noted by Okech (Undated: 65) in Kenya for instance, wildlife cause enormous loss to the people by destroying property and killing humans, thus, inherently, creating conflicts with communities. In this case, allowing wildlife human conflicts to happen unattended has had the effect of retaliatory killing of wildlife in 82% of the protected areas in Kenya (Okech, Undated: 66).

A similar issue was brought up in focus group discussions highlighting that some people surreptitiously engage in revenge killing of some predators such as hyenas, small crop raiders especially those that browse in their fields and other small game for domestic consumption. The most important point to mention is that there could be some people acting in complicity with poachers who come from outside Sengwe to poach elephants and other big game in Gonarezhou National Park. This is caused by the fact that people have since lost a sense of ownership of the resources, which are largely regarded as state owned. In fact, in 2010, there was a high-tech mass poaching of fourteen elephants gunned down in Gonarezhou, and some local members could have noticed this but they were reluctant to communicate to the authorities because of poor communication and diminishing sense of ownership of the resources. From a conservation point of view, there are a myriad of factors at play that require the GLTP authorities to address from human-wildlife conflicts to addressing the fundamental issue of ownership and user community rights to leverage for more local collaboration and effective environmental policing.

The formal framework in Sengwe in terms of natural resource governance takes the form of CAMPFIRE Committees at the Ward level that works closely with the RDC. This implying that when it comes to environmental decision making, the two structures functioning together can enhance collaboration in the context of the Contractual Park affairs. Naturally, one would envisage this becoming the basis upon which the community can input in the GLTP resource governance and management processes. While the GLTP governance process escalated ownership of natural resources to more centralized governmental structures, it is a misnomer to ignore community structures both legal and traditional, to which people subscribe insofar as conservation of biodiversity and ecosystems management are concerned.

7.26 Community livelihood patterns

The starting point is to appreciate the status of land in Sengwe community. At law, communal land in Zimbabwe is state owned and the authority over land is vested in "traditional rulers to local authorities" with the Act stating that communal land is vested in the President who is to permit it to be used and occupied in accordance with the Act (Communal Land Act, 1982). Manjengwa et al. (2010:14) propose that communal people lay usufruct claims and rights over small pieces of land they have. Household data as well as discussions, interviews and transect field evidence showed that majority of the people in Sengwe communal land depend largely on subsistence farming, livestock production, supplement their basic livelihoods by trading and harvesting forest products for livelihood or use forest resources to support other forms of livelihoods such as forage to feed livestock (Chirozva, 2010). These economic activities coupled with ancillary resource use

such as medicinal plants, manufacturing of a traditional wine from Ilala plant known locally as *Njemani* were identified as some of the activities people derive from their environment. Harvesting of wild vegetables for nutritional supplement also augment other forms of livelihood.

The relationships of the local people with their land and associated natural resources play a pivotal role in their lives. Their future survival depends largely on their ability to maintain a healthy natural resource base, especially communal land and their environment resource, which they consciously regarded as a supply pot. Studies done in 2001 by Sola (2001:251) in Sengwe Xini ward revealed that over 86% of the households own livestock and practice rain-fed crop production. On average, a household is said to have been cultivating about 2.2 ha per season (Sola, 2001:251).

Equally, it was found that subsistence farming is a key livelihood activity accounting for 87% of the three hundred and thirty surveyed households that responded. Farming combines both livestock and crop production. There is also a strong element of cross-border trade usually involving buying and selling consumables and groceries obtained from South Africa, just across the Limpopo River and from Mozambique. There is significant cross-border trade between Sengwe communal people and business establishments in South Africa and Mozambique. This is an affirmation of long established historical ties between communities in adjoining borderlands.

7.27 Crop husbandry

As noted above, Sengwe households rely on farming, particularly rain-fed agriculture and livestock production. These activities have a direct connection to their land and natural resources in their areas within the confines of the GNP, consequentially interrelated to the GLTP. The following tables show food crops and cash crops that households identified as anchoring their livelihoods. Table 7.28 Average household food crops grown in Sengwe

Listed crop type	N	%
Maize	224	68%
Sorghum	43	13%
Millet	2	0.7%
Rapoko	17	5%
Soya beans	10	3%
Others	34	10.3
Total	330	100%

The incidence of huge variation in maize production accounting for 68% against sorghum (3%), Millet (0.7%), Rapoko (5%), Soya beans (3%) and other crops (0.3%) can be explained from the perspective that maize is largely the staple crop in Zimbabwe. The ranking of cash crops produced in percentage terms are shown in Table 7.29.

Table 7.29 Cash crop grown

Listed crop type	N	%
Cotton	65	19.7%
Tobacco	0	0%
Maize	69	21%
Sorghum	8	2.3%
Millet	1	0.3%
Rapoko	100	30.4%
Soya beans	57	17.3%
Others	30	9%
Total	300	100%

Clearly, those who grow cotton (19.7%) is mostly for commercial sale despite concerns raised during focus group discussions that the price for the 'white gold' was dwindling and people, thus are losing interest to continue producing it. It is important to mention that food crops such as maize, millet, rapoko, soya beans and sorghum were highlighted as part of cash crops. However, this relates to localised selling of these crops by cash or batter trading, but not for commercial sale such as the case with cotton. Therefore, it might be misleading to conclude that these food crops are fundamentally cash crop, but need to be understood in their context of localised sale. The critical point that needs mentioning is that household' food crops in both Table 7.28 and Table 7.29, show consistency of particular crops that underpin the livelihood of households.

The combined incidence of 'other' food and cash crops, which accounted for 10% and 9% respectively, related to vegetables that people grow for both subsistence and localised sale to others in Sengwe. These were listed by households and were largely concentrated in Malipati area where there is Manjinji Irrigation Scheme. However, other villages too, closer to rivers and streams and those we water wells at their homesteads produce vegetables for domestic use and selling to neighbours.

Data frequencies of households involved in crop farming activities, similarly suggested that land is critical for their livelihood as almost all the households from all the Wards do engage in agricultural production. Transect drives and walks in the study area evidently confirmed dry stocks of millet, maize, rapoko and cotton. Another visit to Manjinji Irrigation Scheme confirmed how vibrant vegetable production is in ward 15. However, most of the vegetables perish, as the local people do not have a reliable market for their crops. The following pictures show some of the crops which were under production at the time of the research.



Photos by Muzeza Figure 7.16 Collage of irrigated vegetable gardens photos at Manjinji Scheme

Vegetable production offers a variety of nutritional relish to the community. Since Malipati households are benefiting from this project, there is potential for these activities to offer a fall-back position as a livelihood option in the event of natural rain fed crop failure or any natural disasters like crop damage from thunderstorms and droughts. If the vegetable irrigation schemes are spread to the rest of Sengwe communal land, considering its intensive production nature can offset hunger in the three wards. However, such production need to be supported through securing markets for the produce and initiating some local agro-products value addition so that the farmers get value of money from their produces. Additionally, frequent crops are tomatoes, onions, peace, sweet potatoes, groundnuts, dry season maize, watermelons, cabbages, rape, carrots and green beans, which were not covered by the household questionnaire. The relative importance of these vegetables was shown by their attribution to providing them with critical income from local sales, with one interviewed farmer at the irrigation scheme indicating that she earns an average of \$500 per each production season (June-September each year). Generally, the households who interacted with the researcher complain about lack of markets with most of their crops rotting.

Linked to their production processes, is the availability of water. Currently the flooding irrigation is done from tunnels from a diesel engine powered water pump which is proving expensive to run and the operational cost are shared equally among participating households. There is no dam to supply them with water, and above all, virtually all the households in the project appear to share the same sentiments. They were grateful to SIFIRE, which rehabilitated the irrigation scheme when government support was withdrawn and the project had completely collapsed. Perhaps of significance to this study is that the irrigation scheme is approximately 3 kilometres to Manjinji Pan Sanctuary, an important hydrogenic scenic area that is part of the GLTP in terms of the Trilateral Treaty. The local people interviewed including the local councillor complained that there were ongoing attempts to stop the people from engaging on vegetable gardening because of its proximity to Manjinji Pans. They lamented that its collapse is attributed to these machinations, which is detested locally by households.

These threats to livelihood security potentially confirm the negative attitudes towards the GLTP since they are now aware that this area has been integrated as part of the strategic zone for the GLTP. This certainly is a cause for concern among the Malipati community. On the overall, the study also looked at the amount of land those households samples generally prefer in order to determine the extent to which this can affect wildlife conservation. The study in line with its objectives, linked land sizes needed to consultations about land use in the area. The following tables present overview of household land sizes they prefer for crop production and their perspectives about land use consultations.

Household preferred land size	N	%
1 to 5 acres of land per household	306	92.6%
5 to 10 acres of land per household	24	7.4%
15 to 20 acres of land per household	0	0%
Total	330	100.0

Table 7.30 Percentage of household preferred land sizes for crop production

The data show that majority of households are concentrated in the 1-5 acres land sizes accounting for 92.6%, with those wanting bigger sizes (+5-10 acres) averaging 7.4% while the 15-20 average land sizes is 0%. On further examination of whether the households were satisfied with availability and land sizes, it was clear that the patterns were common that they are satisfied to maintain their small plots they are manageable to meet their crop production. However, this study remains cautious that the demographic factor can be counterproductive, and potentially can be ecologically unsustainable in the long run considering the obvious population growth naturally puts pressure on available land and other natural resources.

More critically, the study used household surveys to find out whether any consent was being sought in the GLTP scenario planning of land use in the area. The results as shown by the Table 7.31. Local perspectives in percentage terms reveal that the people expressed objection of consultation 89% of the 330 households having (n=294 households) disagreeing and 4% (n=13 households) strongly disagreeing with the assertion that consultations about land use was being done during the scenario planning of the GLTP.

Varied response	N	%
Strongly Disagree	13	4%
Disagree	294	89%
Undecided	13	4%
Agree	7	2%
Strongly Agree	3	1%
Total	330	100%

Table 7.31 Perceptions on GLTP consultation in planning

The varied difference between those who disagree to strongly disagreeing with those who agree (2%=n=7 households) to strongly agreeing (1%=n=3 households) is 90% (n=297 households), indicating that broad consultation on land use is extremely low, particularly with respect to the GLTP planning process. Further discussions with the local leadership, it came out clearly that consultation through workshops was confined to selected local leaders who contribute in these meetings considering the limitations of resources, it was reported that bringing people in large numbers was not practical. Ideally, a combined percentage figure of those who agree and strongly agree to being consulted is a paltry of 3% that accounts for nine households, presumably being households of some leaders who have participated in the past meetings convened during CESVI consultations. Consistent with overall views from household questionnaires, it is justified to conclude that the level of land use consultation is low and any GLTP planning particularly around those households inevitably to be affected by the Sengwe Corridor boundary demarcations is likely to be arbitrary with a likelihood of resistance. The issue of evictions is sensitively an emotional issue to people with tremendous attachment to their land, cultural sites and heritage. The ZIMParks official did not elude stating in his questionnaire response in which he stated clearly that:

"Any members of the community who may be relocated from their current homes would, logically, be expected to be settled within easy access of the corridor so that they can benefit meaningfully from the shared fruits of the Corridor development" (ZIMPark official questionnaire response to possible relocation of households).

It is important to note that location of fields in the greater part of Ward 14 and 15, and some sections of Ward 13, puts the local people in direct contact with wildlife at the boundary of GNP,

which has generally a slack fence. This poses problems with wild animals constantly straying out and predating and raiding crops, thereby creating human-wildlife conflicts in the community. Respondents at Malipati focus group discussion reported that some households had lost crops previously to wild animals without compensation from the government. Upon answering a household survey questionnaire about the local people's feelings on relocations, these results were indeed revealing as Figure 7.32 can reaveal.

Table 7.32 Household	opinions on	relocations	from Sengwe

Response variable	N	%
Agree	3	1%
Strongly agree	6	1.7%
Negative	89	27%
Strongly negative	232	70.3%
Total	330	100%

The data above clearly shows resentment of relocations by households accounting for 70.3% expressing that they were strongly feeling negative as compared to 1% of households who expressed being positive about it. The difference between combined being positive (1%, n=3 households) and strongly positive (1.7%, n=6 households) with those being negative (27%, n=89 households) and strongly negative (70.3%, n=232 households), is 97.3%, which by any measure one can easily generalise that the people are largely negative about relocation from their areas. Considering that the GLTP process is irreversible, it calls for more community engagement, education and consultation to start convincing them about the importance of the GLTP. The study noted that such a process is a remedial measure because this was supposed to have been done at the formulation phase of the GLTP process.

Linked to this was a question seeking to understand why they felt so. On the overall, 49% felt that they own the land, 3.7% said they have nowhere else to move to, 43% were of the view that they have a strong emotional and cultural attachment to their land and 4.3% were of a contrary view that they were willing to be moved. The percentage variations therefore suggests that majority of households have a high sense of ownership of their land, coupled with emotional and cultural attachment to their land, such that they are not willing to move out of Sengwe or any such near place that would enable them derive benefits from their former homeland.

Households were also asked if they were experiencing difficulties regarding access to cropping land, and if so, the problems they encountered to access it. Household survey responses showed that 97.6% (n=322 households) reported no difficulties are being experienced. In the majority of cases, land in Sengwe is held under some traditional tenure systems. Linked to the same issue,

was to examine how household perceived ownership and the subsequent allocation of land in their area. The following Figure 7.17 present the local views.

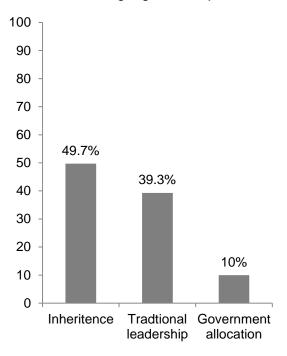


Figure 7.17 Overall views on land ownership and allocation

As clearly shown in Figure 7.17, households are of the opinion that land is entrusted to customary processes of families, and passed from one member to the other largely under inheritance that accounts for about half of households (49.7%), while the traditional leaders account for 39.3%. The government was ranked 10% because Sengwe being a communal area, land adjudication falls largely under the local authority and the traditional leadership. A combination of inheritance and traditional leadership represent a total sum of 90% (n=297 households) confirming the two local administration processes determine who and how to get land in Sengwe community. This dynamic translates also into the way the local people treat their natural resources, in this case land. Ideally, this dismisses the assumption that resources in Africa's communal areas are open access. On being asked as to who determined use of land in the area and its associated natural resources, 97% reported that it is the local Chief and his traditional systems using locally prescribed rules, that includes inheritance, while 3% believed that it is the government. Ideally, a strong traditional system exists in Sengwe that exercise allocation and distribution responsibilities, particularly of communal land.

Those who believed that it is the government, generally have an ideal of land that relates to the park where the DPWMA is the custodian of the protected area. The placing of parts of Sengwe

communal land into the GLTP implies that areas such as Malipati safari area, Manjinji and a strip that will form the Corridor all become state land. Resultantly, this also make changes on how people access, use and even make decisions on deriving benefits because government can take policy positions contrary to local livelihood and conservation expectations. On the overall, access to land is through family system of inheritance as well as allocation by traditional leaders. This is supported by a 2010 scenario planning process in which Chirozva et al., (2010:4) put forward that in Sengwe access to land is based on a tenure system that include family land inherited through paternal lineage, spouse' family land, land rented or leased.

In terms of livelihood changes resulting from the GLTP, household responses could not confirm any fundamental changes despite sentiments from focus group discussions that they were opposed to relocations. However, inherent conflicts have always existed over grazing of cattle in Gonarezhou National Park (GNP) and farming in conceivably some ecologically sensitive areas, putting communities and conservation authorities in a collision course. These tend to exacerbate environmental conflicts because the GNP is a protected area as much as the GLTP conforms to park processes as opposed to integrated multiple land use. This protracted conflict has always been there, and with livestock being the anchor economic activity in the area followed by subsistence farming, it is likely to escalate with increase in livestock that individuals have to graze in the borderlands between Sengwe community and the GLTP. In summary, the impending changes of land use and extension by incorporating some pieces of land into the GLTP, consequently, would limit grazing land and farming land that people could have for their livelihood.

To conclude this part, it is critical to highlight that in as much as theory of the tragedy of the commons assumes that communally held resources including land opens up the areas to a free-fall under 'open access', leading to depletion of resources, this does not exist in Sengwe. The strong traditional systems regulate access, ownership and utilization, such that the prognosis by Hardin's (1968) 'tragedy of the commons' does not arise. There is potential for the removal of people from the areas they currently occupy. A government official cautiously confirmed it that it results in significantly deepens vulnerability of the local people by imposing restrictions on access and exploitation of natural resources such as land and pastureland. This is particularly to those households that are likely to be evicted and probable resistance from the communities is likely. A combination of discontent among people, whose livelihoods are failing, over competition for land, grazing land and above all, access to forest products, is a self-local-mobilization force to wage a resistance by the local people against the state's attempts to change their local processes and

livelihood activities without offering viable options. Ultimately, this has the potential to lead to grave livelihood insecurity, which are predictably listed as follows:

- 1) Interrupting food access, production systems and undermining their diversification;
- 2) Restricting access to agricultural or grazing land, particularly around households directly bordering with the GLTP;
- Restricting access to water holes for livestock and other natural resources that sustain the livestock industry and consumptive forest products use;
- 4) Causing the collapse of the local traditional and family system and loss of cultural sites that people are emotionally attached to by those households to be evicted, which potentially create a situation of mistrust of government; and
- 5) Preventing, destroying or blocking market and trade routes as the Corridor that is established without having a viable access point for traders migrating to and from Mozambique, South African and Zimbabwe, cut off social ties of the Shangaan people through a Corridor imposed restriction. This is likely to rival hostility across the three countries' communities in the GLTP.

Therefore, this study would conclude this discussion by putting forward that there is reasonableness for effective consultations on land use, particularly as it relates directly and impact tremendously on local people patterns of pragmatic survival. All crops grown on their land adjacent to the GLTP are contributing to sustainable livelihoods towards food, but the contribution of maize as staple food and the centrality of irrigated vegetable gardens underpins how land use under existing plots can be intensified to increase productivity that contribute to local sustenance. The discussions with people also highlighted the need for support in terms of certified seeds through programmes like the Presidential Inputs Scheme, which the local people lamented was not getting to the ordinary people. In view of these dimensions, it is important for conservation agencies and other environmental planners to revisit their strategies as the deal with the communities. Indeed the cooperation and local buy-in to typically can provide impetus for conservation by starting on a very modest process that avoids the 'tragedy of the common man' in terms of undermining local livelihoods. If anything, the GLTP should facilitate the realization and diversification of livelihoods and not to jeopardize them, which technically would exacerbate vulnerability of households. In

addition, it makes ecological sense for conservationists to leverage on local customary processes for conservation purposes.

7.28 Livestock production

Livestock production is the anchor economic activity in Sengwe communal land. Cattle production is reportedly vibrant in the area despite some years of occasional droughts that tend to decimate on household herd. Through household survey questions and working focus group sessions with the local people, the study was able to understand livestock production as it sought to appreciate how the local overall livelihood processes are to be affected by the GLTP.

The study examined more generalised trends of livestock in the study community in terms of the numbers and composition of identified the type of livestock the people keep for various uses. These were further examined in line with their use value of the livestock and well as looking at where households graze their livestock, adequacy of pastureland, problems they were experiencing regarding livestock production in view of the GLTP interrelationships and compensation on predation. Using mainly household survey questionnaires and working group discussions, the study was able to collect and collate valuable data. Through household survey questionnaires, people identified livestock they popularly kept in their community. Resultantly, on average, the herd composition per household is captured, reported, and in the Table 7.33: Table 7.33 Livestock composition by type in Sengwe community

Livestock species	Average number of livestock owned per household
Cattle	6
Goats	9
Sheep	4
Donkeys	1
Pigs	0
Chickens/Ducks	25

On average, 330 surveyed households own about 6 cattle, 9 goats, 4 sheep and an average of 25 chickens/ducks. Interestingly, the number of donkeys kept by respondents averaged 0.3 with zero for pigs kept. Just like in Makuleke community, cattle are the most valued and the mainstay of profitability and symbol of wealth status in the area in terms of economic value. In this case, the study obtained the utility value of livestock by 'attitude measure of livestock value orientations.' In this case, the researcher used the Schutte Scale to measure attitudes to get a sense of value orientations attached to livestock species in among focus group discussions. The measure in this regard covered many things. Value orientations tap into different domains like utility of animals such as consumptive values, economic aspects including saleability and profitability. Using the Schutte Scale rating of 1-11, the data from respondents was collected, collated and averaged to

give a clear indicative utility value orientation of each type of livestock identified above in the Figure 7.18.

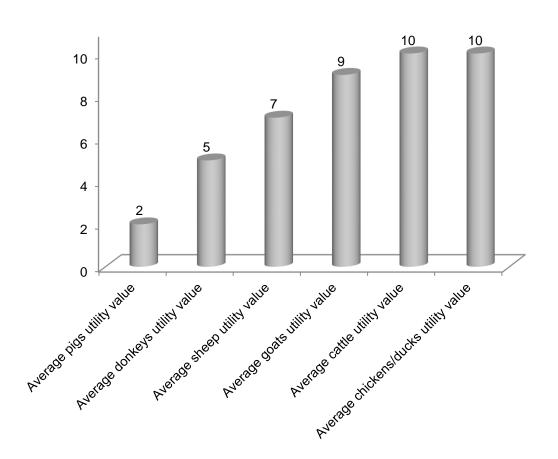


Figure 7.18 Household utility value orientations of livestock in Sengwe community

The questions asked here are based on a Schutte Scale methodology used to get an understanding of the value people attach to different livestock species. The questions posed related to rather general, however fundamental aspects of human utility value perceptions of their livestock they keep. They were asked as statements where respondents had to rate or rank the value of each livestock type that had been identified to be prominent in the community and plot it on the Schutte Scale rated from 1-11. The statistical data obtained was averaged to plot it in the utility value graph as shown by Figure 7.9 All the livestock kept exceeded an average from five rating, with cattle and chicken/ducks having the highest rating of 10, followed by goats with a rating of nine. Generally, all the ratings have a positive average rating above the middle of 5 on a scale

of 1-11, except for pigs that scored an average of 2 on a scale 1-11. This shows how much the households economically value their livestock for draughts power in the case of cattle, for meat, sale to earn cash and as a symbol of wealth. The fact that the pigs were lowly rated does not make them less in value scientifically, but such perceptions were motivated by the simple reasons that not so many people in the area are akin to keeping pigs. Generally, it is safe to assert that there is positive utility valuation of livestock as they underpin their livelihoods in Sengwe community. Related to livestock production, was an attempt to understand grazing of livestock in the area. Generally, grazing is not restricted in Sengwe communal land. Given the amount of forests in the area, this provides sumptuous palatable pastures for livestock production. Generally, the cattle seemed to be in good condition (although no scientific assessment of the body condition was done) based on the observation of livestock across Sengwe community during field trips when the research was conducted. The situation also obtained in Makuleke community across the Limpopo River. However, according to focus group discussions, people listed some of the problems they experience in livestock production and these complaints were reported as:

- Seasonal lack of livestock grazing grass or that grazing area would be far away after cattle exhaust grass. The feeding constraints would be acute in where communities are not adjacent to thick forage and riverine vegetation that readily provide grazing for livestock.
- Long distances to water sources for livestock, resulting in some sharing the same water sources with wildlife heightening chances for spreading wildlife diseases to livestock, risking both animals and humans.
- Twenty case of cattle having been stolen into Mozambique were reported. The attempt to recover them was unsuccessful due to alleged lack of cooperation by security agencies of Mozambique.
- 4) Not surprisingly, the people complained of poor markets for their cattle and those who come to buy their cattle generally negotiate until the farmers realise little profit. On average, a one bull would sell at \$350-\$400.
- 5) Vaccines to treat livestock diseases was reported to be difficult, resulting in some people losing their livestock as the people do not always have enough money to buy vaccines.

- 6) Losses due to predators were reported and the most reported predators were cited as the lions and the hyenas. In Ward 15, the Councillor Dube reported that his subjects at the time of the research had lost a total of 15 goats, 6 cattle and 1 donkey. The total reported cases of predation from focus group discussions by July 2011 were 56 in the three Wards. The case numbers could be more because there is a possibility of unreported cases in the area. The respondents at Headman Gezani's homestead expressed their displeasure at the marauding hyenas terrorising the community resulting in households losing their valuable livestock without redress by the DPWMA and they were not compensated for the losses.
- 7) This was worsened by lack of compensation for the losses, and finally,
- 8) The groups reported some contagious abortions occasionally taking place in the area, implying that there is a possibility of wildlife-livestock disease spreading. This would need to be researched.

In ending this part, it is critical to mention that livestock is one of the most vital livelihood activities in Sengwe community. It is a source of livelihood, symbol of wealth, however, there are serious problems that the households face to enhance their livelihoods. Generally, the issue of predation is linked directly to the GLTP affecting the local economy, particularly with fences being brought down, consequently increases the chance for more predatory animals preying on livestock. General information from councillors insinuated that the cases are on the growth trajectory since 2002. The conservationists have to take note of the negative factors that affects livestock and wild animals interface. The relationships between humans and wild animals, especially carnivorous are hostile. A research would be critical to carry out in Sengwe to determine the effect of human-livestock and wildlife interfaces so that it informs scientific interventions such as dealing with problems animals and disease transmission as the area opens up for the GLTP. In addition, since livestock is the mainstay of their local economy, any restrictions of the local people to access grazing pasture, reduces the quality of livestock, thereby having diminishing returns from their sales of livestock. Alternative methods of cattle breeding are therefore critical to ensure the success of livestock production as a livelihood strategy.

7.29 Wildlife value orientations, perceptions and livelihoods significance

The questions that were asked in focus group discussions related to general and fundamental aspects of human perceptions of wildlife. The survey questionnaires were more detailed. They addressed specific issues relating to wildlife ownership, threats posed by wildlife, benefits derived

from wildlife, compensation of losses and hunting of wild animals. Other aspects addressed touched on existence of commercial and domestic policies and programmes, to allow community use of wild animals or at least access their services. However, currently there are no benefits coming directly to the community following the seemingly collapse of CAMPFIRE. The only tourism venture operating in Sengwe is the lodge (former World Vision staff houses) handed over to the community when the organisation stopped operating. As a result, the community in Ward 15, Malipati, resolved to use it to provide lodging accommodation to visitors. In dealing with focus group discussions, wildlife utility value orientation assessment was important in this study to try to understand how the local people value their resources. In this regard, it is critical to indicate that focus group members were allowed to identify the type of wild animals they perceive to be important and using the Schutte Scale, they rated the utility value for each type of animal in the same way with livestock production. Figure 7.19 illustrates the average value of each animal identified by the nine focus group members the researcher dealt with.

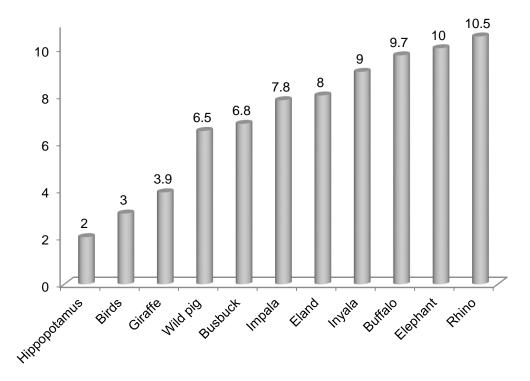


Figure 7.19 Wildlife utility value orientations in Makuleke community

The other grouping of wild animals concerned carnivorous species. Their average scores are shown in Figure 7.20.

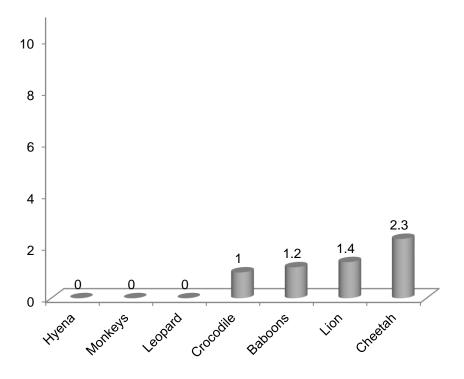


Figure 7.20 Average wildlife utility value orientations in Sengwe community

Community perceptions on wild animals show variations in the value they attach to particular animals based on a number of reasons. Using the scale rating from 1-11, across all the assessed animals, it was possible to determine local value perceptions about these animals and the group members explained how they viewed these animals as such. For instance, in Figure 7.19, rhino scored 10.5 because the local people are conscious that it is an important endangered animal worth protecting by stakeholders including the government. They further confessed that although they no longer see those species in their areas, they were guite aware that the rhino remains a very important animal in the ecosystem. This in a way is due to the environmental education on the value of animals in this community. Elephant scored 10, followed by buffalo at 9.7 and Inyala scored 9 on the a scale 1-11. Interestingly, while elephant is a major culprit in crop raiding, it remains highly rated due to its commercial value in terms of trophy hunting and tourism related business. Buffalo besides being regarded as a dangerous animal, is also perceived as a special animal for meat. The group members pointed out that they were not allowed to hunt it. For Inyala, the people prefer it for bush meat. However, they are not allowed to hunt in terms of the laws of DPWMA despite scoring 9. Bushbuck, wild pig, impala, and eland scored from 6.5-8 on the scale of 1-11, which generally is above the average score of 5.5 on the Schutte Scale. Ideally, these

were rated high because they have both commercial and local value in terms of meat products, although the law prohibits unlawful use by the community unless they buy wildlife from the DPWMA. Hippopotamus was not familiar in the area, and therefore scored zero. Those closer to Limpopo highlighted that they have problems with it as the animals eat crops from April-June annually. Giraffe scored 3.9, while birds scored 3. There no reports on giraffes seen in the area, but they exist in the Park. The birds were noted to wreak havoc on millet and sorghum, and as drought resistant crops, the average score reflected how detested they were among people.

Figure 7.20 shows show that the crop and the carnivorous animals are not liked. In particular, the hyena, monkeys and baboons scored zeros, implying that they are disliked and have no value at all from the local perspectives. Hyena was cited as the most notorious animal. The group members had harsh words for the DPWMA for not attending to the problem of hyenas preving on their livestock. Generally, all the animals in Figure 7.20 failed to reach half on the scale 1-11, again showing that there are problems with these animals in the area. In general, the perceptions on the value of wildlife are diverse and considered differently depending on wild how the local people understand them in socio-economic value orientation locally. Some of the wild animals are commercially tradable goods that bring monetary benefits to the government through trophy hunting and tourism. As such, they are considered with high value. Perhaps it is important to note that Malipati safari area is the only part of the GLTP where Sengwe community is said to be enjoying legalised government regulated consumptive use of wildlife. Ideally, this resulted in high score for those animals the local people generally regarded as commercially important under CAMPFIRE. In terms of conservation, such attachment of high value to wildlife is self-motivating towards sustainable conservation, should the GLTP leverage and strengthen wildlife benefits going directly to local people. Consistently, this study has argued that wildlife and other natural resource benefits underpin the stimulation of ensuring local people's collaboration, particularly where they have a sense of ownership and participate in making decisions over their resources.

In intermediate focus group discussions, the study found a strong dislike of typically 'problem animals' in the sense that they are viewed as dangerous to humans, predatory to livestock and periodically cause crop damages. These were mainly lion, hyena, monkeys and baboons. Perhaps it is important to indicate that losses of potential income when community members lose cattle and maize crop to wildlife exacerbate the human-wildlife relationships particularly with respect to 'problem animals'. As highlighted in chapter 6 that in Kenya, such kind of antagonistic relationship where people do not see benefits coming to their community, it has always led retaliatory killing of wildlife in 82% of the protected areas (Okech, undated:66). Generally, crop raids, predation, injury

to people or even death are reported in many parts of Africa and Southern African in general in and around may parks (Magome and Fabricius, 2004; Bauer, 2003; Coupe et al., 2002; Hulme and Infield, 2001). What worsens this situation and is more disheartening is that fact that the people in Sengwe who incur losses have not received compensation. This apart from creating natural resource based conflict between people and wildlife; it has consequently led to mistrust and antagonism against conservation authorities.

7.30 People wildlife relations

Data from household questionnaires were quite revealing in terms of the relations that exist. Respondents expressed resentment on crop and livestock losses, lack of compensation, prohibition to communally exploit wildlife for their benefit and hence their levels of satisfaction even about the much lauded tourism. Only 1.2% of the 330 households affirmed satisfaction on tourism benefits. The following Table 7.34 gives comprehensive assessments of the various human wildlife issues.

Table 7.34 Assessment of experiencing crop raiding and livestock predation

Response variable	Number of households	%
Yes to crop raiding and livestock predation	215	65%
No to crop raiding and livestock predation	115	35%
Total	330	100%

The overall observation is that there is phenomenal crop raiding and livestock predation accounting for 65% that confirmed the existence and pervasiveness of this problem. The crops that were mainly raided were maize followed by sorghum with elephants being the main culprits and birds also eating sorghum when it is ripe. The fact that household data showed losses were recorded high, it is more general since focus group discussions established that some of losses were incurred a long time ago, and over the last ten years, there has been a decline in the number of cases of crop raiding and predation. Through focus group discussions, the prominent problem animals that were cited included buffaloes, monkeys, baboons, wild pigs and duikers. They even suggested solutions that scaring tactics such as beating drums as the mostly practices form of scaring them away. However, animals like elephants would charge at people in some cases. Predators such as lions and hyenas were problematic since these are viewed to be dangerous to both humans and livestock. The local people feel that there is little effort to deal with the problem, resulting in valuable livestock loses. As a long-term strategy in view of the GLTP, the group members suggested strengthening the fence to separate households from marauding wild animals. Losses of crops and livestock were not being addressed by way of compensation on crops and livestock loses. Therefore, 98.7% mentioned that they had not received any

compensation for both crop and livestock they lost in the past, while 4.29 indicated that they were compensated as shown in Table 7.35.

Table 7.35 Assessment of having	received for crop	and livestock lose	compensation

Response variable	N	%
Yes to having received compensation for loses	4	1.3%
No to having received compensation for loses	326	98.7%
Total	330	100%

Obviously, similar sentiments came out of focus group discussions. The general perception is that the DPWMA is letting the community down by not compensating them for losses. In a related discussion, the community members highlighted that they needed more say over their resources so that they can derive benefits even though loses are incurred.

In terms of permission to access and use the wildlife resources, 98.7% expressed that they were not allowed to do so. Only 1.3% mentioned that they were permitted to utilize wildlife resources in and adjacent to the GLTP. This is shown in Table 7.36.

Table 7.36 Assessment of permission to use wildlife resources

Response variable	N	%
Yes to having permission to access and utilize wildlife resources	4	1.3%
No to having permission to access and utilize wildlife resources	326	98.7%
Total	330	100%

It is also important to highlight that the 1.3% of those who answered that they were allowed to access and utilize wildlife resources, could have based their opinions on previous rights they used to exercise under CAMPFIRE. This study was able to ascertain this by way of seeking clarity from respondents. However, there was still a failure in some cases where people could not account on the permission they get to access and utilize the resources, and this is attributed to failing to understand the specific permission inferred in the question needed. During focus group discussions, respondents provided deeper insights by indicating the most targeted crops by wild animals.

On the overall, the issue of benefits remains critical to the local people. It is apparent that generally, the government led wildlife management and tourism development has not yielded positive perceptions at the local level. The household survey questions and focus group discussions demonstrated dissatisfaction and unhappiness with the benefits streams. The government through the RDC has continued to regulate community substantially natural resource access and the distribution of benefits. Table 7.37 and 7.38; show these assessments of household views.

Table 7.37 Assessment of satisfaction and happiness with wildlife benefits

Response variable	N	%
Yes to satisfaction and happiness with wildlife benefits	10	3%
No satisfaction and happiness with wildlife benefits	320.	97%
Total	330	100%

Table 7.38 Assessment of satisfaction and happiness with tourism benefits

Response variable	N	%
Yes satisfaction and happiness on tourism benefits	4	1.2%
No satisfaction and happiness on tourism benefits	326	98.8%
Total	330	100%

Some participants lamented that the benefits sharing arrangements was skewed in favour of the elites, the local authorities and the DPWMA. In their humble view, these are taking most of the benefits at the expense of the local people such that they have not been able to rehabilitate their roads, refurbish schools, dip-tanks and to pay school fees for those who cannot afford in the community. Equally, there is disgruntlement when their stated their levels of satisfaction on wildlife benefits that scored a paltry 3.2% and 1.2% over wildlife and tourism benefits respectively.

7.31 Local people and Park relations

Likewise, the study addressed local views about hunting of wild animals. The premise of obtaining this information was to get honest responses about whether the communities were indeed a threat to wildlife in general. While it was a sensitive issue, the assurance the researcher gave to households opened up for honest engagements that revealed valuable information. In Zimbabwe, unauthorised hunting is regarded by government as 'poaching' and is criminalised whether one hunts for sale or for subsistence consumption.

The people were asked about whom they thought own the wild animals, between the community and the Department of National Parks and Wildlife Management Authority, 5% (n=17 households) were of the opinion that wildlife belong to the community. Contrary, to that 95% (n=314 households) were conscious that wildlife belong to the state despite the fact that communal lands enjoy some rights over wildlife through CAMPFIRE. Even though these rights are granted to the community under CAMPFIRE, the role of determining use has remained fundamentally a government function through Chiredzi RDC.

When people were also asked about their perception of how hunting or killing of wild animals may affect wildlife populations, a range of views emerged. This question separated herbivores from carnivores, but the overall pattern is the same. Slightly more than one-third of the people interviewed think that hunting has no effect on wildlife (36.1% on herbivores and 31.2% on

carnivores). People highlighted that if anything, those local hunters were scared of the Parks officials. They occasionally use traditional snaring, which is only possible on small game. However, almost one-half of the people in focus group discussions think that hunting destroys both carnivore and herbivore populations (47.9% for herbivores and 46.1% for carnivores). Collectively, 96% of the households expressed that hunting has a negative effect on wildlife populations. The above results point towards some obvious contradictions in views or expressions among the people who responded in this study, and this most likely reflects the sensitivity of the hunting or poaching issue. While most people deny the knowledge of hunters in their homesteads or immediate vicinity, or at least are hesitant to acknowledge their existence, they do this for fear of punishment meted out on those who might have been identified in their community. Most people discounted hunting as they acknowledged that this tended to destroy their heritage. Most people agreed to the importance of acquiring game meat for subsistence only through legal means. This included receiving meat rations when the DPWMA or any legal commercial hunter kills an animal and donates the meat to the community, which they usually trade also for cash in their community. Therefore, there is a distinct discrepancy between the recognised role and importance of harvesting game meat and the admitted presence of the phenomenon of poaching locally. In addition, the fact that there is widespread concern among households and local leadership over the potential effect of poaching on wildlife population indicate that poaching in itself locally is viewed as an anathema. Furthermore, poaching in the GLTP is a complex phenomenon and to understand it would definitely require a separate study. However, through this engagement, the issue of poaching was simplified to understand local interrelationships with wildlife. Examining of the various facets of poaching was confined to less sensitive issues and people were comfortable to talk freely. It is important to mention that in interpreting the results there is always the danger in seeing poaching as dominant, but the reality is that the cases involving members of the community were not too many. The people who were interviewed in this study placed more emphasis on government working with the community to prevent killing of wildlife, and not stigmatise and criminalise them.

Furthermore, the researcher talked to some people in Sengwe, who expressed dismay on the general perception by conservationists that community members were involved in rampant poaching such that this has tended to antagonise relations, and they have of late treated the local people with suspicion rather than treating them as custodians of nature, ready to serve nature.

Examining the issue of poaching further, it was identified from interviews with a park official in Harare (2 August 2011) that the main drive behind the local people hunting animals was mainly

for subsistence. Bushbuck, wild pigs and other such smaller game mainly for local subsistence for survival were reported to be occasionally the most targeted animals. However, the cases remain very low around Sengwe community, as livestock production has provided a substitute for the appetite of bush meat. On the other hand, commercial poaching was reportedly rampant in the GLTP, particularly in Zimbabwe and reportedly so in Kruger National Park. Most poachers targeted mainly the endangered species such as the rhino. They have of late poaching elephants. It is mainly profit driven and externally controlled. Commercial poachers targeted animals with high international market value such as rhinos for their horns and elephants for their ivory. These are the prime targets in particular because of high demand in the Asian and European markets. Indeed

Gonarezhou is home to thousands of elephants that survived the 19th century massacres by foreign ivory seekers, and continues to be the centre of high elephant population density (Mswazie, 2011:1). The Chronicle newspaper of 6 December 2011, the African Environmental Police of 27 June 2011 and the Daily News of May 2010, reported that a powerful rhino, elephant and lion poaching syndicate known by the name of Musina Mafia was on the loose and decimating wildlife in the GLTP. For example, ten elephants were killed in Gonarezhou in 2010 at one spot, and seven again decimated in June 2011 with Zimbabwe government officials and wildlife experts concluding that well-connected, sophisticated international poaching syndicates, using high-tech equipment, were to blame for the killing of the elephants in Gonarezhou side of the GLTP. There were strong indications that this involved helicopters when the poachers slaughtered these elephants. Some analysts have added their voices saying:

"The sustained poaching of elephants in Gonarezhou National Park, which, together with South Africa's Kruger National Park and Mozambique's Limpopo National Park, forms the world-acclaimed Great Limpopo Transfrontier Park, is a reminder for wildlife authorities in the three SADC countries to treat cross-border poaching seriously. It is believed that the same group of suspected poachers who killed 10 elephants in Gonarezhou National Park late last in 2010, were also behind the latest killing of seven jumbos in the same park. What has confounded wildlife experts is that on both occasions, the perpetrators of poaching were not arrested, and they keep on using the same modus operandi in decimating the elephants" (Mswazie, 2011:1).

It is imperative to state that unlike in Kruger National Park, part of the GLTP where government officials are directly involved in poaching of wildlife in the GLTP, in Zimbabwe's side, the problems

is more to do with lack of effective environmental policing that the external poaching syndicates are taking advantage of to enter the park and kill elephants. There is no evidence available to suggest any collusion between the park officials with the poachers, let alone the community members in Sengwe community. Ideally, it was indicated in a questionnaire response by a DPWMA in Zimbabwe in which he applauded the community and Chief Sengwe for being supportive of biodiversity and ecosystems conservation in the framework of the GLTP.

That be the case, this study would put forward that sustainability of the GLTP hinges on local support. Thus, its governance and resource management has to take on board the communities around it. The question of levels of their participation is simple since there are local institutional processes, values and practices that are capable of enhancing sustainable conservation. This does not need to re-invent the wheel, take CAMPFIRE as an example, would require strengthening its capacity at all levels to enthuse the local people realise the importance of the GLTP and the contribution that it can economically make to their community and the nation at large.

7.32 Forest products use and ecological sensitivities

Forests products are key components of biodiversity, and play an important role in the life of communities surrounding the GLTP in terms of diversifying and enhancing local livelihoods, providing materials for shelter and environmentally, forests are critical for carbon sequestration. Without devilling into the science of forests taxonomy, this study concentrated at the value of forests among households in Sengwe community in terms of provision of goods and services that contribute directly or indirectly towards the wellbeing of households.

7.33 Summary of local forest use and impacts

The household questionnaires as well and focus group discussions helped to understand forest uses and to ascertain the value connectedness with the local people's resource needs. From time to time, group members mentioned that people engage in the harvesting of wild forest products for various uses such as food, production of a local wine (njemani) wild fruits and collection of wild vegetables. The following Table 7.39 shows the trends from household data about the value and use orientation of identified of forest products.

Table 7.39 Understanding forest resource use

Class of species	Uses	N	%
Tree	Used as poles in the construction of huts	39	11.9%
Shrubs	Grazing livestock	39	11.8%
Dead wood	Making domestic fire from dry dead wood	200	60.6%
Palm/Ilalla tubes	Production of wine (Njemani) from ilalla	3	0.8%
Palm/Ilala leaves	Leaves used for basket making	4	1.3%
Wild fruits	Production of jam and porridge mixture from adansonia digitata (baobab) pods	5	1.5%
Wild vegetables	Relish/food	3	1%
Grasses,	Thatching huts	34	10.1%
Medicinal plants	Treatment of ailments	3	1%
Total		330	100%

Forest products are important to Sengwe community. The highest household score on Table 7.39 was on fuel wood accounting 60.6% (n=200 households), while tree stems are used for construction of huts accounted for 11.9%. Perhaps it is important to highlight that the combined percentage of these critical uses constitute 72.5% (n=239.2 households) using forest products largely for fuel wood and as poles. Two ecological sensitivities arise in this perspective. The first one is the community's over reliance on fuel wood, which in this case, can have serious environmental consequences on plant species diversity. There is no monitoring to ensure that people are adhering to use dead wood without having to cut down live green trees for wood. In the case of construction of huts, the most preferred stems are live ones, which ideally deplete plant population. Exploratory observations indicated that many households were in fact relying on cutting live trees for poles. This is compounded by the fact that the area is not electrified. The average degree of tree use as wood and poles is high, consequently affecting the diversity and composition of three species. It was expected that the levels of use of wood is predominant at household level as it is the only source of energy in the area, however, other sustainable energy sources such as solar power could be experimented with to broaden household energy mix.

Forest products provide a key resource as forage to feed livestock accounting for 11.8%, while thatching constitute 10.1%. The other uses such as some wild vegetables for relish/food supplements were ranked at 1%, and this might suggest the timing of the research at which time it was dry and not the season when people harvest those most. So, some of the uses and their average percentages need to be treated with caution due to their seasonality that influence the pattern of their percentage use.

It is unsurprising that the economic and social value of forests is significant to households. Use of grass and poles for construction of huts are expected to declining because people are restoring to brick houses and using asbestos for roofing. Because of these changes in Sengwe community

in the use of forests, the environmental impact is likely to improve incrementally thereby setting a long-term path towards environmental recovery and sustainability. Unfortunately, there are no environmental education programmes being conducted by the Environmental Management Agency (EMA) in this remote part of the country. In a questionnaire response from EMA, it was indicated that not much had been done with respect to Sengwe environmental campaigns, however, it was indicated that the agency was committed to sound and sustainable environment but they were saddled by lack of resources to undertake programs to remote areas.

Environmental activities therefore can be said to be low, but there is an opportunity to capitalize on local normative environmental values to ensure that communities conserve their environments. For example, other communities in the remote part of India have been able to roll out some conservation programme based on local values and practices that people understand and can easily leverage to enhance environmental sustainability. To this end, Higgins-Zogib (2008:54) using India's protected areas as an example, further argues that thousands of sacred groves and sacred trees were restored through use of local people's revival of culture and local social organisational structures to lead environmental restoration process. All of these and more contributions from local networks add value to environmental conservation. However, Higgins-Zogib (2008:56) cautions that attempts to work with local communities and traditional peoples in protected areas is difficult unless conservationists start viewing the land or seascape as the local populations do in terms of practically including the social and spiritual dimensions, adopt local practices and use local institutions for purposes of successful conservation. Informants interviewed during field research were quick to voice their concern that relatively secure forest rights and rights of the land around the GLTP was pivotal to ensuring that the people are motivated to make use of the forest in a sustainable manner and work towards environmental conservation.

7.32 Analysis and discussion

According to household surveys, interviews conducted with key informants and focus group discussion with community members, respondents observed that there is currently enough land for settlements but people in Ward 15 and some parts of Ward 14 face some restrictions as they are closer to the park boundary and border area with South Africa and Mozambique. As a result, with the reality of population growth and demand for land increasing, this potentially puts pressure on the amount of land and other resources that can sustain the local community such as farming and livestock production. As indicated by councillor Dube in a discussion, he said:

"With population increasing, our children marrying and some not willing to go to school so that they migrate to other areas, the demand for land for settlements, crop and livestock production is correspondingly going to be increasing. We face a challenge as leadership here to balance various interests of people and in the majority of cases, we fail to meet these, since the community cannot expand going further towards the park boundary of the Gonarezhou National Park, neither can people go southwards because we are now surrounded by the GLTP. Just close here, we cannot exploit the richness of Manjinji Pans because it is for the Department of Parks in Harare and we receive orders with regards to conservation of this area" (interview with councillor Dube, Ward 15, 20 July 2011). As such, there is apparent sense of insecurity being a result of lack of foreseeable demographic problems in the area because alternative livelihood options will, in the future fail to cope unless there is commitment to undertake irrigation that has the potential to transform the lives of people in the area.

The geographical location of Sengwe and the attendant GLTP limitations raises many questions pertaining to the sharing of GLTP's benefits with government agencies and the private sector that is expected to provide tourism services in the framework of the GLTP. It was noted with concern that there is no local organisational structure that integrates Sengwe community to work independently on modalities in defining their benefits. The survey that was done by CESVI, has not had its results implemented which recommended the creations of a local structure, however, most technical issues and plans remain stuck within government processes. As noted by one of the DPWMA officials, the people are becoming frustrated due to lack of delivery on the promises made about the benefits from the GLTP. While the government has kept the promises on a low profile, the enthusiasm created, is sufficient to have raised expectations too high.

One of the most detested aspect is the fact that the GLTP governance and operational functionalities have remained fundamentally exclusionary of the local people. Rather, the strategies adopted in the governance and management of resources are restrictively a rigid 'park' and 'protected' approach typical of the colonial strategies that did not promote the human-wildlife interfaces, particularly in marginal areas.

To this extent, there is intriguing concern that the failure by the state to accord local institutions and giving them some authority over natural resources affects the principles needed in decentralising natural resource management to enable communities to realise benefits, and DeGeorges and Reilly (2009:751) argue: "The tendency of the state preferring decentralization at the level of local government over full devolution to the producer communities divorces responsibility from authority and entitlement, these programs remaining co-optive rather than empowering, while authority remains firmly held in state hands. This is institutionally fatal, since when authority and responsibility are separated, institutions rarely perform effectively. Ultimately, CBNRM generally ignores opportunity costs in favour of a very narrow source of benefits (e.g., primarily safari hunting and some eco-tourism) that generally benefits the community at a higher level (e.g., social infrastructure such as roads schools, clinics, boreholes, grinding mills–common property benefits), but places the traditional entrepreneurs (e.g., hunters, charcoal makers, sawyers, fishermen, honey collectors, thatch grass collectors, wild medicine and food collectors, etc.) at a major disadvantage, often turning them into poachers as a means of supporting their households".

The other impact that people raised relates to predation of livestock by carnivorous animals such as lions and hyenas are the most troublesome culprits. While the cases are not regular, however, the few cases of loss of property and cattle destruction were reported. The human-wildlife conflict although seem to be increasing if the feedback from focus group discussions are to go by. Generally, the fence of the GNP is slack such that it cannot prevent wild animals from encroaching to communities and fields. Further, wildlife carries many diseases that are dangerous to livestock and the reported contagious abortions particularly on cattle, expresses concerns of the spreading of some diseases. The other diseases popular in such areas, include malignant catarrh fever, a viral disease that kills livestock, foot and mouth disease that is a highly contagious viral disease that reduces milk supply as well as body weight. Ideally, the challenge that the Zimbabwean government has and the GLTP JMB, is to ensure safety of people, their livestock as well as the crops.

Sengwe community (ward 13, 14 and 15) lie central to the largest part that connects GNP to the GLTP. The GNP thus has some of the world's largest herbivore and carnivore populations. Since some settlements are at the boundary with a poor fence around the Gonarezhou National Park, there is constant interaction among humans and wildlife in the habitat, with land uses drawn by the borders of the national park. Given the close proximity between areas with humans and areas with large wildlife populations, people are frequently exposed to wild animals. However, the degree of actual interaction between humans and wildlife vary considerably depending on the location of the Ward and distance of households to the protected area and the types of animals, seasonal

movement of wild animals and the nature of the human activities such as agricultural and livestock production. Generally, the human, Wildlife and Livestock interface is intricate as shown above and calling for effective management strategies so that there is co-existence and continued interdependence.

Constantly, given local community proximity to the Zimbabwe side of the GLTP, it becomes inevitable for wild animals straying into communities. The paradoxical challenge is how the local people expected to appreciate the significance of wild animals when their livelihood interests are not being enhanced by leveraging on wildlife and the existence of the GLTP to maximize their livelihood opportunities. This perplexing issue remains critical in the GLTP, and partly determines the extent to which mutual local collaboration in conservation can be achieved. There is empirical evidence of human-wildlife conflict manifesting in predation and crop raiding, however, compensation on losses is not forthcoming, raising concerns that this increase levels of livelihood vulnerability among households that incur losses. In many instance, some households in Sengwe bear the costs for loss of crops and livestock because of the foregoing.

Furthermore, what makes wild animals in the park usually move in and out of the community is mostly in search of food, particularly the predators find it easier to kill livestock than chasing out a wild animal in the park bushes. The browsers, grazers and diggers like wild pigs usually come for fodder and tubers like sweet potatoes in the fields. This rise in human-wildlife conflict, for example, in Kenya's rural communities and in Amboseli National Park, has seen an increase in human-wildlife conflict evolving and escalating into a major crisis because solutions are not immediately found to address the problems (Ogodo, 2003).

More importantly, in Kenya, such human-wildlife relationships where livelihoods of people are at stake, and the conflicts not solved, it adversely affects both humans and wildlife, usually leading to retaliatory killing of wildlife in 82% of the protected areas in Kenya (Okech, undated:66). Despite having cases of predation and crop raiding being experienced in Sengwe, just as the case of Maluleke, both communities being case studies and affected by the GLTP, not much is being done to help the communities address the problems. The situation is worse during summer and end of summer when Sengwe community is virtually impassable for the Problem Animal Units under CAMPFIRE to come and deal with the problems. According to an interview with Dr Machena (CAMPFIRE Programme Manager) based at Harare Head Office, due to underfunding, the organization has faced serious challenges in the last eleven years, slowing its response to community problems (interviewed on 19 August 2011).

This study hastens to mention that since there are no compensation mechanisms in Sengwe for losses, and just like an official from the CAMPFIRE Association said once a wild animal is out of the GNP, it falls under the jurisdiction of the Rural District Council, and there is Problem Animal unit that deals with those problems. However, the interventions are usually late when so much loses and extensive damage to property and human is done. Munyori (1992:110; 1992:16), Sindiga (1999) and Sindiyo (1992:76) observed in the context of Kenya that in many conservation programmes, such contestation between livelihood practices by resident communities, their environment, buffer zones and animal corridors such as the Sengwe Corridor in the GLTP, is predominantly on wildlife-human conflicts. Therefore, the negative impact on livelihood activities experienced in Sengwe has a direct survival threat to the local people.

In addition, one weakness of the GLTP governance process in relation to Sengwe community has been the development of policy at national and regional levels not linked to local processes in terms of conservation and management of the GLTP. The current consultations by the DPWMA facilitated by CESVI, is rather a belated process worth undertaking, however, the local people are already aware of the fact that they were initially left out, and consultations are now generally seen in bad light, nothing less than dispensing tokenism and legitimizing environmental control. On one hand, the policy development processes have been largely a preserve of state authorities, and have continued as such not only for the GLTP, but other transfrontier conservations in the SADC region as well. The pronouncement of the park as opposed to a TFCA foreclosed multiple land use, hence the tendency to handle communities heavily and policies that are in place have little public participation and, some argue, that there is inordinate private sector participation. On the other hand, the policies are not clear and appear inconsistent with local development priorities. On the South African side, an interview with Mr. Maluleke (Maluleke Community Representative, 6 September 2011), revealed that the community and SANParks are in a contented partnership. This is despite the fact that there is need for benefits to be derived for the community, particularly by ensuring that wildlife in the Maluleke Contract Park is used profitably to generate high value financial gains for community development. This, Mr. Makuleke alluded, builds more trust, however it will take time to happen.

In the case of Sengwe community, the local leaders lamented their exclusions, which they think is a ploy to deny them benefits. As such, councillor Chauke said, "it will take time to see the real partnerships with the government as well as any prospecting private sector investor with the community because the government is competing with us and we are just Sengwe people, and therefore cannot out-compete the government" (discussion with Councillor Chauke, 23 July 2011). The greatest challenge that remains unresolved and a big source of conflict is on the governance issue of the GLTP, with concerted efforts to exclude the local people, thus this has mitigated against co-governance and management of natural resources on the Sengwe side of the GLTP. Ideally, this study argues that this undermines conservation management of the GLTP. Despite this however, some form of fairness still need to be done by ensuring that there is no environmental discrimination of the local communities, even land alienation without compensation.

More essentially, the issue of local benefits in a changing conservation environment is beset by enormous problems. While the ZIMParks official clearly state in a questionnaire emphasised state control and ownership when he said:

"Community access to natural resources in the GLTP must happen within a framework of the relevant park policy, national laws and at levels that are acceptable ecologically, not exceeding sustainability. It is therefore critical that developmental and conservation research and monitoring, accompany such utilization analysis to help us plan ahead".

There are significant constraints that can be noted here. Community benefits concerning the GLTP process remain ambiguous and the same official acknowledged that the local people were becoming impatient on the slow pace at which progress was going in terms of ensuring communities benefits. At the same time, the predominance of the state is clearly spelt out, and considering that the GLTP Joint Management Board has not finalised policy harmonisation to define all processes including accessing of benefits, cast doubt if the communities are likely to benefit substantially. In that regard, it is with reasonableness to postulate that the current GLTP process inhibits participatory beneficiary process of communities, negatively affecting local livelihoods and undermining collaborative conservation. In other words, it has been argued consistently in this study that where community ownership and resource access in super parks, directly de-motivate the local people from participating effectively in conservation. One can only ignore local values, local participation and local institutional processes at the peril of sustainable conservation.

The other most tantalizing issue is that use of resources have not been defined in its trilateral parameters, such that resource ownership and access have fundamentally remained in terms of the park management plans of DPWMA. Ideally, Zimbabwe is particular on issues of sovereignty and territorial integrity, such that the GLTP process seems a hanging programme that is still trying

to find its local space. ZIMParks thus remains strongly responsible for the day-to-day management of its GNP side of the GLTP. Resultantly, the Joint Management Board, guided by the Joint Management Plan, becomes responsible for the management of joint trilateral issues. This is the reason explaining some resistance towards having a Community Working Group, which would ordinarily enable the affected communities participating in the GLTP process. Ideally and logically so, this study views this as another way of maintaining the GLTP as an enclave to communities wishing to benefit from it, but cannot do so due to a plethora of governance and management constraints mitigating against their environmental rights.

7.33 Conclusion

Given the complexities of state controlled governance and management of the GLTP, real and potential threats to local livelihoods and local people's participation in natural resource conservation are elaborate. In the face of poor performance of CAMPFIRE as a local institutional process to facilitate benefits to the people, inherent policy implications for livelihoods remain risk. It has been made clear that the current GLTP governance process at the Joint Management Board level, the national and district processes show the preponderance of higher institutions over local processes, local environmental values, traditions, cultures and institutional process that have regrettably attenuated and regressed in terms of their conservation performance. This is a negation of the clarion call by Murphree (1993:10) to use "communities as resource management institutions." Consequently, the current GLTP governance process poses socio-ecological problems on the affected communities, with significant altering of their livelihood practices by agitating eco-tourism development, yet the benefit stream formula is not clear, thus perpetuating an ambiguous development process. Gartlan (undated: 225) in his view chose to differ on the role of communities. He consistently follow the way local people are treated in these super parks when he argued that "to turn these ecosystems to the responsibility of such local communities to manage would be to effectively sign the death warrant" over natural resources in general including forests and wildlife. However, contrary to his antithetical view of communities, it is socio-ecologically important to accept that communities living in and adjacent to Peace Parks have a fundamental role to play in conservation. Besides their voluntary collaboration that reduces environmental policing, they judiciously, with urgency of action, save biodiversity and ecosystems since they know how their exhaustion might lead to their livelihood vulnerability. In the words of Murphy (2000), "the empowering of local communities will not be enough to ensure the functioning of large Transboundary Natural Resource Management Areas. The sheer scale of such a venture is so large that, after achieving empowerment, it will be necessary to develop new institutions that enable a mosaic of communities to represent themselves in the higher decision taking forums and

co-ordinate their ecological management across a wide landscape. This requires both delegation of some authority upwards and a strong degree of accountability downward." In view of this remarkable observation, the conservation discourse therefore needs to progress in a manner that breaks the barrier in socio-ecological thinking that separates communities from natural resources, rather start treating communities in and adjacent to Peace Parks as integrated stakeholders. This can open new avenues for effective collaborative and sustainable conservation for the successful development of transfrontier conservation areas or their metaphor 'Peace Park.

CHAPTER EIGHT

8.1 Introduction

Data availability on transfrontier governance in relation to communities is limited. In turn, this tends to limit analysts' ability to study the complex issues relating to transfrontier conservation phenomena at both larger and smaller scales. In a recent summary of lessons learned in natural resource conservation activities in Africa, the United States Agency for International Development (USAID, 2002), emphasized the importance of good natural resource governance at the local level, and considerable variations apparent at the local-level natural resource governance processes that are fundamental to natural resource sustainability. The two case study communities (Makuleke and Sengwe); have shown critical socio-ecological insights as far as resource governance is concerned and its attendant implications on the local people. In this regard, the researcher integrated various fields of literature in order to analyse, comprehend and have a deep-understanding of the complexities of transfrontier resource governance dynamics in relation to communities found inside and adjacent to transfrontier parks/areas.

The most notable outcomes from Sengwe and Makuleke communities can be summarised by stating that transfrontier conservation is complex with varying implications on local people's ability to enhance livelihoods, and for them to continue supporting conservation activities governed at the highest level. It was apparent that there is dissatisfaction at the local level as regard to the current governance processes. Consequently, conservation organisations from government agencies to environmental stakeholders should be cautious to avoid making prescriptive interventions and implement policies based on misjudgements in transfrontier conservation zones about community-wildlife relationships. From what has been observed, it is also critical to highlight that most interventions are premised on hypothesized evidence, which have not empirically been verified based on the credibility of socio-ecological scientific results. Despite transfrontier governance community livelihoods and sustainable conservation being a difficult subject, it was established that conservation conceptual underpinnings in view of natural resource governance as it is currently practiced in the GLTP, does not involve the local people, let alone their local institutional processes regarding community participation and deriving livelihood benefits. If anything, the issue of local property rights, resource access and utilization are contentious, which the communities feel that they have not been guaranteed of their sovereign rights of their resources, and thus potentially undermining local collaboration towards conservation.

The most mind boggling question that conservationist still battle with is whether the much lauded and romanticised idea of transfrontier conservation in the GLTP is going to achieve the envisaged positive impact on communities. When the researchers looked at the popular posturing of the GLTP, aggressive marketing of the park, and ultimately relate these to ground realities pertaining to the achievements made so far in changing local lifestyles for the better, little evidence exist to confirm significant progress. The change in communal people's lives in and adjacent to the GLTP in Makuleke and Sengwe communities is particularly criticised as mere media rhetoric to the extent that the local communities think that they are being used in the process. From the GLTP formulation to implementation and the removal of park fences to allow wildlife reclaim ancient migration routes. This has created huge biosphere reserves subsequently increasing overlapping control by government conservation agencies to landscapes also occupied people. The result of this ecological adventurism has created conflicting relationships between the communities and conservation agencies. The simple reason to this is the contentious exclusionary process that puts community livelihoods and conservation at seemingly cross-purpose owing to the governance of the GLTP. This has created localised salient opposition from the community members against park managers. Ideally, communities find their lifestyles reliant on natural resources greatly compromised, thus complicating accosting their support towards biodiversity conservation, particularly when the GLTP is not offering sustainable alternative livelihood options. For Makuleke who lost so much upon their removal from Pafuri Triangle in 1969, they, today, yearn to derive maximum benefits from the GLTP, but lack of involvement is major impediment. For Sengwe community, their proximity to the GLTP had given them semblance of the audacity of hope; however, they told this researcher that nothing much is promising for their lives. The two communities are semis twins caught between a hard rock and a hard surface in this jigsaw puzzle of transfrontier conservation complexities.

8.2 Conclusion

Field results from Makuleke and Sengwe demonstrate that the GLTP's multi-level natural resource governance trajectories have had significant negative effects on the two communities. The legal, policy environment, stakeholder interrelationships and institutional operational systems as they stand, are not necessarily enabling the two communities' full participation in natural resource governance, management, let alone empowerment and enhancement of local livelihood activities within the GLTP territorial confines. The results showed several serious weaknesses inherent in understanding the role of communities. It is critical again to mention that communities, if properly engaged in development processes, can contribute meaningfully to transfrontier conservation. Conservation organisations therefore, can leverage on popular local collaboration and support for

sustainable conservation of the available serene resources to transform rural communities and stimulate development to close the infrastructure gap that exist in many rural communities. Perhaps, one important concern apparent in the study is the failure to utilize local institutional processes, culture and harnessing of normative values to broaden participation and empowerment of the communities to make a positive contribution towards sustainable conservation in the GLTP. Ultimately, due to multi-level institutions and their inconsistencies in terms of discordant interrelationships with the communities as far as policies and legislation at various levels are concerned, they have not been aligned to the local processes in terms of conservation to create an environment through which rural people can derive maximum benefits. This study therefore, would postulate that if positive livelihoods and sustainable conservation are to be achieved in the GLTP and contribute towards rural development, then it should be unequivocally be stated that serious consideration should be given on redefining the GLTP governance and management style. This entails an approach on resource governance that has to change to be inclusive than exclusionary. Sustainable conservation and livelihood attainments by the communities are integral to the desired outcomes, which the local people believe can be realized through entrenching community participation in conservation of natural resources.

It is imperative to indicate that although the study was hectic, demanding and exhausting, it was able to examine the background of transfrontier conservation, juxtaposed and integrated various theoretical aspects. This alone provided concise understanding of transfrontier conservation concepts and the dominance government agencies in conservation in environmental decisions. However, the governance disjuncture is witnessed where the higher-level institutions of biodiversity conservation are conspicuously not synergized with local communities' processes. This missing link in the whole discourse the GLTP administrative structural and the communities is worrisome, hence, the assertion that transfrontier conservation is seen as unable to make positive contributions to both conservation planning and determining local natural resource driven development. Thus, it is logical to conclude in line with the study's objective that the current GLTP governance process is not 'enabling' the local people to adequately derive benefits and participate in the governance of natural resources. This is critical in appreciating and understanding complexities of how laws, policies and institutional provisions of the GLTP, are likely to lead to disenfranchisement of the local people's livelihoods, and consequently, their disempowerment as well. From this vantage point, the win-win situation of attaining sustainable biodiversity and ecosystem conservation, and achieving rural development is obviously problematic.

Ideally, the less involved communities are, the more likely they are not going to collaborate in natural resource conservation, and quite logically so, this increases the costs on environmental policing that government agencies incur in managing these huge bioregions. Therefore, this demands for an urgent need to examine the GLTP administrative process with a view to find a more synergizing natural resource governance model that includes communities' structures and harnessing, of course, local institutions. More essentially, incorporating livelihoods aspirations of the communities in planning processes is indeed the best strategy to have a mutual win-win situation in transfrontier conservation. This study is of the view that through monitoring and objective evaluation of policy provisions and review of the administrative processes, the GLTP should be in a position to transform into a more responsive project design to both sustainable conservation expectations and meeting the needs of the local people. Perhaps, the major study results showed also absence of integrated GLTP regional policies, laws and institutional frameworks that inform and direct strategic planning and implementation of transfrontier projects in which case communities' participation is well defined. Such laws, policy provisions and frameworks are needed. They should ideally transcend spatial concerns between countries and within countries in order to address matters not limited to how they can deal with communities found in and adjacent to the GLTP, but also consider the sensitivity of issues of sovereignty and territorial integrity of individual states that many of its leaders are too particular about. Until there consensus building, sub-regional policy harmonization and institutional realignment is developed, it would seem that the intentions of the GLTP in relation to developing rural communities, particularly uplifting their livelihoods and enhancing their participation in biodiversity and ecosystem conservation, would not match the expectations fostered by the proponents of transfrontier conservation concept.

The research findings further demonstrate that the GLTP Treaty mentions communities as key stakeholders in general terms and their participation partially emphasised. However, there is little in practical implementation of the GLTP that shows close partnership between the GLTP governance and local institutions working as a collective. The policy pronouncement by the Ministerial Committee to disband the Community Working Group was superimposed and prescriptive, hence resulted in negative implications on the prospects for community participation. In fact, the outcome of this is particularly exclusion of the community representatives from participating in the GLTP conservation processes and resource governance. Because of this superimposition, and prescription without broad consultation, it left too much room for interpretation and the argument therefore is that the GLTP conservation process is for agencies more than it is for the transformation of the communities in terms of uplifting their livelihoods

development and supporting local conservation efforts. In other words, it can be argued that the culmination of these actions is complete disenabling of communities to fully have a sense of ownership and participate in biodiversity conservation. In addition, the governance architecture of the GLTP if one looks at the level of local dissatisfaction with the current processes; create a sense that there is no mutually shared understanding of the vision of the GLTP fostered by the government agencies and other conservation stakeholders towards community buy-in. It is important mention that it becomes supper critical for conservation agencies to initiate and sustain cordial stakeholders' environmental relations through dialogue on transfrontier conservation, tourism and environmental cooperation between and among governments agencies and the communities. From this, the GLTP can leverage more on stakeholders and interstate environmental relations to prevent conflicts that affect the success of the GLTP and tourism as the centre state. Conservationist need to understand that some of the conflicts witnessed in the 21st Century, revolve around the exploitation of natural resources and the destruction of ecosystems, which imply devastation of livelihoods based on natural resources. This research has established a link between access to natural resources and political-ecology contestations as it pertains to the actual management, ownership and governance of natural resources.

The issues of equity and Access to natural resources came out as one of the key issues from Makuleke and Sengwe communities. The understanding is that where communities feel disenfranchised, the situation creates a potentially explosive mix of burgeoning local and presumably national outcry, and then perceived social discrimination can threaten peace and stability. Active involvement of the local people in any process helps to alleviate one important cause of festering discontent, which is exacerbated by social cleavages and social exclusion of the local people. The case in point is the Save Valley Conservancy saga integral to the GLTP on the Northern part of Zimbabwe's Gonarezhou National Park. For example, the elites literally took over this haven of a success story of sustainable conservation as opposed to promoting a broadbased public participation in Community Share Ownership Trusts. The argument by a few voices has been clearly for a community-oriented process as opposed to empowering the individuals especially those that have benefited in other empowerment schemes in Zimbabwe. As the GLTP, it has to remains alert to issues that are sensitive to the communities disenfranchised by historical circumstance. The efforts to restructure biodiversity economy, should in a way reflect the circumstances of the people who directly interact with the resources and the demographics of the communities as only noble in correcting some of the shortcomings that arose from historical socioecological imbalances. In this case, this can become an approach in itself for achieving local support and ecological peace building. It has to be based on the premise that long-term and comprehensive equitable transfrontier natural resource distribution and access, even in the tourism sector, can be prerequisites for durable ecological peace and stability. Consequently, the most important issues that need to understood is that transboundary natural resource inequalities and lack of access to resources by the local people, including land, on which tourism subsists as well as on which people rely for subsistence farming as a livelihood strategy, can cause instability and undermines conservation efforts in a short, medium to long term.

Going forward, this study has noted that little effort has been made to harmonize multi-level institutional processes with local interplay of people as stakeholders through local institutions in terms of conservation governance. Due to this complicated ambiguity, this study interpreted it in many ways. Either this was intentional, but consequentially, it marginalizes communities from effectively collaborating in sustainable conservation. Despite the Makuleke case study differing slightly with Sengwe community in terms of the legal basis for land transfer of Pafuri Triangle, the fact is that the two communities have constraints when it comes to the GLTP governance process as a whole. While it is notable that the Pafuri Triangle is partly controlled by the Makuleke Community Property Association as at the 'Heart of the Great Limpopo Transfrontier Park', the problems that affect both communities in terms of the GLTP making decision to utilize, access the resources and the general ecological governance are more or less the same. It has to be mentioned that Makuleke community has a Contractual Park within the GLTP, which they were directed by the Government of South Africa to use for conservation purposes. This has given them some advantage to consolidate their tourism gains, whereas in Sengwe such resource rights and ownership systems do not exist. There was the mention of the existence of Malipati Hunting Safari by ZIMParks official, which he said the community was leasing to a private operator. However, the reality is that this Hunting Safari remains heavily controlled by Chiredzi Rural District Council (CRDC). Equally, wildlife proceeds in the form of money and other benefits derived thereof, are shared largely among the CRDC through the CAMPFIRE Association and the private operator far more than what the community get. One local respondent claimed that if he had a way, this arrangement would be abolished (claimed by the local people during interviews). It is if interest to note that this research found that Makuleke community receives favourable media coverage and it has built its capacity, with significant financial support from conservation agencies. In a way, they seemingly participate in beneficiary management of their resources at the Pafuri Triangle. This has given some semblance of local involvement. However, this needs to be treated with great caution since local participation and engagement arrangements as far as biodiversity conservation is concerned, started well before the GLTP was implemented. Ideally, this study can still conclude that the set up in terms of natural resource governance in Makuleke in the context of the GLTP,

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still does least involve communities. Thus, this is affecting diversification of local livelihoods. Local participation in the governance and management of the GLTP has remained critically low. The Makuleke community, through the Makuleke Community Property Association, has been significantly more successful than Sengwe community's CAMPFIRE project. In other words, Sengwe's CAMPFIRE literally collapsed due to funding constraints and lack of decentralizing it fully to the grassroots level where people can be more effective in biodiversity management and conservation. CAMPFIRE challenges on the Zimbabwean side of the GLTP, reflects the widespread funding constraints across most of its Community Based Natural Resource Management Programmes, which is has made it difficult for people to be structurally mainstreamed in the GLTP

Furthermore, the two communities still have a long way to go as far integration into the GLTP administrative framework is concerned before their livelihood and conservation decisions can be considered seriously. Resultantly, Makuleke community's involvement in the affairs of the Contractual Park in the GLTP can better be understood in its historical terms and should not be mistaken as an outcome of the current GLTP resource governance in terms of community engagement in conservation. In the case of the Sengwe community, it is clear that local people involvement is far too low. They hold claims of rights in their hands in terms of natural resources ownership through communal ownership processes, and their legitimate expectation is to have some form of co-governance or to co-manage the GLTP with the Park authorities. This, according to their assertion, helps the two communities in deriving benefits from wildlife. The status guo of the GLTP is not allowing those processes to happen, leading communities to have negative perceptions on the GLTP since they are not seeing benefits from the park. The Makuleke community, as has been shown through empirical data, is commercially able to benefit from tourism developments in the GLTP while Sengwe community on the other side of the GLTP, lacks tourism infrastructure in relation to exploiting the tourism economy of the GLTP. Nothing so far is being realised in terms of the GLTP tourism opportunities that were touted as the panacea to economic challenges of the communities. Perhaps, Makuleke community's institutional arrangements could provide a model that can be used in relation in Zimbabwe's Malipati Hunting Safaris that the community is said to be 'leasing' to a private operator.

In terms of the role of the local communities in driving the process, there has been minimal participation of the inhabitants (Wolmer 2003; Koch 2001). Thus, the decision-making framework that has been suggested in this chapter tries to rectify the problem of environmental decision making in line with the study objectives. An illustration of lack of public consultation was highlighted

by household survey results. The households indicated that they were not being consulted. Interviews that were conducted established that very little consultation has happened in respect of the GLTP process. When one reflects on the current GLTP governance, and the manner in which decisions are being made, it is clear that the type of governance is not in consonance with the aspirations of the affected communities' livelihood interests or their locally based conservation practices. It however, reflects elements of state driven environmentalism that is divorced from the local people in terms of planning, decision-making and management processes. It appears further that the development programmes in the GLTP is disintegrated from the communities. The variance in objectives of conservation and community livelihoods expectations, have not been synchronised and integrated such that the national conservation policies do not speak to community interest, let alone engagements of the local people as found in South Africa and in Zimbabwe. Results from questionnaire indicated that policies and action plans for the GLTP are developed by state agencies. These processes however, do not involve the local in terms of public participation in environmental decision-making. In other words, consultations are not effective in gathering local views that would inform project design, implementation and evaluation. Wolmer (2003) put forward that in the case of Zimbabwe, the consultations were close to zero. The few attempts by some NGOs to engage communities in Sengwe were outside government processes, however, these yielded some important results as far as what people in Sengwe would want done. In addition, substantial academic research results have further indicated the gaps that exist concerning community participation.

The ensuing debate therefore is that current belated efforts to engage Sengwe community are ideally an afterthought. These cosmetic consultations are remedial in nature to the past mistakes at the formulation stage. However, people are already sceptical of the process, which they regard as a smokescreen to cover past mistakes. In fact, community consultations currently being pursued are largely suspicious and questionable as the local people view it as seeking mostly to legitimise predetermined proposals and action plans of conservation agencies. It is apparent that the communities and their local structures are completely not part of the decision-making processes on biodiversity and environmental issues. In this view, Zerner (2000) conceived that conservation cannot be separated from the local power dynamics and went ahead to emphasize that in analysing conservation practices and resource management, one should be aware of existing local types of power dynamics that obtain and to whom it is allocated, and for what ecological purpose that power serve. With this in mind, it is critical to advocate that local power matrixes should interlink with conservation agencies in order to harness collective efforts and ecological competences of all stakeholders to enhance sustainable biodiversity conservation. This

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study noted that under the GLTP conservation, land tenure systems are not clear and there are pervasive undefined access rules to natural resources. Hence, this affects natural resource based livelihoods, which ultimately de-motivate local conservation. These jurisdictional contradiction and confusion precipitated at the local level over natural resources tenure systems subsequently mean that there is uncertainty at the local level. Indeed, the access rights have changed as well and the user community rights are fundamentally faltering. This creates anxiety, social cleavages, a sense of exclusion and eventually incessant livelihood insecurity among households. On a softer note, despite these shortcomings characterising the GLTP project, it is ecologically sensible to acknowledge that transfrontier conservation remains very vital in biodiversity protection within Southern Africa sub-region. Its adoption and stimulation of development and sustainability of a variety of species has opened up for dispersal processes of migratory species. This has helped to avert possible localised environmental or ecological catastrophe due to wildlife over-population pressure, for example in the Kruger and Gonarezhou National Parks. One of the greatest advantages and success factors of the GLTP has been increased monitoring on cross-border poaching inter-state collaboration level. This has subsequently has reduced significantly poaching cases and broken some networks of poaching syndicates in the GLTP eco-region.

It is also important to indicate that this study encountered numerous problems. The first problem encountered is that the research on transfrontier conservation is new with limited critical analysis as a concept. One of the biggest problems is that generally government officials seem to express biased opinions on the GLTP transfrontier project since they regard it as the solution to biodiversity and ecosystems management, such that their levels of objectivity concerning communities were largely biased against communities. In that view, local people are not regarded as equal vital stakeholders. In this way, that weakness has manifested in a situation that policies that agencies formulated regarding conservation in the GLTP, do not effectively take into account the need to increase local people's involvement and participation in natural resource governance. Laws and policies outcomes in this process by their nature provide general framework to guide the GLTP governance and resource management. These are interpreted differently by implementing agencies to suit various situations on the ground in both Zimbabwe and South Africa. Perhaps, the implementing agencies have not adequately taken cognisance to interpret the clear intentions of these laws and policies with regard to community participation in conservation so that they incorporate into local by-laws to create a sense of custodianship to natural resources among rural communities. Furthermore, communities have not been able to build regional competitiveness to put a collective case for their environmental rights and demand their participation in conservation. Ideally, communities have failed to leverage on the GLTP's promise as a rural transformation

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flagship of empowerment in terms of advancing and diversifying rural livelihoods. As this research has shown, the GLTP governance processes is does not focus much on the communities, hence it is difficult to envisage a situation when the communities will have a bigger say in the GLTP biodiversity management and governance process. As such, it is difficult for them to enhance their livelihoods and participate in the conservation of natural resources. This raise questions about the extent to which the GLTP will succeed going into the future, should these plethora of problems of exclusion of communities and lack of guaranteeing of their natural resource rights continue. In addition, conservation laws, policies and multi-level institutions show little intention to integrate with the local institution and processes for mutual collaboration in conservation. More essentially, it is difficult to figure out how then communities will find their way to collaborate with conservation institutions both governmental and Non-Governmental Organisation to achieve sustainable biodiversity conservation, and take the opportunity of resource abundance to develop the rural communities.

8.2 Recommendations

These recommendations are not exhaustive in providing the way forward to the GLTP governance problems. The researcher is convinced that these recommendations provide the starting point on how the GLTO resource governance reforms can be improved in the short to medium and long-term strategy. The suggestions that are proffered are a direct response to directly deal with specific empirical problems that were identified during research. These include addressing complexities relating to the GLTP governance. It is envisaged that through a process of inclusivity in decision making process as well as adoption of consultative approaches to capture community concerns, the GLTP can operate better in the future and avoid pitfalls that have caused some country-specific and transfrontier conservation projects to fail dismally. Those failures as observed in the thesis are a culmination of the governance processes neglecting the importance of local communities since the development approaches remain dictated from the central government with communities playing a peripheral role.

8.3 The watershed contestations: the GLTP and communities

The central starting point would be to suggest the most strategic and analytical recommendations that are practical and implementable. The concurrent presentation, discussion and analysis of findings in chapter 6 and 7 showed enormous disjuncture about the GLTP governance dynamics as it relates to Makuleke and Sengwe communities. Essentially, natural resource governance in the GLTP in different ways, through different institutions, by individual organisations, in different public and private sectors, at different levels, over different periods, in different locations, at

different scales, with different resources, is largely affecting and undermining local livelihoods. This potentially jeopardise collaborative sustainable wildlife conservation.

The premise of this argument is based on the observation that successful conservation of areas where landscapes intersect with communities cannot be achieved without involving the local people. This study is cautions about some theoretical exploration and hypothetical considerations that are less empirical, in particular, in situations where communities are positioned in a wrong way concerning application of governance and decision-making architectures that naively portray communities as ecologically not so good environmental stewards. Such claims were identified and manifesting throughout this study. In final analysis, there is complete disregard of simple ecological understanding of local value systems and institutional processes at the community level in both Makuleke and Sengwe, which can be leveraged to enhance sustainable biodiversity conservation, and researchers have identified the community linkage as feasible. In the words of Katerere (2001:117), she supports this idea by arguing that:

"One common approach is to use participatory systems to create a trade off with communities-the community receives some benefit for implementing conservation practices".

These socio-ecological scientific revelations have not seen the light of the day in the way the GLTP is managed by the Joint Management Board (JMB). The JMB's interaction with communities in Zimbabwe, South Africa or even in Mozambique is low. Consequently, conspiracy against communities has been rife, raising serious sociological labelling theories that seek to brand communities as 'poachers'. Such environmental machinations are environmentally retrogressive and gradually lead to of conflicts between user communities and conservation agencies. Evidence has further shown that clearly that the removal of the Community Working Group from the GLTP governance matrix, is a culmination of preconceived and premeditated actions arising from the mistrust agencies hold tight against the communities (Spierenburg et al., 2008:89). Both Sengwe and Makuleke communities are between a hard rock and a hard surface. This ecological gridlock put communities in victims' circumstances, and therefore escalating tensions manifesting in mistrust over the communities. Consequently, this has tended to foreclose local space to participate fully in natural resource governance. Clearly, biodiversity conservation institutions together with international conservation organisations have not reflected thoroughly on the local communities' expectations in seeking ways to combine local existing resource governance processes to enhance local livelihoods and support locally based conservation practices. Instead,

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they prefer a more rigid process that ideally indicates a return to 'fortress conservation' and management styles often criticised for precariously undermining local capacity towards wildlife conservation during the colonial period. In their wide research in this perspective, DeGeorges and Reilly (2009:752) gave typologies using the case of CAMPFIRE in Zimbabwe and concluded that various stages of conservation needed to evolve towards communities by awarding them a much say in conservation. This become the means to make "Wildlife Management by' the People" have a meaning where the state is compelled to retain regulatory function, while the benefits accrue directly or indirectly to the communities. In this way, there is direct symbiotic connection between communities' way of life and their natural resources, which they can justifiably be motivated to conserve. Ordinarily, one would argue that this could form synergies between conservation agencies and local communities. Similar arrangements exist in Makuleke Community Property Association. Nevertheless, the current GLTP process, in reality conform to the previous typology of "Wildlife Management 'for' the People", which was the project windfall of the 1978-1988 period. It was epitomised state agency control, with "almost nothing gets to the people" (DeGeorges and Reilly, 2009:752). When one looks at the GLTP on the overall, similar aspects with little benefits trickling to the communities, thus raising concerns about the impact of the GLTP since the local people are deriving little or no benefits to transform lives depended on natural resources shows. The communities are falling into the trap of different governance regimes that are far removed from their livelihood aspirations.

8.4 Reflections on the study objectives

This study was delectably inspiring, however challenging. The objectives of this study, after empirical examination of the GLTP governance from its conception, were largely met. The study looked at the historicity of conservation, the ideological imperatives and its accompanying theoretical aspects, and ultimately empirical the findings were presented in concurrence methodological approach. It is critical to indicate that the issues that emerged, particularly the GLTP administrative governance is arguably exclusionary, and shows preponderance of higher-level institutions over local values, conservation culture and the global practices complexly superimposing themselves on the communities. This contradicts local processes that could have capitalised on for effective and sustainable conservation of natural resources. As such, the promises of a galore of benefits to the people are too remote, ten years after the GLTP establishment. Ideally, local communities who are already frustrated by lack of local participation are becoming impatient with lack of benefits. Additionally, the institutional functionality in the management of natural resources in the GLTP can best be described as having created 'scales of marginality' in consonance with the observation that Ramutsindela (2007:105) made with regard

to transfrontier conservation the SADC region. In fact, this has a disenabling effect of the local institutions from effectively executing their traditionally reposed mandate to manage natural resources in and adjacent to the GLTP as a mega Park. In fulfilling its objectives, this study gave comprehensive analysis of complex issues in order to make strategic recommendations and assist in the development of two important frameworks that are presented in this chapter based on the understanding of a number of complex issues relating to conservation.

As the starting point, there is the need to reconfigure environmental decision-making in the GLTP given its ideological construction and current GLTP structure that lacks local active citizenry participation in the governance and management of the environment. The current structure does not institute responsible socio-ecological elements that are fair to the local people. The fact that there were high levels of dissatisfaction about environmental decision-making is a symptom of a bigger problem that has not been resolved for long. Thus, biodiversity and ecosystems conservation decision-making in the GLTP is disconnected in practical terms from the local processes. This is recipe for ecological disaster, which is far reaching and potentially militates against the success of the GLTP. At a more pragmatic and strategic decision-making process, this study suggests that local collaboration in the management of natural resources in complex transfrontier biodiversity and ecosystematic levels can only succeed, if there is integration of stakeholders' values. This also include natural resource interests and diverse processes that happen at the community level with those of the government conservation agencies and conservation stakeholders at various scales, be it regional or international should find common grounds for working as a single entity. The contribution that each make stakeholder make in decisions regarding conservations ensure a sense of collective resource ownership and therefore more invigorating in supporting the GLTP.

It is critical to do remodelling and rethinking of the GLTP's multifaceted governance architecture. In this case, this study suggest a holistic and a hybrid synergistic resource governance regime that will be able to respond appropriately to the needs of the communities to avoid the "tragedy of the commons" (Hardin, 1968) and also 'the tragedy of the common man' living in and adjacent to the GLTP.

More essentially, the conservation approach used in the case of the GLTP has been juxtaposition with community processes, local livelihoods and conservation expectations. The literature review (in Chapters 2 and 3) and the empirical evidence (in Chapter 6 and 7) indicated that resource governance and resource rights contestations are pervasive in the GLTP. This threatens potential of the GLTP to be a successful flagship of conservation. Instead of a Transfrontier Conservation

Area (TFCA) as initially envisaged, would have allowed for multiple land use by the communities, giving further assurances that their livelihood practices would be at the centre of development planning. However, the GLTP as a project was modified to an effective Transfrontier Park that meant a different management regime and the governance of Park areas then took precedence in terms of natural resource management, governance and subsequently state ownership. This lucidly leaves communities in both Zimbabwe and South Africa with little room to manoeuvre to be part of the conservation process as far as their involvement and participation in natural resource management. With a park having manifested from state driven processes, the tendency to ostensibly move towards a rigid 'fortress conservation' became a reality. In that veil, the negative perception over real and perceived implications on local subsistence livelihood activities have been rampant among residents that are now insecure about the crowding out of space to leverage on the GLTP to sustain communities. Through controlled or even restricted access to natural resources imposed by the park authorities, instituted against all logic for communities to benefit directly or indirectly from natural resources, the environmental relationships are now antagonistic. The rendition of the communities attested to the fact that biodiversity preservation has, for all its conservation purposes become governmental with the much-lauded benefits in terms of macroeconomic benefits in neo-liberal market logic accruing directly to the state rather than communities.

The financiers of the GLTP such as KfW (German Development Bank), the World Bank and the recipient of the funds, the Peace Parks Foundation (which is the technical advisor to the JMB of GLTP), have raised concerns on the matters of communities. The lack of community participation ideally, becomes a thorn in the flesh of conservation that if it is not addressed can lead to the demise of this flagship conservation project. The most and clearest realisation that is of concern to this study is that the GLTP administrative governance architecture impedes local people to leverage on natural resources around them to broaden their livelihoods options. The three governments of Mozambigue, South Africa and Zimbabwe, which are involved in the GLTP, have moved ahead with their plans for possible relocations of communities. The Makuleke community was affected by historical circumstances in 1969. In Zimbabwe, the generality of Warf 13, 14 and 15 are largely within the proposed Sengwe Corridor zone conceivably having to take place any time from the time of this research. Similar communities in Mozambique have already been affected, although this was not part of the study area. The relocations reincarnate the ugly colonial past in which people were forcibly removed from their ancestral land, thereby losing their important livelihoods. These efforts are tenaciously resisted locally despite the fact that this proposal in the case of Zimbabwe remains quite solid although the government is cautious about it. In a way, such

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intimations of relocations remind people of the sad colonial memories of forced removals where there was not compensation.

The results have furthermore shown that households are opposed to any attempt to remove them due to the fact that communities' subsistence activities will adversely be threatened, and the promise of a galore of tourism benefits have not materialised around these areas. The other rude complexity is that the communities are not certain whether tourism benefits are sustainable compensatory substitutes for their losses. Besides Makuleke community running three tourism projects in partnership with Wilderness Safaris and the World Wide Fund for Nature (WWF) in Pafuri Triangle and the Outpost Lodges respectively the sharing of proceeds from these projects are still not fair. The MCPA also runs a Community Bed and Breakfast facility from which they get direct benefits accruing to the household and the generality of the community. However, concerns on the Zimbabwe side have been that no established credible tourism infrastructure exists. In addition, there is no any form of foreseeable partnerships secured in Sengwe community such that the community benefit from tourism enterprises is just a mere talk. There are no solid proposals that articulate something tangible that people can take advantage of as a fall-back position for any desired livelihood activity change in the event of tourism enterprises failing to accrue substantial livelihoods for the community. In that context, biodiversity conservation synergy with local aspirations remains a fallacy since there are more disconnections than what can unite people around a common conservation agenda.

It is imperative to mention that the study objectives were met in terms of understanding the GLTP governance dynamics, livelihood and sustainable conservation contradictions and the discourses and the multi-level governance complexities in transfrontier conservation. One critical component of the study, which was of major concern, was that the communities in and adjacent to the GLTP are gradually becoming peripheral in the management of the natural resources in the Great Limpopo Transfrontier Park. This was proved during research when households indicated clearly that there is an elusive win-win situation among GLTP conservation stakeholders. This study and other literature consulted, particularly Jones (2011:2), point to a common difficulty that the mutually beneficial win-win situation envisaged by the planners of the GLTP is far from reaching that stage where communities are treated as partners. Due to limited economic benefits accruing to the communities and more particularly lack of involvement of people the GLTP governance, it creates a sense of disenfranchisement ((Metcalfe, 2005; Whande and Suich, 2009).

8.5 Reconstructing local institutional competences

Looking at the two communities, the following table in brief looks at comparative local resource governance institutional processes in terms of their competencies and shortcomings from the researcher's point of view. This analysis helps the ensuing justification and discussion this study makes that the institutional frameworks at the local level in both Makuleke and Sengwe communities are competent and can easily be integrated in the GLTP framework governance structure to advance not only their livelihood benefits, but enhance sustainable conservation as well.

Makuleke Community Pr	operty Association	Sengwe community: CAMPFIRE	
Institutional robustness	Weaknesses	Institutional robustness	Weaknesses
Locally initiated, organised with active community membership. In terms of the 1996 Agreement valid for 50 years with SANParks, they co-manage the reclaimed Makuleke Region and its Contractual Park at the North most corner of Kruger National Park that forms the "Heart of the Great Limpopo Transfrontier Park.	There are element of mistrust over leadership seemingly lacking accountability and transparency. There is growing disliking of limitations from the 50-year Agreement particularly disallowing trophy the lucrative trophy hunting that has the potential to accrue huge benefits to the community. SANParks retains substantial control of conservation processes and management of natural even though under the jurisdiction of the community.	Originated from the government and is centrally controlled in line with national conservation laws \and policies. The state defines benefit streams through CAMPFIRE, thereby retaining exclusive control over management and control of natural resources. The community lack proprietary rights over their resources, making local integration into the GLTP very complex for Sengwe community.	Governmental control curtails local participation and effective deriving of benefits. Generally, this de- motivates the local people from active participation in conservation.
Easy to integrate into the GLTP governance process since the MCPA controls Pafuri Triangle	There are contradictions with the GLTP being wholesomely a trilateral project that is government led in conservation and emphasise private sector eco-tourism investments with limited, but community participation is limited.	CAMPFIRE offers easy synergy for collaborative co-governance and co- management of wildlife even at the GLTP.	Government control means local interests will be represented by officials rather than by the local people, thus curtailing local participation and representation in the GLTP.
Local people show readiness to collaborate in resource governance and management	No platform to interface with high-level institutions for conservation collaboration since the demise of the Community Working Group, hence GLTP engagement with communities is minimal.	CAMPFIRE communities have experience, coupled with a conservation culture, but the programme is performing poorly owing to funding problems, hence difficulty to integrate in the GLTP.	Lack of funding in the last 10 years resultantly attenuated the competencies of CAMPFIRE in resource management.

Table 8.1 Comparative institutional typolog	gical competence and weakness
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While these communities have strength and shortcomings in terms of institutional organisations, it is argued that the GLTP administrative governance structure through the Joint Management Board (JMB) can do more to:

- Put in place mechanisms that recognise and integrate local institutions as niche areas for local communities to be involved in conservation, and ensuring that there is broadening of the scope for local livelihoods to be attained through building local capacities to achieve sustainable conservation.
- 2. Leverage on local value systems and practices based on local utility valuation of natural resource, and interlink these to global values in enhancing the GLTP biodiversity and ecosystems conservation.

8.6 Reclaiming Local Participatory Environmental Decision Making

The overarching issue in attaining sustainable conservation as mentioned above hinges on how the local people are able to participate fully. In other words, conservation without local involvement is conservation without the people. The cause of contention is that most affected stakeholders are bound to fail dismally if people living in close proximity with these resources are excluded. Perhaps, for the GLTP initiative to manage natural resources sustainably, it is important for its administrative governance structure to avoid despoiling the sound objectives of conservation by failing to recognise the importance of local-environmental relations. This study pointed out in many instances that even where there is extensive use of national governmental structures in conservation development, it is imperative not only to give obligations to the local communities in terms of biodiversity and ecosystems management, but to accord them responsibilities in a medium to long term strategic planning process that ensures sustainability of conservation. Thus, the conclusion this study emphasizes is that the issue of effective participation in environmental decision-making as a practice of environmental good governance, be followed and needs to combine with the national and local levels (USAID, 2002). Because the prospective causal relations between biodiversity decision-making in the GLTP flow through multiple institutions, possibly countervailing pathways and institutional variations with many confounding variables, it is not clear as to where people shall get involved in the GLTP

This study therefore strongly suggest a framework for decision-making that brings together multiple stakeholders such as the government agencies, conservation stakeholders and the private sector, forming a decision-making matrix that is more inclusive and participatory. However, before proffering this framework, there are key issues critical for noting that pertain to Makuleke and Sengwe communities in relation to their country level processes to which handling of community-natural resource issue subscribe differently. It has been highlighted that community

concerns were receded to be dealt with at the national level of the participating countries in the GLTP. This was a directive by the Ministerial Committee at the abolition of the Community Working Group on the GLTP. The exclusion of communities lacked strong justification because in one way or the other, the local people have been involved in conservation under CBNRM. The failure of CBNRM is not of their making, but clearly a matter of lack of transfer of capacity to the local level as well as aid withdrawal by the conservation donors that rendered most projects dysfunctional and insufficiently resourced at a critical moment when local expectations were indeed positive. The problems that CBNRM faced, and the pressure that was eventually exerted on communities, resulted in subsequent exclusion of local people, but it is not adequately admissible to explain the ultimate governance that obtain in the GLTP. In fact, the current degradation of natural resources is not consequential to the local communities' failure, but also attributable to poor planning and lack of mainstreaming of communities.

In a provocative article in scholarship in the conservation discourses, Chapin (2004) put forward that the focus on the transnational conservation is a deliberate move away from the local and away from involving local communities in nature conservation. The promotion of TFCAs, Chapin (2004) maintains, was a reaction to the difficulties environmental organisations created by neglecting building local capacity that they experienced with community-based conservation, and therefore, they needed a way to escape from local partners that the organisations now consider, regrettably though, not to be so good ecological stewards. Going forward, there is need to reform the decision making process. This study advocates that the starting point is to have serious policy and law reform at a country level. For example, in Zimbabwe, community participation in environmental decision-making processes requires comprehensive planning and institutional reengineering in terms of capacity building of local level conservation institutions.

There is also the need to refine and regularize the skewed relationships between Rural District Councils (RDCs) and the communities in terms of moving away from central government control by devolving authority, power and financial resources management to the local level community structures to be effective going forward.

Currently the local people in terms of wildlife benefit sharing, are of the view that it is the RDC and the DPWMA that benefit more them, hence governmental institutions are seen in bad light by the local people. Consequently, given lack of involvement of the local people in transfrontier conservation in general, leads to negative perceptions among communities. Phillips (1998:v) put forward that these mega conservation areas and parks, are seen "as places from which local people are excluded and unable to gain any benefit from natural resources to which they have had traditional access". The overall observation and conclusion of this study as supported by empirical data, confirm strong opposition to the GLTP, and the most clarion call is the inclusion of Sengwe communities. Unfortunately, the political ecology space for people in Makuleke and Sengwe communities is far too foreclosed by bureaucrats at the local government level, and enhances central government, opportunistic tendencies with regards to centralised-decisions taking precedence over local processes.

In this regard, the researcher is persuaded to suggest that those who ignore the strong views from the communities, do so in complete ignorance of the fact that there is potential to harness and mainstream local institutional process for conservation. In addition, local capacity can be ameliorated over time, to establish viable participatory environmental decision-making structures. For example, strengthening of the CAMPFIRE local structures is critical so that the local people can re-establish their local networks for making sound environmental decisions towards participatory conservation as it were. In similar circumstances, the local structures naturally can guide communities in the formulation of conservation programmes based on broader community vision for natural resource conservation and development as part of positive civic engagements in the wildlife business.

In the case of Makuleke community (South Africa), the existence of Makuleke Community Property Association (MCPA) in itself is a huge achievement by the community. It offers some key learning point for future conservation interface with communities. However, the general weakness that was found lies in over-reliance on external donor support, which may not be sustainable in the long-term perspective. More essentially, the fact that MCPA's contribution in terms of environmental decision making in the GLTP is constrained by lack of mechanisms for the people to be involved since they are not part of the GLTP structure, mean that their concerns are part of the GLTP development agenda.

On the overall, this study seeks not to reinvent the wheel. Perhaps, it is imperative that it makes strategic suggestions improve environmental decision-making process with regard to transfrontier conservation. The framework is inspired by tried and tested local structure arrangements such as the CAMPFIRE programme in the case of Sengwe and the Makuleke Community Property Association in the case for Makuleke community. These structures, if were supported financially and by way of conferring power to them, show great promise as robust local institutional processes that can assume fiduciary responsibilities for rural communities they represent to facilitate broad-

based participation of the people in biodiversity and ecosystems management in the GLTP. This framework, in the interest of competing socio-ecological interests, form part of empirical views from the local people gathered during field research. It incorporates key role players in a holistic development of the GLTP and shows the way in which stakeholders at different decision-making hierarchies can interrelate as shown in Figure 8.1.

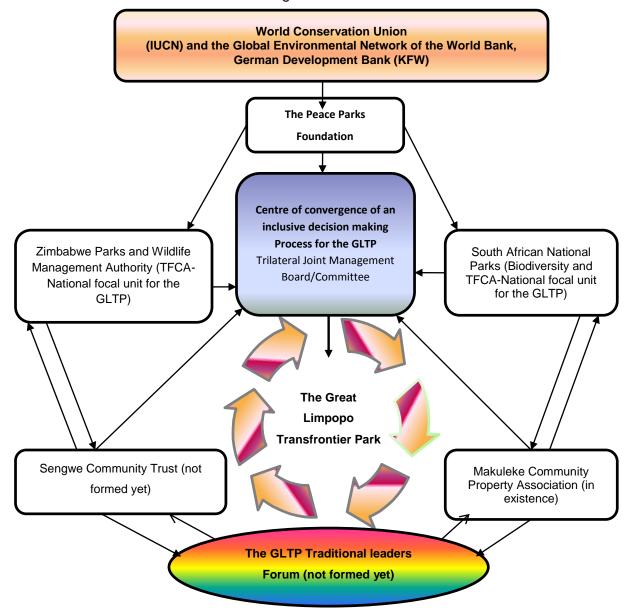


Figure 8.1 Suggested GLTP decision-making framework

The framework that is shown in Figure 8.1 is based on stakeholder relationships envisaged for a broad based inclusive decision-making process that can be considered for the GLTP. The GLTP (in the middle of the framework) is the centre of all activities upon which stakeholders should focus their attention in terms collective biodiversity and ecosystems management. It is crucial to interpret

the current GLTP structures, within which the local structures can be integrated and incorporated to ensure that communities are mainstreamed. These synergies in environmental decision-making, including traditional leadership structure helps to involve value systems as part of cultural conservation strategies. It is accepted generally that traditional leaders are the custodians of culture and customarily are the owners of land. Perhaps, it is also important to highlight that the communities' (Makuleke and Sengwe) structures at the local level with the Traditional Leaders Forum, collaborate as local processed of seamless inclusion in terms of local governance

This suggestion for a Traditional Leadership involvement through a Forum arose from the fact that traditional leaders are generally regarded in both countries as the custodians of nature, culture, and in many cases, they are responsible for looking after the land. As a result, they play an important role in deciding who gets 'what, when and how' in their areas of jurisdiction in terms of land on which wildlife resources are found. Furthermore, they are critical institutions independent of the community structures and independent of the state, with the mandate to enforce environmental values in their areas as much as they also ensure rewards for good environmental behaviour while they punish for environmental crimes. They do this by using local rules and regulations that are part of the culture of the local people, to which the whole community is expected to subscribe. In this regard, defining environmental relationships and clarifying roles of stakeholders in complex and difficult biodiversity and ecosystems conservation such as the GLTP, is crucial in finding synergies that can work for communities with the local people working closely with traditional leaders in collaborating for effective biodiversity conservation.

Institutions such as the traditional leaders also play an important role in enforcing conservation at the local level, and in enhancing benefits arising from keeping those resources. The inclusion of local communities guarantees the success of the GLTP in the conservation of wildlife. The role of communities central in development theory. Katerere (2001:116) supported this view by arguing that participation, accountability; local institutions, local practices, indigenous knowledge, policy, gender equity, tenure and fair and equitable decision-making processes become key success factors in development, with special focus on natural resources. Ideally, the local decision-making processes help in advancing sustainable conservation efforts by a plethora of stakeholders if they are involved in transboundary conservation. This argument intimate the need for a fundamental shift in conservation development, power dynamics to devolve from a centralist development strategy, which currently characterises the GLTP, to a more inclusive and bottom-up approach that involves around the local people. It is important to realise that local processes can substantially complement conservation efforts at the national, regional and international levels.

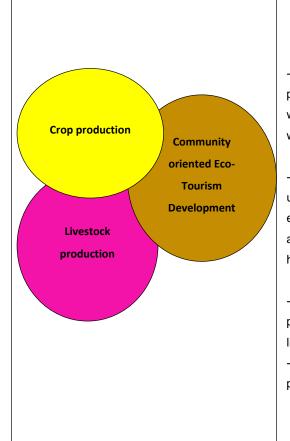
The corresponding effect of that process and synergy with communities, manifest in shifts in the manner the local people would perceive conservation programmes. The most probable effect is positive conservation support and successful natural resources management, considering that communities would be part of the development processes in making decisions at the country level and the GLTP via the JMB. The decision-making framework answers objective four of this study and its hypothesis, which identified that the current GLTP resource governance institutional functionality does not allow local participation in the GLTP. Thus, as a matter of ecological governance necessity, this framework is in line with the study's aspiration to address critical resource governance pillar so that it speaks to the collective of stakeholders.

8.7 Amalgam of subsistence livelihoods and tourism development

Following the analysis made in the literature in chapters 2 and 3, coupled with empirical data from both SANParks and ZIMParks, one gets the sense that there is a strong call for transformation of livelihood activities from agricultural and livestock production to switch to eco-tourism with park mangers making concerted effort for this to happen. One of the GLTP's environmental characteristics are harsh climatic conditions, with erratic rainfall received in both communities that make crop production difficult unless under irrigation. The objective of eco-tourism development, which is supposed to change land use of the area from unsustainable subsistence agriculture given the low rainfall patterns in the areas to wildlife management, is the pinnacle of the GLTP development plan. The obvious expectations are that there will be huge benefits flowing to the communities. It is expected that there will be influx of tourists in the area, which will benefit communities as far as village and cultural tourism are concerned. In this regard, one cannot deny the fact that the GLTP has great potential in generating income from various tourism activities, but the challenge that remains is, whether the communities are ready to migrate from current livelihood activities that sustain them to switch to eco-tourism enterprises. In addition, will ecotourism activities bring the much-needed sustainable livelihood options and deliver on key rural development needs so that the communities avert the risks and vicissitudes of poverty? These considerations and some of the envisaged transformations, remain suspicious and questionable. It is the view of this study that to gradually change rural people to a tertiary eco-tourism economy has the potential to create livelihood vulnerabilities in the event of eco-tourism failing to perform satisfactorily to deliver livelihood goods and services for the people. In fact, eco-tourism and tourism in general, are very sensitive sectors susceptible to be affected easily by a number of factors. Some of the factors that have bedevilled tourism in the past include but not limited to socio-economic and political upheaval. For example, the tourism sector has been performing dismally in Zimbabwe as exemplified by a huge drop of tourist arrivals in Gonarezhou National Park side of the GLTP. It is reported that tourist arrivals plummeted drastically since 2000 due to socio-economic and political environment that prevailed in that country. In addition, Whande and Suich (2009) assessed tourism performance in the GLTP and its adjacent areas and established the following important observations and facts regarding the state of tourism in the GLTP.

- 1. There was very little economic impact on the local people by the GLTP. As a result, the local people are sceptical of the GLTP since it has not been able to usher in some fundamental livelihood positive change.
- 2. The envisaged tourism enterprises development were not developing at the expected pace, and in the wider Great Limpopo Transfrontier Conservation Area, the sector employed 8 900 people and generated around \$25 million in wages, but most of these enterprises existed before the GLTP was formed. The conclusion reached by Jones (2011:3) and Whande and Suich (2009) is that eco-tourism is unlikely to improve large numbers of people out of poverty considering the slow growth in the GLTP.
- 3. The third dimension is that majority of the local people are employed for lowly paying menial jobs as porters and cultural dance groups. Thus, the benefits derived therefore from these activities that most of the local people perform, make little impact on the macro-economic development of their areas.

Considering these mitigating factors, this study is cautious to take the route that clearly jeopardises local livelihoods such as subsistence agriculture and livestock production, which have been demonstrated empirically that they are critical in ensuring communities attain some form of food security. Through production of crops and livestock production, the local people have always cherished their way of life as the substantive means that can sustain the two communities. In the interest of reducing current and possible vulnerabilities, the researcher conceived that there should be an amalgam of three aspects: crop production, livestock production and community oriented eco-tourism development and wildlife management as shown by Figure 8.2.



Suggested amalgam of anchor sustainable livelihood activities synergized with eco-tourism in the GLTP

-Expanding conservation enterprises by encouraging direct partnership with the communities with the revenue accruing from wildlife shared with the communities so as to reflect the value of wildlife and nature to the people.

-Diversification of tourism and integrating communities' consumptive use with non-consumptive cultural, photographic and African village experiences so that the communities share with government agencies the huge monetary benefits from the lucrative trophy hunting.

-Incorporate neighbouring communities in intensive irrigated crop production with a view to increase productivity for sustainable livelihood and reduction of encroachment into the GLTP land. -Build local asset value by setting up livestock financing schemes to produce more meat products and curb poaching of wildlife.

Figure 8.2 Amalgams of subsistence livelihoods and tourism in the GLTP

The most important amalgams relating to Makuleke and Sengwe communities lie in four critical areas in which it is important to consider the following key points:

- Expanding and supporting genuine conservation partnership with communities so that that they invest time and effort in establishing broad-based agro and eco-tourism businesses. The social partnership with neighbouring communities is the ultimate response, which can institute some great measure of trust in restoring confidence between communities and conservation agencies in the GLTP. This should be complemented with equitable sharing of revenue based on principles of fairness and equality of stakeholders.
- 2. Diversification of eco-tourism enterprises from the traditional cultural and village experiences in the communities should be integrated most lucrative trophy hunting so that the local people broaden their monetary benefits directly accruing to the communities than the current arrangements where most benefits accrue to government agencies, and the private operators selling the trophies. This unequal sharing of trophy hunting monetary benefits has been a

source of socio-ecological contestation. The direct impact of this acrimony has also been lack of support by the communities. The issue of ensuring that the local people benefit from trophy hunting came out strongly from Makuleke and Sengwe communities. Respondents demanded that they needed permission to conduct trophy hunting through their associations, as regulated and supervised by the government conservation agencies. This bitterness and the demand thereof, arise from the mere fact that private operators are benefiting more with government agencies.

- 3. The improvement of existing livelihood practices have to focus on agriculture both crop and livestock production. These anchor livelihood activities, and should be supplemented by forest resource harvesting to improve on nutritional foodstuffs. Major products such as relish and *Mopani* worms have been harvested and commercially sold and used for domestic consumption. In the case of Sengwe, the Shangaan people are known to produce a local wine called *Njemani*, which they use as beer or simply wine. Some have been selling this sumptuous wine for visitors and to local residents. There are irrigation schemes in the two communities, with the Makuleke irrigation project being the anchor one in terms of food production, particularly maize and potatoes that are used for commercial sale. In Sengwe ward 15, the Manjinji Irrigation Scheme is dedicated for vegetable production. These projects can be expanded and supported in terms of financing, which is not the case at the moment and this limit the extent to which the communities can leverage on agro-production to avert food insecurity. Ideally, it is possible to reduce environmental degradation and natural resource over-use if the productive integrity of the areas is enhanced.
- 4. Divesting: The other strategic decision is for governments of both Zimbabwe and South Africa that are involved in the GLTP to divest their operations as players and revert to regulation and policy making in terms of facilitation of eco-tourism partnerships. The paradox that exists in the GLTP is that the governments are also players and regulators at the same time, which is contradictory from a corporate governance point of view. This amounts to conflict of interests, and in other instance, it is some form of what is known as corporate incest. As a result, one would question the sincerity of the governments in encouraging partnerships between the communities and the private sector when they seize every opportunity to enter into such partnerships themselves. Currently, these partnerships have not yielded meaningful results for the communities because of competing and at worst, conflicting interest with those of the local people propagated by the governments. Ideally, the seemingly collusion of conservation organisations and the private sector investors with government agencies, explains why there

is reluctance to encourage and consolidate investments with the communities. This has been to the disadvantage of the communities. There are difficult trade-offs to resolve these issues where communities or small and medium sized enterprises are made to compete for the same resources and business opportunities with more efficient large-scale enterprises that are government supported throughout.. In such situations, this study proposes to balance between the objective of maximising the total value of benefits that accrue to the operators or government and at the same time create opportunities for the rural tourism enterprises. This is the basis of the amalgam framework as outlined in Figure 8.2. It addresses the issue of integrating agro-processes with eco-tourism processes working parallel to each other in complementing rural livelihoods than changing them.

In essence, if these aspects are taken into account, they reverse current negative impacts on livelihood and avert changes imposed by the new park governance and management plans that emphasise on eco-tourism as the anchor livelihood system. This study is cautious to give advice for any change of local livelihood practices. What it does is changing livelihood strategies and replacing them with less familiar practices that they may not have knowledge on how to execute the business. This create potential vulnerabilities should tourism fail to perform effectively in those communities as they have not experimented with it in the past to scientifically conclude that people can rely on it solely. The park management process and the communities' livelihood subsistence objectives such as agriculture, use of forests resources and such other related natural resource driven livelihoods, are definitely not necessarily working in harmony. In fact, the local livelihoods practices are viewed pejoratively, and simply considered unaligned with the GLTP decision makers' focus on biodiversity preservation and tourism development. As was the case in past conservation approaches, the communities in the GLTP faced challenges to move out of this ecological thinking, and the planners do not see the communities in the same light as an opportunity for "successful" conservation while their conservation agriculture work hand in hand with tourism projects. The4 temptation has been vigorous call for change of lifestyles, but this change does not guarantee sustainability of livelihoods anchored on tourism. Evidence of achieving livelihood security is exemplified by current efforts for sustainable irrigation schemes in the two communities that are intensive and produce sufficient food and excess vegetable for the local communities. They can reduce drastically encroachment on to parkland by ensuring that food produced is under intensive production and it is sufficient to feed the communities from indeed small pieces of land.

In meeting, the study objectives of assessing multi-level GLTP governance on local livelihoods, empirical household and interview data showed that there are negative consequences in the communities arising from insistence on changing current local livelihoods. It may have been not conceived that integrating agriculture and conservation related activities in the context of biodiversity conservation the GLTP actually broaden the scope and options for the rural people. In the event of one sector failing, people will have a fall-back option. Associated with maintaining and generating diversity of livelihoods, there is the need to develop policy frameworks for the GLTP in a manner that encourages experimentation on amalgam and diversification of productive fields to foster development of adaptive capacity of the local people. Taking the tourism industry as the anchor livelihood, some critical questions will certainly need some research such as:

- 1. What is the range and nature of tourism enterprises that can be established in Sengwe and Makuleke communities that give substantial trade-offs to the communities in the GLTP framework?
- 2. How diverse and sustainable are the tourism activities in the GLTP Treaty, and does this encourage lucrative use that benefit the local people, whereas it is clear that some private sectors and government agencies are reaping huge benefits from trophy hunting at the expense of the communities?
- 3. Have private-public-community partnership been thoroughly investigated and the potential benefits determined, or it will be the same story where communities are used to legitimise government-private sector partnership while the local people receive fringe benefits?
- 4. What opportunities are exist in the joint ventures that positively benefit communities to ensure substantial and sustainable benefits accrue directly to the local people?

These questions and many more that can be posed could be the basis to analyze and formulate some fundamental intervention strategies in the two communities. As consistently argued in this study, the researcher still insists that Makuleke and Sengwe communities have had strong historically and mutually beneficial relationships with their wildlife that has been and continue to be sustainable anyway. The best that can be achieved in the GLTP project is to find mechanisms for inclusion of the local people. Wildlife to these communities is sociologically and anthropologically part of their African culture and heritage that has always had a symbiotic

relationship with the people. The cultural issues of totemism serve to strengthen conservation rather than abusing wildlife. As Rukuni (2012) argues:

"In folklore, mythology and traditional religions, wildlife is the most significant inherited form of relationship with nature that defines family, clan and ancestral identity. The traditional beliefs in the sacredness of wildlife should be re-invented by once again formalizing the relationship between communities and wildlife".

Indeed, there is pragmatic and a more effective least-cost means in which the GLTP can leverage on this to enhance conservation. Enforcement against poaching of flora and fauna would not require much money and will not require a plethora of laws, regulations and game wardens once the synergies with the communities are established using community structures. In concluding this argument, Rukuni (2012), says, "Rather the people's beliefs and conscience is a far better policeman and deterrent".

8.8 Redefining the GLTP communal resource rights and governance

The misfortune of the situation of communities living inside and adjacent to the GLTP are continuous livelihood threats and land use changes heightening existential concerns characterised by a plethora of insecurity. The threats of relocation in the case of Sengwe community and diminishing livelihood options in communities of this study showed the extent of discontent at the local level. Communal areas living adjacent to conservation areas in Southern Africa are usually constrained in terms of having viable livelihood options such that they are under persistent threats from pervasive poverty. The threats they experience include among others limitations to have access to natural resources and limited land for agro-subsistence farming around Transfrontier Parks, which exacerbate ecological marginalization of the communities. This is in particular regards to accessing environmental goods and services that are critical for rural livelihoods. Due to the introduction of state institutions in natural resource governance matrix of this type, field based research experiences show that state institutions demonstrably, have been ineffective during the colonial and post-colonial eras (Murphree, 1993:4). It is noted, on the basis of concerns raised in Sengwe and Makuleke communities that bringing tourism private sector operators at the terms of the state, is synonymous with privatization of the 'commons' that the local people rely on as life support.

It is also important to indicate that practically, administrative cumbersome of the GLTP result in fragmentation, attenuation of local level natural resource governance and management regimes.

The benefits to the local people have been negated, and with processes that define sharing of the benefits skewed in favour of outsiders at the expense of the communities. In the case of Sengwe community in Zimbabwe as an example, it is a fact that the ZPWMA and the private sector have been facing financial problems to finance conservation of natural resource. This has seen an increase in the number of cases of poaching, an ugly ecological situation that can easily be reversed by instituting governance and management regimes that are local, with the communities given the mandate to undertake resource monitoring in support of nation resource policing processes, particularly in the GLTP area. While the ZPWMA has some strength in natural resource management, clearly, it has funding constraints due to withdrawal of donor support from European countries following a regime of sanctions that were imposed on the country since the year 2000. Ideally, it is only logical to prospect for more innovative and less costly ways in sustaining conservation. One way of doing this is harnessing local effort and local conservation institutional competencies to complement government conservation agencies in sustainable management of natural resources.

In addition, under-funding of park authorities especially in Zimbabwe is compounded by the fact that the country is facing economic challenges, with liquidity crisis crippling most efforts towards sound environmental management. The little resource mobilised domestically is not enough, considering that there are other competing interest such as food security in the country. As a result, supporting the enormous task of large-scale conservation that includes seemingly porous boundary areas is a difficult task. In other instances, due to financing challenges, the state conservation institutions have not maintained their presence in these conservation areas, not even through their local Anti-Poaching Committees. As such, they are seen as distanced from the resources and the communities that are adjacent to the mega conservation areas geographically. More essentially, it is a reality that both SANParks and ZIMParks, experience the perennial problems of under-staffing.

In such circumstances, it is prudent that state agencies and the private sector who are managers of the resources, can achieve conservation sustainability if they enlist the support from the local people living with those resources concerned. However, local resource governance and management institutions are marginalized. The relationship between state institutions and the local people are antagonistic when it comes to issues of managing natural resources and deriving wildlife and natural resources benefits, with most benefits going to the state agencies and the private sector. For that reason, whatever degrades the resources is not attended to at the local level because the people have since lost a sense of ownership, with the resources largely regarded as exclusive state property. Usually, such resources are exploited commercially with limited financial and material benefits going to the local people. The issue that is of paramount importance is that communal people ownership of natural resource become somewhat peripheral in the GLTP process since the predominant discourse emphasise more of state-ownership than community ownership. At a macro-economic level, the multi-level environmental considerations least value local needs. Quite often, respondents from Makuleke and Sengwe communities were concerned that their social and economic needs were subsumed at national level in terms of planning and natural resource ownership. To this end, Bromley and Cernea passionately deprecated state ownership and governance process by arguing that:

"Unfortunately most state property regimes are examples of the states reach exceeding its grasp.' Many states have taken on far more resource management authority than they can be expected to carry out effectively. More critically it sets the government against the peasant when, in fact, successful resource management requires the opposite" (Bromley and Cernea, 1989:25).

In support of the above assertion, it is intriguing to note that environmental governance practices not only require balancing national economic and environmental objectives, but also strive to recognize the fundamental social and livelihood questions of the local people living inside and adjacent to the GLTP. Ecological discourses around the TFCAs and the GLTP governance in particular, show huge disgruntlement coming out of the communities over lack of participation. The fact of intentional exclusion of the local people is clearly a monumental failure to locate transboundary resource governance within legitimate claims of disenfranchised rural people. Consequently, the current GLTP administrative governance architecture that was introduced, redefined tenurial systems that escalate and entrench state and private natural resource ownership regimes at the expense of common ownership rights of the people resident in the GLTP. It is the conclusion of this study that sustainable transboundary and sustainable use of natural resources are not solely or even largely determined by physical state institutions, but also dependent of local value systems that abhor improper that is sanctioned severely locally by the traditional authorities. The success of transfrontier conservation in this perspective, would require to secure tenure rights, which are largely dependent on having the right to include the local communities to use the resources, benefiting from resources and ultimately, facilitating the communities to have the ability to enforce some sanctions over improper use of natural resources. The lack of such support and institutional reform to reflect local aspirations indict the successes that were envisaged under decentralized and devolved natural resource governance through

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CBNRM programmes. As noted earlier on, CBNRM was abandoned since transfrontier conservation started to be state-centric from 2000. This became apparent when local institutional and legal systems were sidelined. This fundamentally changed ecological relationships and perceptions thereof between state conservation agencies and communities or the state and individuals such as the community leaders like the Chiefs (Tyler, 2000:4). Mohamed-Katerere (1996) further postulated that macro-legal frameworks such as property rights, including traditional resource rights, administrative fairness and procedural equity, which are so critical to the success of decentralization initiatives in natural resource systems of this kind, consequently fall short of in the balancing of power dynamics. The central notion in this research is that the concept of environmental governance comes with responsibilities, authority and accountability, which are at the core of communal people's legal rights, claims, obligations and widely accepted as the "bottom line" for rural transformation and development. Redclift and Benton (1994, cited in Dalal-Clayton 1994:4) pointed out that in the majority of cases it has become clear that some of the recent developments in international law reflect trends within conservation discourses, development thinking and practice that more can be achieved if the local people's rights, claims and needs are respected. Further to that, certain norms and local practices are fundamental to human existence. Consequently, local human environmental needs in Transfrontier Parks require some reorientation so that communities are protected from governmental decisions that do not speak to their needs and avoid problems associated with those decisions. Hence, suffering inflicted through natural resource deprivation and outside resource exploitation by organized and powerful conservation organisations and individual groups of other human beings or government can be averted.

The protection of the local people is espoused in international environmental law. This include the Stockholm Declaration, the World Charter for Nature, the 1992 Rio Declaration of from the Conference on Environment and Development (UNCED) that is also known as the "Earth Summit" (3-14 June 1992, Rio de Janeiro, Brazil). Agenda 21, the Framework on Convention on Climate Change, the Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests, the Convention on Biological Diversity, the Convention to Combat Desertification and the Vienna Declaration and Programme of Action adopted by the World Conference on Human Rights on 25 June 1993 (International Institute for Sustainable Development, 2005, 2 and Mohamed-Katerere, 1996). These legal instruments articulate the protection of communities from any forms of ecological discrimination. However, not so much research has been done to leverage on international environmental law provisions to enable communities living inside and adjacent to

transfrontier conservation areas and parks, to derive livelihood and promoting rural development. In the end, resource abundance, given the pervasive conflicts that the communities experience in terms of resource exploitation by powerful social classes and private companies, appear to be fast a resource curse for the common people, particularly in Africa.

8.9 Harnessing the GLTP natural resource assets for pro-poor development

Protecting and expanding natural resource assets available in the GLTP for pro-poor development is indeed important incentive that potentially can motivate communities towards sustainable beneficiary biodiversity and ecosystems conservation. Protecting and expanding natural resource access, which are of particular importance to the poor, are therefore important ways to support pro-poor growth and local development. The first step to consider, takes into account ensuring strengthening of communal ownership and locally based self-regulatory utilization of natural resources in Makuleke and Sengwe communities. This motive behind this is that communities depend on available resource for their livelihood as opposed to de facto privatization of the resources among the elite groups and profit driven private entities.

Privatization of resource in the GLTP manifest in private tourism investments, and this has progressed in complete disregard of existing traditional use of natural resources and local communal ownership systems in terms of regulation of common property resource use that worked in the past. Most of the local processes are being sidestepped and g broken down at each stage of the GLTP development. This is partly due to exogenous and endogenous pressure that defines new resource governance regimes to complete ignorance of local natural resource management systems as complementary to the current GLTP governance processes. Furthermore, benefits distribution are problematic based on the obvious reasons that communal resources, for example, wildlife, forests and cultural places, are subjected to commercial utilization by the private sector operators under concession agreements. These agreements are concluded between the state agencies and the private sector mostly, which grant use rights to the private sector without outlining how much in monetary and material terms go towards the local people. Even the principles of equity and social responsibility, seem not to have taken root in the communities. This is the same criticism against CAMPFIRE programme in Zimbabwe. The benefits have been and are skewed in favour of the state controlled CAMPFIRE Association as opposed to the communities. The problem of the state and private sector relationship, epitomise the case of 'predatory resource capture by the elites', through patronage. This is prevalent in these areas and it far from meeting the aspirations of the local people. Public scrutiny diminished since the local people have neither the platforms nor the power to register their displeasure, which precisely explains difficulties experienced by the local people in supporting conservation initiatives. Addressing these issues may require reforming existing governance architecture, access or use rights, strengthening enforcement and redefining resource tenure systems.

8.10 Reconstituting the GLTP governance

One critical endeavour this study made is to develop a hybrid synergistic resource governance framework. This framework derives from two dominant processes: the top-down and bottom-up approaches that are applicable in natural resource governance of this nature. The summary of this proposed framework is shown in Figure 8.3.

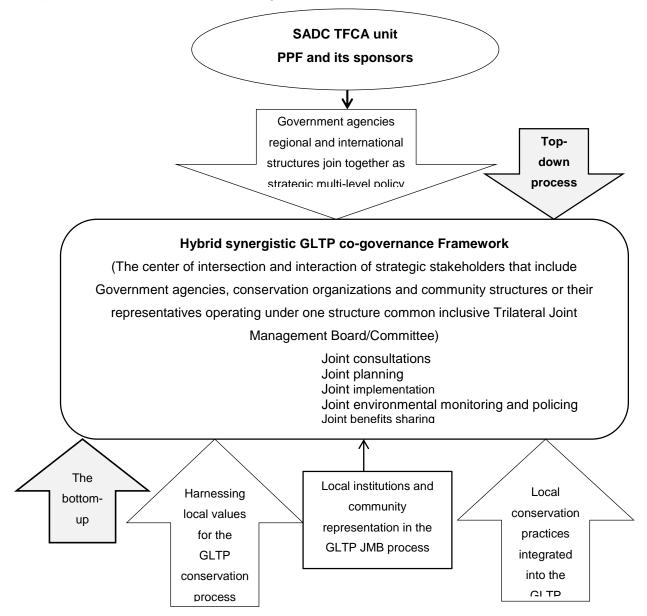


Figure 8.3 Proposed Hybrid synergistic GLTP governance framework

This framework assumes that the GLTP administrative governance model on Figure 1.2 does not provide space for community participation as a collective. However, a number of underlying fundamentals explain why it was set like that at the national level. Concerns are that local matters would be a matter of the country level consultative processes, which unfortunately is not happening at the time of the research. In fact, some key figures that represent the communities in Makuleke and Sengwe communities were eloquent to mention their displeasure over lack of incorporation of the local people. The biggest challenge is that there is little in the direction to create platforms for interaction. As a result, the national level is not intersecting with communities and ideally, it is less compelling in terms of generating credible local environmental consciousness that can show enthusiasm on local players towards sustainable biodiversity conservation. In the end, the current Community Working Group in the GLTP, just as the Kavango Zambezi Transfrontier Conservation Area (involving Angola, Botswana, Namibia, Zambia and Zimbabwe) is not involving the local people, but made up of government officials (personal interaction and conference deliberations at KAZA TFCA Technical meeting, Maun, Botswana, 4-10 February 2012).

Consequently, this framework assumes that successful transboundary management needs to operate on a number of inclusive scales from the international, regional, national and local scale (communities). It is invigorating to put forth that a pragmatic approach envisaged in this proposal, seeks to synergise all stakeholders under one governance framework. In this way, it goes clearly that this helps to complement country level stakeholders' platforms and processes in transfrontier biodiversity governance. The argument that has always been mentioned, questions legitimacy of communities given the fact that in many cases, their structures are diverse and TFCA landscapes overlap to other states, making coming up with a common community structure difficult. However, bringing community representatives although is not easier than said, however, these communities are semi-homogenous and contiguous to each other, thereby no complications that can vitiate their ecological interaction, despite the cost involved. For these reasons, the framework (Figure 8.3), advocates that it is still possible to integrate local governance processes into higher scales, through reconciling and making the governance of the GLTP inclusive and truly representative. At the height of the process, the communities' concerns may better positioned effectively by their representatives, and the implications arising from this co-governance and collective management arrangement is that it amplifies the community voices in making their needs heard and harnessing local support towards conservation efforts. In the end, the local people's interests, that of the government conservation agencies and Non-Governmental Organisations, will be met in an atmosphere of collaboration and no suspicion.

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In addition, partnerships on the ground in terms of conservation and programme delivery are likely to be communicated by the local representatives who can mobilise communities toward biodiversity conservation. On top of that, land tenure negotiations, land use and planning, will be made less laborious because of consensus building that starts at the community level. Ideally, this framework promotes that on the overall, environmental harmony, mutual toleration and coexistence of stakeholders having a common conservation agenda. Perhaps, this also reduces the burden of government spending on conservation because of collaboration from the local community representatives who feed into the higher structures to inform policymaking and conservation strategies that take into account local communities' ecological practices. The outcome of the deliberations can also find their way down to the local people smoothly. Above all, the Hybrid synergistic governance framework is useful in promoting environmental transparency, accountability and helps the local communities to gain, not only important exposure, but to develop networks with possible project sponsors who they can leverage on to develop their eco-tourism enterprises. In summing up this part, it remains critical for the GLTP to transform itself in terms of changing its 'scale of marginality' (Ramutsindela, 2007:105). Defining the scale of governmentality becomes critical in the processes of complex GLTP governance, and it can be realised substantially, if stakeholders converge their thoughts and minds in collaborating to make mega biodiversity and ecosystems landscapes work as a success stories for the benefit of all stakeholders.

8.11 Potential for future research

Given the complexities of the GLTP in relation to Makuleke and Sengwe communities, there is great promise for future scholarly and development research by conservationists and rural development enthusiasts who may want to get comprehensive understanding and offer solutions to rural communities in and adjacent to Transfrontier Conservation Areas. This potential can be summarised as follows:

1. There is potential for research to determine appropriate eco-tourism partnerships that can be pursued in respect of the GLTP so that as a sector, it complements rather than substitute current livelihood practices in Transfrontier Conservation Areas. This arose from the mere fact that the GLTP is premised on migrating communities to sustainable eco-tourism as a development strategy for these communities as was discussed. This has a bearing on the current livelihoods practices, hence eco-tourism as the bulwark for rural transformation has to be analysed from the perspective of its sustainability and the benefits that it can bring to communities to offset the vagaries of poverty, hunger and starvation that characterise these

areas. The idea is to encourage some research that yield result which can help any development intervention that impact positively on the lives of people and enhance rural areas development. In that regard, the community-private sector partnership as noted in this study has not been addressed adequately since it was not part of the research objectives.

- 2. There exist an opportunity for researchers to be involved in some scholarly work to understand complexities of the GLTP governance on harmonisation of conservation legislation and policies for regional natural resource management in the SADC sub-region. This helps the entire sub-region to formulate joint environmental policies and interventions that regulate on standards as well as inter-state collaborative environmental policing. Currently, the issue of dealing with poachers in the GLTP is weak, because of different legal regimes. In those circumstances, communities usually are branded suspects whenever a case of poaching occurs, even though they might not have been involved in well-syndicated poaching activities. It is therefore, difficult to handle poaching problems due to differential legislation existing in each country dealing differently with those common environmental problems.
- 3. There is need for research and analysis of polices and incentive structures relating to wildlife as an integrated land use. This is particularly important, as it relates to the amalgam framework developed in this study and the strategic recommendations made in the research, especially in addressing issues of defining a cocktail of benefits that act as incentives to motivate communities towards sustainable conservation. In other words, policy makers misunderstand communities living adjacent to transfrontier conservation parks and there no foreseeable environmental benefits from eco-tourism that can substantially complement their existing livelihood practices. Perhaps, defined incentives provide strong inducements for broader participation and collaboration by the local communities to focus people towards sustainable conservation of biodiversity and ecosystems that straddle geo-political boundaries.

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APPENDIX 1: LETTERS OF AUTHORITY



ZIMBABWE PARKS AND WILDLIFE **MANAGEMENT AUTHORITY**

 Telephone:
 263-04-792786-9 707624-9, 703376, 792731

 Fax:
 263-04-724914, 792782
 726089

HEAD OFFICE: P.O. Box CY 140 Botanical Gardens Borrowdale Rd/Sandringham Drive

Causeway Harare

E-mail: natparks@africaonline.co.zw Web: www.zimparks.com All correspondence to be addressed to the Director General

Ref: B/303/1

18 June 2010

Cape Peninsula University of Technology Faculty of Applied Sciences Department of Environmental health and Occupational Studies PO Box 652 Cape Town Republic of South Africa

Attention: Prof De Wet Schutte

LETTER OF CONSENT

I have read the information presented in the letter about a study to be conducted by Mr. Darlington Muzeza of the Faculty of Applied Sciences at Cape Peninsula University of Technology.

I have had the opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted. I am aware and satisfied that the intention of this research is for academic purposes.

I am also aware that the researcher will do field study visits for purposes of conducting group discussions and administering questioners in Makuleke community in the Republic of South Africa and Sengwe community in the Republic of Zimbabwe in order to gain their views, and that respondents will remain anonymous.

I am satisfied that the researcher, is interested to interview institutions involved in the Great Limpopo Transfrontier Areas (GLTP) for purposes of getting more insight on his study. I was assured that respondents may withdraw, or choose not to respond to certain questions when they deem necessary at any time during the interviews.

Having discussed Mr. Darlington Muzeza's Doctoral research project with him, on behalf of the Ministry of Environment and Natural Resources Management of the Republic of Zimbabwe, I have no reservations on his intentions. This letter, therefore, serves to confirm my consent to go ahead to require ethical clearance at the Cape of Peninsula University if Technology to proceed with his study on "The impact of institutions of governance on communities' livelihoods and sustainable conservation in the Great Limpopo Transfrontier Park (GLTP): An exploratory study of Makuleke community in the Republic of South Africa and Sengwe community in the Republic of Zimbabwe

With full knowledge of all the foregoing, I consent the researcher to carry out this research within his study area and upon getting the necessary and written approvals from other relevant stakeholders.

Yours sincerely V Chadenga **Director-General**

MINISTRY OF LOCAL GOVERNMENT, RURAL AND URBAN DEVELOPMENT

Telephone 263 4 793700 Fax 263 4 794034



The Office of the Secretary Private Bag 7706 Causeway, ZIMBABWE

> MIN. OF LOCAL GOVT. RURAL AND URBAN DEVELOPMENT REGISTRY 1 1 6 JUN 2011 P. BAG CY 7706, CAUSEWAY ZIMBABWE

RIEASE QUOTE REFERENCE No

Ref: ADM 23/8

16 June 2011

Darlington Muzeza Flat No 83, Block 5 Francis Flats, Belvedere **HARARE.**

PERMISSION TO CARRYOUT AN ACADEMIC RESEARCH : SENGWE COMMUNAL LAND : MASVINGO.

The above matter refers.

The Head of Ministry has granted you authority to carry out the research as per your request letter dated 05 July 2010. Please note that the information you will get is strictly confidential and for academic purposes only.

We will be grateful if we could receive a copy of your end product. We wish you the best in your study.

Y. Chivandi U For Secretary for Local Government, Rural and Urban Development

	and the second sec	
CHIPERTI DC	CHIREDZI RURAL DISTRICT COUNCIL	
CHIREDZI RURAL DISTRICT COUNCIL P.O. BOX 128 CHIREDZI	Phone 031 - 2547 / 2765 COUINCIL OFFICES Fax 031 - 2596 69 INYATI DRIVE E-mail: chiredzinet@comone.co.zw	
	All correspondence to be addressed to the Chief Executive Officer	and the second se
Chiredzi Rural District Council		
P . O Box 128		
Chiredzi		
24/06/2011		
Dear Councillors Ward 13,14 and 15		
REF: REQUEST FOR YOUR AS:	SISTANCE TO MR DARLINGTON MUZEZA A PHD	A AND ANY TO
Mr. Muzeza Darlington is currently un governance on communities and sust	RESEARCH IN WARD 13, 14 AND 15 Phone 031 - 754 / 2755 dertaking a research in on the impacts of institutions of tainable conservation in the GLTP area. He was cleared by the nd Urban Development assed to the Chief Executive Officer	
He is purely on an academic research	may you kindly assist him	
Thanks for your usual cooperation	CHIEF EXECUTIVE OFFICER	•
PAD Ancie	CHIREDZI RURAL DISTRICT COUNCIL	
C. Zanamwe FOR CHIEF EXECUTIVE OFFICER	CHIREDZI RURAL DISTRICT	
C. Zanamwe FOR CHIEF EXECUTIVE OFFICER	CHIREDZI RURAL DISTRICT COUNCIL 2 4 JUN 2011 69 INYATI DRIVE P.O. BOX 128	
C. Zanamwe FOR CHIEF EXECUTIVE OFFICER <u>CHIREDZI RURAL DISTRICT COUNCIL</u>	CHIREDZI RURAL DISTRICT COUNCIL 2 4 JUN 2011 69 INYATI DRIVE P.O. BOX 128	
C. Zanamwe FOR CHIEF EXECUTIVE OFFICER <u>CHIREDZI RURAL DISTRICT COUNCIL</u> REQUEST FOR YOUR ASS IT TO CARRY OUT HIS	CHIREDZI RURAL DISTRICT COUNCIL 2 4 JUN 2011 69 INYATI DRIVE P.O. BOX 128 CHIREDZI	
C. Zanamwe FOR CHIEF EXECUTIVE OFFICER <u>CHIREDZI RURAL DISTRICT COUNCIL</u> <u>REQUEST FOR YOUR ASS</u> <u>IT TO CARRY OUT HIS</u> Mr. Muzeza Darlington is currently un	CHIREDZI RURAL DISTRICT COUNCIL 2 4 JUN 2011 69 INYATI DRIVE P.O. BOX 128 CHIREDZI SISTANCE TO MR DARLINGTON MUZE RESEARCH IN WARD 13, 14 AND 15 dertaking a research in on the impacts of institutions of tainable conservation in the GLTP area. He was	
C. Zanamwe FOR CHIEF EXECUTIVE OFFICER <u>CHIREDZI RURAL DISTRICT COUNCIL</u> <u>REQUEST FOR YOUR ASS</u> <u>NT TO CARRY OUT HIS</u> Mr. Muzeza Darlington is currently un	CHIREDZI RURAL DISTRICT COUNCIL 2 4 JUN 2011 69 INVATI DRIVE P.O. BOX 128 CHIREDZI SISTANCE TO MR DARLINGTON MUZE RESEARCH IN WARD 13, 14 AND 15 dertaking a research in on the impacts of institutions of cainable conservation in the GLTP area. He was followed by tainable conservation in the GLTP area. He was followed by the upper development.	
C. Zanamwe FOR CHIEF EXECUTIVE OFFICER <u>CHIREDZI RURAL DISTRICT COUNCIL</u> <u>REQUEST FOR YOUR ASS</u> <u>NT TO CARRY OUT HIS</u> Mr. Muzeza Darlington is currently un concern on communities and sust	CHIREDZI RURAL DISTRICT COUNCIL 2 4 JUN 2011 69 INVATI DRIVE P.O. BOX 128 CHIREDZI SISTANCE TO MR DARLINGTON MUZE RESEARCH IN WARD 13, 14 AND 15 dertaking a research in on the impacts of institutions of cainable conservation in the GLTP area. He was followed by tainable conservation in the GLTP area. He was followed by the upper development.	
C. Zanamwe FOR CHIEF EXECUTIVE OFFICER <u>CHIREDZI RURAL DISTRICT COUNCIL</u> <u>REQUEST FOR YOUR ASS</u> <u>NT TO CARRY OUT HIS</u> Mr. Muzeza Darlington is currently un	CHIREDZI RURAL DISTRICT COUNCIL 2 4 JUN 2011 69 INVATI DRIVE P.O. BOX 128 CHIREDZI SISTANCE TO MR DARLINGTON MUZE RESEARCH IN WARD 13, 14 AND 15 dertaking a research in on the impacts of institutions of cainable conservation in the GLTP area. He was followed by tainable conservation in the GLTP area. He was followed by the upper development.	
C. Zanamwe FOR CHIEF EXECUTIVE OFFICER <u>CHIREDZI RURAL DISTRICT COUNCIL</u> <u>REQUEST FOR YOUR ASS</u> <u>NT TO CARRY OUT HIS</u> Mr. Muzeza Darlington is currently un second communities and sust	CHIREDZI RURAL DISTRICT COUNCIL 2 4 JUN 2011 69 INVATI DRIVE P.O. BOX 128 CHIREDZI SISTANCE TO MR DARLINGTON MUZE RESEARCH IN WARD 13, 14 AND 15 dertaking a research in on the impacts of institutions of cainable conservation in the GLTP area. He was followed by tainable conservation in the GLTP area. He was followed by the upper development.	

All communications should be addressed to "The Secretary for Tourism and Hospitality Indusity"



MINISTRY OF TOURISM & HOSPITALITY INDUSTRY 9th Floor Tourism House 55 Samora Machel Avenue P O Box CY 1718 Causeway

Telephone: 263-4-759391,770897 Fax: 263-4-252673

Your Ref.: Our Ref.:

3 June 2010

LETTER OF CONSENT

I have read the information presented in the letter about a study to be conducted by Mr. Darlington Muzeza of the Faculty Applied Sciences at Cape Peninsula University of Technology. I have had the opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted. I am aware and satisfied that the intention of this research is for academic purposes.

I am also aware that the researcher will do field study visits for purposes of conducting group discussions and administering questionnaires in Makuleke community in the Republic of South Africa and Sengwe community in the Republic of Zimbabwe in order to gain their views, and that respondents will remain anonymous.

I am satisfied that the researcher, is interested to interview institutions involved in the Great Limpopo Transfrontier Park (GLTP) for purposes of getting more insights on his study. I was assured that respondents may withdraw, or choose not to respond to certain questions when they deem necessary at any time during the interviews.

Having read and satisfied myself of Mr Darlington Muzeza's Doctoral research project, its contribution to tourism knowledge particularly Community Based Tourism Enterprises, I have no reservations on his intentions. This letter, therefore, serves to confirm my consent to go ahead to require ethical clearance at the Cape Peninsula University of Technology to proceed with his study on "The impact of institutions of governance on communities' livelihoods and sustainable conservation in the Great Limpopo Transfrontier Park (GLTP): An exploratory study of Makuleke community in South Africa and Sengwe community in Zimbabwe."

I was informed that if I have any comments or concerns relating to this research, I may contact the following persons:

NAME Prof. De Wet Schutte	POSITION Main supervisor of my research	TELEPHONE Tel:+27(0)21 0214603194 Fax:+27(0)21 14603905	EMAIL schutted@cput.ac.za
Prof. ReinetteSnyman	Co-supervisor	Tel: +27 (0)21 460 3947 Fax: +27 (0) 21 460 3217	snymanr@cput.ac.za
Mr Darlington Muzeza	PhD student	+27 73 993 9941	darlymuzeza@gmail.com

With full knowledge of all the foregoing, I consent the researcher to carry out this research.

Yours sincerely

B.S. Maunganidze (Dr) SECRETARY FOR TOURISM AND HOSPITALITY INDUSTRY

MIN OF TOURISM & HOSPITALITY INDUSTRY 0 3 JUN 2010 P O BOX CY 1718 CAUSEWAY, HARARE

MAKULEKE CPA

P. O. 415

SASELAMANI 0928

Tel: +27 (0)15 853 0063/1286 Mobile: +27(0) 79 088 8267Fax:+27(0) 86 665 7251 E-mail: <u>makulekecpa@gmail.com</u> , <u>makuleke@mweb.co.za</u> CPA No: CPA/99/0140/A VAT No: 4330191109

PAYE No:9099369184_

14 October 2011

The Supervisory Team

Cape Peninsula University of Technology Department of Environmental and Occupational Studies

ATT: Prof De Wet Schutte Prof ReinnetteSnyman

PERMISSION FOR DARLINGTON MUZEZA (210227028) TO UNDERTAKE PhD RESEARCH IN MAKULEKE COMMUNITY

The above subject matter refers.

I acknowledge receipt of a request from Mr Darlington Muzeza (PhD student: Environmental Health-Cape Peninsula University of Technology) to undertake academic field research in Makuleke community. Makuleke community owns Makuleke Contract Park, which is an integral part to the GLTP initiative that brings together South Africa's Kruger National Park, Mozambique's Limpopo National Park (former Cautanda 16) and Zimbabwe's Gonarezhou National Park.

Having read his request and deliberated about it in the Makuleke Community Property Association (CPA) Executive Council and the Traditional Authority structure, we are satisfied on his noble academic intentions. We therefore have no reservations to welcome him and granting him the permission to do research. On behalf of the CPA, we assure him the audience and interaction with households and any concerned members for the purposes of gaining data for his research.

I therefore do not have reservations for him to be granted ethical clearance as we see no harm in type of research. We are hopeful that this process will produce results that maybe beneficial to contribute to knowledge and ecological developments for the community and others as well. On behalf of Makuleke CPA Executive Council, we request MrMuzeza at the end of his study to share with us his experiences by way of sharing his recommendations.

For any queries, we welcome them and we are ready to assist you.

Thank you,

BonganiBalovi Chief Executive Officer Makuleke Communal Property Association

1P	AKULEKE O PROPERTY AS REG NO: C.P./	SOCIATION
	2011 -10	- 14
TE	EL / FAX 015 85 nail: makuleke LIMPOPO PI	@mweb.co.za

ExecutiveCommittee: MB Hlungwani (Chairperson), MMHatlane (Vice Chairperson), T Baloyi (Secretary), NS Sithole (Vice Secretary), KS Maluleke (Treasurer), GE Tivani,RC Chauke, XD Chavani, G Ngobeni (Ordinary Members), Chief PJ Mugakula (Ex-Officio)

APPENDIX 2: HOUSEHOLD INTRODUCTORY LETTERS



Cape Peninsula University of Technology Faculty of Applied Sciences Department of Environmental and Occupational Studies PO Box 652 Cape Town 8000 Cell phone: +2773 993 9941 Email: <u>darlymuzeza@gmail.com</u> 210227028@cput.ac.za

KA MUHLAYI WA MIVUTISO YEYI

A mivutiso leyi ya kunipfuna a kuyendla a Research ya vu Dokotela a Yunivhesiti.Hloko yamhaka ya kulava kutwisisa aku khunguvanyeseka kama hanyelo avanhu na svamisava nasvikumiwa svanhova a Great Limpopo Transfrontier Park andawini ya Makuleke na Sengwe.A research leyi itakota kupfuna avanhu vandau leyi himathirhelo asvamisava nasvimwana.Makombeliwa akunipfuna hi nkarhi wawena hi kuhlamula mivutiso leyi.

Hlamulo yawena ayinga bsveliwi hambi kuvonisiwa vamwana vanhu.Hlamulo yeresearch tsena,lesvi uhleketako namavonele awena kalesvi sviyendlekako andawani utsamako khona.Avito rawena aringavutisiwi hambi nasvimwana ungalavi kuhlamula.Wakhombeliwa akuhlamula himatimba awena hikwawo akuvonisa lesvi sviyendlekako andaweni yawena.

Akuhlamula mivutiso leyi kuyendliwa hikuti lavela nakulava kawena. Asvibhohi kuhlamula loko ungalavi. Wakhombeleliwa aku loko kuna svimwana lesvi ulavakho kuvutisa nakutiva wa kota kufona hambi ka email layinga hehla kaphela leli.

Nikhesile ngopfu hinkharhi wawena wakuhlamula a mivutiso leyi.

Darlington Muzeza

PhD Researcher A Mwinyi wa Research



Cape Peninsula University of Technology Faculty of Applied Sciences Department of Environmental and Occupational Studies PO Box 652 Cape Town 8000 Cell phone: +2773 993 9941 Email: <u>darlymuzeza@gmail.com</u> 210227028@cput.ac.za

DEAR RESPONDENT

This study is part of my doctoral research. The research topic seeks to understand the impact of governance institutions on communities' livelihoods and sustainable conservation in the Great Limpopo Transfrontier Park (GLTP): The study of Makuleke and Sengwe communities.

The information that will be provided in this study will assist in the understanding of the impact of governance regimes on livelihoods and local capacities to manage natural resources that will provide a basis for the design of a synergizing resource governance model, and yield recommendations that seek to advance both local livelihoods and realization of sustainable conservation objectives of natural resources in transfrontier conservation areas. I therefore, kindly seek for your help to answer this questionnaire to achieve the research purpose.

The study findings are envisaged to assist policy-makers in conservation to adopt resource governance regimes with a view to improve rural community livelihoods and locally specific conservation of natural resources for sustainability among residents living inside and or adjacent to transfrontier conservation areas. The intention is to indicate areas for improvement in the governance of natural resource that straddle geopolitical boundaries, which in many cases, are intriguingly complex and difficult to deal with because of complex human-environmental interaction peculiarities, and competing resource needs among stakeholders.

Your answers will be used for academic purposes and the ideas, responses, opinions and assertions that will be expressed, will be treated with high degree of confidentiality and privacy. No names will be identified with particular statements. While the results of this study will be published, it is of utmost importance to provide information that is as accurate as is possible.

Participation in this survey is voluntary and anyone may withdraw at any time. Please kindly complete all the questions. Should you require any clarification, please feel free to contact me by phoning or e-mailing me at the details indicated above.

Thank you in anticipation of your support to complete the questionnaire.

Darlington Muzeza

PhD Researcher

APPENDIX 3: HOUSEHOLD QUESTIONAIRE

SECTION (1): AMAYIMELE AMUMITI.

♦ Wakhombeliwa kuhlamula mivutiso ka xi khombiso lexi (□) hikutsala atiki (✓) hambi kuhlamula kandawu yotsalela.

1. A xi nyimo shawena.

N'wanuna	
N'wasati	

2. Malembe awena wotsvariwa.

18-25	26-30	31-35	36-40	Over 40+

3. Ashikolo shawena chiherelile kwi?

A primary education Grade 7	A secondary- Forms4-6	A Diploma	Bachelor degree	A Masters degree	A PhD	Post PhD

4. Nhtiro wawena uyenhlako svosvi huwihi?

Warhima	Utichara	Una Binzu	Un'wasati walakhaya
Svimwana (Hlamusela)			

5. Unamalembe mangani kanthiro lo uyenhlako svovi?

1-5	6-10	11-15	16-20	21-25	above 25+

6. Unthira njani kanthiro lo uyenhlako svovi?

Himinkhari mimwana loko svobhoha	
Nkharhi umwana na umwana	

7. Umuhlobo mani?

UmuTsonga	UmuVenda	UmuNdebele	UmuShona	UmuNdau	Svimwana (Hlamusela)

8. Uvalavula shihlovo mani minkhari yotala?

Xi Tsonga	A xi Venda	A xi Ndebele	A xi Shona	A xi Ndau	Svimwana (Hlamusela)

SECTION (1): GENERAL HOUSEHOLD PROFILE

- ◆ Please kindly answer the questions by putting (✓) in a relevant square (□) or by writing your answers in the space provided.
 - 1. Gender

Male	
Female	

2. In which age categories do your belong?

18-25	26-30	31-35	36-40	Over 40+

3. What is your highest level of education?

Primary education Grade 7	Secondary- Forms4-6	Diploma	Bachelor degree	Masters degree	PhD	Post PhD

4. Which is your current occupation?

Farmer	Teacher	Trader	Housewife
Others (specify)			

5. How many years of experience do you have in your above-mentioned occupation?

1-5	6-10	11-15	16-20	21-25	above 25+

6. Are you part-time or full-time in this profession?

Part-time	Part-time				
Full-time					
7. Which of the following ethnic identities				tities do y	ou associate yourself most?
Shangaani	Venda	Ndebele	Shona	Ndau	Other (Specify)

8. Which language do you mostly speak?

Shanganni	Venda	Ndebele	Shona	Ndau	Other (Specify)

9. Wena Uxirho xihi andangwini/amutini lowu?

Bava wamuti walakhaya,	Bava wamuti kambe utsama a nthirweni	Uhava Nuna kambe kusati (Ufeliwe)	Umwasati vaTimwingi Iamutini	Umwasati na Jaha angavasati lamutini
Svimwana (Hlarr	nusela)			

10. Mwinyi wamuti lowu utsvaliwe kona la andawini leyi?

Hisvona	Ahisvona

11. Wena Utsvaleliwe kwihi?

In this village in the my district	
In another village not in this district	

12. Loko ka uhama a handle ka dolobsvi lebsvi ufikile rhinhi kambe utile yi mhaka yayini?

Lembe	
A mhaka	

9. Which of the following categories best describes your position as head of the household?

Male married, resident	Male married, working away	Divorced or widowed,	Female with married daughters at the households	Female with married sons at the households
Other (please sp	ecify)			

10. As the head of the household, were you born here?

Yes	No

11. May you specify where you were born?

In this village in the my district	
In another village not in this district	

12. If you migrated from another province and district, when did you move this village and why?

Year	
Reason	

SECTION (2): KURHIMIWA KASVALAMASIMWINI AMUMITINI.

• Wakhombeliwa kuhlamula mivutiso ka xi khombiso lexi (□) hikutsala atiki (✓).

13. Amasimwini amwina lamutini mirhima yini lo svodhiwa?

Achifake	Amavele	Millet	Rapoko	Ti Soya Beans	Svimwana (Hlamusela)

14. Amasimwini amwina lamutini mirhima yini lo svo xavisa?

ACotton	Afole	Millet	Rapoko	Ti Soya Beans	Achifake	Svimwana (Hlamusela)

Svamasimwini lesvi mikumako miyendla yini hisvona? (Hlamula mivutiso ka xi khombiso lexi (\Box) hikutsala atiki (\checkmark)

	Domestic use	Coi	mmercial use	Fee	ding livestock
A Cotton					
Afole					
Amavele					
Rapoko					
Soya Beans					
Achifake					
Svimwana (Hlamusela)					
Svimwana (Hlamusela)					

15 Asimu yawena yorhima ayiyahombe svinganjani katihekitas(ha) atshako kalembe la 2002 la kungasula ulongwa bsva Great Limpopo Transfrontier Park?

1-5 ha	5-10 ha	10-15 ha	15-20 ha	20-25 ha	25-30 ha	Svimwana (Hlamusela)

SECTION (2): LIVELIHOOD CROPS GROWN

Please answer the questions by putting (\checkmark) in a relevant square (\Box) or by writing your answer in a space provided.

13. What food crops do you usually grow as a household?

Maize	Sorghum	Millet	Rapoko	Soya Beans	Others (specify)

14. What cash crops do you usually grow as a household?

Cotton	Tobacco	Millet	Rapoko	Soya Beans	Maize	Others (specify)

15 What do you produce the crops for? (Please indicate by ticking (✓) the relevant use ahead of each crop mentioned)

	Domestic use	Commercial use	Feeding livestock
Cotton			
Tobacco			
Millet			
Rapoko			
Soya Beans			
Maize			
Others (specify			
Others (specify			

16 How much land in hectares (ha) would you require for cropping before 2002 when the Great Limpopo Transfrontier Park was established?

1-5	5-10	10-15	15-20	20-25	25-30	Others (specify)
ha	ha	ha	ha	ha	ha	

17 Wankesa na ankhuri ubsveliwe naku mitivisiwe hi pakheliwa kamisava ya Great Limpopo Transfrontier Park nayatshami vendawu?

Aninkheselaninasvona	Ahisvona	Anisvitivi	Hisvona	Nankheselana nasvona

18 Kusukela lembe la 2002 masunguleni ka Great Limpopo Transfrontier Park,andawu yawena ya masimu yamirhingana na?

Hisvona	Ahisvona		

19 Murhima andawu yahombe svinganjani svosvi yamasimu eku mikota ku upfisa?

1-5 ha 5-10 ha 10-15ha 15-20ha 20-25 ha 25-30ha 30-35ha 35-40ha Svimwana (Hamusela) 0	-											
	ſ		5-10 ha	10-15ha	15-20ha	20-25 ha	25-30ha	30-35ha	35-40ha			
	Ē									(inaniacola)		

Tingava ti mhaka tayini tito vangela aku laveka kamimwana misava la kutsamisekeni kamwina?

Kustvaliwa ka svimwana svihlangi naku laveka katisimu takurhima.	
Kuta kavamwani avanhu hanhle kandau leyi svitovangela kulaveka kandawu yotsama nakurhima.	
Amasimu angaha upfi svona,manje kulaveka akukhulisiwa kamisava yamasimu	
Kuhlahliwa kaphunga kuyendlela manwani masimu.	
Misava yahina ayingechenji leyi hingatsemeliwa yona ewuhosini.	
Svimwana (Hlamusela)	

21 Mitsamile muva nahlupheko hikukuma andawu yorhingana yakurhima na?

Hisvona	Ahisvona

22 Loko sviri svona,ku u pfisa kamwina ka svalamasumwini kuchenjile kanjani kusukela lembe la 2002?

Kahombe ngopfu	angopfu	Aphati naphakati				
Svimwana (Hlamusela)						

16 Do you agree that you were consulted when use, allocation and sizes of land were determined when the park was established in 2002?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree					

17 Since 2002 when the Great Limpopo Transfrontier Park was established, has demand for land required for cropping changed in your family.

Yes	No

18 How much land do you require now for the crops you usually produce?

1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	Others (specify)
ha	ha	ha	ha	ha	ha	ha	ha	

19 What could be the possible reasons for the increase of need for more land in your community?

20 Have you experienced limitations regarding access to land for cropping?

Yes	No

21 If yes, how has it affected crop production for your livelihood since 2002?

	p	
Very huge	Huge	Moderate
Other (please specify)		

SECTION 3: MITHIRHELE AMISAVA NAMWINYI WAONA.

21 Himativele awena, misava leyi yamani lakutshameni na?

yaGovernment	Ya Hosi	Ya Vatshami vandau	Ya Private	Ya Umwana na umwana	Svimwana (Hlamusela)

22 Minkhari yo tala nimani atsemelako nakunyika misava andawini leyi?

AGovernment	A Hosi na vakomi vatibhuku	Ti Private operators	Ti Department of Parks and Wildlife Management	Kuhava	Umwana naumwana watitsemela asimu yayena	Svimwana (Hlamusela)

23 Hikuvona kawena amasimu amwina otshama na kurhima amiringana na?

Hisvona	Ahisvona

24 Loko svingahisvona mitayokhuma kwiho amisava yo tshama na ku rhima?

Ka misava ya Park	
Hi tahuma andawini leyi hifamba hilava kungana misava	
Hi thirisa yona leyi misava hingana yo tsena	
Hita nkombela hambi aku shava misava kavamwana	
Others (specify)	

25 Misava leyi mingakayona svosvi miyi kumile njani?

1	l tshaka yavastvari			
2	Hi yi tsemeliwe hi Hosi			
3	Hi yi tsemeliwe hi Government			
4	Hi yi Shavile			
5	Hi yo Lomba			
6	Hi yo ti tsamela hanhle kanawu			
7. S	7. Svimwana (Hlamusela)			

SECTION 3: LAND HOLDINGS AND LAND USE

21 To your knowledge, to whom does the land belong in this community?

	Government	Traditional authority	Community	Privately owned	Open access	Other (specify)
ĺ						

Who mainly determine the use, the size of plots, and allocation of the land to households in your community?

The Government	The traditional authorities	Private operators	Department of Parks and Wildlife Management	No one	Self	Other (specify)

22 Do you think you have enough land for habitation and crop production?

Yes	No

23 If no, how do you think you will get the land you require for habitation/crop production?

From park land	
Will move from the community and get land elsewhere	
Will continue using the small piece of land	
Will rent/leasing form other members of the community	
Others (specify)	

24 How did you get the land you currently use?

_		
1	By inheritance	
2	Given by traditional leaders	
3	Given by Government	
4	Bought it	
5	Renting/leasing it	
6	Simply occupied it with no one's authority	
7. C	thers (specify)	

Tsala mahlupeko mambirhi la ungahlangana nawona kakuva namisava kusekela kusungula ka Great Limpopo Transfrontier Park (GLTP),sungula hihlupheko lahombe.

Hlupheko losungula	
Hlupheko Lawumbirhi	

25 Hi mavonele awena kusungula ka GLTP kufika svovi manthiriseliwo amisava lamutini achenjile na?

Hisvona	Ahisvona

26 Loko svihi svona hlawula lesvinga chinja.

F

Minthiro yamisava le inga chinja	"Hisvona"	"Ahisvona"
Aku hlota kasvi Hari a gemwini CAMPFIRE/CPA		
Kurhima kachikafu amasimwini		
Misava ya kuhanzisa		
Akuhanza asvodhyiwa svaphunga		

27 Hi mavonele awena,wankeselana nasvona na, aku mahanyelo ala mutini achenjiwe hikusungula ka GLTP lembe la 2002 himathiriseliwe asvilo svamusava na?

Aninkeselani nasvona	Ahisvona	Anisvitivi	Hisvona	Na nkesalana nasvona

28 Mavutisiwa na hehleni ka kuphakhiwa kamasimu natimwana timhaka tamisava leti tikotako kuchenja mahanyelo amwina andawini?

Aninkeselani nasvona	Ahisvona	Anisvitivi	Hisvona	Na nkesalana nasvona

29 Loko svihi svona hlawula andlela yithirisiwako minkhari yotala.

	Hisvona	Ahisvona
Ameetings la kutshameni		
Munyimaleli wamwina ti Councillors		
Munyimaleli wamwina ti Hosi		
Umwana naumwana wavutisiwa		
Svimwana (Hlamusela)		

25. Name two biggest problems you are facing concerning securing land since the establishment of the Great Limpopo Transfrontier Park (GLTP) in order of priority.

Problem 1	
Problem 2	

26 In your view, has the land related livelihood activities changed since the inception of the GLTP?

Yes	No

27 If yes, which of the following activities changed?

Land related activity that changed	"Yes"	"No"	
Community wild game ranching through CAMPFIRE/CPA			
Crop farming			
Grazing of livestock			
Harvesting of forest products			

28 In your view, do you agree that household livelihoods have changed since the enactment of new governance regimes over natural resources in the GLTP from 2002?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

29 Do you get involved in decision making regarding land use policy-making processes that affect your livelihood practices?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

30 If "Yes," which of the following describes the process of decision-making process?

	Yes	No
Community consultation meetings		
Representation by local authority Councillors		
Representation by Chiefs		
Individually consulted		
Others (specify)		

30 Kamuvutiso ungahehla, loko svingahisvona, hlamusela mingavutisiwi kakuphakhiwa kamisava andawini?

Mhaka 1			
Mhaka 2			

31 Loko svoyendleka ku wafamba usuka kandawu leyi ungakayona, yingava yi mhaka yayini?

Amhaka yahombe	
Imwana mhaka	

32 Ungatwa njani kusuka kandawu leyi unga kayona svosvi?

Svinga ni vava ngopfu	
Svingava svingari kahle	
Svinga nitsakisa ngopfu	
Svikahle	

33 Hlamusela ku yimhaka yayini?

Hi takuma mimwana misava	
Hi hava imwana ndawu yokuya.	
Misava leyi yatsaka nakuphahla kahina.	
Hiyendlela andawu ya Park	
Hita kuma andawu yingakahle kaleyi hingakayona svosvi	
24. If the response for guestion 24 is "No" give two response for not being in	walvad in dealatan makin

31 If the response for question 31 is "No", give two reasons for not being involved in decision-making processes.

Reason 1	
Reason 2	

32 If you have to leave the land, you occupy or live on, what would be the reason? (Give two reasons in order of priority).

Biggest reason 1	
Reason 2	

33 How do you feel about moving from your land you currently occupy?

Strongly negative	
Negative	
Strongly positive	
Positive	

34 Why would you feel like that?

SECTION 4: SVIHARHI SVALAMUTINI NANDAU YAKUHANZELA.

34 Mikheseleliwa kuva na svihari svingani lamutini kusukela ka GLTP kusela lembe ya 2002?

Kutala kasvihari kamalembe khume angahunza.										
Svihari	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Tihomu										
Timbuti										
Tinyipfu										
TiDonki										
Tinguluve										
Tinsvana										
Tihuku										
Svimwana										
25 Svib	orbi ovo	lomuniti	ni oviho	nzolo kh	ihi?	•	•	•	•	

35 Sviharhi svalamunitini svihanzela khihi?

Amusaveni walamutini	
A park lasvihari	
Kumwana la ndawini	
Amusaveni yoshaviwa	
Kamisava ya Government	
Svimwana (Hlamusela)	

36 Misava yamwina ya khurisela svihari ya rhingana na?

Hisvona	Ahisvona

37 Loko svingari svona, yini mhaka?

Mhaka yosungula	
Mhaka yaumbirhi	

38 Tsala mahlupheko la umavonaka kusukela kamasungileni a GLTP hehleni kamasimu ekuhanzisela svihari.

Hluphekho losungula	
Hluphekho laumbhirhi	

SECTION 4: LIVESTOCK PRODUCTION AND GRAZING

35 How much in terms of livestock allowed for keeping per household over the last ten years

when the GLTP was established?

Number	Number of animals owned over a ten year period									
Animal	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Cattle										
Goats										
Sheep										
Donkeys										
Pigs										
Dogs										
Chickens										
Others										

37 Where do your animals usually graze?

Family grazing land				
In the park				
Community grazing land				
Rented land				
Government grazing land				
Others (specify)				

38 Do you think you have adequate grazing pastureland for your animals in this area?

Yes	No					

39 If "No" why not?

Reason 1	
Reason 2	

40 What problems have you been facing with animal rearing concerning grazing after the establishment of the GLTP?

Problem 1	
Problem 2	

41 Makuma mali na kusungula ku aka axivala xa svihari svalamutini?

Hisvona	Ahisvona

42 Kamalembe khume angahunza amuna svihari svotala njani? Tatisa andawini la inga khombiwa.

Kutala ka	Kutala kasvihari kamalembe khume angahunza.									
Svihari	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Tihomu										
Timbuti										
Tinyipfu										
TiDonki										
Tinguluve										
Tinsvana										
Tihuku										
Svimwana										

43 Ka misava yakurhisela asvihari svamwina, yarhingana na nakutala kasvona?

Hisvona	Ahisvona

44 Asvihari svamwina svalamutini asvidhyiwi na hi ti ngonyama nasvimwana svihari sva phunga?

	Hisvona	Ahisvona
41	Do you get funding for livestock herd buil	ding?
	Yes	No

42 How many animals have you been keeping in the last ten years? Details of livestock kept over ten years period.

Number of animals owned over a ten year period										
Animal	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Cattle										
Goats										
Sheep										
Donkeys										
Pigs										
Dogs										
Chickens										
Others										

43 Considering the available grazing land, would you consider your livestock being too many in your area?

Yes	No

44 Do you face any threat from wild animals over your livestock?

Yes	No

SECTION 5: AMATI AKUTHIRHISA AMUMITHINI/TIDLWINI

45 Amati akuthitirhisa mumakhuma khihi?

Tindawu Tamati	Aphfuka akusuka andlwini	Kutala katindau tamati	Amwinyi
Aphitsini			
Amu mughodini			
A nambweni			
A xi nkovaneni			
Amati ahumako ar bsveni			
A damwini			
Amati aphfula			
Kumwana (Hlamusela)			

46 Amati akuthitirhisa lamutini kasvihari, nakucheleta agadeni,mumakhuma khihi?

Tindawu Tamati	
Aphitsini	
Amu mughodini	
A nambweni	
A xi nkovaneni	
Amati ahumako ar bsveni	
A damwini	
Amati aphfula	
Kumwana (Hlamusela)	

47 Amati akhumeka ankarhi unganjani?

Minkarhi hikwawo kalembe	
Hi minkari wakurhima,kambe amati arhingana.	
Hi minkari wakurhima kambe amati angarhingani	

48 Tindau tamati tihlakomeliwa nimani?

Hivatsami va ndau	
A Government	
Ti National Parks	
Ti National water authority	
Svimwana	

SECTION 5: WATER FOR HOUSEHOLD LIVELIHOOD

45 What sources of water do you usually use?

Source	Estimated distance from home	Number of sources	Ownership
Borehole			
Open protected well			
River			
Stream			
Spring			
Dam			
Rain			
Others (specify)			

46 Which sources of water do you rely on most for watering your crops, livestock and domestic use?

Source	
Borehole	
Open protected well	
River	
Stream	
Spring	
Dam	
Rain	
Others (specify)	

47 How reliable is water supply for household use?

Water plentiful all year	
Water seasonal but plentiful	
Water seasonal and sometimes limited	

48 Who control water sources in this community?

The Community members	
Local Government	
National Parks	
National water authority	
Other	

49 Kusukela kufika ka GLTP kalembe la 2002,kukumeka kamati akuthirisa lamutini achenjile na?

Hisvona	
Ahisvona	

50 Hlamusela loko amati angahakumeki svona.

Hlamuselo	
yosungula	
Hlamuselo	
yaumbirhi	

51 Washuriseka na hikukumeka kamati akuthirhisa la mutini?

Anishurisekangi svinene	Nishurisekile	Anishurisekangi

SECTION 6: SVIHARHI NA MISINYA SVAPUNGA.

A) TIMHAKA TASVIHARHI NAMIHOLO KAVANHU VANDAWU YAMUGANGA

52 Hikutiva kawena sviharhi lesvi svilaveka njani laku tshameni andawini leyi?

Sviharhi svanhoveni/svaphunga	Kulaveka kasvihari andawini	
Ssssshjhasjhbn D Svddhhbelow)	Svilaveka Ngopfu	Asvilaveki Ngopfu
Andlovu		
A Nyarhi		
A mhuti		
chiphenhe		
A Khala		
Angonyama		
Amboma		
A mpala mpala		
Svimwana (Hlamusela)		
Svimwana (Hlamusela)		
Svimwana (Hlamusela)		

49 Since the GLTP was formed in 2002, are you restricted to access water for household use?

Yes	
No	

50 Explain if the water is restricted.

Explanation 1	
Explanation 2	

51 Are you satisfied with the way water is governed in view of your household water requirements?

Strongly Dissatisfied	Satisfied	Unsatisfied

SECTION 6: WILDLIFE AND FOREST RESOURCES A) WILDLIFE ISSUES AND BENEFITS TO COMMUNITIES

52 According to your knowledge, how important or unimportant are the following animals in your community concerning benefiting you?

Wild animal (Name others in the space provided below)	Levels of importance or unimportance	
	important	Unimportant
Elephants		
Buffaloes		
Kudus		
Bush bucks		
Lions		
Leopards		

Hippopotamus	
Impala	
Other (specify)	
Other (specify)	
Other (specify)	

53 Sviharhi lasvingahehla svamani?

Svamunhu hi kwaye	
Sva National Parks	
Asvitivikani	

54 Kuna lesvi musvikumaka hehleni kasvihari svanhova/svaphunga?

Hisvona	
Ahisvona	

55 Loko svihi svona hlamusela ti benefit/amuholo hambi ku ukuma yini?

Amuholo wosungula	
Amuholo yawumbirhi	
Amuholo yawunharhu	
Amuholo yawumune	
Amuholo yawuthlanu.	

56 Hambi milahlekeliwa hi svamasimwini kambi sviharhi svalamutini himhaka yasviharhi svaphunga?

Hisvona	
Ahisvona	

57 Loko svihi svona hlamusela.

Xi Harhi xinga luza	Hlamusela ku xi harhi xiluzile njani himhaka yasviharhi svanhova
Xi Harhi xosungula	
Xi Harhi xa wa u mbhirhi	
Xi Harhi xa wa u nharu	
Xi Harhi xa wa u mune	
Xi Harhi xa wa u thlanu	

Hlovo yala svama simwini svinga luza	Hlamusela ku sva la masimwini xiluzile njani himhaka yasviharhi svanhova
Xi rimiwa xo sungala	
Xi rimiwa xa wa u mbirhi	
Xi rimiwa xa wa u nhari	
Xi rimiwa xa wa u mune	
Xi rimiwa xa wa u thlanu	

53 Who own wild animals mentioned above?

Community	
National Parks	
None	

54 Do you benefit from wildlife related activities and proceeds?

Yes	
No	

55 If yes, mention the benefits in order of importance.

Benefits 1	
Benefits 2	
Benefits 3	
Benefits 4	
Benefits 5	

56 Has your household in the past suffered any losses of (a) domestic animals and (b) crops to wildlife?

Yes	
No	

57 If yes, kindly mention the losses you encountered in the table below.

Type of domestic animals lost	Type of problem wildlife that the crops were lost to
Animal 1	
Animal 2	
Animal 3	
Animal 4	
Animal 5	

Type of crop lost	Type of problem wildlife that the crops were lost to
Crop 1	
Crop 2	
Crop 3	
Crop 4	
Crop 5	

58 Warhihiwa na kalesvi uta uluzile?

Hisvona	
Ahisvona	

59 Mahlota svihari svapunga landawini leyi?

Hisvona	
Ahisvona	

60 Hisvihi asvihari svalanhoveni lesvi muhlotako lamunitini?

Svihari	Kheselo yo hlota	
	I lanaweni	A hanhle kanawu
Xi harhi 1		
Xi harhi 2		
Xi harhi 3		
Xi harhi 4		
Xi harhi 5		
Xi harhi 6		
Xi harhi 7		
Xi harhi 8		
Xi harhi 9		
Xi harhi 10		
Svimwana (Hlamusela)		

58 Do you get compensation for the losses?

Yes	
No	

59 Do you hunt wild animals from the park?

Yes	
No	

60 What types of animals do you hunt at household level?

Type of wild animals hunted	Authority to hunt wild animals	
	Authorised	Unauthorised
Animal 1		
Animal 2		
Animal 3		
Animal 4		
Animal 5		
Animal 6		
Animal 7		
Animal 8		
Animal 9		
Animal 10		
Others (specify)		

61 Hikuvona kawena akuhlota a Game park kayehla na?

Hisvona	
Ahisvona	

62 Himavonele awena vatshami vandau leyi vangakhuma njani asvihari svakuhota aneweni?

Aku hlota kungala naweni wandau kakushujela andangu/amuti	
Kuhota naweni kaulongwa dsva Tourism namiholo yo hlota	
Kuhlota ka vama Safari hanhle ka vatshami vandau	
Kuhava	

63 Watsaka na hi mahloteliwe ayelindlwiwako kahliharhi svaphunga namuholo utako kawena?

Hisvona	
Ahisvona	

64 Kuna ulongwa kambe ti Policy nati Programme tingakona na hokuhlotiwa kasvihari kabhinzu andawini yawena na?

Hisvona	
Ahisvona	

65 Loko svihi svona hlamusela.

Commercial Policy yosungula	
Commercial Policy yaw a mbirhi	
Commercial Programme yosungula	
Commercial Programme yaw a mbirhi	

66 Kuna ulongwa kambe ti Policy nati Programmes tingakona hikunthirisiwa kasvihari kabhinzu andawini yawena na?

Hisvona	
Ahisvona	

61 From your opinion, do you think hunting by the community would decrease the wildlife in the park?

Yes	
No	

62 What do you think should be the best way of exploiting wildlife in this area by the community?

Community regulated subsistence hunting	
Community tourism driven trophy hunting	
Safari hunting by private operators independent of the community	
Others (specify)	

63 Are you happy with the current hunting of wildlife and the benefits coming to you?

Yes	
No	

64 Are there any policies and programmes for commercial use of wildlife in your community?

Yes	
No	

65 If yes, kindly mention them.

Commercial Policy 1	
Commercial Policy 2	
Commercial Programme 1	
Commercial Programme 2	

66 Are there any policies and programmes for domestic use of wildlife in your community?

Yes	
No	
67 Lake ovibi ovene blemusele	

67 Loko svihi svona hlamusela.

Commercial Policy yosungula	
Commercial Policy yawa umbirhi	
Commercial Programme yosungula	
Commercial Programme ya wa umbirhi	

68 Hikuvona kawena misava yi phakiwe kahle phakati ka ti Park navanhu kendau yamasimu nasvihari svakufuyiwa?

Hisvona	
Ahisvona	

B) KUKUMEKA KASVAMISINYA NAPHUNGA NAMATHIRHISELIWE ASVONA.

69 Utsama uthirhirisa amisinya na mitsi aphakhati kambe nakusuhi na GLTP?

Hisvona	
Ahisvona	

70 Loko svirhi svona Hlamusela.

	Hisvona	Ahisvona
Kuhlota		
Amimitsi yamhirhi		
Asvokundya		
A kuhanza matamani		
A ti mhanze ta ku aka		
A mahlahla/A ti hunyi		
A minala yakuluka atinzala		
Svimwana (Hlamusela)		

71 Kululiwa ka tinzala ku pfuna na la amutini?

Hisvona kapfuna	
Akupfuni	

67 If yes, kindly mention them.

Commercial Policy 1	
Commercial Policy 2	
Commercial Programme 1	
Commercial Programme 2	

68 Is land in your community subdivided satisfactorily for wildlife conservation and human activities?

Yes	
No	

B) FORESTS RESOURCES ACCESSIBILITY AND USE

69 Have you been using forest resources inside or adjacent to the GLTP?

Yes	
No	

70 If "Yes," what do you use forest resources?

-	Yes	No
Hunting purposes		
Medicinal use		
Consumption		
Harvesting of mopane worms		
Building materials		
Fuel wood		
Manufacturing of baskets		
Others (specify)		

71 Is the basket industry contributing meaningfully to your livelihood?

Yes	
No	

72 Minga kuma mali muni hikushavisa a tinzala?

US\$

73 Hikuvona kawena kuthirha kaminala kuthirhisiwa kahle na kakulungisiwa ka ti nzala?

74 Loko svingari svona vula asvilo svinharhu svokala zvingayendliwi kahle akutsemiweni kamunala.

Activity 1	
Activity 2	
Activity 3	

75 Ungahlamusela njani mayimele anhova andawini yawena?

Yi kahle svinene	
Ya ha hi kahle	
Yi le kuzameni	
Yi kunyameleleni hikuhathla	
Yi bhihile ngopfu	

76 Who makes decisions about the control, access and use of forest resources in this community?

Ti community association	
Va Rhangeli va Hosi	
Hi va khomi vati Bhuku tahosi	
Ti Parks authority	
I Government	
Svimwana (Hlamusela)	

77 Can you mention how you would make decisions regarding access and control of natural resourcein the past?

Anhlela yosungula	
Anhlela yaw a umbirhi	

78 Svosvi ti Decision takuthirha ka svamisava ti chenjile na kusukela ku fika ka GLTP?

Hisvona	
Ahisvona	

72 State the figure on how much you benefit in monetary terms from selling baskets?

US\$	

73 In your opinion, do you think illala plants are being utilized sustainably for the manufacturing of baskets?

Yes	
No	

74 If no, can you mention three human activities that have led to unsustainable use of illala plants in your community?

Activity 1	
Activity 2	
Activity 3	

75 How do you describe the condition of wilderness in your area?

Excellent condition	
Good condition	
Improving	
Fast disappearing	
Bad	

76 Who make decisions about the control, access and use of forest resources in this community?

Community association	
Traditional leadership	
Local Government authority	
Parks authority	
Government	
Other (specify)	

77 Can you mention how you would make decisions regarding access and control of natural resources in the past?

Decision making 1	
Decision making 2	

78 Currently, has that situation of decision-making changed about control, access and use of forest resources?

Yes	
No	

79 Washurhiseka na hivurhangeleli bwingakona hikuthithirisiwa kasvamisava andawini leyi?

Nishurisekile ngopfu	
Nishurhisekile	
Anishurisekangi	
Anishurhisekanga svinene.	

80 Arhito rawena latwekala na ka ti Decision ta svamisava andawini leyi?

Hisvona ratwakala	
Ahisvona ari twakali	

81 Hambi uyarhisiwa kuthirhisa asvamisava kusuka ka rhangeleli va ti Park andawini leyi?

Ahisvona	Hisvona	
	Ahisvona	

82 Ungalava njani kukuma nakufikeleka ka svamisava andawini yawena?

	Hisvona	Ahisvona
Himayendlelo ahina akhale na kuthirhidsns na CAMPFIRE		
Va Tshami vandawu vafanele va tiendlela ti decision hikuthisiwa kasvamisava		
Namina Anisvitivi		
Svimwana (Hlamusela)		

C) NATURAL RESOURCE GOVERNANCE AND MANAGEMENT: PARTICIPATION

83 Unangatwa hivulongwa bswa GLTP?

Hisvona	
Ahisvona	

84 Utivisiwe nimani kavulonga lebswi?

Ti Parks administration	
Hi ministara ya Government	
Hi mu Dzviti	
Ti Donor	
Himungana	
Ti Councillor	

79 Now are you satisfied with the current governance of natural resources regarding control over access and use of forests and other resources?

Very Satisfied	
Satisfied	
Dissatisfied	
Very dissatisfied	

80 Do you participate freely in deciding about natural resource use in your community?

Yes	
No	

81 Have you had any restrictions regarding natural resource access and use with the conservation authorities in your community?

Yes	
No	

82 How would you want access and control of natural resources to be in this community?

	Yes	No
To continue as we used to in the past under CAMPFIRE		
The community should be part of decision-making over resource access		
I do not know		
Others (specify)		

C) NATURAL RESOURCE GOVERNANCE AND MANAGEMENT: PARTICIPATION

83 Have you ever heard about the GLTP?

Yes	
No	

84 What was your main source of information?

Parks administration	
Government ministers	
Local authority (District Administrator)	
NGOs	
Friend/ Neighbour	
Councillors	

84. La mutini ukhona na angana afambela aminhlangano ya GLTP?

Hisvona	
Ahisvona	
Anisvitivi	

85 Loko svingari svona hlamusela.

Ava kurhambanga	
Awungasvilavi tsena.	
Awutivi himinhlangano yakhona	
Minhlangano yakhona iyenhleliwa akhula ngopfu	
Minhlangano yakhona ya Government na va ti Parks.	

86 Hikutiva kawena nimani akhomako aminhlangano yatemisava andaweni yawena?

······································	
Va Hombe vati Parks	
Aministara yaGovernment	
Ni Mudzviti(DA)	
NGOs(Ti Donor)	
Ti Hosi	
Svimwana (Hlamusela)	

87 Kuna lesvi uyendlako na, hi mathirele navurhangeleli bswa GLTP?

Hisvona	
Ahisvona	

88 Loko svohi svona uyenhla yini kahle- kahle? Hlamusela.

Ukhoma hisvamathirhiseliwo asva misava	
Ukhoma hisva ti Patrol/machingelani wa Park	
Ukuoma hi kurhangelela a Park kambe akuva amwinyi wa Park	
Ukhoma hikuvava mamwani mashaka ti Game Rangers/Avahloti avale nawini	
Svimwana (Hlamusela)	

89 Loko svingarhi svona,hikuvona kawena avanhu vamuganga vafenele vanthirisana na ti Parks/GLTP na?

Hisvona	
Ahisvona	

85 Has a member of your family participated in meetings regarding the GLTP?

Yes	
No	
I do not know	

86 If no, which of the following statements describe your non-participation?

	Yes	No
Never been invited		
We were not interested		
I do not know about the meetings		
Meetings are held far from here		
The meetings are for the government and parks officials		

87 To your knowledge, who hold the meetings regarding conservation of natural resources in the GLTP?

Parks administration	
Government ministers	
Local authority (District Administrator)	
NGOs	
Community leaders	
Other (specify)	

88 Do you participate in the management of the GLTP in any way?

Yes	
No	

89 If yes, which of the following ways describes the exact purpose of your participation?

Participate in resource use	
Participate in patrols of the park	
Participate as owners and partners in park management and administration	
Participate due to some community members being part of the game rangers	
Other (specify)	

90 If no, do you think the community should participate?

Yes	
No	

90 Loko shihi svona,yi mhaka yaini avanhu vamiganga vafanela vakhoma swimwe navulongwa bswa GLTP?

Hi mhaka yaku leyi misava yahina	
A park leyi yafana ku yahina	
Hi mhaka yaku a park leyi ya munhu hikwaye wamuganga.	
Amisvitivi	
Svimwana (Hlamusela)	

91 Loko svingari svona,hlamusela.

Hi mhaka yaku a park ya Government	
Hi mhaka yaku a park aina mwinyi	
Hi mhaka yaku ahisvilavi	
Svimwana (Hlamusela)	

93. Ushurisekile na himathirhiseliwe navurhangeli bsva GLTP?

Nishurisekile svinene	
Svitsamisekile	
Asvitsamisekangi	
Anishurhisekangi svinene	

94 Hi tinhlela tihi leti tifanele ti thitha akuyendlela aku avanhu hikwavo vamiganga vakota kuthirhisana navulongwa dsva GLTP?

Kuhumilela hikuthirhisana na ti Hosi	
Huhumilela himi hlangano navanhu vamuganga lowu	
Kuthirha ka umwana naumwana	
Na khuthirhisana na Committee yavurhangeleli	
Svimwana (Hlamusela)	

95 Avarhangeleli vati Commitee andawini leyi hisva kuthirha hisva misava vahlauliwa njani kambe nimani?

Vavoteliwa hivanhu hikwavo	
Vahlauliwa hi Hosi	
Vahlauliwa hi ti park administrater/varhangeli va ti Park	
Vahlauliwa hi government	
Hi umwana naumwana asvilavelaka/volunteer	
Vahlauliwa hi ti Donar/NGOs	
Svimwana (Hlamusela)	

91 If "Yes," why you think the community should participate?

Because this is our land	
We are part of the park	

Because the park also belongs to the community	
I do not know	
Others (specify)	

92 If no, which of the following best describes your response of having said no?

Because the park belongs to the government	
Because the park has no owner	
We are not interested	
Others (specify)	

93. How satisfied are you with the current resource governance of the GLTP?

Very satisfied	
Satisfied	
Dissatisfied	
Very dissatisfied	

94. In which of the following ways do you think should the community participate in the governance of the GLTP?

Through community leaders	
Through public community meetings	
Participate as individuals	
Participate through management committee representative	
Others (specify)	

95. How are representatives from the community in natural resources management committees selected?

Elected	
Hand picked by the Chief	
Hand picked by the park administration	
Hand picked by the government	
People volunteer	
Hand picked by NGOs	
Others (specify)	

96. Loko svingahisvona Hlamusela.

Hlamuselo yosungula	
Hlamuselo ya wu mbirhi	

SECTION 7: A SENGWE CORRIDOR

97. Wasvitiva na aku avulongwa bsva Sengwe Corridor bsvi endleliwe akhukhomhanisa South Africa Park na Muzambiki Limpompo Park?

Hisvona	Ahisvona

98. Watitiva na ati boundary ta Sengwe Corridor Park kambe la yi helelako kona?

Hisvona	Ahisvona

99. Ikhona na andawini leyi a committe yi thisanako na Sengwe Transfrontier Park?

Hisvona	Ahisvona

100.Muna mahlupheko na hi Sengwe Corridor?

Hisvona	Ahisvona

101.Loko svinhi svona hlamusela mahlupheko lawa?

mahlupheko 1	
mahlupheko 2	
Decision making 1	
Decision making 2	

SECTION 7: SENGWE CORRIDOR

96 Are you aware of the Sengwe corridor established to link South Africa's Kruger National Park and Mozambique's Limpopo National Park?

Yes	No

97 Are you aware of the Sengwe corridor's boundary?

Yes	No

98 Is there a Sengwe Community Transfrontier Park Working Committee?

Yes	No

99 Do you have any concerns about the Sengwe wildlife corridor?

Yes	No

100 If "Yes," what are the concerns?

Concern 1	
Concern 2	

101 Una mimwani mihleketo hambi amahlupheko na hi mhaka ya Sengwe wildlife corridor?

Hisvona	Ahisvona

102 Loko shihi svona,hlamusela mihleketo/amigungulo yawena.

Hlupheko rosungula	
Hlupeko laumbirhi	

103 Uvutisiwe na hi ti mhaka ta kusunguliwa ka Sengwe corridor?

Hisvona	Ahisvona

104 Loko svingari svona, himavonele awena hisvihi svingafanele sviendliwe a kusunguleni?

Xo sungula	
Xa wa umbirhi	

105 Ungalava ke ahurhi a Sengwe corridor yi pfaleliwa afenzini hambi ku ingapfaleliwi?

Hisvona	Ahisvona	Anisvitivi

106 Loko svihi svona yi mhaka yayini ulava ku a corridor leyi ipfaleliwa?

Mhaka yosungula yaku ipfaleliwa	
Mhaka yaumbirhi yaku inga pfaleliwi	

102 Were you consulted in the creation of the Sengwe wildlife corridor?

Yes	No

103 What do you prefer should have been done?

Preference 1	
Preference 2	

104 Would you prefer the Sengwe corridor fenced or unfenced?

Yes	No

105 What are your reasons for wanting it fenced?

Reason 1 for wanting it fenced	
Reason 2 for not wanting it fenced	

106 Would you prefer the Sengwe corridor fenced or unfenced?

Yes	No	Do not know

107. What are your reasons for not wanting it fenced?

Reason 1 for wanting it fenced	
Reason 2 for not wanting it fenced	

107 Himavonele awena avutomi bsva vanhu namahanelo avona bsvita chenjiwa njani himhaka ya Park na Sengwe corridor?

Minthirho yamisava	Minthirho svosvi	yamisava	Minthiro yamisa malembe atako	
	Hisvona	Ahisvona	Hisvona	Ahisvona
A misava yaku vakela kotshama				
Misava ya masimu				
Misava ya kuthisela				
Amati asvihari svamuthini				
Amati asvala muthini				
Kuhlotiwa kasviharhi svaphunga hi CAMPFIRE				
Svihanza- hanza svofana naminala				
Kutsemiwa ka ti mhanze				
Kukumeka kati hunyi				

A kunjova		
Kufikelela kati ndau to phahla		
Svimwana (Hlamusela)		

Himavonele awena kuyendliwa ka Tourism la a andawini leyi Kutakupfuna njani wena?

Hisvona	Ahisvona	

110 Utakota kupfuneka njani hi tourism leyi? Hlamusela.

Benefit from tourism 1	
Benefit from tourism 2	
No benefit from tourism 1	
No benefit from tourism 2	

111 Hi kuvona kawenana niva mani vafanelako akurhangelela avulogwa bsva Sengwe

A Hosi	Ti Village (Village Development Committee)	Ti Ward Developmen t Committee	Ti Councillors	Ti RDC	Ti National Parks	Ti National TFCA Committee	Svimwana (Hlamusela)

108 Do you foresee natural resource use for various livelihood activities being affected by the establishment of the park and the Sengwe Corridor? Tick "Yes" or "No" on the table below.

Type of use	Current	Use	Use cont	inued.	
	Yes	No	Yes	No	
Land for housing					
Land for cropping					
Grazing for livestock					
Water for livestock					
Water for household use					
Harvesting of wildlife through CAMPFIRE					
Harvesting of forestry products like illala					
Collection of poles					
Collection of fuel-wood					
Fishing					
Access to cultural centres					
Other (specify)					

109 Do you think tourism development in your community will benefit you?

Yes	No

110 In what way tourism benefits or not benefits you?

Benefit from tourism 1	
Benefit from tourism 2	
No benefit from tourism 1	
No benefit from tourism 2	

112 Which institutions do you think should control the Sengwe Corridor?

Chief	Village (Village Development Committee)	Ward Development Committee	Councillors	RDC	National Parks	National TFCA Committee	Other (specify)

113 Wakuma amiholo na ka vulongwa bsva GLTP? Hlamusela.

Amuholo wosungula 1	
Amuholo waumbirhi 2	

Mahalelo

WAKHOMBELIWA AKHUHLERHISA AMIVUTISO LEYI KAMWINYI WA RESEARCH.

113 Do you benefit from the GLTP, if so, in what ways?

Benefit 1	
Benefit 2	

The <u>END</u> of the questionnaire Thank you for your co-operation

PLEASE RETURN THE COMPLETED QUESTIONNAIRE TO THE RESEARCHER

A Signature for Consent...... Date......

APPENDIX 4: CONSERVATION ORGANIZATIONS QUESTIONNAIRES

Guide Questions to Interview with Conservation Organizations: Please kindly answer the questions below.

1. Briefly, give an outline of your organisation's mandate?

Explain:

2. When and how did your organization began to be involved in the affairs of the Great Limpopo Transfrontier Park?

Explain:

3. What activities in specific terms was or is your organization involved in the GLTP?

Mention

4. What motivated your organization to be involved in Makuleke, part of the GLTP?

Explain:

5. In your opinion, at what level has your organization been involved in thegovernance of natural resources in the GLTP?

Explain you answer:

6. Do you think the local people are involved in the governance of natural resources in the GLTP?

Explain your answer:

7. How do you link your organization's activities with local people's livelihood expectations?

Explain you answer:

8. In your opinion, do you think much has been done by your organization to support the affected communities by the GLTP to advance their livelihoods?

Explain you answer:

9. What form of support have you been giving to communities from your organization's involvement in the GLTP?

Mention it 1

10 What has been your level of involvement in the governance of natural resources since 2002 when the GLTP was established?

Explain your answer:

11 How does your organization facilitate the participation of local communities in the governance of natural resources to derive benefits?

Explain your answer:

12 In your view, have the natural resource driven livelihoods been enhanced in the affected communities since 2002 when the GLTP was launched?

Explain your answer:

13 In your view, is the current park model viable in realising community livelihoods and sustainable conservation of natural resources?

Explain your answer:

14 Which institutions do you work with at community, national, regional and international levels in the conservation of natural resources in Makuleke area?

Explain your answer:

The <u>END</u> of the questionnaire Thank you for your co-operation PLEASE RETURN THE COMPLETED QUESTIONNAIRE TO THE RESEARCHER

APPENDIX 5 QUESTIONAIRE FOR MAKULEKE: WORKING FOR WATER NGO

15 Please kindly answer the questions below.

What is your mandate with regards to natural resource issues in Makuleke Communal Property Association 1. in this part of the GLTP?

1.	In your opinion, what role have you played regarding supporting the community to benefit fully from
	the natural resources in this area?

Explain you answer:

2. What types of benefits and dividends in material and monetary terms, have been accruing to the community since 2002 when the GLTP was established?

Benefits

Explain:

3. As an institution, how do you describe your relationship with the community in terms of your involvement in the governance and management of natural resources in the GLTP since 2002?

Explain your answer:

1. In your view, has the community natural resource driven livelihoods, been enhanced since 2002?

Explain your answer:

4. From your point of view, do you think tourism as a livelihood strategy, should be the sole livelihood option for communities living inside or adjacent to the GLTP?

Explain your answer:

What other livelihood activities have been happening in Makuleke community? 5.

6. What is your position regarding community natural resource claims in terms of access, control and use rights since 2002 to date with respect to Communal Property Association in this part of the GLTP? Explain your answer

7. Do you think natural resources are declining as a result of local people's human activities?

Explain your answer:

List them where possible.

8. From your knowledge, which livelihoods options would you suggest are appropriate with conservation in Makuleke part of the GLTP?

State livelihood practices:

9. In your opinion, are the current livelihood practices compatible with conservation of natural resources in the GLTP?

Yes 🗆	1	No	
Explain your answer :			

10. Do you have a policy position to ensure to ensure the community is protected from unfair losses of their livelihoods due to changes in access and control rights over natural resources?

Explain	your answe	۶r
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The <u>END</u> of the questionnaire Thank you for your co-operation PLEASE RETURN THE COMPLETED QUESTIONNAIRE TO THE RESEARCHER

APPENDIX 6: QUESTIONNAIRE FOR ENVIRONMENTAL ORGANISATIONS

Please kindly answer the following questions.

SECTION 1: GENERAL QUESTIONS

1. Briefly, explain your mandate with regards to environmental issues and Conservation with respect to the GLTP.

2. In your opinion, do you think you have any role to play regarding natural resources and environmental issues in transfrontier conservation areas?

Explain you answer:

3. Which environmental issues are of particular interest to your organisation in the GLTP?

Mention them
1

4. What do you think in specific terms is your role with regards to community environmental issues in the Great Limpopo Transfrontier Park (GLTP)?

Explain your answer:

5. From the way you do your work so far, have you undertaken educational programmes in Makuleke community regarding natural resource and environmental conservation?

Indicate prog

6. From your experience, are there any environmental threats from Makuleke Community on natural resources?

Expand your answer by giving more information in the following table				
Environmental Threat	Impact on natural resources	Corrective measure		
1				
2				
3				
4				

7. From your knowledge, how many households have you worked with in Makulekecommunity in the GLTP on environmental awareness and natural resource conservation?

Explain your answer:	

8. Do you think communities that have been living inside or adjacent to the GLTP should continue staying on the land they claim to own?

Explain your answer:

9. Do you have a policy position to ensure communities inside or adjacent to transfrontier parks are protected from unfair losses of their livelihoods due to changes in access and control of natural resources?

Explain your answer :

The <u>END</u> of the questionnaire Thank you for your co-operation <u>PLEASE RETURN THE COMPLETED QUESTIONNAIRE TO THE RESEARCHER</u>

APPENDIX 7: QUESTIONNAIRE FOR FOCUS GROUP DISCUSSIONS

SECTION 1: GOVERNANCE OF THE GREAT LIMPOPO TRANSFRONTIER PARK

- 1. Explain if you have participated in meetings about the GLTP.
- 2. Using the **Schutte Scale**, what were your perceptions (positive and negative) about the way the meetings if you participated?
- 3. Do you think the community is treated as part of the decision-making in the governance of natural resources in your area?
- 4. Who, in your opinion, initiates meetings about the park's affairs?
- 5. Using the **Schutte Scale**, how do you feel about the whole consultation process?
- 6. Do you think you are involved enough in the governance of the park affairs? Kindly explain how you should be involved in the governance processes?
- 7. Do you think there is good communication between the community and park authorities regarding conservation of natural resources? If yes, in which way and if no, why not?
- 8. Using the **Schutte Scale**, what is your level of satisfaction as a community with the way the park's governance with regards access to natural resources.
- 9. Besides the park authorities, are there other institutions or individuals that are involved in the governance of the park? If yes, kindly mention them and their duties.

Organisation	Duties	

- 10. Whose interests do you think the above organizations represent?
- 11. Using the **Schutte Scale**, what is the level of satisfaction are you as a community with their involvement and the interests these organizations represent.
- 12. Using the **Schutte Scale**, do you think your livelihood practices and conservations efforts as a community are a priority or not a priority of the organizations?

SECTION 2: CONFLICTS MANAGEMENT AND RESOLUTION

13. Do you experience any conflicts regarding access to and use of natural resources in your community and how do you resolve them?

Type of conflict	Type of authority	Conflict resolution mechanism	

14. Do you face any conflicts with wildlife and how are they addressed?

Type of conflict	Type of animal	Resolution mechanism

Using the **Schutte Scale**, what are your perceptions (negative or positive) about the way mediation and resolution of natural resource based conflicts are handled by government authorities and their conservation partners?

SECTION 3: COMMUNITY LIVELIHOODS AND LOCAL CONSERVATION

- 16 Using the **Schutte Scale**, to what extent your community benefit from the park? If to a large extent, what benefits? If a lesser extent, what benefits would you like to accrue to you?
- 17 In your opinion, do you think the establishment of the GLTP has helped in uplifting your life? If so, in which way has it uplifted your life and if not, how do you think the park should uplift your life?
- 18 Are you allowed to use forest resources and wildlife in this area?
- 19 How do you access them?
- 20 From your experience, can you explain if there has been damage or an improvement of forest and wildlife resources in this area?
- 21 In your opinion, what do you think could be the cause for reduction or increase of the natural resources in this area?
- 22 Which plants and wild animals are critical to your livelihoods? Mention the plant and animal species, and what you use them for.

Plant species	Area harvested	Use
Animal species	Area harvested	Use

- 23 From the above stated species, which ones do you think have been disappearing as you use them?
- 24 From your knowledge, what do you attribute the disappearance of these species?
- 25 How has the disappearance of animal and plant species affected your livelihoods?
- 26 Who, in the recent past, decided on access and use of these resources?
- 27 These days, has this situation changed and who decides on access and control natural resources use?
- 28 In your opinion, is the community happy about control, access and use of natural resources? If not, why not?
- 29 How do you want control, access and use of natural resources for your livelihoods to be in this community?

SECTION 4: ENVIRONEMTAL MANAGEMENT EDUCATION

- 30 Can you mention and explain any environmental education programmes that carried out in your community?
- 31 As a community, how have you welcomed these programmes?
- 32 In your opinion, who implement these environmental education programmes in your community?
- 33 Kindly specify the environmental and natural resource issues the education programmes target?

- 34 What do the educational programmes target these natural resources and environmental programmes?
- 35 Do you think enough is being done by the environmental agencies to equip your community to conserve natural resources?

The END THANK YOU FOR YOUR CO-OPERATION AND PARTICIPATION

APPENDIX 8: QUESTIONNAIRE FOR PARK AUTHORITIES

Please kindly answer the questions below.

SECTION 1: GENERAL QUESTIONS

1. What do you think are the objectives of the Great Limpopo Transfrontier Park (GLTP)?

2.	To your knowledge, how many hous	seholds have been affected by the	GLTP's territorial boundary demarcation	s?
3.	Do you think one should allow comit they claim to own?	munities living inside or adjacent to	to the GLTP to continue staying on the la	nd
Yes		No		
Expla	in:			

4. Do you have a policy to ensure communities are protected from unfair losses of their livelihoods due to changing on principles of access and control of natural resources?

Yes	No	
Explain:		

SECTION 2: GOVERNANCE AND COMMUNITY PARTICIPATION IN THE GREAT LIMPOPO TRANSFRONTIER PARK

5. Are the local people involved in the governance of the GLTP?

Yes, they are involved	No, they are not	
Explain:		

6. Explain the institutional mechanism have you put in place to ensure local communities participate in decision-making process on the governance of natural resources?

Yes, they are	No, they are not	

7. Do you have a Community-Working Group? And the Community Working Group increased local people's involvement in the GLTP resource governance affairs?

Yes	No	
Explain:		

8. Do you think community understands the multi-level governance of the GLTP?

Yes, they do	No, they don not	
Explain:		

9. In general, how do you think the community feels about it?

Explain:

10. In your opinion, to whom do the natural resources think belong to?

Explain:

^{11.} Is there good environmental communication between Parks authorities and the communities?

	Yes		No	
E	Explain your answ	ver:		

12. Do you think enough has been done to create a sense of ownership of resources among the local people in the affected communities in the GLTP?

Yes		No	0
Explain your ans	wer:		

13. To what extent did the local communities participate in terms of governance and management of natural resources?

Explain your answer:

14. How were the local communities involved in the government and management of natural resources in the park?

Yes, they were	No, they were not	
Explain your answer:		

15. With the GLTP established, did you mainstream the households affected by the GLTP into the broader development plans?

Yes		No	
Explain your ans	wer:		

SECTION 3: CONFLICTS MANAGEMETNT AND RESOLUTION

16. Do you experience any conflicts regarding access to and use of natural resources by the communities?

Yes		No	
Explain your ans	swer:		

17. What are the main causes of conflicts you have experienced in the past 10 years?

Explain:

18. If you experience natural resource based conflicts, how were you able to resolve them (mechanisms for conflict management and resolution)?

Yes		No	
Explain you	r answer:		

19. Given the multi-scale level of governance of natural resources in the GLTP, how do you usually deal with supra-national natural resource poaching conflicts of both flora and fauna?

Explain:

SECTION 4: COMMUNITY LIVELIHOODS AND LOCAL CONSERVATION

20. According to your experience, what livelihoods activities are permissible in Makuleke?

Kindly name them:

21. With the integration of Makuleke as the Heart of the GLTP, were communities part of the conservation planning process?

Yes		No	
Explain your answ	ver:		

22. Have you guaranteed communities to derive benefits from natural resources they live side by side with in the GLTP?

Yes		No 🗅	
Explain vo	ur answer:		

23. If yes, what was guaranteed?

Explain your answer:

24. In your opinion, are there possibilities to remove people in this community?

Yes		No	
Explain your a	inswer:		

25. Do you think the local people can benefit from tourism that has been topical for the creation of the GLTP?

Yes 🗆		No	
Explain your answer:			

26. Are there any mechanisms for coping in place in the event of tourism failing as a livelihood for communities?

Yes 🗖		No	
Explain your answer:			

27. Do you think the local people's livelihood practices resonate with conservation objectives?

Yes		No			
Explain your answer					

The <u>END</u> of the questionnaire Thank you for your co-operation PLEASE RETURN THE COMPLETED QUESTIONNAIRE TO THE RESEARCHER

APPENDIX 9: QUESTIONNAIRE FOR TOURISM STAKEHOLDERS

Please kindly answer the questions below.

1. What is your mandate with regards to tourism enterprises development in Sengwe community that is part to the GLTP?

Explain:

2. In your opinion, do you think you have any role to play regarding community based tourism enterprises development in the GLTP?

Explain you answer:

3. What form of support have you been giving to communities from your organization as you are involved in the GLTP?

Mention it

4. What has been your involvement in the governance and management of the GLTP since 2002 when the GLTP was established?

Explain your answer:

5. In your view, have the community natural resource driven livelihoods been enhanced?

Explain your answer:

From your experience and point of view, do you think tourism as a livelihood strategy, should bethe sole livelihood option for communities living inside or adjacent to the GLTP?

Explain your answer:

8. What has been the tourism trends since 2002 with regards to Makuleke part of the GLTP in terms of receipts and arrivals?

Give statistical information where possible.

9. Of the above receipts, how much has benefited the local communities?

Give data information where possible.

10. How are benefits spread to the communities? Give approximate data at least by household.

11. In your opinion, are the livelihood practices compatible with conservation of natural resources in the GLTP?

Explain your answer:

12. Do you have a policy position to ensure communities inside or adjacent to transfrontier parks are protected from unfair losses of their livelihoods due to changes in access and control of natural resources?

Explain your answer:

13. From your knowledge, are there environmental problems being experienced, in ward 13, 14 and]? Specify them.

Environmental Problems:

14. If there are environmental problems, what do you think are the likely causes?

Explain your answer:

15. Do you have a policy position to ensure communities inside or adjacent to transfrontier parks protect the natural resources?

Explain your answer:

The <u>END</u> of the questionnaire Thank you for your co-operation PLEASE RETURN THE COMPLETED QUESTIONNAIRE TO THE RESEARC