Identifying and analysing management requirements in Ezemvelo KZN Wildlife for effective implementation of co-management in the uKhahlamba Drakensberg Park

by

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DECLARATION

"As the candidate's Supervisor I agree/do not agree	ee to the submission of this
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To Jesus Christ my Lord be the glory and honour.

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Abstract

The uKhahlamba Drakensberg Park World Heritage Site (UDP WHS) is one of only 23 properties world wide that has been listed a World Heritage Site of dual significance due to its cultural and natural values. The picture portrayed to the international community depicts a successful conservation history of more than a 100 years. Achievements include the proclamation of the first Wilderness Area in Africa and its listing as a Ramsar Site. However, little or no mention is made of the current anthropological threats facing the Park today as a direct result of the historically discriminatory and politically insensitive protected area designations. The history of the park reveals a battle ground of conflict between indigenous neighbouring communities and management authorities regarding the contentious issues of land tenure and user rights. Even though Ezemvelo KZN Wildlife (EKZNW) as the management authority has embraced a holistic and participative management paradigm in its policies, efforts to implement this paradigm have been slow and contentious with little or no meaningful successes. Internationally, the construct of comanagement has been identified as the best possible way to achieve a participative, inclusive, holistic management paradigm. In South Africa, and the UDP WHS, the relatively sudden imperative for co-management due to legislative requirements as part of the land restitution process has left many conservation authorities to grapple with the implementation of this construct. Co-management however does not conform well to traditional protectionist and imperialist management systems. The implementation of comanagement in Southern Africa, considering the socio-political history of conservation, requires a significant paradigm change not only in the individuals that will be involved with the implementation of the process, but even more so, within conservation organisations, to create an understanding of the requirements of the systems and processes to facilitate the adoption of this holistic management approach.

The overall objective of the research is to analyse identified organisational aspects that are deemed to negatively impact on the process of implementation of co-management in EKZNW, and specifically the UDP WHS. To address this objective, the following three key research questions were identified:

a. What are the expectations within EKZNW with regards to the implementation of comanagement with neighbouring communities in the different departments within EKZNW?

- b. What are the barriers in the management systems of EKZNW with regard to the implementation of co-management with neighbouring communities?
- c. What are the resource requirements in EKZNW for the implementation and maintenance of co-management with neighbouring communities'?

This case study focused specifically on the UDP WHS management within the EKZNW organisational structure. A qualitative research design was used to conduct the case study. Research techniques included a review of existing organisational documentation guiding the implementation of co-management; the conducting of semi-structured interviews with purposely selected interviewees; asking open ended questions developed to address the key questions as identified; as well as participant and direct observation. A content analysis was performed on the answers obtained from the semi-structured interview process. This analysis resulted in the creation of a detailed descriptive narrative. The interpretation of the raw data was used to recognise patterns and common elements in the data that were relevant to the key research questions.

The key findings of the research indicated that, even though participants indicated some level of understanding of concept of co-management, expectations around comanagement varied substantially. The vision and objectives contained in various organisational policies and strategies around co-management are not congruent with operational actions. This affects both individual and organisational expectations around co-management. EKZNW's recognition of the difficulties around the implementation of comanagement can thus be contributed to a vicious circle of poorly defined or understood objectives around co-management which are compounded by a number of real and perceived barriers. It is apparent from the research that a lack of a shared vision and understanding of the objectives has resulted in a poor understanding of the resource requirements for the implementation of co-management. It is envisaged that the development of an understanding of a shared future vision and objectives around comanagement through effective communication, education, participation and awareness will assist in growing EKZNW staff capabilities to transcend institutional barriers and promote the development of an enabling environment for the effective implementation of co-management.

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List of Abbreviations

CBD Convention on Biological Diversity

CEPA Communication, Education, Participation and Awareness

CMPAs Co-managed Protected Areas

DEA Department of Environmental Affairs

DLA Department of Land Affairs

DMA District Management Areas

DWA Department of Water Affairs

EKZNW Ezemvelo KZN Wildlife

IMP Integrated Management PlanINR Institute for Natural ResourcesMOA Memorandum of AgreementMDG Millennium Development Goals

MDTP Maloti Drakensberg Transfrontier Project

NRM Natural Resource Management

NEMA National Environmental Management Act

NGO Non-government organization SANParks South African National Parks

SCAP Special Case Area Plan for the Drakensberg Region UDP WHS uKhahlamba Drakensberg Park World Heritage Site

WSSD World Summit on Sustainable Development

Abbreviations used for Statutes (Acts)

KZNNCMA KwaZulu-Natal Nature Conservation Management Act, No. 9 of 1997

NEMBA National Environmental Management: Biodiversity Act, No. 10 of 2004

NEMPAA National Environmental Management: Protected Areas Act, No. 57 of 2003

LRA Restitution of Land Rights Act, No. 22 of 1994
WHCA World Heritage Convention Act, No. 49 of 1999

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Chapter 1: Introduction and Overview

1.1 Introduction

Protected areas throughout South Africa, including the uKhahlamba Drakensberg Park World Heritage Site (UDP WHS), Kruger National Park and iSimangaliso Wetland Park World Heritage Site and others, have been claimed by indigenous neighbouring communities. In terms of the Restitution of Land Rights Act, ownership of the land will in some cases revert back to the communities upon the successful resolution of claims by the Regional Land Claims Commission. This rapid change was brought about by the change in the South African government in 1994 which created a policy window (Kingdon, 1995 as cited in Berjak, 2008) which gave the new democratic government an opportunity to address past injustices with respect to land rights. This resulted in the Restitution of Land Rights Act, 1994 (Act No. 22 of 1994) being passed as one of the first statutes by the new government. The Land Rights Act specifically aims to address the past injustices of the wrongful expropriation of indigenous communities from their land by allowing them to re-occupy the land. However, in realisation of the consequences for protected areas and ultimately biodiversity conservation, a Memorandum of Agreement was developed and signed between the Department of Land Affairs (DLA) and the Department of Environmental Affairs (DEA) of South Africa to prevent the loss of protected areas as national and international assets. The memorandum in essence states that:

"Protected areas are assets of national and international significance whose continued conservation is non-negotiable and must be managed in perpetuity as protected conservation areas (and that) co-management of Protected Areas involving claimants must take place... [T]he existing Management authority shall continue to manage the protected area" where restitution is granted in favour of the claimants (DEAT, 2007: 9).

Even though both the 2004 - 2009 and 2009 - 2014 Ezemvelo KZN Wildlife Strategic Plans make reference to the positive shift that has taken place towards co-management over the past decade, it recognises the difficulties that are still being experienced with regards to the implementation of these structures (EKZNW, undated a; EKZNW, undated b). Even though the importance of co-management has been advocated for more than 20 years (Mkhize, 2007), the imperative to co-manage many of the protected areas in South Africa is a reality that has happened much quicker than anticipated by many in EKZNW.

It would appear that the speed of these developments has resulted in EKZNW being ill equipped in terms of policies, institutional capacity and resources to effectively deal with the situation. Khulani Mkhize, a former CEO of EKZNW, recognised this in his address called "Co-Management- The Last Crossroad" when he suggest that "conservation at large in South Africa is at crossroad" and that the conservation agenda requires rethinking (Mkhize, 2007: 6). Mkhize (ibid.) raises concerns with regard to the high cost of co-management and the pressure for protected areas to be financially sustainable, and as cited above, two consecutive EKZNW Strategic Plans openly acknowledge the difficulties with regard to the implementation of co-management.

The historical implementation of imperial conservation ideologies throughout the developing world, and the associated exclusion of traditional people, is the major contributing factor that led to the anthropological threats facing protected areas and conservation today (IUCN, 2005). However, for biodiversity conservation to succeed, Hughes (2008) highlights that protected areas are dependent on people's willingness to support its management. The importance of community partnerships in conservation have been repeatedly stressed as far back as 1952 (IUCN, 2005). Social Ecologists argue that co-management is one of the most effective ways to mobilise such support through the devolution of certain management aspects to local people (Borrini-Feyerband et al, 2004; Hughes, 2008; IUCN, 2005 and Berkes, 2004). Borrini-Feyerband et al (2004) indicate that co-management represents a trade-off between the rights and interests of communities, conservation agencies as well as the wider community. Some of the generic features of co-management are that it provides the opportunity for social engagement with communities. Where this was previously absent, it requires experimentation and learning to adapt to the dynamics of these social interactions (Borrini-Feyerband et al., 2004). Joint reasoning, decision making and power sharing is key, not only with the aim of sharing benefits, but also the sharing of responsibilities and accountability (Borrini-Feyerband et al, 2004). Co-management is thus a partnership that requires a positive approach from all the stakeholders involved. Borrini-Feyerband et al (2004) identified that it should ideally begin at the planning stage through a process of public participation which will provides the opportunity for the creation of an enabling environment and mutual learning. Berkes (2004) emphasize that this can only be achieved through good communication, meaningful responses and consensus that will further promote the trust,

understanding and capacity at both individual as well as organisational level that is essential for real and meaningful participation.

Literature reviews provide little evidence of effective working examples in an African context. Fabricius *et al* (2001) state that even though the short-term prospects for community conservation are positive, there are many uncertainties and several causes for concern and the long term effectiveness of co-management with regards to the achievement of biodiversity goals is yet to be demonstrated. Whilst Berkes (2004) and MacDonald (undated) emphasize that the relevance and importance of co-management can not be questioned, they also warn that the failure to implement these structures effectively will adversely affect the attainment of biodiversity management goals.

With political will focusing and emphasizing social and economic development, biodiversity conservation does not receive the political or financial support to address the more prevalent threats to protected areas. Management authorities are thus required to identify alternatives when addressing these threats. Participatory approaches provide the opportunity that not only creates the required understanding and support, but also promotes and develops a support base that can assist to address ever present resource shortfalls.

1.1.1 Enabling Legislation to Facilitate Participation

Where protected areas are subject to land claims, the implementation of co-management falls within the regulatory framework of the Restitution of Land Rights Act, 1994 (Act No. 22 of 1994). The realisation of the potential threat that this legislation had on the sustainability and continued existence of protected areas, resulted in a Memorandum of Agreement (MOA) between the South African Departments of Land Affairs and Environmental Affairs. This MOA recognises protected areas as national assets and provides a further regulatory function to the implementation of co-management where protected areas are successfully claimed as part of the land reformation process. This MOA gives recognition to South Africa's environmental legislation which Kidd (2002) describes as largely adequate under the National Environmental Management Act (Act No. 107 of 1998) (NEMA) as the framework legislation that governs all other sectoral environmental statutes that are relevant to protected areas (Couzens, 2005). In addition, as the Park is a proclaimed World Heritage Site (WHS), management is undertaken in

accordance with the World Heritage Convention Act (Act No. 49 1999) (WHCA) and even though there are no specific regulations pertaining to co-management in the WHCA, the Act specifies that the management authority must be broadly representative with specific reference to "affected adjacent tribal authorities", and that communities and claimants in terms of the Restitution Land Rights Act should be consulted regarding the development of the Park's integrated management plan (RSA, 1999:10-13).

The aforementioned legal framework places emphasis on the legislative requirements of co-management. This research study places emphasis also on the voluntary implementation of co-management as an imperative and social responsibility in recognition of the new participative conservation paradigm. The latter paradigm recognises the need for protected areas to adopt a systematic and ecosystems approach at a landscape level and to include people. Central to this paradigm is the recognition that protected areas can not function as islands in a sea of development which threatens the integrity of the biodiversity. This paradigm requires due recognition of participative management approaches and the regulation of such mechanisms. In recognition of this, the National Environmental Management: Protected Areas Act (Act No. 57 of 2003) (NEMPA) in Section 42 states that the management authority may enter into a comanagement agreement with any other organ of state, local communities, parties or individuals (RSA, 2003).

The legal framework in which the UDP WHS operates is extensive and adopts a holistic approach which Pimbert and Pretty (1995) identify as an essential enabling requirement for the implementation of co-management.

1.1.2 Stakeholders

The above legislative framework thus provides for a broad spectrum of stakeholders pertaining to co-management, ranging from neighbouring communities in terms of the Restitution of Land Rights Act (Act No. 22 of 1994) to various other sectors including Traditional Authorities, local communities, organs of state or individuals as catered for in NEMPA. As this study focus on management requirements within EKZNW as an institution, pertaining to the implementation of co-management, emphasis is placed on the various roles, department, entities and individuals that operate within the existing organisational framework. The need to identify individuals within existing organisations as

important interested and affected stakeholders is crucial as Lachapelle *et al* (2003) warns that assuming a singular interest in a pluralistic society may be fatal to any resource planning process. Thus for the purpose of this study, the main stakeholders included:

- Protected Area Managers, particularly the managers that will be concerned with the running of co-management structures,
- Hospitality management in charge of commercial operations in the Park,
- Senior Management of EKZNW,
- Community Conservation Officers who have to liaise with various communities throughout the Park,
- Ecological Advice section, particularly the scientists concerned with the formulation and regulation of consumptive utilisation policies,
- Human Resources Department with regards to capacity development, and
- Partnership Department concerned with the development and implementation of comanagement agreements where claims have been successfully lodged against specific protected areas.

1.2 Setting

The uKhahlamba Drakensberg Park World Heritage Site (UDP WHS) is situated in the KwaZulu-Natal Province of South Africa. Totalling an area of approximately 242 813 ha, the Park is contiguous along the Drakensberg Escarpment which forms the international border with the Kingdom of Lesotho along the western boundary of the Park (EKZNW, 2005 a). The Park is 28 km wide at its widest point and the South African border of the Park exceeds 300 km and has an estimated 1000 000 people living in the vicinity of the Park (EKZNW, 2005 a). Even though the abovementioned and following information might seem trivial at first, the reason for presenting this information is to create a better understanding of the holistic environment within which the Park operates. In addition, the information will also help to develop an understanding in relation to the need for the implementation of collaborative management paradigms. It is this setting described above, that even though the Park is relatively large, renders it particularly vulnerable to external influences because it has a large perimeter to surface area ratio. Land transformation of areas adjacent to the Park increasingly threatens the integrity of experiential values and biological diversity of the Park (SCAP, 2000; EKZNW, 2005 a). An increase in the frequency of events that threatens the integrity of the Park is symptomatic

of what Barber *et al* (2004) describes as the island syndrome of protected areas. These events that threaten the integrity of the Park include issues such as security, wildlife crime incidents, wildfires and alien invasive species. These threats are also symptomatic of what Pimbert and Pretty (1995) and Driver *et al* (2003) describe as a lack of recognising the importance of neighbouring communities as well as a lack of systematic conservation planning. Ezemvelo KZN Wildlife recognises and is mindful of international conservation systems and developments advocated by various organisations such as the IUCN. EKZNW has therefore adopted a holistic participatory and ecosystem approach at a landscape scale.

The Park forms the core conservation area of the Maloti Drakensberg Transfrontier Project region (MDTP) and is an integral part of the Special Case Area Plan (SCAP) for the Drakensberg, as developed by the KwaZulu-Natal Provincial Planning and Development Commission. The Park has been demarcated into three District Management Areas (DMA's) and thus falls under the District Municipalities as opposed to the eight Local Municipalities along the eastern boundary of the Park.

In terms of the World Heritage Convention Act, 1999 (No 49 of 1999), the KwaZulu-Natal Nature Conservation Board, established in terms of the KwaZulu-Natal Nature Conservation Management Act. 1997 (No 9 of 1997), was appointed by the minister as the management authority of the UDP WHS. The implementing agency for the Board is Ezemvelo KZN Wildlife (EKZNW), a parastatal statutory administrative body delegated in terms of the National Environmental Act, 1998 (No 107 of 1998) to implement, regulate and control activities in protected areas according to the relevant environmental legislation. The uKhahlamba Drakensberg Park World Heritage Site falls within the uKhahlamba Region of EKZNW. Overall the UDP WHS is managed as a single entity, however, within is divided into 15 management units which represent the historically separately proclaimed reserves. The 15 management units are further grouped into three sub-regions (North, Central and South), each with a sub-regional manager who reports to the Park Manager. Each of the 15 reserves has a management team with a Conservation Manager at the head of this team who in turn report to a sub-regional manager. Numerous support services assist with operational issues, including ecological advice, community conservation, technical, finance and human resource departments. In addition, resorts situated in the Park that are managed by EKZNW, have their own managers and reporting structures.

1.2.1 Historical Overview of the Park relevant to Co-management

1903 saw Giants Castle as the first protected area of the Park proclaimed on Crown Land as a game reserve by the Natal Colonial Government (EKZNW, 2005 a). The approach was that of protection and exclusion from human activities to protect the diminishing herds of eland. Royal Natal National Park was established in 1916 as the second protected area and was proclaimed with the purpose of studying its tourism development potential (Pearce, 1973). Even though reports highlighting concerns regarding the exploitation of indigenous forests situated on Crown Lands in the Drakensberg were submitted to the colonial government as early as 1880, it was not until 1927 that the first State Forest Reserves were proclaimed with the aim of protecting the forests from utilisation (EKZNW, 2005a). Subsequent protected area paradigms such as the realisation of the importance of catchment management (1948), wilderness preservation (1970's), biosphere and landscape approaches are all related to development of international conventions and globalisation of environmental approaches. Even though the Park and EKZNW boast a century of successful conservation, the history of the Park however reveals a battle ground of conflict between indigenous neighbouring communities and management authorities regarding the contentious issues of land tenure and user rights (MDTP, 2006).

In a more positive light, the subsequent expansion of the Park and Ezemvelo KZN Wildlife as an organisation towards the end of the century led to a more multi-disciplinary approach. The post apartheid political situation called for reconciliation and reformation of land and the need to adopt an already recognised internationally more inclusive participative management system. This led to the adoption of the new holistic management paradigm which necessitated an organisational change in thinking. It was identified that management systems required change to effectively address the challenges faced in the 21st century (EKZNW, undated a). The majority of the people in the areas adjacent to the Park are from previously disadvantaged communities. Due to historical racial discriminatory legislation, which dispossessed indigenous communities of their land for the benefit of European settlers, communities have been given the opportunity to claim back the land as the rightful owners. As mentioned above in the case

of protected areas, National legislation governing land restitution necessitates the development of co-operative management systems (RSA, 1994).

1.3 Need for the Study

The implementation of co-management with neighbouring communities, brought about by the legal requirements of the land restitution process on protected areas, is a reality that has happened much quicker than expected. This has left most protected area management authorities ill equipped in terms of the understanding of the required systems, processes and resources to successfully implement co-management. Apart from the legislative requirements to implement co-management with neighbouring communities, there is also a social responsibility from management authorities to recognise communities in the management of protected areas to mitigate threats and to achieve systematic conservation objectives (Driver et al, 2003). This is not only to ensure benefit sharing, but to also create an understanding of the need to conserve biodiversity and the importance of protected areas in obtaining this objective. Ezemvelo KZN Wildlife recognises this responsibility, but admits to the difficulties in achieving this despite continued efforts for more than a decade to implement co-management (EKZNW, undated a). The need thus exists to identify the enabling organisational conditions that will allow for the effective implementation of co-management and at the same time will not impact adversely on biodiversity conservation. Various authors however warn of the adverse consequences of the implementation of co-management if management fails to recognise and implement appropriate systems and processes (Berkes, 2004; Pimbert and Pretty, 1995).

Whilst there is of plenty information pertaining to the implementation of co-management and the management of community expectations, there is very little information with regards to the organisational requirements and the creation of an institutional enabling environment and also the management of expectations, within the implementing organisation.

1.4 Statement of the Problem

With reference to the MOA between the Department of Land Affairs and the Department of Environmental Affairs, existing land claims against sections of the UDP WHS is necessitating the development and implementation of co-management agreements with

claimant communities. Apart from this, developmental and anthropological threats on the Park's boundary are on the increase and co-operation to mitigate against these threats is no longer and option, but an imperative. However, as indicated in the previous sections, EKZNW in consecutive five year Strategic Plans (2004 - 2009 & 2009 - 2013) has admitted to the repeated failures and slow progress with regards to the implementation of co-management. Popular discourse on co-management concurs that the failure to implement the appropriate structures effectively will adversely affect the biodiversity objectives (Berkes, 2004; Thomas and Middleton, 2003). In these circumstances it is more appropriate to explore and learn what the requirements are for the successful implementation of community-based conservation initiatives (Berkes, 2004).

With a conservation history of more than a 100 years, EKZNW promotes and claims a holistic management approach with regards to community involvement and comanagement (EKZNW, undated a). This however epitomizes what Pimbert and Pretty (1995) identify as a typical historical colonial conservation management system. In such a colonial management paradigm, the positivist and realist attitudes of conservation professionals are often ascribed as the reason for the repeated failures of collaborative processes (Pimbert and Pretty, 1995). The problem is thus to investigate what management systems are required to support and create the enabling environment for the effective implementation of co-management. In addition, the establishment and implementation of co-management also requires considerable additional resources (Reid et al, 2004). Where these do not exist, some authors argue that it will draw from existing resources which will negatively impact on the achievement of biodiversity conservation goals (Thomas and Middleton, 2003; MacKinnon, undated).

1.5 Objective of the Research

The overall objective of the research is to analyse identified organisational aspects that are deemed to negatively impact on the implementation process of co-management in EKZNW, and specifically the UDP WHS. This will assist in identifying organisational shortcomings and the proposed changes required if EKZNW want to be successful in the implementation of co-management with neighbouring communities. To address the research objective, three key research questions were identified.

1.5.1 Key Research Questions

- a. What are the expectations within EKZNW with regards to the implementation of comanagement with neighbouring communities in the different departments within EKZNW?
- b. What are the barriers in the management systems of EKZNW with regards to the implementation of co-management with neighbouring communities?
- c. What are the resource requirements in EKZNW for the implementation and maintenance of co-management with neighbouring communities'?

Research into these questions will assist in developing an understanding of the case specific problems and the identification of the requirements that need to be implemented. These aspects are crucial in the creation of an organisational enabling environment that is essential for the implementation of co-management.

1.6 Research Methodology

The implementation of co-management remains the responsibility of EKZNW in respect of the land claims that were successfully lodged against protected areas under its authority. Thus, this case study focused specifically on the UDP WHS management within the institutional design of EKZNW. The research specifically investigated systems and processes that affect and guide the implementation of co-management with neighbouring communities. Firstly, a literature review was conducted to gain a deeper understanding of co-management and its needs. The insights gained from this review were used to guide and enrich the question formulation and response analysis. Semi-structured interviews were conducted with various stakeholders within EKZNW identified through a purposive sampling protocol. Members of different EKZNW departments were identified as stakeholders, whilst a bias was placed on managers concerned with the implementation and continuation of co-management agreements.

A qualitative research design was used to conduct the participatory case study. Research techniques included a review of existing organisational documentation guiding the implementation of co-management, and a interview guide was developed to conduct the semi-structured in depth interviews, asking open ended questions developed to address the key questions as identified, as well as participant and direct observation. This ensured

that the interviews were focused and systematic enough to cover comparable information relevant to the objectives. A content analysis was conducted on the answers obtained from the semi-structured interview process, and resulted in a detailed descriptive narrative. The data was interpreted to identify patterns and common elements in the data that was relevant to the objectives of the research.

1.7 Delimitations and Limitations

As explained previously, the focus of this case study is solely aimed at addressing institutional management requirements for the implementation of co-management in the UDP WHS within organisational confines of EKZNW. The study focused on stakeholders at various levels and departments within the UDP WHS concerned with, or affected by the implementation of co-management. Even though the data gathered will only be applicable to the case study, insights gained and deductions may be generic, and given the extent of EKZNW and the application of organisational policies and procedures, it is possible that generic results may be applicable to other protected areas that are managed by EKZNW.

1.8 Sequence of Chapters

Consisting of five chapters, the following is a summary of the sequence of chapters for this dissertation.

Chapter 1 is a brief overview of the situational analysis with regards to the implementation of co-management in the UDP WHS as managed by EKZNW. It describes the need for the study, the stakeholders identified and, the research problem and key questions that were identified with the aim of developing a deeper understanding. Chapter 1 also provides a brief overview of the research methodology and concludes with delimitations and limitations of the study.

Chapter 2 is a review of the literature relevant to the objectives of the research as identified by the initial review in preparation for submission of the research proposal. The chapter presents an overview of the construct of co-management and protected areas and differentiates between the legal requirements of co-management as opposed to the imperative thereof. This is followed by a review of the literature relevant to the objectives and provides a comparison on issues related to expectations surrounding co-

management, barriers to effective implementation of co-management, and the resource requirements pertaining to co-management.

Chapter 3 describes the research design and methodology. It provides an overview of the setting of the study followed by a detailed description of the techniques that was used to address the research questions. A detailed account is given of the procedures used to collect the data and how this was interpreted and analysed. The chapter is concluded by a discussion of the validity and reliability of the data.

Chapter 4 presents and discusses the results of the research as conducted according to the set research objectives, with the aim of creating an understanding of the expectations of EKZNW staff around the implementation of co-management. It includes an analysis of the setting, the history and the administrative aspects of the Park and EKZNW regarding the implementation of co-management. This is followed by findings and an interpretation of the semi-structured interviews according to the research objectives of expectations, barriers and resource requirements.

Chapter 5 contains conclusions and recommendations emanating from the research. The key findings of Chapter 4 are summarised followed by a discussion on the research questions and objective. The chapter is concluded with recommendations with regards to the identified research questions, improvements in methodology and possible further research suggestions.

Reviewing relevant literature forms an integral part of any research. It provides important facts and background information on aspects or the research topic previously not investigated (Welman *et al*, 2007). Chapter 2 is a review of the relevant literature of comanagement and focus on the objectives identified in this chapter with the aim of identifying shortcomings and inconsistencies relevant to this study.

Chapter 2: Literature Review

2.1 Introduction

Berkes (2004) emphasizes that it has become increasingly important to recognise and integrate the dynamics between societies and natural systems. The integrated concepts of social-ecological systems are increasingly recognising people as part of natural systems. However, there is little agreement as to how this can be realised in the realm of Protected Area Management (PAM). Collaborative management or co-management (CO-MANAGEMENT) is a construct that affects all spheres of life. By nature, humans, societies, communities and the various spheres of business are co-dependant for their continued existence and support. Participatory approaches have come to dominate environmental management because of the complex nature of environmental problems (Berkes, 2004). Protected areas, for too long, have existed as islands in the surrounding landscapes. Failure to collaborate will result in failure to address the increasing developmental, social, political and anthropological threats that are adversely affecting biodiversity conservation goals.

This chapter will thus start by exploring the broader context of co-management and the various factors that affect its implementation and effectiveness. In addition, this chapter will examine not only the need or imperative for co-management, but also the systems and processes required for the effective implementation of co-management in protected areas. In conclusion, this chapter will present a review of the relevant literature with respect to the main objectives of the research, focusing on organisational expectations, barriers and obstacles to the implementation of various constructs as well as the related resource requirements for the implementation of co-management.

2.2 Clarification of Concepts

Co-management

Co-management means managing in such a way that you take into account the needs and desires of stakeholders, neighbours and partners through the devolution of power. Co-managed Protected Areas (CMPAs) are defined as protected areas where the management authority, responsibility and accountability are shared amongst two or more stakeholders, including government agencies, indigenous and local communities (IUCN,

2005). Co-management thus represents a trade-off between the rights and interests of both neighbouring communities, conservation agencies as well as the wider community. Decision making and power sharing is key, but not only with the aim of sharing benefits, but also the sharing of responsibilities and accountability (Borrini-Feyerband *et al*, 2004).

Communities

By definition, a community refers to an association of individuals, each occupying a certain position within a specific environment and the related interaction with one another (Damm, 2002). Within the context of this study, reference is made to two specific communities; firstly, neighbouring or local communities which for the purpose of this study means any community of people living or having rights or interests in a distinct geographical area as per the National Environmental Management: Protected Areas Act (Act No. 57 of 2003); and secondly, the institutional community of Ezemvelo KZN Wildlife and the various departments or associations within. MacDonald (undated) warns against the danger of homogenising communities and emphasizes the importance that processes, due to the dynamics of communities, should be flexible and adaptive as opposed to the rigid procedural obligations that governs formal conservation organisations.

Expectations

For the purpose of this study, expectations can be defined as a perceived understanding of the desired outcomes based on the information, or the lack thereof, at hand. Raised or incorrect expectations have negative implications to the effective implementation and sustainability of co-management (Borrini-Feyerband *et al*, 2004). It is generally agreed that community expectations with regards to co-management are poorly managed, which can lead to the creation of wrong individual or community perceptions (Bernstein, 2005). The focus of this study however will be on the institutional as well as individual expectations within EKZNW as the implementing agency. It will also focus on the negative implications of these expectations and perceptions on the implementation of co-management.

Barriers

For the purpose of this study, barriers will refer to those obstacles, specifically organisational systems and processes, which hamper the effective implementation of co-

management. Lachapelle *et al* (2003) indicate that understanding barriers in current planning and implementation processes, can lead to the adaptation of the processes required for complex and dynamic systems to succeed. Lachapelle *et al* (2003) also recognises that there are a number of institutional barriers, which may lead and compound other operational issues such as a lack of agreement on goals, rigidity in the process design, procedural obligations, requirements and a lack of trust. It is unlikely that barriers in resource planning occur independently. It is thus necessary to understand and identify that a relationship exists between different barriers and that these are inextricably linked.

2.3 Co-managed Protected Areas (CMPAs)

Governments alone are not able to ensure the accomplishment of all their protected area conservation objectives. The construct of Co-managed Protected Areas was developed in an effort to address the increasing concerns regarding not only the social injustices of past and present protected area proclamations (Borrini-Feyerband *et al*, 2004), but also in response to the realisation that biodiversity conservation, and even more so protected areas, are becoming more and more dependant on peoples' willingness to support conservation. Pimbert and Pretty (1995) contribute the majority of anthropological threats to protected areas to the past exclusion of especially neighbouring communities. Similarly, this notion was reiterated in at the Fifth World Parks Congress in 2003 (IUCN, 2005). Hughes (2008) emphasizes this collaboration is imperative for protected areas, to not only gain support from the broader community, but also to ensure that the people support the management thereof.

Co-managed Protected Areas (CMPAs) are defined as government designated protected areas where the responsibility and accountability for the management are shared between the management authority and other stakeholders, in particular indigenous communities (Borrini-Feyerband *et al*, 2004). Co-management is also referred to as participatory, collaborative, joint or multi party management (Berkes, 2004). Borrini-Feyerband *et al* (2000:1) furthermore describe Co-management as "a situation in which two or more social actors negotiate, define and guarantee amongst themselves a fair share of the management functions...". Singleton (2000) states that this combined governance system not only decentralizes decision making and accountability, but also combines the strengths and mitigates the weaknesses of each other. It is thus a complex

pluralist approach which incorporates a diversity of partnerships and roles which Borrini-Feyerband *et al* (2000:1) term a "political and cultural process *par excellence*: seeking social justice and 'democracy' in the management of natural resources". It is this politicization of co-management, by contrast, that authors such as Thomas and Middleton (2003) and MacKinnon (1992) warn against, as it not only dilutes the primary objective, but creates an environment for political interference that negatively impacts on biodiversity conservation. On the other hand, Lachapelle *et al* (2003) in their research on barriers to effective natural resource planning, imply that because of the political nature of the process, the need exists to explore this relationship to the advantage of the process. An indication of this is that, partnerships in achieving conservation targets have also been recognised as crucial by the Convention on Biological Diversity, Millennium Development Goals (MDG) and the World Summit on Sustainable Development (WSSD) plan of action (CBD, 2005; IUCN 2005, UNDC, 2005).

The importance, as well as the benefits, of partnerships with communities has been emphasized by the IUCN as far back as 1952 (IUCN, 2005). Berkes (2004) and MacDonald (undated) thus argue that the relevance and importance of co-management can not be questioned. On the other hand, apart from their support for the construct, Thomas and Middleton (2003) and MacKinnon (1992) warn that failure to implement comanagement effectively will have adverse effects on the biodiversity goals of Protected areas. Similarly, Berkes (2004) also recognizes this when stating that there is rising concern that the increased emphasis on community and participation is diluting the conservation agenda. Co-management is a complex and lengthy process which involves frequent changes (Borrini-Feyerband et al, 2004). Berkes (2004) warns that this does not bode well for co-management as trust, an implicit requirement in the process of adaptive co-management is often undermined by these frequent changes where communities require certain constants to familiarise themselves. This emphasizes the need for strategic adaptive learning and management (Berkes, 2004). Similarly, Salafsky et al. (2001) emphasize that strategic adaptive management is an iterative process and identify the requirement of certain constants to ensure a measure of success.

It is thus understandable that the merits of participatory conservation constructs have been frequently debated due to mixed results at best (Brosius and Russell, 2003). Berkes (2004) however argues that this is not as a result of the weakness or impracticality of the

construct, but rather the improper implementation. On the other hand, Borrini-Feyerband *et al* (2004) emphasize that it is important to identify and recognize when the implementation of co-management will not work. It is therefore necessary to question the need for the implementation of co-management. Literature searches basically identify three main reasons for the implementation of co-management: (1) a social responsibility perspective (Pimbert and Pretty, 1995; Borrini-Feyerband *et al*, 2004; Berkes, 2004), (2) from a systems perspective, recognising that protected areas can not operate as islands in an increasingly complex and diverse community (Thomas and Middleton, 2003; Driver *et al*, 2003, Davey, 1998), and (3) due to recognition of common property rights and ownership (Carlsson and Berkes, 2005; Lu Holt, 2005) or as is the case in South Africa, the legal requirements to implement co-management as part of the land restitution process (RSA, 1994). Thus it is imperative to recognise that the forced implementation of co-management can have negative implications with regard to the outcome of the process (Pimbert and Pretty, 1995; Berkes, 2004). The following sections will outline two of the options relevant to the context of this study.

2.3.1 Co-management as a legislative requirement

Co-management for protected areas in South Africa has evolved over the last 20 years (Mkhize, 2007). The policy window (Kingdon, 1995 as cited in Berjak, 2008) brought about by the change in government in 1994 created the opportunity for the new South African government to address the past injustices of the previous government. This brought about the advent of co-management in South Africa. The Restitution of Land Rights Act, 1994 (Act No. 22 of 1994) was promulgated with the specific aim to address the past injustices of wrongful expropriation of indigenous communities from their land (RSA, 1996; Carruthers, 2007). Land restitution in South Africa is the order of the day and protected areas throughout South Africa, for example Kruger National Park, iSimangaliso Wetland Park World Heritage Site, uKhahlamba Drakensberg Park World Heritage Site (UDP WHS) to name but a few, are being claimed by indigenous communities. In terms of the Restitution of Land Rights Act, ownership of the land reverts back to the communities upon the successful resolution of claims by the Regional Land Claims Commission (RSA, 1994). However, in realisation of the consequences to protected areas and ultimately biodiversity conservation, a Memorandum of Agreement was developed and signed between the Department of Land Affairs (DLA) and the Department of Environmental Affairs and Tourism (DEAT) of South Africa to prevent the loss of protected areas as national and international assets (DEAT, 2007). The memorandum in essence states that:

"[P]rotected areas are assets of national and international significance whose continued conservation is non-negotiable and must be managed in perpetuity as protected conservation areas..." and that "... co-management of Protected Areas involving claimants must take place ..." and "... the existing Management authority shall continue to manage the protected area" where restitution is granted in favour of the claimants" (DEAT, 2007: 9-12).

South Africa's environmental legislation is largely adequate (Kidd, 2002) and the legal framework for protected area management is exhaustive (EKZNW, 2005). This legal framework adopts a holistic approach which has been identified as an essential requirement by Pimbert and Pretty (1995) if effective participation is to be achieved. The framework legislation of the National Environmental Management Act (Act No. 107 of 1998) emphasizes the importance of trusteeship and that the environment is protected as the people's common heritage as a benefit to all and not just for a selected few to the detriment of others (RSA, 1997; Couzens, 2005). Even though the National Environment Protected Areas Act (Act No. 57 of 2003) makes specific provision for co-management (RSA, 2003), Section 42 (a) however emphasizes the voluntary nature of comanagement. The management authority may choose whether it wants to co-manage or not. Similarly, even though there are no specific regulations pertaining to co-management in the World Heritage Convention Act (Act No. 49 of 1999), the Act specifies that the management authority must be broadly representative. Specific reference is made to "affected adjacent tribal authorities" and that communities and claimants in terms of the Restitution Land Rights Act should be consulted regarding the development of the Park's integrated management plan (RSA, 1999:10-13). South Africa's situation is therefore contrary to what Borrini-Feyerband et al (2004) state as the inability of modern state policies to recognise communities. On the other hand, when referring to the current situation with regards to land reform, Carruthers (2007) emphasizes that this situation favours the establishment of co-management structures as the current government understands the situation. Carruthers (ibid) recognise that land reform is not a simple process due to the complexity of governance structures.

However, this sudden advent of the co-management of protected areas is a reality that has left the majority of management authorities ill equipped in terms of policy, capacity and resources to effectively deal with the situation. Even thought the political climate in South Africa favours co-management implementation, Borrini-Feyerband *et al* (2004) and Berkes (2004) however warn against the forced implementation of co-management as this will have a converse effect on biodiversity goals due to the complexity of the construct. Similarly, MacDonald (undated) warns against forced implementations as external political impositions fail to give internal legitimacy for both communities and the management authorities alike. This is a real threat to the South African scenario. The question now begs: what are the alternatives and how can the construct be given internal legitimacy? In recognition of the relevance of the co-management construct and the imperative to recognise communities and other sectors in protected area management, the next section will explore the imperative of co-management.

2.3.2 Imperatives to Co-manage and when Co-management is inappropriate

"The expropriation and exclusion of local communities who once used to occupy protected areas has led to increasingly severe social and ecological impacts in many countries" (Pimbert and Pretty, 1995:7).

In South Africa, apartheid laws were responsible for the forced removal of approximately 3.5 million people alone between 1960 and 1983 from both rural and urban areas (Bernstein, 2005). In recognition of the relevance and importance of co-management, Carlsson and Berkes (2005) indicate that the idea is that the agency with jurisdiction over any protected area may develop a partnership or collaboration. However, Berkes (2004) emphasizes that co-management is not a fixed state and can take place along a continuum of collaboration with a varying degree of power sharing. On the other hand, Pimbert and Pretty (1995) however question the relevance of what is often referred to as token co-management. A warning is issued that failing to qualify the level of participation will threaten rather than support the biodiversity conservation objectives. Pimbert and Pretty (1995:30-31) further describe the continuum of seven types of participation from a less desirable to an acceptable level where there is a definite devolution of power at a functional level of participation. Emphasis is placed on the importance of true participation in that, if the objective of the process is sustainable conservation, nothing other than functional participation will be sufficient. Similarly, Robinson and Boniface (1999) state

that co-management has been criticized as a construct with a vague meaning and emphasize the importance of qualifying what is implied when agreements are made. Carlsson and Berkes (2005) also recognise the importance of co-management in creating polycentric arrangements as opposed to the single administration units that practice monolithic decision systems. This is an important factor with regards to institutional memory and the threat of the high staff turnover experienced in EKZNW. It is thus not surprising that Carlsson and Berkes (2005) describe co-management as the logical approach to solving resource problems through partnership. Perhaps it should be described more as an imperative necessitated by the changes in social and developmental pressures on protected areas. Further more, the question should be asked if protected areas can continue to exist without participation.

Carlsson and Berkes (2005) however emphasize that co-management is not a panacea for all problems. It is necessary to recognise when co-management might not be a practical solution (Berkes, 2004). The challenge in this is that co-management is continually emphasized as a process with no fixed state or clear direction with regard to the outcomes and how these can be achieved without compromising the biodiversity goals. Therefore, Carlsson and Berkes (2005) further suggest that before co-management can be used as a remedy for common property problems, it is important to establish whether management power has been taken away from the community in the first place. They emphasize that in this case power sharing is usually an attempt by management authorities to increase the legitimacy of their dominance. It is thus important to establish whether or not there is a need to co-manage.

It is generally agreed that co-management can assist in addressing anthropological and other threats to protected areas. This is achieved through the increased understanding and realisation of the importance of conservation and protected area objectives (IUCN, 2005; Pimbert and Pretty, 1995). Similarly, Singleton (2000) emphasizes that the establishment of co-management systems may serve as a means of conflict resolution between local communities and management authorities.

Protected areas can no longer exist without the support of the local and wider communities. Barber *et al* (2004) recognise this and emphasize that the adoption of this new protected area paradigm necessitates community involvement at all levels. Hence

participation or collaborative management of protected areas has become an imperative. Whether this takes the form of co-management or governance structures or a different construct yet to be developed is irrelevant, the fact is that protected areas can no longer exist in isolation. It is important that the levels of participation should be qualified, functional and objective to avoid the danger of diluting the conservation objective. Communities are central to co-management. This requires a better understanding of what communities are and the next section will explore the broader context of communities and participation.

2.3.3 Communities and Co-management - the broader context

With regards to co-management, Berkes (2004) raises the issue that the term community hides a great deal of complexity. Similarly, MacDonald (undated) raises concerns regarding the management authorities' tendencies to contextualise and treat different communities as homogenous units. This poses immense difficulties with regards to comanagement as Berkes (2004) indicates that it is difficult to find a cohesive social group to work with within existing communities. Communities are multidimensional, and not as often perceived, a static isolated group of people. Berkes (2004) states that communities are cross scale social political units changing through time. Similarly, a fact that is often neglected in discourse, Pimbert and Pretty (1995) identify the need to recognise that different communities within institutions or conservation agencies are often not recognised. Lissu (2000) agrees with the above, indicating that often communities within government institutions are ignored, particularly with reference to those internal stakeholders interested in maintaining the status quo. Stakeholder analysis and identification thus form a crucial part in effecting and legitimising co-management structure in both communities and governments. Similarly, Carlsson and Berkes (2005) reiterate this when the presumption is made that co-management often depicts the state as some monolithic structure that neglects to recognise that not only communities, but the state itself has many faces. Institutions must be made to fit local circumstances (Carlsson and Berkes, 2005) which involve identifying the need for change internally. Lewis (1996) emphasizes that failure to recognise not only the rights, but also the interests and needs of all communities involved, will not only result in a general apathy, but will also over the decades exacerbate the mistrust that in some instances may escalate to conflict. The paradigm shift towards collaboration in protected area management requires change which necessitates the involvement of all parties concerned at all levels (Barber et al,

2004). Both Pimbert and Pretty (1995), Berkes (2004) and Lachapelle *et al* (2003) identify positivist or rationalist conservation professionals as stakeholders that do not necessarily support participative approaches. The need to recognise different communities within conservation authorities, especially with regards to the understanding of the imperative to implement co-management, has been largely neglected in popular co-management literature. The recognition and involvement of all the interested and affected parties from the start as legitimate stakeholders, is an imperative requirement to bring about the required paradigm shift that is essential in the creation of an internal enabling environment before any attempts can be made to implement co-management.

When referring to broader communities, Berkes (2004) states that it is easier and more productive to focus on institutions, rather than communities. Similarly Pimbert and Pretty (1995) refer to the failure of management authorities in many instances to recognise existing institutions such as traditional authorities in communities. These structures are more defined and can give legitimacy to the development of co-management institutions (Berkes, 2004). Similarly, Pimbert and Pretty (1995) recognise and emphasize this process of institution building, however they identify that this can only be achieved through a bottom up approach which will provide the opportunity for legitimate institutions to develop at local level. This process of institution building is a lengthy process that may take up to 10 years and requires certain constants to develop trust, flexibility, mutual learning and the ability to adapt and embrace mistakes (Pimbert and Pretty, 1995; Carlsson and Berkes, 2005). The following two sections, in line with the research objectives, will explore the broader context of what the institutional expectations are or the understanding is with regards to co-management and the barriers that negatively impact the implementation of this participative conservation paradigm.

2.4 Expectations, Protected Areas and Co-management

According to Mkhize (2007) the current reality in protected area management is that the present requirement is that protected areas should pay for themselves by generating adequate income, as well as to provide access and a suite of benefits to their neighbouring communities. Similarly, Carruthers (2007) states that South Africa's protected areas are seen as rural centres for economic and social development and service delivery rather than as biodiversity protection or providers of essential ecosystems services. Kumleben *et al* (1998) in their report of the Board of Investigation into

International Arrangements for Nature Conservation in South Africa, state that nature conservation can never be self supporting and that it is the exception to the rule when eco-tourism activities and other income adjuncts to conservation exceed the expenditure. Expectations as to what economic benefits protected areas can deliver are thus unrealistic. Both the World Summit on Sustainable Development (Johannesburg 2002) and the Fifth World Parks Congress (Durban 2003) demonstrated that South Africa's protected areas exist for the benefit of the people (Carruthers, 2007). The question thus begs what the limits are to these benefits, and what a realistic objective for protected areas should be.

2.4.1 Institutional expectations and co-management

Khulani Mkhize, then CEO of EKZNW, in 2007 delivered a talk to employees stating that: "...community management and ownership of protected areas and natural resources and management models for conservation areas present a situation which can be defined as the most important crossroads for conservation and may determine a pathway which we live to regret or which ensures an equitable, sustainable future for all" (Mkhize, 2007:1).

Mkhize (2007) suggests that these expectations can only be overturned by a paradigm shift by the broader community in realisation of the fundamental benefits of our protected areas. What are the expectations with regards to the implementation of co-management? Is there is singular understanding of what the implementation of such an elusive concept entail? Borrini-Feyerband et al (2000) recognize the importance of not homogenising communities when dealing with co-management. One of the failures is that sociologists fail to necessarily recognise the diverse expectations and understanding of comanagement within management authorities as the implementing agency. Popular discourse tends to focus on community aspects and expectations and often ignore institutional departments and inadequacies. It is however important to recognise the diversity within conservation organisations and not merely to presume that there will necessarily be an understanding for the case of co-management. Lachapelle et al (2003) warn that assuming a singular interest in a pluralistic society may be fatal to any resource planning process. Similarly, Hesselink (undated) emphasizes that an organisational communication strategy that fails to create a shared or common vision, as well as opportunities to develop an understanding of community needs and interests, will result in unreasonable expectations that can be detrimental to co-management.

According to Lewis (1996), the historical and current failure to recognise the needs and interests of different stakeholders or communities is the underlying causes of general apathy and conflict. Carlsson and Berkes (2005) identify that organisational inability to conceptualize and analyse co-management is one of the biggest challenges for the development of these collaborative structures. This emphasizes the need to address inhouse the negative perceptions and expectations of what co-management are, before it can or should be attempted to initiate these systems. The need to develop and communicate a common understanding of the objective is thus central to the successful implementation of the co-management construct. Dent and Densham (2008) emphasize that vision is a primary motivator of human behaviour. Adopted essentially from Starkey *et al* (2004) in How Organisations Learn, Dent and Densham (2008) identify the need to recognise the different perspectives of the currently reality and the need to develop a shared future vision as a motivator. Figure 2.1 illustrates the importance of creative tension that is created when the difference in the current reality and future vision is recognised.

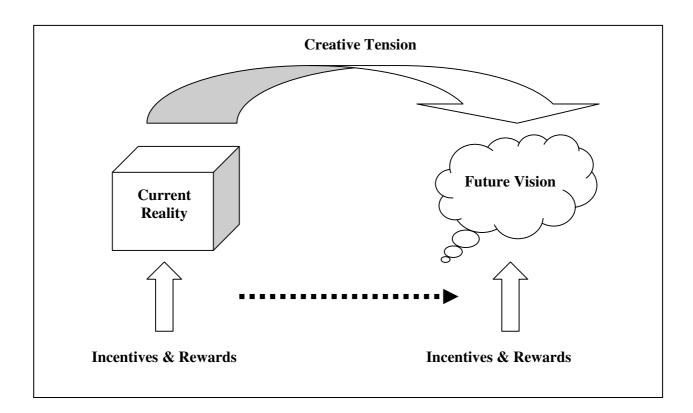


Figure 2.1: A model illustrating the importance of creative tension when the gap between the Current reality and Future Vision is recognised. (Dent and Densham, 2008)

Dent and Densham (2008) however emphasize that it is the responsibility of good leadership to create a realistic view of what the current reality is, and what the future vision should be. Similarly, Mkhize (2007) states that issues pertaining to co-management pose significant leadership challenges and require innovative, effective, informed and meaningful responses. Dent and Densham (2008) further emphasize that this creative tension is not enough to bring about the required change and that the movement towards this future vision is a product of various incentives and rewards. Defining or determining the current reality in an institution regarding the implementation of co-management plays an important function in the development of a shared future vision. This will point out the inconsistencies with regards to the understanding of co-management and what changes need to be brought about to realise this future vision. According to Kreitner & Kinicki (1992) as cited in Dent (1996) unclear objectives and vague performance measures contribute to and perpetuate situations around implementation of projects where there is uncertainty or a lack of a shared future vision. Similarly, Pimbert and Pretty (1995) emphasize that the challenge for top and middle managers is to design appropriate institutional mechanisms and rewards to encourage the spread of participatory approaches within organisations.

The expectations of the protectionist conservation biologists (Lu Holt, 2005) is indicative of what Pimbert and Pretty (1995) term the positivist or realist approach of scientists. Thus, Goodale *et al* (2003) state that where co-operative management is required; a division between social and biological goals is not possible. Pimbert and Pretty (1995) confirm this and identify the ideological and positivist attitude of conservation professionals as one of the reasons for repeated failures of processes where these departments are evident. Biologists, scientists and managers often understand the need for participative management approaches, however, opposition regarding the implementation of co-management is based on the expectations of the detrimental impact that the devolution of power will have on key decisions regarding the use of natural resources and the sustainability thereof (Pimbert and Pretty, 1995). This in turn raises the question of what communities expect from co-management.

2.4.2 Communities and Expectations

As the scope of this research does not concentrate on community expectations, this section will only provide a brief overview. Community expectations to some extent influence the perceptions and expectations of the conservation professionals involved with the implementation process. The failure to address negative community expectations can thus have adverse implications on the outcome of the implementation process (Borrini-Feyerband et al, 2004). Similarly, Berkes (2004) recognizes that there is often a misunderstanding of what conservationists see as community benefits (e.g. the sharing of financial benefits from ecotourism) and what multiple stake holders may have considered to be benefits. Similarly, this is indicative of the lack of understanding of community needs and interests (Lewis, 2006) and the tendency to homogenise communities (Macdonald, undated). In recognition of these perceptions, Berkes (2004) emphasizes that local communities in the developing world rarely equates benefits with simple monetary rewards and that various social and political benefits tend to be important. Communities often place more value on equitable beneficiation, empowerment and recognition of land tenure rights (Pimbert and Pretty, 1995; Berkes, 2004; Borrini-Feyerband et al, 2004; Carlsson and Berkes, 2005; Lewis, 2006). On the other hand, Carruthers (2007) states that the bureaucratic inadequacy of government to effectively address the land restitution process in South Africa has led to tension and unrealistic levels of expectations. The 2006 People and Parks Conference held at Beaufort West South Africa produced a Community Statement which highlighted South African communities' generic concerns regarding the implementation of co-management which included the following:

"Communities are not experiencing the reality of co-management on the ground (...) communities feel alienated and unable to influence park management decisions (...) government does not respect settlement agreements, e.g. the issue of co-management is stated in the settlement agreement, but not applied (...) both community members and park officials need capacity building (...) co-management as it is implemented at the moment is not empowering the community" (DEAT, 2007:11-12).

The Community Statement further emphasized the lack of benefits received and equitable benefit sharing that does not transpire to the broader community (DEAT, 2007). What are the incentives for communities to co-management and what are the perceived benefits? Failure to address this poses a serious threat to the successful implementation of co-

management. In order to manage these perceptions it was identified that beneficiaries themselves should analyse what they perceive the benefits to be. This process was recognised as essential to the development of an understanding of the stakeholders' interests and perceptions and should be implemented upfront (DEAT, 2007). This however also indicates a tendency by communities to homogenise protected areas and conservation organisations, equating them to the state.

Mkhize (2007) states that perceived benefits are often idealistic with real benefits often being not tangible and only experienced in the long term. On the other hand, Pimbert and Pretty (1995) emphasize that for co-management to serve the purpose of sustainable conservation, communities need to experience immediate and real benefits. These once again emphasize the importance of recognising the community's needs and interests. Failure to address this will result in a further distrust between conservation agencies and stakeholders which will inhibit the effective implementation of co-management (MacDonald, undated). This raises the question of how institutions not only deal with barriers and obstacles, but more so with the repeated failures from the unsuccessful implementation. Co-management is an iterative problem solving process of strategic adaptive management (Berkes, 2004; Carlsson and Berkes, 2005). Identifying barriers and obstacles that impact on the implementation of co-management, learning from the experience and adapting to the needs of the system is essential to the success of the construct. The following section will explore literature regarding the second research question of institutional barriers to effective implementation of co-management.

2.5 Barriers to effective implementation

The requirement of co-management as a process rather than a well defined state or system adds to the complexity of the implementation process (Berkes, 2004). Senge *et al* (2008) emphasize that institutions are humanly devised constraints that structure human interaction and are made up of formal constraints such as rules, laws and constitutions, each with its own dynamics and restraints that impacts on its efficacy. Thus Berkes (2004) identifies that the failure of collaboration is not necessarily due to the weakness or impracticality of the concept, but rather due to the improper implementation of the concept. Borrini-Feyerband *et al* (2004) describe the implementation of co-management as an iterative process that requires a degree of flexibility with regard to institutional arrangements. Similarly, Lachapelle *et al* (2003:473) suggest that the new natural

resources paradigms of functional participation does not conform well to the "traditional rational comprehensive" planning processes and only serve to exacerbate already contentious situations. In support of this, Pimbert and Pretty (1995) identify that the majority of conservation institutions faced with the implementation of the co-management construct, conforms to a blue print paradigm. This is contrary to the holistic process based management approach that is required for participative management. The following sections will explore the requirements of appropriate management systems for the implementation of co-management.

2.5.1 Institutional design and operational requirements for co-management

Pimbert and Pretty (1995) stress that the challenges of participatory approaches are enormous. They identify that insufficient attention has been given to methodological research and development that promotes functional participation. Similarly Carlsson and Berkes (2005) state that there are a number of concerns surrounding the definition of comanagement in capturing the complexities and dynamic structure of the contemporary management systems. They highlight that these include the following: (1) complexities of management agencies; (2) complexities of communities; (3) complexities and dynamics of the iterative nature of co-management; (4) complexities of the conditions available to support the system which refers to the availability of exogenous factors involving security of resource tenure, autonomy, availability of appropriate financial resources, facilitation, support and so on...; (5) complexities of co-management as a governance system, and (6) the complexities of the ecosystem and associated resources concerned (Carlsson and Berkes, 2005:67). In support of this, Lachapelle et al (2003) indicate that Natural Resource planning with regards to participation has been a rational-comprehensive or synoptic model approach with a scientifically based expert-driven approach to management. This conforms to the blue print paradigm described by Pimbert and Pretty (1995) and is contrary to the holistic approach required for the implementation of participative management paradigms. Lachapelle et al (2003) further emphasize that resource planning has moved from a well defined process to a complex situation of continuously changing and competing ill defined goals, limited time and resources as well as a lack of information in a volatile socio-political environment. This often results in dissatisfaction with regards to the implementation of contentious systems or constructs and is often experienced as a lack of participation, as animosity and as distrust. This synoptic approach is not well suited to what Lachapelle et al (2003:474) term as "messy"

situations. These situations require a multi-dimensional approach aimed at learning, relationship building, ownership and improved social and political acceptability. Similarly, Berkes (2004) recognizes that issues such as fairness, transparency, equitability, accountability as well as adaptability have an important impact in the implementation of these holistic approaches. Both Pimbert and Pretty (1995) and Lachapelle *et al* (2003) note that while current day management may have claimed to adopt or employ a more holistic and system based approach, the reality of the situation is that the values of the old paradigm have not been left behind. It is thus evident that a complete paradigm shift is required; not only in terms of adopting the holistic management approach, but also at personal levels to ensure that a paradigm shift is affected throughout organisational systems. Even though conservation agencies adopt or promote the implementation of a holistic participative management paradigm, the actual implementation thereof is not always evident. What are the reasons for this? The following section will explore institutional barriers that might hinder the implementation or even the acceptance of comanagement.

2.5.2 Institutional Barriers

The empirical question with co-management is how governance systems in conservation agencies are configured to allow for co-management? To effectively plan, implement and establish co-management requires an understanding of both barriers and obstacles to the process. Lachapelle *et al* (2003) indicate that understanding these barriers in current planning and implementation processes, can lead to the adaptation of the processes required for these complex and dynamic systems to succeed. Lachapelle *et al* (2003) also recognise that there are a number of institutional barriers, such as a lack of agreement on goals, rigidity in the process design, procedural obligations and a lack of trust, which may compound operational issues. It is unlikely that barriers in resource planning occur independently. It is thus necessary to understand and identify that a relationship exists between these barriers and that these are intrinsically linked as indicated by Lachapelle *et al* (2003) in Figure 2.2.

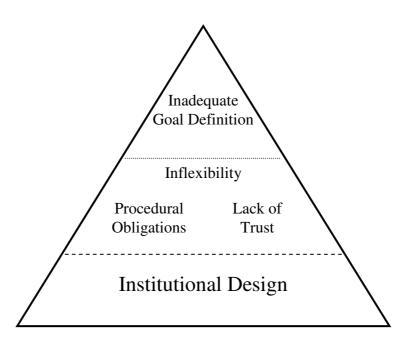


Figure 2.2: A conception of how institutional barriers are linked indicating the most visible and dependant at the top and the most fundamental and structural at the bottom. Source: Lachapelle et al (2003)

Similar to the four quadrant model adopted by Dent and Densham (2008), Lachapelle et al (2003) identify the importance of a clear specific set of mutually acceptable goals if the planning is to be successful. Assuming a singular interest in a pluralistic society may be fatal to any resource planning process. This usually develops from implicit assumptions about agreement on the goals or objectives (Lachapelle et al., 2003). The difficulty or inability to define mutually acceptable goals can prove to be a significant problem. Pimbert and Pretty (1995) therefore state that the new paradigm requires greater emphasis to be placed on training in communication. Similarly, Szucs (undated) stipulates that as co-management addresses the facilitation and creation of partnerships, it requires the development of specific communication objectives. Failure to plan to communicate effectively is planning to fail. Of further relevance, Lachapelle et al (2003) indicate that even though communication is often blamed as a barrier, they maintain that poor communication is symptomatic of the three second tier barriers of inflexibility, procedural obligations and a lack of trust. It is important to consider that even though not all of these might occur in a planning situation, one barrier alone is enough to hamper or even overcome the planning process.

Similar to Pimbert and Pretty's (1995) reference to the blue print management paradigm, Carlsson and Berkes (2005) refer to the negative implications of conservation agencies top down or command-and-control kind of resource management. Emphasis should be placed on an adaptive management approach in which policies are treated as hypotheses and management actions as experiments from which managers can learn. Management processes must be adaptable and flexible. On the other hand, Robinson and Boniface (1999) emphasize that governments must have a clear mandate of what they can achieve. Similarly, Carlsson and Berkes (2005) emphasize the need for recognition of a state centric approach where the main research problem is to what extent the State has the political and institutional capacity to implement co-management. On the other hand, Berkes (2004) emphasizes adaptive management in recognition that, as a starting point, information will never be perfect. Close co-operation and risk sharing requires collaboration, transparency and accountability. This necessitates the creation of an adaptive learning and enabling environment that practice to build on experience. Similarly, Pimbert and Pretty (1995) indicate that the learning process approach best fits an organisation with an organic structure that is flexible with free lateral communications. This approach is fundamentally different from the command and control approach and requires a major paradigm shift. Management by participatory approaches needs to abandon enlightenment and assumptions of predictability and control. Berkes (2004) emphasizes that conservation agencies need to recognise the limits of expertise and embrace the advantages of participation. Cross scale conservation has to be planned bottom-up rather than top down because it makes sense to rather start solutions at the lowest possible level. This necessitates the use of the subsidiary principle that the goal should be a local solution with as little regulation as possible (Berkes, 2004). It is an evolutionary process requiring mutual learning and trust building. Co-management is thus rather an approach to governance as opposed to a formal power sharing agreement. Power-sharing should be the result and not the starting point. Similarly, Carlsson and Berkes (2005) emphasize that an approach focusing on the legal aspects of comanagement with emphasis on formal structures of arrangement and institutions runs the risk of neglecting the functional side of co-management. Thus, Robinson and Boniface (1999) highlight that negotiations should rather be based on solid foundations as opposed to using imprecise terms and agreements which can create false expectations. In support of this, Carlsson and Berkes (2005) emphasize that research on co-management should

rather focus on how management tasks are organised and distributed and concentrate on function rather than structure of the system.

Co-management denotes a concept that combines vertical linkages with dynamic learning characteristic of adaptive management (Berkes, 2004). It is thus a process by which institutional arrangements and ecological knowledge are tested and revised in an ongoing process of trail and error. This process however comes at a cost. The following section will briefly review what current literature states on co-management with regards to the resource requirements associated with the implementation thereof.

2.6 Resource requirements for the implementation of Co-management

The complexity of the construct and the volatility of the processes create difficulties with regards to planning for the resources required. Timelines are not fixed and due to the need to create and build trust, processes can drag on indefinitely. With most conservation agencies, as implementers, conforming with what Pimbert and Pretty (1995) term as a blue print management paradigm, organisations are restricted by the inherent requirements of government in terms of well designed resource planning and defined allocation according to project management procedures. Hence, most authors identify the need for policy intervention as part of the process to create the required enabling environment for the implementation of co-management (Mkhize, 2007; Reid *et al*, 2004; Fabricius *et al*, 2001; Pimbert and Pretty, 1995). This spans across the framework from National legislation down to an implementation level on the ground. On the other hand, Berkes (2004) emphasizes that in some cases, policy intervention may lead to system failure due to the need to do deliberate institution building when working with communities as complex entities.

References regarding the resource requirements for co-management are few and vague. This is indicative of the complexity in determining the resource requirements. There is a definite need and opportunity for more research on this topic to guide implementers as to what the resource requirements are and what can be expected. Thus the following sections briefly explore what current literature state with regards to resource requirements for the implementation of co-management.

2.6.1 Financial implication of Co-management

Fabricius et al (2001:837) refer to the high transaction cost of co-management as "(a)n unexpected disadvantage... (that is) far from representing a cheap conservation option". Similarly, Mkhize (2007) states that co-management has high financial implications for management authorities with regards to additional staff, meetings, trainings, investments and reduced revenues. Reid et al (2004) indicate that the implementation of comanagement requires an increase in operational budget of 25-50%. Mkhize (2007) states that the development of a policy framework that address the investment of financial resources into long term development aimed at providing ongoing sustainable resources specifically aimed at the implementation of co-management. On the other hand, Carlsson and Berkes (2005) state that although the initial phases of the establishment of comanagement increase the costs, they emphasize that, one positive that is often neglected, is that a well tailored system help reduce the long term transaction costs. Similarly, Pimbert and Pretty (1995) indicate that conservationists are quick to highlight the increased costs of the implementation of a collaborative paradigm whilst they fail to recognise the high cost and futility of continued law enforcement operations. On the other hand, Thomas and Middleton (2003) and MacKinnon (1992) warn that the resource requirements of co-management can ultimately dilute the primary management objectives of protected areas and divert resources from the primary objective, thus decreasing management effectiveness.

Even though the financial implications of co-management are real in terms of affecting conservation operational budgets, the real impact is in terms of human resource requirements and associated personnel costs. The following section will explore these requirements with regards to the implementation of co-management structures.

2.6.2 Human Resource Requirements

Co-management provides real challenges for managers at all levels, particularly at a reserve management level, as it is an additional requirement and dimension, outside their area of expertise (Wangchuk, 2005). It adds to existing threats, challenges, costs and requirements such as training or capacity building. Inamdar *et al* (1999) as cited in Fabricius *et al* (2001) indicate that the collaborative management paradigm requires well trained and experienced staff to be successful. Carlsson and Berkes (2005) highlight the importance of the need to identify and build capacity. Similarly, Büsher and De Beer

(unpublished) place the emphasis of capacity building not on how to resolve specific problems, but rather on how to develop the ability within systems to resolve their own problems. This is reiterated by Scharmer (2009) who calls for the development of a new systemic leadership paradigm that focuses on developing leadership capacity within cooperative systems that are prepared to creatively deal with the major challenges of our time.

Where capacity building is required, Borrini-Feyerband et al (2004) emphasize the importance of analysing the organisational needs. In line with this, Mkhize (2007) suggests that a tailor made capacity programme has to be developed for conservation organisations and communities alike. This is often a long and costly process that requires additional resources to provide the training. References to what is required are vague and non-descript leaving implementing organisations to grapple with the complexity thereof. As conservation organisations do not have the fiscal resources to create new posts required for the implementation of co-management, human resources are taken from within existing establishments. Rather than creating new structures and positions, Berkes (2004) and MacDonald (undated) emphasize the importance of implementing comanagement from the bottom-up, rather than the top-down approach. Keidel (1994) emphasize the importance and power of thinking as a leading element of change in transforming or re-engineering organisational design. Keidel (1994) states that rethinking, in the changing of patterns of understanding, is far more effective in addressing issues of performance as opposed to restructuring. He emphasizes that this cognition or re-thinking is not an organisational function, but takes place at an individual level. Similarly, Senge et al (1995) state that organisations behave the way that people in them behave. Emphasis should thus be on the changing of individual perceptions and the development of individual re-thinking. Hughes (2008) states that communication, education, participation and awareness (CEPA) within organisations is a crucial social instrument in fostering change with regards to policy changes and acceptance and the creation of an enabling environment for co-management. However, where policy changes to implement co-management do not effectively address the resource requirements, Berkes (2004), Thomas and Middleton (2003) and MacKinnon, (1992) warn that the implementation of co-management will ultimately adversely affect management effectiveness.

The successful co-operation for long term mutual benefit in collaborative management practices depends on the development of social capital (Nkhata et al, 2008). Social capital refers to the stock of socio-psychological attributes of relationships including trust and commitment. These are not the only attributes but some of the most important ones; i.e. trust involves present and past experiences as well as expectations. Commitment refers to the extent in which organisations invest resources in the creation of long term relationships. Nkhata et al (2008:45) state that "Volatility in social capital is reflected in the transformation of property rights regimes and tests the resilience of governance to respond to systemic forces...". Together with the inherent complexity of co-management, a lack in social capital may lead to instability and a rapid collapse of systems in response to disturbances or emergent forces. Similarly, Carlsson and Berkes (2005) emphasize that successful reduction of conflict is essential for long term planning and to the extent to which an organisation invest in resources for the creation of a long term co-management institution. This emphasizes the need to retain staff in key positions to ensure the trust relationship is built up. Similarly, Borrini-Feyerband et al (2000) state that people that are involved in the promotion of the co-management process require knowledge and skills in the ecological, social and economic disciplines. Managers need the capacity to communicate with all stakeholders and to obtain and maintain their confidence and trust. This once again emphasizes the need for continuity to develop the required social capital. On the other hand, Fabricius et al (2001) have identified that some conservation agencies have established specialised social ecology units to deal with these requirements. This adds costs and draws from existing resources as conservation agencies do not have the resources to cover the creation of these new units. In theory, these units aim to address the lack of capacity, but often fail to address the development of the required expertise at an operational level where these agreements will be implemented.

2.6.3 Identifying alternative resource solutions

Research done by Balmford *et al* (2002) as cited in Mkhize (2007), indicated that the value of intact and conserved ecosystems is greater (from 14% to 75%) than the values of converted areas. The study indicated the estimated costs of the loss of ecosystem services, at US \$250 billion. However, Mkhize (2007) emphasizes that even though there is no problem attaching a costing to unconverted landscapes, the problem lies in who should be accountable for covering the meagre costs for managing these areas. With the realisation of carbon trading and payment for ecosystem services (PES) in the UDP WHS

(Diedrichs and Mander, 2004) the possibility of accessing the resources required are becoming more feasible. This will provide the opportunity that Adams (2006) suggests to use the market as an effective tool in changing behaviour, a crucial requirement for the implementation of co-management (Berkes, 2004; Borrini-Feyerband et al, 2004; Hughes, 2008). To implement PES requires collaboration with multiple stakeholders and presents an opportunity to form partnerships across a broad spectrum, including other environmental Non-Governmental Organisations (NGOs). This in turn provides opportunity for a mutual learning environment that can assist in addressing insufficient internal capacity. These NGOs can also assist with crucial requirements such as verifying stakeholder legitimacy, conflict resolution, facilitation and mediation (Alder et al, 2007). Similarly, Carlsson and Berkes (2005) describe co-management as a network of various actors. One of the basic features of this network is that the activities of two formal parties can be co-ordinated by a third party. This also has the effect that not only information, but also resources, are pooled and allocated to serve specific functions and address resource shortcomings. Similarly, Berkes (2004) recognises the need to create both vertical and horizontal linkages in and between various institutions to compare and learn. Fay (2007) however warns in an article on Theorizing Negotiations, that in the creation of such vertical or horizontal linkages where the resources do not exist within the implementing agency, it is essential that their roles are clearly defined and that they do not promote their own agenda.

2.7 Summary

The complexity surrounding the implementation of co-management presents unprecedented challenges for protected area managers. The need and the imperative to co-manage protected areas is fraught with unrealistic and varied expectations of the numerous heterogeneous stakeholders. Implementing conservation agencies need to conform to an adaptive and holistic system based approach which calls for an institutional as well as individual paradigm shift. The complexity of implementing agencies and the traditional, rational comprehensive planning processes, together with a lack of flexibility to adapt to these volatile systems are further exacerbated by a lack of resources. To address these barriers requires an evaluation of the current reality and an understanding and agreement with regards to the future vision regarding co-management. This however calls for a new paradigm of leadership development, focusing on systems as opposed to individuals, with the ability to solve problems creatively within.

Chapter 3: Research Design and Methods

3.1 Introduction

Semi-structured interviews were used as part of a qualitative case study approach to address the various objectives of this research. Further techniques included the analysis of organisational strategic documentation of relevance to the implementation of comanagement in EKZNW. Direct participant observation was used in addition to gain a better understanding of the existing perceptions and attitudes that might impact on the implementation of co-management. The research focused on the institutional aspects regarding the implementation of co-management within EKZNW. Stakeholders were therefore identified within the various organisational departments with a strong bias towards management who would be responsible for the implementation at ground level. Semi-structured interviews, as the main research tool, formed the basis of the research and aimed at identifying the various perceptions, barriers and resource requirements related to co-management. Interviews were transcribed and descriptive data analysis techniques were used through the interpretation and coding of data. Due regard was given to issues of reliability and validity.

3.2 Research Design

The research design was determined by the setting in which the study was conducted. As the objectives of the research aimed at identifying the various perceptions and barriers within the confines of EKZNW as an institution, the case study research design was deemed most appropriate. Yin (1994:13) defines a case study as "...an empirical inquiry that investigates a contemporary phenomenon within its real-life context ...". This case study aims to translate or describe the meaning of occurrences that can not be separated from the influences of its surrounding social environment. To confirm the selection of the case study approach, Welman *et al* (2005) emphasize that it is a descriptive form of research that can be used successfully to study groups, small communities and organisations and is specifically well suited to practice orientated fields such as management science. The case study approach thus aimed to create an understanding and explore the uniqueness of the UDP WHS, taking into account all considerations and complexities within the institution of EKZNW. This case study involved the use of field work where investigations were conducted under natural circumstances of the specific case.

3.2.1 Research Methods

Berkes (2004) emphasizes that many of the socio-ecological and environmental problems do not lend themselves to analysis by conventional methods of a rational or positivist approach. The positivist approach defines problems, collect data and make decisions based on these results. Socio-ecological problems can not be separated from issues of social justice, values and equity. Berkes (2004) furthermore identifies the need for researchers to interact with stakeholders to define important questions, objectives, relevant evidence and convincing forms of argument. This approach is also referred to as ethnography. Yin (1994) states that ethnography is well suited to studies that focus on behavioural regularities such as attitudes and perceptions. Qualitative research is best described as an approach rather than a design. Welman *et al* (2005:193) explain that qualitative research designs aim "...to uncover and explicate the ways in which people in particular settings ... take action, and manage their situations". This study used a qualitative research methodology that lent itself to this anti-positivist approach and took account of the social environment that influenced the case that was being studied. Hence it was deemed that a case study approach would be most appropriate.

3.2.2 Population and Sample Selection

Given the complexity of the implementation of co-management, a non-probability or purposive sampling technique, rather than random sampling technique was used. This was to ensure that the sample included a diverse set of perspectives, and as Welman et al (2005) indicate, this is the most important type of non-probability sampling. In this technique, researchers use their experience and ingenuity "...to deliberately obtain units of analysis in such a manner that the sample they obtain may be regarded as representative..." (Welman et al, 2005:69). The criteria used for the purposive selection of individuals were based on the objectives of the study and the criteria required for the successful implementation of co-management as identified in the literature review. A bias was shown towards to the lower level managers that were concerned with the implementation of co-management on the ground. A small sample of 18 individuals/units of analysis from various roles and departments in EKZNW concerned with the implementation of co-management were selected. Even though the sample is small, within the context of the case and in line with the objectives of the research, the bias towards lower level protected area managers represent a reasonable proportion of the management function of the case. The purposive sampling ensured that individuals

concerned, apart from being stakeholders themselves, were also representative of the various departments within EKZNW. Appendix A is an anonymous list of the Interview Subjects that categorise the individuals that were interviewed, also indicating their respective roles in the organisation, however with due regard to anonymity. A further conscious effort was made to include various races, sexes and different age groups. However given the small sample of units of analysis, the organisational context and employment equity policies, more emphasis was placed on categories and job descriptions.

3.2.3 Research Techniques

Fieldwork was used to conduct an investigation into this specific case. The research procedure consisted of the use of semi-structured interviews as well as participant and direct observation to search in an inductive fashion for recurring patterns and consistent regularities. In addition to the abovementioned techniques, to corroborate findings, as the researcher was the research instrument, EKZNW organisational documentation relevant to the implementation of co-management was used to ensure triangulation.

To ensure that the objectives of the research were addressed, semi-structured interviews with stakeholders identified through purposive sampling were used as the main measuring instrument. In addition, the review of EKZNW organisational documentation also aimed at identifying aspects relevant to the three main objectives of the research namely; the perceptions of co-management, the identification of barriers and the identification of the required resources. As far as the techniques of participant and direct observation were concerned, these techniques only addressed the objectives of developing an understanding of barriers impacting on the implementation of co-management and the perceptions of people with regards to co-management.

3.2.4 Measuring Instrument

Data was collected through the use of in-depth, in person interviews. A semi-structured interview process was used to conduct interviews with individuals. To ensure that the interviews were systematic and focussed on the research objectives and covered the relevant comparable information, an interview guide (attached as Appendix B) was developed and used as the measuring instrument. The development of the interview process involved an analysis of the problem to develop an understanding of the required

information, and the identification of who would be able to provide the information was incorporated as suggested by Welman et al (2005). The three main research questions identified as part of the objectives formed the main themes of the interview guide. These themes guided open ended questions aimed at identifying perceptions relevant to the research objectives. In addition to the objectives of the research, the questions addressed issues constraining the implementation of co-management as was identified in the literature review. The purposive sampling technique ensured that the third requirement of identification, of who would be able to provide the information, was met. Literature on question development and interviewing was reviewed to ensure the application of the most appropriate techniques. To ensure the appropriateness of the interview guide, four pilot interviews were held. As the researcher was familiar with all of the interviewees, the interview guide was adopted to ensure that the questions did not affect the validity and reliability of the research. As Yin (1994) emphasizes the advantage of the iterative nature of the semi-structured interview process, the interview guide was amended, addressing issues as they arose. In addition, the further advantage of the use of semi-structured interviews was that each interview could be structured in such a way to suit the situational background of the respondents. Where information and detail was vague, non-directive probes were used to obtain clarification as suggested by Fowler and Mangione (1990).

Interviewee's identified through the purposive sampling were approached by means of an informed consent letter (Appendix C). This letter provided the background information relative to the research and explained the purpose of the study. It also indicated the request to set up an interview indicating the approximate amount of time that would be required, whilst ensuring the interviewee of his/her anonymity. Once the informed consent document was received, or the interviewee communicated acceptance, an appointment was made and confirmed for the interview to take place. In setting the interview stage, as suggested by Kvale and Brinkmann (2009), to put the interviewee at ease, the background and purpose of the study was explained, also allowing room for questions. Apart from the introductory questions being non-threatening, questions in the interview aimed to be simple, non-threatening, not leading and probing. Interviews were conducted as far as possible in an environment familiar to the interviewee to assist in creating a confidential and comfortable environment.

Interviews took approximately 45 minutes to an hour to complete. Detailed notes were taken during interviews and to avoid bias and mistakes, and as well as for further referencing or validation, interviews were also recorded with a digital sound recorder to minimise the disturbance previously created by tape recorders. Recordings however were only done with the permission of the interviewee. These detailed notes formed the empirical foundation of the research. The database consisted of 77 pages of notes from more than 15 hours of taped interviews.

3.3 Procedure

The need to identify the management requirements for the effective implementation of comanagement within the uKhahlamba Drakensberg Park, was identified during the course work in partial fulfilment of the academic requirements for the degree of Master of Environment and Development, Protected Area Management. Literature relevant to the implementation of co-management was extensively reviewed during the course work section and was used in the completion of a research proposal. On approval of the research proposal, a further extensive literature review was done focusing on the objectives identified in the research proposal. As the research proposal indicated the qualitative nature of the study through the application of a case study, the main themes of the interview guide determined by the research objectives were further supplemented with relevant questions identified in the literature review. On completion of the draft interview guide, a submission was made to the University's Ethical Committee for clearance to proceed with the research. As part of the ethical clearance, an Informed Consent Letter was developed (Appendix C). This letter aimed to not only serve as an introduction to individuals identified as part of the purposive sampling technique, but also to assure their anonymity should they agree to be interviewed. To address an expected non-response, 33 informed consent documents were posted to individuals identified through the purposive sampling technique. In addition to this, further contact was made by e-mail and telephone to confirm appointments. 13 non-responses were encountered, but subsequent telephonic communications ensured that the minimum required number of identified individual agreed to participate. The persistence to ensure that the identified individuals partake was important due to the purposive sampling technique applied.

As part of the four stages of semi-structure interviews (Welman et al, 2005), a pilot study was done to determine whether the draft interview guide addressed the objectives of the

research. Interviews were scheduled with the individuals concerned and were conducted throughout the uKhahlamba Drakensberg Park at the various management units, Ezemvelo KZN Wildlife Head Offices at Queen Elizabeth Park and at Midmar Regional Offices. Interviews were conducted using appropriate interview techniques described by Welman et al (2005) and Kvale and Brinkmann (2009) with due regard for interviewerrelated error as described in Fowler and Mangione (1990). At the beginning of each interview, participants were issued with a copy of their signed informed consent documents assuring them of their anonymity. In addition, units of analysis were described using their biographical information to ensure anonymity (Appendix A). As all interviewees were at least protected area managers with an understanding of terminology and jargon pertaining to the subject, interviews were conducted in English. Detailed notes were made during the interview by hand which was later written up as complete descriptive report for the purpose of recording and analysis. Appendix D is an example of a written descriptive report where the name and title and references that could lead to the identification of the individual, were deleted. In addition a digital recorder for minimal interference was used to record interviews, should any doubt arise from hand written notes. These notes were downloaded onto a computer and renamed with a filing reference on the descriptive narrative report. A written communication was sent to all participants to thank them for their contribution. Analysis and collection of institutional documentation was ongoing as part of the literature review and sampling process. Data was interpreted and analysed as the sampling was done.

3.4 Data Interpretation and Analysis

Welman *et al* (2005) emphasize data analysis as one of the most important stages of the research process. Welman *et al* (2005) also state that the selection of the most appropriate statistical procedure to analyse data, should be made even before data collection begins. To address the objectives of the study, Yin (1994) states that data analysis consists of examining and categorizing the data collected. Patton (2002:433) emphasizes however that because "... each qualitative study is unique, the analytical approach used will be unique". In order to analyse the field notes, these were processed by converting the notes into complete descriptive reports that could be read, edited and commented on. Data analyses started with the onset of the sampling as Burgess (1994:235) emphasizes that "...data analysis is a long and laborious process, where the researcher has to try to avoid skimping the work". Analysing qualitative data was difficult

as strategies and techniques have not been well defined and even though there are some formulas, much of the analysis depended on the researchers thought processes with due regard for alternative interpretations as suggested by Yin (1994).

As the objective of the research focussed on the development of a better understanding with regards to factors that might negatively impact on the implementation of comanagement, the general strategy of developing a case description or detailed narrative description was opted for in the interpretation of the data. The case data consisted of all the information that was available about the case. This included the interview data, observations and documentary data. In constructing the case study report, data was processed in three steps according to Patton (2002). Step 1: All raw data was assembled. Step 2: Raw data was condensed and organised and edited into manageable and accessible files. Step 3: Compilation of a case study narrative which is a readable descriptive account of the specific case in its uniqueness. Appendix E is an example of the content analysis that was done with the data obtained from the semi-structured interview process. The intent of this descriptive analysis is to produce a highly readable narrative that can be used by decision makers to better understand the requirements of this specific case for the effective implementation of co-management. Even though this case study is focussed on the development of a descriptive narrative and categorisation is not a necessity, a thematic content analysis was conducted to reduce and make sense of the qualitative data and to "...identify core consistencies and meanings". (Patton, 2002:453). The aim was to identify patterns or descriptive findings in support of the main themes under the objective of the research through an inductive analysis. This process of open coding (Yin, 1994, Patton, 2002,) forces the researcher to become emerged in the data to reveal embedded meanings and relationships. However, Patton (2002:457) emphasizes that "...the analytical process is meant to organise and elucidate telling the story of the data ... (and that)... the skilled analyst is able to get out of the way of the data to let the data tell their own story". Thus the analysis through coding was used to make sense of the data, however not with the idea of forcing or straining the analysis. Hence as identified earlier, the importance of the descriptive narrative was used to let the data reveal the perspectives of the people interviewed.

3.5 Validity and Reliability

As this case study is a form of empirical research, Yin (1994) suggests that four design tests can be used to ensure the quality of case study research. Not all four of these tests are necessarily applicable to this specific case. As indicated in the research design, this study will employ a descriptive narrative analysis technique. Hence internal validity which aims to establish causal relationship is not applicable (Yin, 1994, Patton, 2002). Similarly, external validity does not enjoy priority as the possibility of generalising this specific case study's conclusions are also limited as findings can not necessarily be held as a solution for other similar cases (Welman *et al*, 2005). Since the case study is focussed on the UDP WHS within the organisational context of Ezemvelo KZN Wildlife, external validity may apply to other protected areas within the greater context of the organisation. However, as this study focussed purely on the UDP WHS, no attempt was made to prove external validity. Thus the two tests that are relevant to this case were the application of construct validity and reliability. These tests were applied throughout the study to ensure the quality of the research. In this sense, the design work of the study continued beyond the initial research proposal as part of an iterative process.

To ensure construct validity in this specific case, three possible methods, as suggested by Yin (1994), were applied. Firstly, during the data collection phase, multiple sources of evidence were used and secondly, a chain of evidence was established. In addition, as part of this study, the draft case study report was reviewed by the appointed supervisor and amended according to suggestions received. The second test used in this study to minimise errors and biases, and to ensure a high quality product, was reliability. The procedures followed in this study were carefully documented to ensure that the study could be replicated by another researcher to arrive at the same findings and conclusions. Research was conducted in such a way that the process and steps taken during the research was well documented and could be audited. To achieve this, as suggested by Yin (1994), a case study protocol (even though more applicable to multiple cases) and a case study database, to organise data collected, was used to further ensure the reliability. In addition to this, a chain of evidence was created to increase the reliability through cross referencing the data collected to the protocol followed, indicating date, time and place as part of the process (Appendix F). Yin (1994) indicates that following these steps also addresses the methodological problem of determining construct validity.

What was of concern with regards to the validity of the data was the issue of bias. Yin (1994) stresses that all criteria implemented to ensure a quality research will be negated if the researcher seeks to substantiate a preconceived position. As the researcher was from within the organisation in which the study was conducted, this issue was identified early in the data collection during the pilot study phase as a major concern. As part of the iterative nature of the process and the associated learning, growth and increased understanding of the researcher, the case study was adapted to address issues identified. Part of this was this use of an interview guide as opposed to an unstructured interview process. In the pilot study, questions identified to be leading or bias was changed as the researcher grew in understanding. This happened to the extent that the questions were adopted three times before finalising the guide which essentially minimised the need for the use of probes which could bias the questions. The use of a recorder during the interview process aimed to address bias as Fowler and Mangione (1990) state that the use of a recorder shows a significant positive effect in reducing bias. As the scope of this research did not allow for the use of a traditional research assistant, external to the process, who would present an unbiased view, Patton (2002:569) however states that "...rigorous data collection and analytical procedures, like triangulation, are aimed at substantiating the validity of the data and minimizing enquirer biases...".

3.6 Summary

This chapter provided a description of the research design and the methods used to achieve the objectives of the study. A description of the research methods, population sampling, research techniques and the measuring instrument used, is given. This includes a discussion of the research procedure, followed by the data interpretation and analysis methods used. To conclude this chapter, issues of validity and reliability are discussed. This concludes the research framework. The following chapter interprets and discusses the results from the data analysed and aims to address the objectives of the research.

Chapter 4: Results and Discussion

4.1 Introduction

This chapter presents and discusses the results according to the set research questions:

- a. What are the expectations within EKZNW with regards to the implementation of comanagement with neighbouring communities in the different departments within EKZNW?
- b. What are the barriers in the management systems of EKZNW with regards to the implementation of co-management with neighbouring communities?
- c. What are the resource requirements in EKZNW for the implementation and maintenance of co-management with neighbouring communities?

The results will address the objective of the research to analyse identified organisational aspects that are deemed to negatively impact on the process of implementation of comanagement in EKZNW, and specifically the UDP WHS. The results will also include discussions around the EKZNW organisational context and documentation concerned with co-management with the objective of identifying implied expectations, barriers and resource requirements around co-management.

4.2 Organisational Expectations of Co-Management

Senge *et al* (1995) make it clear that organisations behave the way they do because of the way that the people in them behave. Organisational behaviour is determined largely by what people in the organisation understand their job to be. It is thus pertinent to ask what the understanding of co-management in EZKWN is, and what the individual expectations are with regard to the implementation of co-management. Is there is shared understanding in EKZNW of what the implementation of such a concept may entail? From the interviews it is apparent that there is substantial variation in the expectations around co-management. It is evident that the interviewees understanding of co-management is based on their perceptions. From the research it is evident that interviewees' perceptions are mostly based on the limited exposure they have had to co-management in EKZNW. It is also evident from the research that very few of the interviewees had any exposure to the theory or discourse of what the co-management entails. This is supported by the indication that 50% of the participants saw co-management purely as a legal requirement with specific relevance to land claims. Even though it can be deduced that the remaining

50% of the participants did not necessarily see co-management as a legal requirement, it is important to note that not a single participant made reference or recognised the imperative to implement co-management as a means to address the threats facing the Park. In its policy on land claims, EKZNW views land claims against its protected areas not as a threat, but rather as an opportunity to work with the rightful owners of the land. In addition, in its mission statement, the UDP WHS lists the following as one of its reasons for its establishment:

"To manage and conserve the Park for its globally significant natural, cultural and wilderness values and life support systems through co-management with partners and all stakeholders, and to provide a flow of benefits beyond the boundaries of the Park" (EKZNW, 2005 a: 24).

From the above statements taken from EKZNW policies and management plans, there are two implied expectations. The first expectation correlates to some degree with the expectations of 50% of the interviewees in that EKZNW implies that they will embrace the opportunity to work with communities as the rightful landowners in the case of land claims. The second implication of the mission statement of the UDP WHS is that EKZNW will work with communities and stakeholders through co-management to create a flow of benefits. The mission statement also creates an expectation of co-management irrespective of land claims; however none of the interviewees recognised this.

In the Corporate Strategic Plan on co-management, with specific relevance to the context of this study, section 7 of the document on the Land Claims Unit Programme deals specifically with the legislated requirement to implement co-management in protected areas where land claims have been registered (EKZNW, undated a). Strategically the document is sound and recognises all the requirements of popular discourse on the implementation of co-management. The document maps out the objectives of the programme, which includes a situational analysis and lists the outputs, performance indicators as well as the relevant sub-programmes and activities. However, the existence of this document, even though it appears on the organisational intranet in EKZNW, is not widely known. Even though most of the participants listed in the study, were stakeholders, they made no reference to this document. This document, contrary to the expectation created in the UDP WHS mission statement, however makes no reference of the need or

the imperative to recognise local communities of existing protected areas where land claims were not lodged. The following statement made by a member on the executive staff echo's this contradiction in EKZNW:

"Other than land claims [co-management] is generally recognised but overemphasized that protected areas do need the support of their neighbours and that without that support it is going to be difficult to manage".

In addition, expectations raised by the interviewees included that co-management with neighbouring communities is a formal process where the co-management forum or committee is a properly constituted forum for which legally binding contracts are required between protected areas and various stakeholders. However, these expectations of the need for the formalisation of co-management is more than likely to have been built around the perceptions that co-management is only a legal requirement as in the case of land claims. Berkes (2004) cautions against the strict formalisation of co-management arrangements as it not only undermine trust relationships, but also negatively affect the effective devolution of power. With regards to the functions of these forums, it was expected that it should be a win-win situation where information is shared, mostly with the aim of expanding understanding of the systems involved and for problem resolution. No specific mention was made with regards to the devolution of power, power sharing and the ability to influence decisions. As one of the manager's expectation's on co-management forums indicated:

"[Co-management forums] have to be properly constituted. Thus it is a legal forum so that the parties involved, get and give feedback as to what is happening in the reserve. Members of the forum can also use co-management as a platform to raise issues or problems that are current in the reserve with regards to the protected area."

Expectations were raised around the transient nature of co-management as a construct as one of the managers that have been involved in the implementation of co-management indicated that "...as in many conservation constructs, this [co-management] is just a temporary wave that will come to pass". Some interviewees' expectations raised questions about EKZNW's commitment to real and true participative co-management where there is devolution of power as suggested in popular discourse (Pimbert and

Pretty, 1995; Berkes, 2004; MacDonald, undated). One of the senior managers indicated that co-management in EKZNW "...is very much a master and servant relationship at the moment... (and that it is) ...huge problem if it is in name only. It needs to have input and has to involve people from the start." EKZNW's promotion of a strategic approach that embraces an integrated participative management approach creates an expectation that the implementation of co-management will be participative. As an example of this paradigm, Local Boards, empowered by legislation, is a system that was first implemented by EKZNW. Local Boards allows neighbouring communities and business communities to participate in the management of formally protected areas of KwaZulu Natal (KZN). This confirms the commitment of EKZNW to transparency and partnerships in which conservation and people mutually benefit (EKZNW, undated a). The Corporate Strategic Plan addresses all the various aspects of co-management in the organisation by implementing programme design workshops that are aimed at translating strategic direction at both tactical and operational levels through the definition of programmes (EKZNW, 2005 b). There is thus an impression created that EKZNW will not only commit to transparency, but will also lend support to both tactical and operational levels with regards to the implementation of co-management. The first Local Board for the UDP WHS was appointed by the Minister in 2007 and should theoretically form an integral part of the management system. Figure 4.1 below explains the structure, role and relation of Local Boards with regards to the integration with governance structure of EKZNW.

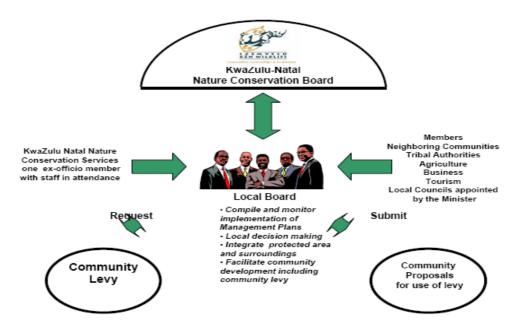


Figure 4.1: Local Board Structure and how it integrates with the EKZNW governance structure (EKZNW, undated)

Even thought there were only two indications of this, some expectations around the Local Boards indicated that they should be structures with true influence if they are to have an impact. The alternative, as one of the EKZNW managers indicated, would be that:

"If [co-management] is like the local board it would only be a glorified liaison forum opposed to true co-management, opposed to a body with true influence".

In addition, the expectations exist from EKZNW managers that "they [the Local Board] should become more involved and, they are not actually interested" and the expectations exist that they should be capacitated to develop an understanding of what they do as "the current Local Board doesn't even know what they are doing there themselves".

However, Local Boards are not representative of the different, complex and dynamic communities neighbouring the Park. As some of the EKZNW managers interviewed indicated: "There are concerns about how people are, and will be, elected to represent this forum". Failure to address the underlying expectations in the above statements, relating to the election of appropriate people to the Local Boards, has resulted in communities, including EKZNW staff, not recognising the legitimacy of these structures. Interviewees expectations here raised concerns about how people are, and will be, elected to represent communities adjacent to their protected areas as there is an expectation that representatives in such forums will also manage communications in an effective manner between their constituencies. As one of the managers indicated:

"There are concerns with regards to the dissemination of information back to communities. There is a lack of trust, lack of communication. Levels of representivity raise concerns about agendas. Feedback is important as people are fed the wrong information."

Of concern however is that expectations around co-management varied substantially with regards to what the structures should look like; the power they should have and even if it should be implemented. Some interviewee's, even among the executive and inside the co-management departments expressed their concerns with regards to the implementation of co-management by stating that:

"When looking at co-management from a legal imperative in the case of land restitution, neighbouring communities are going to extract everything they possibly can at the expense of conservation as they have always assumed an adversarial stance against EKZNW."

"I feel that we have been sold down the tubes, it will be difficult where there is an agreement as opposed to buying out the claimants".

From these statements, a number of expectations can be deduced. Expectations exist in EKZWN that co-management will more than likely have a negative impact on management and conservation, even though EKZNW in its policy on land claims states that this is an opportunity to work with the rightful owners of the land. The expectation also exists that the problem in the case of land claims can be solved by buying out communities as co-management will be too difficult to implement. Although it was expected that perceptions would vary, as interviewees spanned across different departments in EKZNW, it is concerning to note that there was not one expression of understanding of the future vision or objective of co-management. EKZNW state that various policies, strategies and processes are in place in EKZNW to ensure that each functional area within the organisational structure develops and implements its own operational or integrated management plan (IMP) which should fall within the framework of the overall strategic plan as approved by the EKZNW Board. These IMP's place emphasis on developing and maintaining synergy between the cross-cutting functional disciplines (EKZNW, undated a). This creates an implied expectation that there should be synergy between cross-cutting functional departments. However, as discussed later in section 4.1.4.2 and 4.1.4.7 and as is indicated by the interviewees', there is a lack of understanding which leads to a lack of integration and synergy. The expectation does however exist, as a senior EKZNW manager indicated, that "with the development of a better understanding that there will be a better synergy with the groups coming together and seeing the benefits [of co-management] if implemented properly." When asked if there are different expectations and perceptions around co-management in EKZNW, 94% of the interviewees indicated that expectations vary, and as one manager indicated:

"Everyone has their own ideas. I don't know if the organisation has a policy on comanagement; which leaves it all open to interpretation".

There is a definite link between the perceptions and the expectations of the interviewees and the amount of exposure to co-management that interviewees' have received. For instance, in the different departments, senior managers and above had a reasonable understanding of where the EKZNW is going with co-management. Operational manager's expectations on the other hand varied substantially. These also included perceptions around ethnic backgrounds where one manager indicated that:

"There certainly are different expectations. There is an expectation around black members that co-management should have happened a long time ago and should happen right now... There are also the perceptions with regards to the older white managers that believe that co-management is an evil that is doomed to fail and that it never should have started".

This however was juxtaposed by a comment from a senior official in the co-management department who stated that:

"Yes, the first thing is that there are employees who see co-management as a threat as they see it that people will come and take over the land and employment opportunities and this is mainly amongst the African [staff] (...) From the European community it is more the fear of the unknown and for some people it is an issue that we now have to deal with illiterate people with limited knowledge of conservation"

From this it is evident that information regarding co-management is not disseminated to managers at an operational level. What is interesting however, given some of the criticisms against co-management, is that when asked about the importance of co-management, 83% percent of the respondents indicated that not only that it is important, but vitally important. Of further relevance is the fact that the responses received from scientists and some managers, as expected, conformed to the positivist attitude of conservation professionals in respect of the level of power sharing, stating that conservation is a specialist field that requires conservation professionals to make the decisions regarding the running of biodiversity conservation operations. Pimbert and Pretty (1995) identify that the majority of conservation professionals place clear limits on the type or level of participation from communities neighbouring protected areas even though they may recognise the importance and need for participation. Expectations

therefore do exist that co-management forums should exist purely as liaison forums and that there should be no or as little as possible devolution of power. As some of the scientists interviewed indicated:

"It is a pain, but it is important. All decisions made with specific reference to protected areas will have an impact on neighbours, so it is important to get buy in. Not necessarily have them make the decisions for you, but to get agreement. We have the experience, we'll take the decision and they just need to approve..."

"It will be like saying the people that have a land claim on Durban International now have a right to go and sit in the control tower. Perhaps after some coaching they would be able to perform some tasks, but nature conservation is a specialist area..."

What is interesting however, is the fact that one of the line managers recognised this and raised an expectation that:

"These differences [in the understanding and expectations around co-management] will have both a negative and positive impact as it will lead to an understanding, but initially it will have a negative impact that will prove a big challenge".

However, as indicated in Figure 2.1 in section 2.4.1, where there are diametrically opposite future visions, the creative tension will work against each other and cancel each other out. To develop a creative tension in individuals in EKZNW will require the development of a shared understanding of the future vision of co-management for EKZNW. When the question of whether there are different perceptions of co-management was put to one of the scientists, the response was that:

"Yes, however for us to be this far into the land reform process with no clear guidelines on the approach to co-management is a problem".

Only 16.6% of the respondents knew what the organisation's objectives of comanagement were. Once again, these respondents were all either senior managers or working in the co-management department. Ezemvelo KZN Wildlife describes itself as a multidisciplinary organisation with an integrated approach to management and planning,

with all operations guided by the Corporate Strategic Plan (EKZNW, undated a). The Corporate Strategic Plan further states that co-management has given a wider constituency and relevance to biodiversity especially since democratisation has created more opportunities for participation (EKZNW, undated a). The implied expectations here are around the integration and participation in conservation management and planning. When asked what the biggest challenge in the implementation of co-management in EKZNW is, the following statement from one of the executive staff members encapsulates the situation:

"The main area that is a challenge with regards to co-management will be the understanding of what co-management is, and why it should be embraced... With staff there is a big difference in the understanding...'

This statement supports the findings of the research. It is however concerning to note that even though this critical aspect was identified by the executive, there was no indication of how this was being addressed. It is this implied difference in the future vision and understanding of co-management and the communication thereof that is proving to be the major obstacle in the implementation of co-management.

As indicated in the literature review in section 2.3.3, for co-management to succeed in effectively addressing the anthropological threats of a protected area, popular discourse informs us that it requires devolution of power regarding certain management aspects to the lowest possible levels (Pimbert and Pretty, 1995; Borrini-Feyerband *et al*, 2004; Hughes, 2008; IUCN, 2005; Berkes, 2004 and MacDonald, undated). For the UDP WHS, this means protected area managers are crucial to the process. They are the direct link with neighbouring communities regarding issues including conflict resolution, law enforcement, social interaction and environmental education. At a half-day workshop for EKZNW regarding the development of a co-management strategy through an internal participative approach, the lack of representation by protected area managers was indicative of the general apathy towards co-management. Co-management requires decision making at all levels and hence requires a buy in and a thorough understanding from all levels, especially top levels. From the statement above made by an executive staff member, it is evident that there is knowledge of the lack of understanding which will inhibit the implementation of co-management. The recognition and involvement of all the

interested and affected parties from the start as legitimate stakeholders is an imperative. All of the operational EKZNW managers interviewed have raised their expectations that it is imperative that they should be involved from the start with statements such as:

"The manager needs to be involved right from the start as very important decisions will be made in the planning phase (...) as a protected area manager I would be seen as one of the main role players."

However, when EKZNW managers of protected areas where there are land claims were asked what their involvement has been with regard to the planning, development and the implementation of co-management, it can be deduced from the following statements that the creation of the required understanding has not taken place:

"I know co-management is there, (...) it was bantered around but nobody has come to say what is happening. That was the first and last time I have heard of it."

"At the moment I am very much in the dark. I have not been brought up to speed and I don't know what the organisations policies are. Where I have been involved it was very unclear. No specific objectives and direction. Loose ended. There are no clear guidelines or direction."

It is thus evident from this that an expectation exists that senior management should involve operational managers in the process and also communicates the organisations vision with regards to co-management.

When asked whether the implementation of co-management will impact on the sustainability of biodiversity conservation, most of the interviewees indicated, as was expected, that it will have an impact. Only 16.6% of the interviewees expected that it will not impact in a negative way and that it will only contribute to the improvement of community relations. The remainder of the interviewees all recognised the possible benefits of co-management; however expectations were more focussed on the negative implications of co-management in that it is expected to take up valuable time and resources with statements such as:

"It is easier to adopt a stronger law enforcement approach than to go to an approach where you think you will need less law enforcement but, you are going to need more time and staff, which if you don't give this, you will end up with simmering conflicts which will have negative impacts."

This indicated and confirmed the lack of understanding of co-management and how it will assist in addressing anthropological threats if implemented effectively. The perceptions are reinforced by manager's expectations that have been developed from their exposure and experiences of failed implementations of co-management. As one EKZNW manager indicated:

"Where agreements and commitments are not honoured, there is a soft approach which in the case of Ndumo has resulted in a net loss of biodiversity, speaking on behalf of the environment. It becomes more important to have good relationships than to tackle biodiversity issues because of conflict around issues coming in the way of biodiversity. A huge mind shift will have to take place as EKZNW staff will still it see as their protected areas."

It is thus evident from the presented data that the expectations around co-management and the implementation thereof vary considerably and that there is no shared future vision for co-management in EKZNW. The current reality in EKZNW indicates that the various expectations, visions and differing understanding are pulling in opposing directions, as opposed to the harnessing of the creative tension with regards to the different perspectives of co-management as suggested by one of the interviewees. As these different perspectives are not part of a single future vision, it will negatively impact on EKZNW's efforts to implement co-management. With regards to the expectations of the need for co-management in EKZNW, five different themes were identified from the data. These expectations of co-management varied from opposite ends of the spectrum to situations that vaguely represent what popular discourse promotes. These include:

- 1. No co-management, i.e. buy out claimants and continue operation as before,
- 2. Increase law enforcement and limit collaboration to information sharing,
- 3. Promote localised liaison forums where information is shared,
- 4. Establish co-management forums as information forums, but no devolution of management making decisions,

5. Creation of high level co-management structures similar to Local Boards, which will exclude real participation from the ground up.

Figure 4.2 below, illustrates current perceptions around the EKZNW expectations of the implementation of co-management. The figure represent a number of diametrically opposed future visions that will result in the creative tensions working against each other and cancel each other out, as opposed to the shared future vision referred to in Figure 2.1.

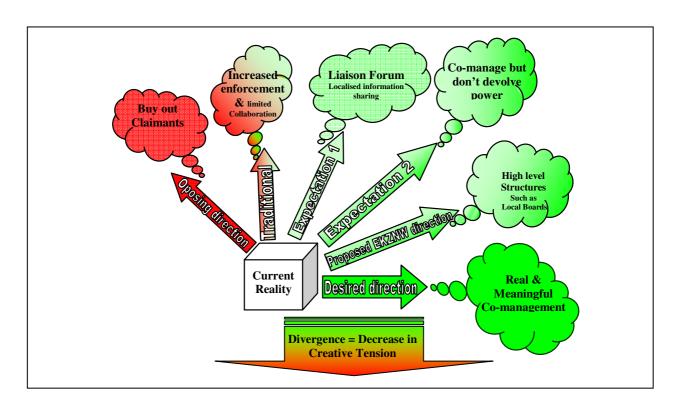


Figure 4.2: A model illustrating the current divergent future vision of co-management in EKZNW which will result in individual creative tension working against each other

It is however evident from the research data that there is some increase in recognition by managers of the importance of co-management, even though expectations are varied and the understanding around the implementation requirements for real and effective co-management is not that well known. This evidence, together with what the Biodiversity Co-Management Programme describes as a favourable policy and legislative environment (EKZNW, 2005b) and the fact that EKZNW advocates a holistic management approach (EKZNW, 2005a) should allow for the development of the

enabling conditions required to bring about the required paradigm shift in all EKZNW officials, especially protected area managers for the implementation of co-management.

4.3 Barriers to Implementation of Co-Management

As indicated in the literature review, Senge *et al* (2008) emphasize that institutions are composed of humanly devised constraints that structure human interaction. Organisations such as EKZNW are made up of formal constraints such as rules, policies, laws and constitutions, each with its own dynamics and restraints that impact on the organisation's efficacy. Not only can these constraints serve as barriers to the effective implementation of co-management, but individual perceptions and thought processes around these issues might serve as further barriers. Hence, with regards to the barriers that will impact on the implementation, it was identified that there are two important aspects that need to be analysed. The first included an analysis of the interviewees' perceptions of barriers in their operating environment, and secondly the organisational operational and management system.

4.3.1 Interviewees' Perceptions of Organisational Barriers

Peoples understanding, perceptions and thoughts can at times be key barriers. In addition to the first objective that analysed employees' understanding and expectations of the concept of co-management, it is important to analyse what employees perspectives of barriers are in their operating environment, and to see how this relates to the evaluation of the organisational barriers. A number of barriers were identified from the analysis of the 18 semi-structured interviews. Lachapelle *et al* (2003) emphasize that it is unlikely that barriers occur independently and they thus developed a model (as described in Figure 2.2) that shows how barriers in collaborative planning environments are linked. The barriers identified in this study were thus grouped according to themes and will be discussed individually in the subsequent sections. These barriers include (not in order of importance):

- 1. Lack of direction, vision and objectives,
- 2. Lack of communication or poor communication,
- 3. Lack of incentives or motivation,
- 4. Lack of capacity,
- 5. Lack of trust.
- 6. Rigidity of processes, policies & procedures, bureaucracy, autocracy,

- 7. Empire building or a silo mentality, top down management systems,
- 8. External factors such as political interference,
- 9. Inadequate funding, resources and time.

Figure 4.3 is an adapted model of the conception of how the barriers identified in the analyses are linked.

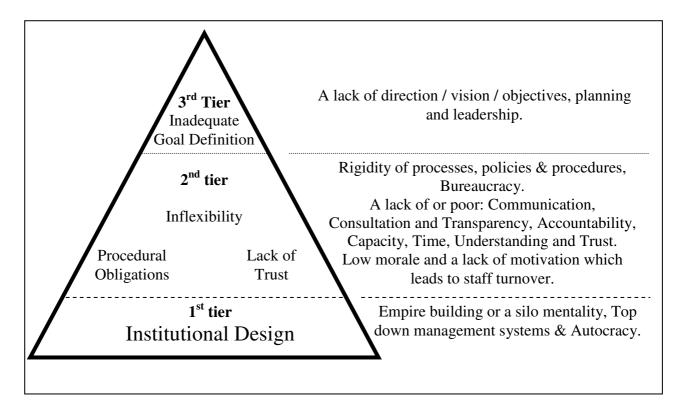


Figure 4.3: An adapted model illustrating how the barriers identified from the research are linked according the model developed by Lachapelle et al (2003).

4.3.1.1 Lack of Direction, Vision and Objectives

Lachapelle *et al* (2003:485) emphasize that "assuming a singular public interest in a pluralistic society may be fatal to any natural resource planning process and results from implicit assumptions about goal agreement". Even though only 50% of the interviewees made a specific reference to the lack of common direction, it is evident from section 4.2 that the expectations and perceptions of the vision of co-management are substantially varied. One interviewee when asked what his biggest concern was simply replied that "[There is a] Lack of cohesiveness and common direction". Or, as one of the senior managers indicated:

"For some years now we have processes in place but it feels as if we are still trying them."
We have not been managed to say as to how we will do this."

Dent and Densham (2008) indicate that an agreed vision serves as the primary motivator (Figure 2.1). However, it is important that where such a vision has the potential to exist, as in the case with co-management in EKZNW, it is important that it is developed into a shared vision that is common amongst all the stakeholders.

4.3.1.2 Poor Communication

Poor communication is often symptomatic of the underlying second tier barriers such as inflexibility, lack of trust and procedural obligations (refer to figure 2.2). One of the commonalities from the interviewees was that 88.8% highlighted poor communication as a major barrier, commenting that:

"There is a lack of communication. Why are people implementing projects and not talk to the manager if it affects my operations."

"They hide information. People on the ground are not getting information ... there is a lack of information and communication between the different levels and it makes us afraid of approaching people."

"Communication is non-existing, even within departments it is lacking. You can not manage an organisation where you have certain departments where there is no communication."

4.3.1.3 Lack of Incentives and Motivation

With reference to Figure 2.1, where a shared vision exists, it is crucial that there are the required incentives and rewards to motivate people to move in the correct direction. Effective communication and a common understanding might serve to create the common vision; however it is not enough to motivate people to move in the required direction. Incentives play an important role in motivating people. Where incentives, which are consistent with the shared vision, are absent, they become an important barrier that hampers progress towards the shared vision. At the time of the research, no formal performance assessment system has been in place in EKZNW for the last 12 years, let

alone one that contains incentives consistent with the shared vision, and as some of the interviewees stated:

"It is frustrating. If I have a goal to achieve, it gets postponed and it does not happen. ...

There is nothing that brings that accountability to the table."

"I have had one [performance assessment] in 12 years. There is no performance management at all and it is nice in a way in that you can do what you want regardless, because you will get paid and you won't get fired. But it does not allow development..."

61% of interviewees' indicated that there are no incentives to develop or improve the way they are operating. Inevitably, this de-motivates personnel, and as one participant indicated:

"I think my performance is very good, however, I have never had any recognition for it and that is discouraging ... I am very discouraged and I am looking for other work."

In co-management, where building trust relationships are critical, staff turnover can become an important barrier. "People come and go and there is a turnover of staff and capacity will get lost." Where this takes place capacity has to be developed again, but more important, in working with communities, trust relationships need to be re-built.

4.3.1.4 A Lack of Capacity

In addition to the above, the lack of formal assessments in EKZNW has created a lack of accountability with no way to manage or rectify poor performance or to identify developmental requirements. 55% of interviewees indicated that the current situation in EKZNW regarding co-management is partially due to a lack of capacity, training and resources. Comments that underline this include:

"In last 10 years [there has been a] huge decline in number of staff, budget and the capacity in the field to make good decisions"

"There are systems that are appropriate but difficult to implement due to resistance and a lack of resources and the capacity of people required to implement these systems."

Capacity building is also directly linked to training. Interviewees indicated that there has not been enough training to assist in addressing developmental barriers:

"Staff are not getting any training and staff can't grow if there is no capacity building and training."

Some interviewees indicated that the structures are sufficient; however they commented that a lack of capacity and filling of vacancies with suitably qualified staff should go a long way in addressing some of the issues:

"I am happy with the structures but I am not happy with how it is implemented. The positions are there but there is a problem with the people in the positions."

"We need to start identifying the right people for the correct jobs, i.e. environmental education - use the right people with the right competencies. We can be much more successful if we put the people with the correct qualification into identified jobs. Use social ecologists and put them in these position and we will start seeing results."

Addressing capacity issues and development of individual and organisational cognition through a change in the patterns of understanding will have a far greater effect on performance than protracted and costly restructuring according to Keidel, 1994 (cited in Dent and Densham, 2008).

4.3.1.5 Lack of Trust

Trust is the foundation of collaborative management processes. Even though the interview responses revealed only one specific reference to trust itself, there were many indirect references that allude to the fact that weak trust is a major barrier in EKZNW. It was identified that there are a number of issues that contribute to this lack of trust. Comanagement in a holistic paradigm requires a flexible system that allows for process based management (Berkes, 2004) and this requires trust. Lachapelle *et al* (2003) found in their research, that decisions often have unintended outcomes (or consequences) which require a flexibility to deal with these situations. However, as will be discussed below, a rigid system that inhibits this flexibility is also indicative of a lack of trust. Statements to verify the lack of trust include:

"[There are] lots of restrictions and the constant threat of disciplinary action. The managers are living in fear."

"Managers should allow more open relationships where there is room for lower ranking managers to approach management."

Perhaps this lack of trust is also indicative of the top down management paradigm of EKZNW where senior managers and professionals indicate a lack of trust in the ability of lower ranking staff as identified in the following comments:

"Some projects are supposedly transparent, but they are shrouded by secrecy which is also responsible for the low morale."

"The major problem is that people are making decisions without consultation."

However, lower ranking staff, even though there was no specific mention of trust, have indicated the same level of mistrust against top management, and in many instances blamed this on a lack of capacity by stating that:

"[I] lost complete confidence in the leadership of this organisation to guide us and to make good rational decisions"

"Management is very top heavy and in most projects there is no consultation as they never ask middle management or junior management for input. ... If they just plan better they can get more input and people will also be a bit more positive about things."

Failure to address issues that lead to mistrust creates a resistance at an operational level that will inhibit the ability of managers to accept suggestions from senior management. As a EKZNW senior manager indicated:

"... there are systems that are appropriate but difficult to implement due to resistance..."

4.3.1.6 Rigidity of Processes and Procedures

Participants recognised that even where resources did exist, procedural obligations and the rigidity often pose a significant barrier. One of the senior managers indicated that:

"Based on the way we are managing budget at the moment, we do not manage effectively. There are problems in the systems that create obstacles that prevent effective expenditure."

Pimbert and Pretty (1995), Berkes (2004) and Mosse (2004) indicated that the rigid procedural requirements from donor organisations and formal institutions often places restraints on the implementation of participative process due to the bureaucratic constraints and the timelines connected to the reporting requirements of donated funds. Bureaucratic and rigid procedural requirements were phrases used by interviewees to describe the EKZNW's management systems. EKZNW is a parastatal organisation, characterised by rigid and inflexible and bureaucratic procedural obligations and as interviewees' indicated:

"It is too bureaucratic and too top heavy and it is difficult to get things done on the ground. There is a lot of uncertainty as to how to get things done and with all the red tape. It makes it difficult."

"There are a lot of policies and procedures that are not relevant. A lot of red tape."

The EKZNW management system is congruent with what Pimbert and Pretty (1995) describe as a blue print paradigm, a management system that is recognised by second tier barriers such as inflexibility, procedural obligations and a lack of trust (as identified in the barriers). Such a blue print paradigm is not well suited for the implementation of a complex holistic management system where goals are often ill defined. As Lachapelle *et al* (2003) indicated, planned decisions often have unplanned outcomes. A lack of flexibility to respond accordingly will only serve to inhibit the process and fail to deliver on the outcomes which ultimately affect the trust relationship. Flexibility also implies responsiveness to the learning engendered by adaptive approaches (Lachapelle *et al*, 2003). 33% of interviewees' referred to the need and the importance of adaptive management in the implementation of co-management. However, even though the term

adaptive management was used, there is very little evidence of the implementation of the adaptive management cycle. To support this, one of the scientist's interviewed stated that the reality in EKZNW is one where "...the adaptive management cycle is not understood."

4.3.1.7 Empire building, Silo Mentality and Top Down Management Systems

Lachapelle *et al.* (2003) emphasize that barriers such as a lack of future vision or an agreement on the objectives (as identified in section 4.3), procedural obligations and the rigidity of the process design (not dissimilar from the current situation in EKZNW as described in section 4.2.1.2) can be compounded by the institutional design. There is a lack of recognition that co-management is a process as opposed to a narrowly defined operational procedure. This shortcoming adds to the difficulty of the implementation process. Dent and Densham (2008) emphasize that organisations often respond to complex challenges by breaking the challenges up into their perceived components and then creating structures to address each part of the challenge. This leads to empire building or a silo mentality which severely inhibits integrated efforts and only serves to increase barriers that will inhibit the implementation of co-operation. As one of the executives interviewed indicated:

"There is definitely a silo mentality that we need to address. (...) We have created a number of units on their own that are compromising the core function."

The above statement summarises EKZNW's current situation. This top down approach of conservation professionals is indicative of what Pimbert and Pretty (1995: 20) describe as a blue print paradigm which fits the bureaucratic nature of an organisation with clear and "fixed definitions of roles, procedures and methods (...) [with] inhibited lateral communications". In contrast with the process based approach, organisations associated with the blueprint approach are better adapted to controlled management environments and do not cope well with the fast changing environment and flexibility required for fully integrated participative or co-management (Berkes, 2004; MacDonald, undated). Understanding institutional barriers in implementation processes can lead to the adaptation of the processes required for co-management to succeed. Even though all respondents recognised that integration is critical, 94% of interviewees indicated that there is a lack of functional interdepartmental integration. Figure 4.4 below is an illustration of the current situation in EKZNW as a result of failure to address specific

barriers around integration which resulted in compounding the 'silo' problem as emphasized by Dent and Densham (2008). The complexity of co-management, a lack of a shared future vision and the different departments' in EKZNW's inability to effectively communicate and integrate, led to the formation of an integration co-management department. This is largely a structural response to a relationship problem. In stead of providing leadership and guidance to field operations in the implementation of co-management, the Co-management Department is allowing the departments that should implement co-management to simply pass on all the co-management related issues related to the co-management integration department. The failure of this department to capacitate operational managers has only served to increase the flow of co-management type issues from departments into the co-management integration department. However, what is most concerning is that the formation of the co-management integration department added to an already inadequate operational budget, as many of the resources required for the establishment of this department was drawn from existing departments.

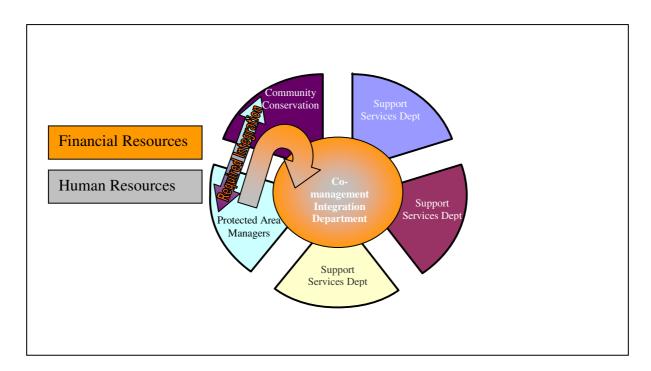


Figure 4.4: A model illustrating how the formation of an integration department in EKZNW to address multi-disciplinary complex challenges impacted on existing operations, drawing from existing inadequate operational resources. Adapted from Dent and Densham (2008).

As opposed to an inclusive and transparent management system, EKZNW displays a strong top down or command and control management system. There is little or no evidence of consultation. At a meeting that addressed the realignment of EKZNW, staff had to sign an attendance register to confirm their attendance in a supposedly consultative forum, one of the senior line managers asked:

"How come you make us sign a register that says we have been consulted, when all you did is informed us on what has been decided already without accepting any of our input? Where is the consultation in that?"

Similarly, the EKZNW Land Claims Policy (EKZNW, 2002) as well as current comanagement agreements were developed using the approved EKZNW drafting and adopting procedures which states that "[the] policy provides a secure and defendable set of guidelines to ensure that the Organisation fulfils the legislative and best practice requirements ..." (EKZNW, 2004). The important aspect of participation from the start, which MacDonald (undated) and Berkes (2003) identifies as critical in participation and policy development, is largely absent in EKZNW and of such a nature that it negatively impacts the effectiveness of the policy. This is evident in the case of the EKZNW Land Claims Policy as well as co-management agreements as few of the participants in this study professed to any knowledge of the development of the system, or as a senior manager puts it:

"It is very much like the strategic meeting that was held at Didima. They put a whole lot of strategies on the table and asked if we know anything about it and if there were 5% of the staff that reacted to it, it would have been a lot. It was a whole range of things like the strategy, mandate our mission and people did not know what the executive were planning."

This can also be equated to what Mramba (2004) describe as an unwillingness to relinquish power, evidence of a rationalist paradigm where professionals in the top structures assume that they know better as to how these processes can be implemented. When asked how interviewees experience current management systems, 33.3%, indicated that EKZNW has a top down management system by stating that:

"[It is] Bureaucratic, not cohesive, strong autocratic individual influenced system where senior management positions determine the direction."

"Management is very top heavy and in most projects there is no consultation as they never ask middle management or junior management for input."

As one of the executives interviewed puts it: "There are too many levels and we are not operating on a flat structure that is performance based ... our current structure is hierarchal..."

4.3.1.8 External Factors – Political Interference

Borrini-Feyerband *et al* (2000:1) refer to co-management as a "political and cultural process *par excellence*: seeking social justice and 'democracy' in the management of natural resources". Senior officials in EKZNW regard political interference as probably the biggest factor that has contributed to the slow progress on the implementation of co-management, especially where co-management is legislatively required. It is this politicization of co-management, by contrast, that Thomas and Middleton (2003) and MacKinnon (1992) warn against, as it not only dilutes the primary objective, but creates an environment for political interference that negatively impact on biodiversity conservation. As one of the executive members interviewed indicated:

"EKZNW have been targeted by politicians for their own gain and interests. Land affairs failures are blamed on EKZNW as we are on the ground (...) The legislation has created certain expectations which have not been dealt with, especially with regards to the land restoration process."

Politicians use the legal requirement for co-management to gain the favour of local communities by creating unrealistic expectations amongst communities around co-management without any real interest in the outcome. Berkes (2004) explicitly states that it is important to recognise when co-management will not be effective. As indicated earlier, Berkes (2004) cautions against the strict formalisation of co-management arrangements as it not only undermines trust relationships, but also negatively affects the effective devolution of power. The implementation of co-management must be driven from the ground upwards. High level political interference, places undue pressure on EKZNW

driving the process from the ground, as one of the senior managers in the comanagement department identified:

"The problem is that it [co-management] is imposed. It is not driven from the ground, in that the act stipulates that there shall be co-management."

On the other hand, Lachapelle *et al* (2003) in their research on barriers to effective natural resource planning, imply that because of the political nature of the process, the need exists to explore this relationship to the advantage of the process.

4.3.1.9 Inadequate Funding, Resources and Time

"It is going to cost EKZNW a lot of money. There will be many meetings. As the Local Boards are costing us a lot of money, co-management will be more complicated and thus cost more. You need more resources."

The above comment from a senior manager in the co-management department reflects on the importance of funding and resources. All of the respondents indicated that they do not have sufficient resources to comply with their key performance requirements. This included time to address existing basic work requirements. Interviewees' perceptions alluded to co-management as an additional requirement, which would only serve to add onto an existing overburdened work schedule, as one manager indicated:

"Supervision is not what it should be because of workloads that everybody has. People don't have empty diaries; people are planning two months down the line."

When asked about what resources would be required for which specific purposes regarding the implementation of co-management, bye and large interviewees did not have many suggestions to offer. Inadequate funding and resources are major barriers. Failure to address resource requirements prior to the implementation of co-management will not only hamper the implementation process, but it will result in a failure to deliver on commitments made to neighbouring communities, and thus further impact on an already fragile trust relationship. As one of the line managers indicated:

"It will be frustrating if the resources are not there. You can not make promises and not deliver on them."

Failure to address funding inadequacies in EKZNW will result in a failure to overcome barriers that inhibit capacity building of individuals and the development of the required understanding. A lack of resources is a major barrier that is intrinsically linked to all the different barriers. What are the requirements for the implementation of co-management, and if the data has revealed such a divergent understanding of the concept, what is the understanding in terms of the requirements? The next objective thus analyses the data collected with the aim of addressing this question.

4.4 Resource Requirements for Co-Management

Unfortunately the data collected during the research failed to effectively address the third research objective in determining the resource requirements for the implementation of comanagement in the UDP WHS. This is interesting as most participants indicated the lack of resources as an explicit barrier. Perhaps the reason for this is that there is an uncertainty as to what is expected and a lack of knowledge around the implementation of co-management. As one of the senior managers involved in the co-management department stated when asked about the required resources for the effective implementation of co-management:

"I think it is the understanding of what are we entering into. That is the biggest challenge as an organisation. How are we going to engage with the communities and what are the capacity and resources requirements."

An important factor in EKZNW is the substantial variance in the estimated increased cost of co-management as indicated by Reid *et al* (2004). This is due to the uncertainty of the processes required to implement co-management. As indicated in both section 4.2 and 4.3.1.1 of the discussion, ensuring a clear objective and common understanding is an important factor in the creation of the enabling environment for the implementation of co-management. Failing to address this barrier has impacted on the implementation of co-management in EKZNW, especially in terms of the planning process as far as the need to determine what the resource requirements are. Even though no one could articulate the

resource requirements, all of the participants were of the perception that additional resources are crucial if the implementation of co-management is to succeed:

"It [additional resources] is very critical, but the question is where the resources will come from?"

In terms of the data analysed, two major categories of resource requirements were identified:

- 1. Financial resources specifically referring to the lack of budget, and
- 2. Human resources this included issues around the lack of human resources, the capacity of staff and the need to develop skills.

4.4.1 Financial Resource Requirements

Reid *et al.* (2002) indicated that a protected area's operational budget requirement increases by 25-50% for CMPAs. Former Chief Executive Officer of EKZNW, Mr. Khulani Mkhize, indicated that not only are the financial implications of co-management high, but additional staff, meetings, training, investments and reduced revenues, for example adds to an already inadequate operational budget (Mkhize, 2007). From the limited experience with Local Boards, a senior manager in the co-management department confirmed this when he stated that:

"It is going to cost EKZNW a lot of money. There will be many meetings. As in Local Boards is costing us a lot of money, co-management will be more complicated and thus cost more. You need more resources."

EKZNW as a parastatal organisation generates 40% of its operational budget from its commercial operations. There are expectations that the implementation of comanagement, especially in the case of land claims where there will be a change in ownership, will impact on the revenue generating capacity of the organisation. As a senior manager in the commercial operations stated:

"It [co-management] will impact on the sustainability of camps as profits now have to be disseminated to communities and currently in EKZNW the bigger camps have to sustain the smaller camps."

Another important consideration that is not always thought of is that where there is a change of ownership, with regards to the land claims agreements, even though the land use is not affected, the assets are transferred to the community. This will have a serious impact and as a senior manager indicated: "Our balance sheets will take a serious knock because of these agreements".

The following comment made by an executive member in response to the challenges of co-management clearly indicates the reality in EKZNW:

"Resources are diminishing on the ground and in senior management there is a big challenge to identify what is the model to be used on the ground. Fixed costs exceed operational increases on a year to year basis."

However, co-management still remains a legal requirement and the responsibility of EKZNW to implement where there are land claims against protected areas. As a parastatal organisation, EKZNW is still dependant on its subsidy from state to perform is legislated mandate. However, as a senior official commented: "The issue is that when the legislation is developed it is not costed. That is where the problem is". This comment refers to a statement made by the Acting Head of Department when a question was asked by a representative of the Department of Environmental Affairs with regards to EKZNW's failure to address their legal requirements.

Economic models and budgeting however are based on a historical way of doing things. This might not necessarily be the best way. The indications from the interviewees are that if you allocate more resources to the problem, it will be resolved. The perceived requirements of EKZNW are however based on a very poor understanding of what comanagement actually entails. The perceptions are also indicative of thought patterns with regards to the ownership of protected areas. EKZNW is merely the custodian, whilst the reality is that the protected areas with its entire infrastructure belong to the people of South Africa. Changing thinking in this regard will be an important leverage in addressing perceptions around the actual requirements for co-management. There is thus a definite need and opportunity for more research on this topic to guide implementers as to what the actual resource requirements are.

4.4.2 Human Resource Requirements

"Human capital is becoming far too expensive. We can not improve on issues of service while the cost of human capital is constantly increasing." (EKZNW Executive member)

Fabricius *et al.* (2001) identify that a collaborative management paradigm requires well trained and experienced staff in order to be successful. However, one of the concerns raised by interviewees' in section 4.3.1.4 is not only the decrease in the number of staff, but also the lack of capacity in EKZNW as a major barrier that will affect the implementation of co-management:

"In the last 10 years there has been a huge decline in number of staff, budget and capacity in the field to make good decisions..."

As some of the interviewees' indicated, the criticism is not necessarily against individuals capacity as such, but rather against the organisation's ability to identify the appropriate structure in which suitably qualified individuals are appointed:

"Implement an effective structure with relevant and appropriate people in the structure"

"Put the right people in the right jobs. Put social workers in place that understand the dynamics of communities."

Capacity can be developed through the required training, however it not only requires additional resources; it requires individuals that are willing to make the required paradigm shift. However, as a senior manager indicated, this comes at a cost:

"Capacity is an issue without resources. You can get capacity with resources."

The abovementioned comments are indicative of the kind of thinking taking place in EKZNW. Thinking is key in creating the required paradigm shift towards co-management and its resource requirements. Keidel (1994) indicates that a change in structure, as is a perceived as solution in EKZNW, is the weakest leverage point from bringing about change. As indicated in Figure 5.1, Keidel (ibid) emphasizes that thinking is far more effective in bringing about change.

There were a number of positions identified in EKZNW where staff were appointed to work with communities without the necessary qualifications. The appointment of appropriately qualified staff to the correct positions requires thinking and a understanding of the requirements of the structure. As such there are no problems with identifying staff for development, in fact it is encouraged. However it requires the identification of appropriate capacity building programmes aimed at changing thought processes that will facilitate the desired understanding and paradigm shift that is required. The lack of appropriate training in EKZNW has been identified as one of the contributing factors as to why the capacity lacks, even though the structure might exist:

"There are concerns with regards to the training of people ... The organisation has done away with training positions. Now we are just putting people into positions without the proper guidance and capacity building."

Borrini-Feyerband *et al.* (2000) emphasize that people involved in co-management require knowledge and skills in ecological, social and economic disciplines. However, as was shown, EKZNW does not function in a way that is consistent with the requirements for co-management. It is thus important that the development of key skills and a change in thinking is not only focussed at the frontline of co-management, but at all staff.

In response to the lack of capacity on the ground, EKZNW has created a specialised comanagement department as identified in section 4.3.1.7. However, as Fabricius *et al* (2001) identify that action such as this only draw from already stringent existing resources to cover the creation of this department. As indicated earlier, to date this specialised department has failed to develop and communicate a shared vision. This integration department is not only responsible for leading the implementation of co-management, but is dependant on true leadership and guidance from the very top of the organisation to ensure the communication of a consistent shared vision to the rest of the organisation.

4.5 Summary

This chapter presented and discussed the results according to the set research questions:

- a. What are the expectations within EKZNW with regards to the implementation of comanagement with neighbouring communities in the different departments within EKZNW?
- b. What are the barriers in the management systems of EKZNW with regards to the implementation of co-management with neighbouring communities?
- c. What are the resource requirements in EKZNW for the implementation and maintenance of co-management with neighbouring communities'?

This included an analysis of the setting, the history and the administrative aspects of the Park and EKZNW. To conclude the first section, an analyses and discussion of documented co-management in the Park was done. In the analyses of the three key questions, it is interesting to note that the findings largely conformed to the expectations developed from the literature review. It was also interesting to note how interrelated and dependant the various aspects, identified in the analyses of the three questions, were. Even though it was unfortunate that the third question, to develop a better understanding of the resource requirements for the implementation of co-management, did not deliver the expected results, this is very revealing of a severe problem. It is indicative of the situation in EKZNW around lack of understanding of the structures, processes and paradigms shifts required for the implementation of co-management. The perceptions however is that EKZNW need more resources to implement co-management. The reality is that these resources will not be forthcoming and, that it more than likely will decrease. This will necessitate a change in thinking to do things differently. The following chapter will aim to encapsulate the findings from this chapter where conclusions are drawn from the analyses with the aim of developing appropriate recommendations.

Chapter 5: Conclusions, Suggestions and Recommendations

5.1 Introduction

The overall objective of this study was to identify and analyse the management requirements in Ezemvelo KZN Wildlife for effective implementation of co-management in the uKhahlamba Drakensberg Park World Heritage Site. To achieve this, identified organisational aspects that can negatively impact on the process of implementation of co-management in EKZNW and specifically the UDP WHS, were analysed. This was achieved by addressing the three key research questions which were:

- what are the expectations within EKZNW with regards to the implementation of comanagement with neighbouring communities;
- what are the barriers in the management systems of EKZNW; and
- what are the resource requirements in EKZNW for the implementation of comanagement with neighbouring communities?

To address the research objective, this chapter will present a summary of the key findings of the previous chapter which will be compared with the expectations of the findings from the literature review presented in chapter 2. From these conclusions, recommendations will be made with regards to each of the key research questions that were developed to address the overall objective of the study. In addition, recommendations are made with regards to the improvement of the research methods and additional research needs pertaining to the case study and the implementation of co-management.

5.2 Summary of Key Findings

The following section summarises, very briefly, the analysis and discussions and draws conclusions for each of the three key research questions. This is followed by very brief suggested actions to be considered for the effective implementation of co-management in EKZNW. The chapter ends with recommendations for future research that will be discussed in section 5.3.

5.2.1 Organisational Expectations of Co-management

The development of an understanding of employees' expectations and their understanding and expectations of co-management, identified a number of critical areas that require attention. Even though expectations of co-management varied substantially in EKZNW, some participants demonstrated a relatively good understanding of the

construct. This was not anticipated considering the identified lack of exposure and communication around the implementation of co-management in EKZNW. However, considering that only managers and higher levels of employees were interviewed, it was concerning to note that some interviewees' had very little understanding or knowledge of the construct of co-management or the implementation thereof in EKZNW. From these conclusions it is evident that the transmission of knowledge in EKZNW is not taking place. Expectations regarding the construct of co-management, the need therefore and issues around the implementation varied greatly, and could be characterised by one or more of the statements below:

- no co-management, i.e. buying out claimants to continue operation as before,
- an increase in law enforcement with collaboration limited to information sharing,
- a promotion of localised liaison forums where information is shared,
- the establishment of co-management forums to share information, but no devolution of management making decisions, and
- the creation of high level co-management structures similar to Local Boards, which will exclude real participation from the ground up.

There are a number of contradictions in the stated thoughts of those interviewed, for example: Even though 88.8% of the interviewees viewed co-management with local communities as either important or critical, no expectations were raised around the need or the imperative to implement co-management where there are no land claims. Even though EKZNW's policy on Land Claims embraces the opportunity to co-manage with claimants as the rightful owners (EKZNW, 2002), the expectations raised by some of the senior managers implied that, due to the difficulty of the process and the associated risks involved, it would be preferable to rather buy out claimants. Reasons cited for this included the fact that co-management is a legislative requirement that is forced onto protected areas by government without the provision of sufficient additional resources or political support as referred to in section 4.3.1.8. In addition, organisationally implied expectations taken from various strategic documents, policies and integrated management plans are also contradictory. Strategic documents imply an expectation of synergy, participation and transparency in the planning and implementation of comanagement (as indicated in section 4.2 of this study); however the indications from the participants are that this has not taken place. This is also evident from the earlier

comment in this section where there is no transmission of knowledge with regards to the implementation of co-management.

It was also established that there is a greater understanding of co-management amongst the senior staff of EKZNW. However, even though this is the case, there is not a shared or common vision of co-management, let alone a clear and agreed understanding of how co-management should be implemented amongst these senior staff members concerned with the development of strategic direction in EKZNW. EKZNW states that various policies, strategies and processes are in place to ensure that each functional area within the organisational structure develops and implements its own operational or integrated management plan (IMP). All IMP's in EKZNW are subject to or should fall within the framework of the overall EKZNW Strategic Plan, as approved by the EKZNW Board. These IMP's, as is the case with the UDP WHS IMP, emphasize the development and maintenance of a synergy between the organisation's cross-cutting functional disciplines. Yet there is a contradiction in the implied expectations of the UDP WHS mission that creates the expectation that it will co-manage with all its neighbouring communities; however the Biodiversity Conservation Co-Management Programme only recognises the need for co-management with communities at a Local Board level or where there are land claims.

Interviewees raised expectations around the validity of the construct of co-management. Even though most of the participants recognised the importance of co-management, concerns were raised about the impact that the implementation of co-management will have on existing resources and the possible negative implications of co-management, should the implementation fail for what ever reason. It is interesting to note that this concern with regards to the negative implication has not instilled or identified the need for the development of a shared vision. Expectations strongly aligned with the positivist attitude of conservation professionals in that co-management should be limited to information sharing and getting the communities approval for what EKZNW is doing, without any devolution of power. These expectations, of both scientists and managers, indicated clear limits on the type and level of participation that will be tolerated. To confirm this, expectations were identified that it would be easier to adopt conventional conservation approaches through increased law enforcement. This was substantiated by the opinion that EKZNW lacks not only the capacity and resources to implement co-

management, but also the political support to address the threats should attempts to implement co-management fail. Few interviewees recognised that a change of attitude is key to the implementation of co-management.

With reference to the existing Local Board for the UDP WHS, interviewees raised concerns around the co-management forums' ability to influence decisions and to have real and meaningful impact on management. Concerns were raised that, when constituted, co-management forums should be adequately representative. Failure to address adequate stakeholder representation in co-management forums will only result in an increase in the mistrust that exists between EKZNW and local communities. This, as in the case of the Local Board, has resulted in both management and communities not recognising the legitimacy of these forums. The expectations about how representatives of co-management forums will be identified and elected, confirmed the protected area managers' need and expectations to be recognised and included in the whole process as important stakeholders. EKZNW protected area managers indicated that their role in the process is critical and raised expectations to be involved in any decisions pertaining to co-management and their respective management units.

With regards to protected area managers at an operational level, indications are that the lack of understanding is largely due to the expectation that senior management needs to disseminate information and knowledge of the shared vision of co-management and give direction around the implementation of co-management. Protected area managers indicated that they expect to be involved from the start. It is encouraging to note that there is a realisation and awareness amongst senior officials that there is a lack of a common understanding with regards to EKZNW's co-management objectives and the expectations on the ground. The expectation was raised that this awareness of the lack of a common understanding of co-management can contribute to the development of a better understanding of co-management in EKZNW. Yet, no concerns were raised about the lack of a common or shared vision of co-management in EKZNW. This is crucial as only 16.6% of the interviewees, which were all senior managers, had some understanding of the organisational objectives around co-management. Even though there was very little indication of this, the expectation was raised that there is a need for a paradigm shift, a change of attitude amongst many of the employees in EKZNW around the acceptance of co-management.

5.2.2 Organisational Barriers to the Implementation of Co-management

In addition to the conventional barriers such as a lack of direction, poor communication, procedural obligations and a lack of trust that were anticipated from the literature review, it was also identified that individual perceptions and thought processes around the implementation of co-management are a major barrier. As indicated earlier, Senge et al (1995) state that organisations behave the way they do because the people in them behave the way they do. Behaviour is generally influenced by thinking. Keidel (1994) emphasizes the importance and power of thinking as a leading element of change, which is further discussed under section 5.4.3 of the suggested actions. As identified in the first question, expectations of the majority of interviewees were based on a lack of information and exposure to the construct, both from a theoretical and organisational perspective. This in itself is a major barrier that will negatively impact on the need to develop the required paradigm shift before the implementation of co-management should be considered. Barriers in EKZNW are intrinsically linked. These divergent expectations identified above, together with the fact that half of the interviewees identified the lack of direction, vision or objectives as a major barrier, will only serve to further inhibit any implementation efforts around co-management. The identification of poor communication as major barrier in EKZNW by the majority of interviewees, serves to explain why there is a lack of understanding, as from the data it was identified that EKZNW does have set objectives for the implementation of co-management. The expectations from protected area managers were that this was the responsibility of senior and executive management to guide and lead the development of the co-management objectives.

The creation of a shared and common future vision for co-management is not enough. Interviewees indicated that a major barrier in achieving day to day goals is the fact that, for the last 12 years, there has been no performance management system. EKZNW has failed to create the required accountability and incentives for individuals to move towards a shared future vision as indicated in Figure 2.1. This major barrier has hampered progress and performance in general through a lack of motivation and accountability. In addition, the lack of performance management has also created a barrier with regards to the identification of the correct capacity development requirements. It is however important that the performance management system should specifically address the implementation of co-management. It was identified that the failure to address this has

served to not only de-motivate staff, but has also led to increase in staff turnover. This fact in a situation where the building of trust relationships are crucial, has only served to compound developmental barriers. It was surprising to note that some interviewees felt that current structures were sufficient to address issues around co-management, but in these instances they identified developmental barriers as a major issue, and specifically the appointment of suitably qualified people in the correct positions.

Even though there was only one specific reference to a lack of trust in the data, there were many indirect references that identified a lack of trust as a major barrier. This was especially prevalent between managers at an operational level and senior management. It was identified that this second tier barrier, as identified by Lachapelle et al (2003), is indicative of the underlying barriers in the institutional design. Interviewees' experiences of the hierarchical organisational structure were that of a negative top-down management system. This was raised as a major barrier by managers specifically, implicating a lack of trust with statements around a lack of transparency and consultation. Barriers identified around procedural obligations and the rigidity of processes highlighted by all interviewees, are also underlying symptoms of inadequate institutional design as a major barrier. It is however interesting to note that this specific barrier was identified by the executive and managers alike. It is however concerning that EKZNW is in the process of a planned realignment, the third in less than ten years and the majority of the participants confess to knowing very little about this. As explained in Figure 5.1, EKZNW is placing too much emphasis on restructuring as opposed to rethinking; however this is expanded on in section 5.4.3 under the recommendations. Interviewees identified the lack of functional integration as barrier, which in EKZNW is compounded by the silo mentality created by the institutional design and the lack of communication and trust.

Senior managers and executives indicated political interference and a lack of political support as the biggest barrier that has inhibited EKZNW's efforts to implement comanagement to date. They indicated that co-management, as a legislative requirement, that is forced onto conservation organisations, are used by politicians to gain unfair advantage for their party. The concern was also raised that legislation can not be implemented without the provision of adequate additional resources. All interviewees indicated that the lack of resources is one of the biggest barriers, even though the perceived resource requirements with regards to co-management could not be

articulated. Participants emphasized this by stating that the current resources are not enough to address existing key performance requirements. The perception here is that more of the same resources would assist in addressing the problem. However, it was also identified that, should additional resources become available, concerns were raised about the lack of capacity and the rigid procedural requirements that will inhibit the effective use thereof. This indicates that, what is really required is in fact a radical change in thinking as advocated by Keidel (1994) as opposed to more of the same resources that are failing to address the current shortcomings and concerns.

5.2.3 Resource Requirements for the Implementation of Co-Management

The uncertainty around the implementation of the construct of co-management, together with the lack of direction and complexity of the construct, possibly contributed to this study not effectively addressing the third research objective. In this perspective, uncertainty becomes an important barrier in the co-ordination of the implementation of comanagement. According to Kreitner & Kinicki (1992) as cited in Dent (1996), the unclear objectives and vague performance measures, as identified in EKZNW, further contributes and perpetuates situations where uncertainty exists. Resource requirements for comanagement will be based on the understanding of the desired outcomes and objectives, which in the case of co-management with neighbouring communities in EKZNW has not been well defined. Participants in the study essentially only recognised financial and human resources shortcomings as a concern. There was no clear indication of specific requirements; however senior managers whom have had experience with regards to local boards, all recognised the potential financial implications of co-management due to the complexity and lack of understanding around the implementation of co-management. All participants recognised the need for increased financial resources where co-management will be implemented. Participants however raised concerns that there are not enough resources to effectively address their current key performance areas, let alone the additional requirement of co-management. This indicates that participants perceive comanagement as an additional requirement when it should actually be a change of attitude and thinking about doing what you do in a different way. Realising the imperative to comanage as one of the most important key performance areas for EKZNW will be the recognition of its dependency on neighbouring communities for the continued conservation of biodiversity. Failure to recognise the importance and imperative for comanagement would mean denying the anthropogenic threats that protected areas are

facing and fail to address the continued and increasing impact of these threats on biodiversity.

With regards to the human resource requirements, participants identified a lack of capacity as a major concern, but also the need to place appropriately qualified people, such as social ecologists, in the correct positions. None of the staff in the UDP WHS specifically responsible for dealing with communities are social ecologists. Where these positions do exist in EKZNW, there has been no mentorship, training or any form of interaction with protected area managers or community conservation officers regarding co-management. Thought processes and attitudes in EKZNW should be reflecting its commitment to promote conservation as a societal function, as opposed to a purely policing type conservation function or attitude.

Interestingly, participants highlighted the need to improve capacity through training, recognising that human capital is too expensive and that education is cheaper than employing additional staff. However, it was recognised that capacity building requires additional financial resources and that training in EKZNW has been at a minimum. Interviewees did not place a high priority on employing additional staff for the implementation of co-management. In fact, participants raised concerns around the lack of impact that the relatively newly created Co-management Department has had in EKZNW. In addition, some participants were of the opinion that, apart from the lack of capacity, the existing structures are sufficient to address the implementation of comanagement. Once again the importance of thinking in leveraging effectiveness as suggested by Keidel (1994) is recognised, as opposed to a change in structure. There is recognition that with the correct capacity building, a change in attitude and thinking, a structure such as the co-management department might become redundant. Capacity building was thus recognised as essential. However, it was recognised that before capacity building should be considered, emphasis should be placed on creating the required paradigm shift and understanding of what co-management with neighbouring communities will entail.

5.3 Conclusions

It is not only EKZNW's situation with regards to land claims and the legislated requirement surrounding these claims, but also the spatial distribution of the Park and the

related anthropogenic threats from neighbouring communities, that make the implementation of co-management an imperative. Co-management however provides a real challenge for managers at all levels. In addressing the research objective to identify management requirements in EKZNW for the effective implementation of co-management with neighbouring communities in the UDP WHS, data obtained from the semi-structured interviews indicated that employees in EKZNW require undergoing a transformation and a paradigm shift with regards to the implementation of co-management. The implementation of co-management is an iterative and adaptive learning process. Even though popular discourse, as identified in the literature review, advocates the implementation of co-management with neighbouring communities as a sustainable long term solution to increasing anthropogenic threats, most authors warn against the converse effect should co-management fail. Social learning, as is the case in comanagement, requires learning by doing as part of an iterative adaptive management process. If EKZNW wants to move from its admitted continued failures to implement comanagement, the implementation of co-management should not be seen as an additional requirement. Instead, co-management is a dimension that will require leadership in EKZNW. Real leadership will be required at all levels to change attitudes and the way of thinking to bring about an organisation wide paradigm shift.

Even though EKZNW has been advocating the implementation of co-management over the past 20 years, this research indicates that most staff members who should be involved in co-management, have largely been excluded and have very little knowledge of the organisational objectives or vision for co-management. Diverse expectations, a lack of understanding of co-management and the lack of the required paradigm shift, can be directly contributed to the exclusion of managerial staff members as key stakeholders in the planning, developmental and implementation processes. Lewis (1996) indicates that a failure to recognise the needs and interests of different stakeholders or communities in such initiatives, are the underlying causes of a general apathy. The creation of the required understanding and a shared future vision for co-management, however, is not enough. Even though EKZNW strategies promote an integrated participative approach, major inconsistencies were identified in the objectives and the application of the various organisational documents pertaining to co-management. As opposed to highlighting the need for co-management in EKZNW's strategies and policies, the implementation of co-management in EKZNW requires a change of heart towards the imperative for co-

management. Even if employees have made the required paradigm shift, the implementation of co-management requires leadership for the creation of the required enabling environment.

The complexity of EKZNW as a parastatal organisation and the formal constraints such as the legislated requirements, policies and constitutions it has to abide by, impact on the efficacy with which it can operate. Barriers identified in EKZNW were numerous and included a lack of objectives, poor communication, a lack of trust and procedural rigidity. These identified barriers largely concurred with the literature that was reviewed. As expected, the barriers identified were all interlinked which concurred with Lachapelle et al (2003), who indicated that it is unlikely that existing barriers will occur independently. Apart from the diverse expectations around co-management being an important barrier on its own, it was interesting to note how the additional identified barriers directly impacted the employees' expectations. In essence, the lack of a shared vision, diverse expectations and barriers create a vicious circle that will have an adverse impact on the implementation of co-management in EKZNW. EKZNW conforms to what Pimbert and Pretty (1995) term a blue print management paradigm. It depicts a system that is distinctive for its second tier barriers such as a lack of trust, inflexibility and procedural obligations. This lack of flexibility to respond to the un-predictive nature of comanagement inhibits learning through adaptive approaches. Compounded by first tier barriers of institutional design, the empire building and top down management system identified in EKZNW only serves to aggravate poor communication, lack of transparency, a lack of accountability and a lack of trust and motivation. It is thus evident that the diverse expectations and, more specifically, the lack of direction, understanding and inadequate goal definition identified in the first objective, are directly related to the underlying barriers.

The resource requirements for the implementation of co-management in EKZNW are poorly understood at all levels. The perceptions from the research indicate, in reality, that current resources are not sufficient. As Reid *et al* (2004) indicate that co-management significantly increases the resource requirements; it is of critical importance that this requirement must be addressed in more detail. Even though interviewees emphasized the need for capacity, no specific mention was made as to whether this included the application of more of the same capacity or skills types, or if more training was required to

develop individual capacity. However, the resource requirements for co-management will be based on the understanding of the desired outcomes and objectives, which in the case of co-management with neighbouring communities in EKZNW has not been well defined. These outcomes and objectives should however be aimed at fostering the right conditions for co-management, and determining the right conditions under which co-management will function (Berkes, 2004). This however is dependent on a shared future vision and well defined and integrated objective, an important management requirement that currently does not exist in EKZNW.

5.4 Suggested Actions for the Implementation of Co-management

"Asking whether community based conservation works is the wrong question. Sometimes it does, sometimes it does not. Rather it is more important to learn under which conditions it does or does not work" (Berkes, 2004: 624).

Co-management provides real challenges for managers at all levels, particularly for protected area managers. It is perceived as an additional requirement and dimension, outside their area of expertise. Considering the complexity of the construct of co-management and the implementation thereof in the complex organisational environment of EKZNW, the following recommendations are made with regards to the key findings of the study. The current situation regarding the general lack of resources to address even basic key performance areas on the ground emphasizes the need for a pragmatic approach as opposed to recommendations that might be viable, but not necessarily realistic. The recommendations also include improvement in the research methods and possible future research suggestions with regards to co-management in EKZNW.

5.4.1 Organisational Expectations of Co-management

The implementation of co-management requires leadership in the creation of an enabling environment. In fact, leadership is required at all levels in EKZNW to address thinking around the implementation of co-management. The current situation in EKZNW, where there are major inconsistencies in organisational policies, strategies and integrated management plans relating to the implementation of co-management, needs to be addressed by the strategic, participative and integrated management approach that EKZNW espouses. The creation of a required understanding of co-management is paramount to bring about the required paradigm shift. A person who does not have co-

management at heart, will only obstruct the successful implementation thereof. Therefore, all EKZNW employees need to develop a positive attitude towards the imperative of comanagement. This is essential in the creation of an internal enabling environment for the furtherance of implementing co-management with neighbouring communities. This however can only be achieved if EKZNW commits to the development and promotion of a shared future vision of co-management with well defined objectives. Szucs (undated) emphasizes the importance of setting and clarifying organisational objectives that are aimed at creating a functional enabling environment for co-management before allocating and committing resources. EKZNW's failure to do this is thus indicative of the difficulties experienced in co-ordinating the extensive community programmes referred to in the Corporate Strategic Plan. An integral part of this communication strategy should address the development of a communication, education, participation and awareness (CEPA) strategy that should aim at providing the enabling learning environment that is essential for the implementation of participative structures (Berkes, 2003).

This imperative to co-manage irrespective of land claims, even though it is advocated, has been wholly excluded from existing EKZNW strategies. If EKZNW is serious about addressing the anthropogenic threats that are facing the UDP WHS and its surrounding environment, the imperative to co-manage with neighbouring communities from the bottom up needs to be incorporated into existing strategies. Even though the research indicated that employees recognise the importance of the need to co-manage with communities, the diverse expectations about how this should take place were however still indicative of the positivist nature of most employees. The indication is that most participants want to limit the level of participation to what would be less than functional as indicated in the literature review. This is indicative of the level of paradigm shift that is still required. This however can only be achieved once the organisation has a well defined comanagement strategy that includes the imperative to co-manage with neighbouring communities with due recognition where co-management is deemed necessary and appropriate. The involvement of all the identified organisational role players, especially managers as key stakeholders, is an imperative that will assist in the creation of the required understanding. Failure to implement co-management structures from the bottom up will fail to recognise the unique context of individual communities that is required to provide on the ground solutions for on the ground problems (Berkes, 2003; MacDonald, undated).

5.4.2 Barriers to the Implementation of Co-management

Lachapelle et al (2003) suggest that the understanding of barriers in the implementation of a new paradigm will assist in the design criteria for these new processes. In contrast to the blueprint approach of EKZNW, it is essential that policy and co-management strategy development should adopt a more holistically participative process based approach. The process should incorporate values such as lateral communications with mutual learning, and not teaching, as the focus. The diversity of the people involved forms the basis from which continually evolving ideas originate (Pimbert and Pretty, 1995). The implementation of CEPA in these instances is a crucial social instrument in fostering change with regards to policy changes and acceptance (Hughes, 2008). As opposed to only referring to strategic adaptive management, EKZNW should evaluate current adaptive management processes critically, with the aim of implementing a true adaptive management cycle. Failure to apply adaptive co-management will not only result in an unresponsive management system that is not inclusive of all role players, but will fail to provide opportunities for applied learning (Berkes, 2003; Carlsson and Berkes, 2005). Berkes (2003) emphasizes that although adaptive co-management cannot be imposed from top down, the development and implementation can be greatly assisted by the creation of an enabling environment by top management structures.

EKZNW also needs to recognise that the problem is perhaps not the structure, but the fact that groups cannot transcend barriers to work together. Dent and Densham (2008) indicate that where an integration department is required, its function should not be to take over the functionality of the different departments, but rather to facilitate the integration and transcending of barriers through good leadership and the ability to influence.

5.4.3 Resource Requirements for the Implementation of Co-Management

In light of the resource requirements for the implementation of co-management, it is essential to develop an understanding of the requirements. Thomas and Middleton (2003) and Adams (2006) emphasize that this includes the recognition of the cost of implementation so that there is a measure of consistency between what is being planned and what realistically can be expected. Fortunately, this is recognised in EKZNW, as an executive member stated when questioned about the resources required to implement comanagement:

"Look at what is needed to implement co-management effectively. Look at the resources you have, go back and identify and then prioritise what will have the desired outcome. You need to be able to do the best with the limited resources you have."

However, as indicated in section 5.4.1, this will be dependent on EKZNW's vision and objectives of co-management, which in turn highlights the need to prioritise this requirement. With specific reference to the legislative requirement to implement co-management, the additional requirements created needs to be communicated to the various levels, especially government, to ensure that adequate resources are provided. It should however be stressed that the resources required are different from what is current, *i.e.* not more of what is existing, but that there is a shift as to what resources are needed in line with an objective of creating an enabling environment for co-management. Here, policy intervention which spans across the framework from national legislation down to an implementation level, is a crucial requirement in the creation of an enabling environment for the implementation of co-management (Mkhize, 2007; Reid *et al*, 2004; Fabricius *et al*, 2001).

Contrary to the perceptions identified in this research, co-management could in fact require very little additional resources. The appropriate development and capacity building of employees concerned with co-management will combat the need to acquire additional resources or expertise from outside EKZNW at vast expense. Capacity building and the development of individual employees in EKZNW will enhance the rethinking that Keidel (1994) is promoting, and improve the overall performance of EKZNW. Senge *et al* (1995) emphasize that organisations behave the way that individuals in them react and think. The wise development of individual capacity will assist in addressing organisational behaviour, changing individual attitudes and hence improve the overall performance of EKZNW. It is this development that promotes the rethinking that Keidel (1994) recommends, which in turn leads to a change of patterns and understanding (as illustrated in Figure 5.1). This is often more effective than restructuring or re-engineering which require vast resources. Wise re-thinking is particularly effective because it results in a change in patterns of understanding that also enables employee development and improves performance.

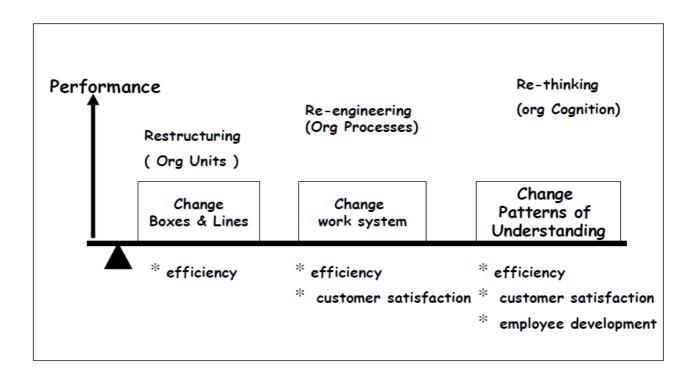


Figure 5.1: A model illustrating thinking as an important leading element of change or an alternative leverage points for performance (after Keidel, 1994).

Considering the current resource limitations in EKZNW, implementation approaches should adopt a gradual approach. EKZNW should start small with a strategic adaptive comanagement approach where there is a gradual increase in power sharing as suggested by the IUCN (2005). The implementation of co-management is not a linear sequential process. The iterative nature of the process suggested will create the opportunity for EKZNW to recognise and learn from the mistakes in the implementation of co-management and assists in the development of staff at all levels. The need in EKZNW is not only to develop the institutional capacity at ground level, but also to develop leadership at all levels.

5.4.4 Improvements to the Research Methods

Considering the scope of this study, it may be possible that the researcher's affiliation with EKZNW and his background is likely to have biased the analysis of the data. Yin (2002) stresses that all criteria implemented to ensure a quality research will be negated if the researcher seeks to substantiate a preconceived position. The scope of this study however did not allow for the use of additional methods to address this specific issue that might affect the validity of the research. However, even though the predisposition or biases of the researcher may affect interpretation or analysis, social sciences recognises

that despite all the checks and procedures, values and biases will still be found in all research as the very topic investigated is often shaped by a researcher's values, interests and the inherent need for the researcher to develop an understanding of the issues at hand (Yin, 1994; Monette *et al*, 2002; Patton, 2002).

5.4.5 Recommendations for Future Research

One of the major areas that need to be researched in depth, is the actual resources required to ensure the creation of an enabling environment. Reid *et al* (2004) indicate that operational budget requirements can be as much as 25 - 50% more. Research is needed as to how is this additional requirement should apportioned and where the funding is required? Another possible research project might look at identifying developmental requirements for managers who will be concerned with the implementation of comanagement.

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Appendix A: Interview Subjects

Stakeholder Group	Total Interview	Gender	Age	Ethnic Group	
Hospitality Managers	1	Female	55+	European	
Community		Male	36 - 45	European	
Conservation	2 Male 36 - 45		African		
		Female	26 - 35	African	
		Male	26 - 35	European	
	_	Male	26 - 35	European	
Protected Area Managers	7	Male	26 - 35	European	
		Male	46 - 55	European	
		Male	55+	European	
		Male	26 - 35	African	
Line Management	2	Male	26 - 35	African	
		Male	36 - 45	African	
	4	Female	36 - 45	European	
Scientific Services		Male	36 - 45	European	
		Male	36 - 45	European	
	Male 36 - 45		European		
		Male	46 - 55	African	
Executive	2	Male	55+	European	
		Male	46 - 55	African	

	Female		
African	European	European	African
6	9	2	1

Age Groups	Total in each Group
18 - 25	0
26 - 35	6
36 - 45	7
46 - 55	2
55+	3

Appendix B: Interview Question Guide

Introductory:

Provide a background to the study and try and put the person at ease.

Expectations:

- 1. What is your understanding of the concept of co-management?
- 2. Do you think there are different expectations as to how people see co-management?

IF YES: How do you think they see it? (Answer will probably indicate how the person answering experience co-management)

If NO: Is it a problem (possible answer, YES, might pull the process in different directions and there is no clear direction of future vision)

What would the effect of this be?

- 3. Is co-management important? If yes, why do you think co-management is so important? What are the expectations in terms of conflict around the implementation of co-management?
- 4. What are the objectives or future vision of co-management in EKZNW?
- 5. Do you think the implementation of co-management will have an impact on the sustainability of biodiversity conservation? If YES: Why and how will these affect biodiversity conservation outcomes? If NO: Why will it not affect the outcomes?

Barriers

- 6. How do you experience the current situation regarding the implementation of comanagement?
- 7. How would you see your involvement in co-management implementation/structures?
- 8. How do you experience your organisation's management system, i.e., how would you describe it?
- 9. How are you experiencing cross-departmental management in EKZNW?
- 10. What are your experiences with regards to your performance management?
- 11. How do you communicate or deal with difficult issues in your organisation?

If you avoid these difficult issues, why? (Possible that there is a lack of understanding?)

Would the organisation accept repeated failures to implement a specific co-management system?

IF YES: How would the organisation react to this to address these failures?

IF NO: Why would you say so?

- 12. How would EKZNW react to repeated failures to implement co-management?
- 13. Do you feel there has to be a resource allocation to the development and establishment of a co-management system? How important is resource allocation in the development and implementation of co-management structures?

If YES: Is the current allocation enough?

If NO: How do you think this will impact on current operations?

RESOURCE REQUIREMENTS

- 14. EKZNW policies support the development of co-management, why is it that difficulty is being experienced in the implementation thereof?
- 15. Do you feel that capacity exists in the field at a PA level to manage the co-management agreement once this is set up?
- 16. What is the biggest organisational challenge to the implementation of co-management?
- 17. Do you feel that you have all the resources required at the moment?
- 18. If given more resources, do you feel that the capacity exist to effectively put these to use?
- 19. If you had unlimited resources, how would implement co-management?
- 20. Considering the current lack of resources, how can co-management be implemented?

FOR SENIOR MANAGEMENT ONLY

- 21. What do you envisage the co-management structures to look like?
- 22. What are the capacity requirements in the field to implement co-management?
- 23. Do you feel the capacity exist in the field?
- 24. What are the financial implications of co-management for EKZNW?

Appendix C: Example of an Informed Consent Letter

INFORMED CONSENT DOCUMENT

10 December 2009

Mr. John Doe Ezemvelo KZN Wildlife

Dear Sir

I am currently undertaking a Masters course in Environment and Development, at the University of KwaZulu-Natal, Pietermaritzburg Campus South Africa. As part of this course, I am doing research that seeks to examine the implementation of Co-management with neighbouring communities. I am using the uKhahlamba Drakensberg Park World Heritage Site (UDP WHS) as a case study for this research.

The implementation of participative management and Co-management in particular, has become an imperative for protected areas. Co-management not only aims to address the increasing developmental, socio-political and anthropogenic threats facing protected areas, but also to address the inappropriate and wrongful expropriation and exclusion of communities from protected areas. As is the case in the UDP WHS, the implementation of co-management is a legislated requirement for protected areas that has been claimed by local communities as part of the Land Restitution Process. Despite this, in recognition of the need to include communities in protected area management, co-management with neighbouring communities has become an imperative if we are to achieve our biodiversity conservation objectives.

The implementation of co-management is not a new construct; however there are some inherent difficulties due to the complex nature of communities and institutions concerned. Majority of the research conducted with regards to the implementation of co-management, has been from a social-ecological perspective, neglecting to address management issues from an institutional perspective. As part of my research, I would like conduct a face to face interview with you to gather information that might prove invaluable in assisting Ezemvelo KZN Wildlife with the improved implementation of co-management. The interview should take no longer than an hour of your time and would prove invaluable to my research. I aim to complete at least 30 interviews in order to gain a more in depth understanding of the topic. If you are willing to take part in the process, I would be very grateful if you can complete the declaration to ensure confidentiality and to protect your anonymity in this survey. The University of KwaZulu-Natal has an ethical code that

all students are obliged to follow when undertaking research. I would also like to assure you that as a participant you have the right to withdraw from the process at any stage of the research programme. There is no payment to the participants since it's a voluntary exercise.

I sincerely hope that you will be able to assist me with this project. If you would be interested, I would like to offer you the opportunity of receiving a summary of the research once it is completed. On receipt of this form I will contact you to arrange a date and time for the interview when convenient to you.

If you require any further information please contact me or my supervisor at;

Contacts Details;

Student Mr. Eduard J. Goosen Ezemvelo KZN Wildlife, Royal Natal National Park uKhahlamba Drakensberg Park, Private Bag X1669, BERGVILLE, 3350, South Africa Fax 27 (36) 438 6231

Cell phone: +27 84 629 1647 Email: goosene@kznwildlife.com Supervisor
Dr. Mark Dent
University of KwaZulu-Natal,
Centre for Environment, Agriculture
and Development (CEAD),
Private Bag X01, Scottsville, 3209,
South Africa
Fax 27 (33)260 6118

Phone: 27 (33) 260 5775 Email: dent@ukzn.ac.za

DECLARATION			
Iconfirm that I understand the contents of this do and I consent to participating in the research projection.	·		
I understand that I am at liberty to withdraw from t	he project at any time, should I so desire.		
SIGNATURE OF PARTICIPANT	DATE		

Appendix D: Amended example of an Interview Report

PLEASE NOTE: This is an actual transcribed report, for anonymity, the actual name of the interviewee and relevant protected areas have been changed.

Post Interview Report No. 04- Mr. John Doe

Date: 04 December 2009		Time: 12:30		
Interviewee: John Doe	Age group: 26 - 35	Ethnic Group: European		
Department: Biodiversity Conser	Sex: Male			
Job Description: Conservation Manager "The Drakensberg"				
Notes Reference: # 004 Interview Guide: Version 2				
Digital Recording: Digital Wave Player - Transfer File Tray/Studies/John Doe.wav				
Time Start: 12:35	Time End: 13:42	Duration: 1 h 08 min		

Practical Details: The interview was held at "The Drakensberg" in the interviewee's office. Notes were made by hand and the use of the digital recorder was explained as a backup option and the responded indicated no objection to the use there-off. The interviewee was given the opportunity to conduct the interview in Afrikaans; however he indicated that he was happy with answering the questions in English.

Perceptions of interviewee: The interviewee was very aware of the importance and the need to involve local communities. His understanding of the dynamics and past experience was reflected in the well thought through answers and in depth understanding of the organisations systems and processes. The interviewee was optimistic and positive about EKZNW. The interviewee placed emphasis on being frank with regards to the answers especially where these answers indicated negative aspects of the organisation. The interviewee was very open and communicated very well.

Introductory:

A background of the study was provided to try and put the interviewee at ease, and the following questions were asked:

Tell me about the communities outside your protected area.

Very diverse mix of community. In "The Drakensberg" there is a rural community and the main community is predominantly European commercial community focussed on the hospitality industry. In addition Culfargie has also has a mixture between commercial hospitality and rural poor communities focusing on subsistence farming. Also indicated that there is the international boundary with Lesotho along the western boundary.

- What are your main challenges with regards to communities?
- Law enforcement with regards to illegal hunting and common law crimes. Alien vegetation that occur on properties that invade the park. The park is established as a catchment area and pollution and restrictions are a concern.
- How do you currently deal with communities?

More interaction is currently required. Interaction is achieved by attending forums and committee that address various environmental areas. Rural communities are interacted with by conservation forums however there is a need to improve this.

Are there any land claims lodged against your protected area?

No, not against "The Drakensberg" protected area, also not aware of any claims against "Drakensberg 2".

What impact do you think communities are currently having on your protected area? There is an impact on the wilderness values as well as the direct illegal or legal unsustainable use of resources. There is also biophysical impact from Lesotho side with regards to the illegal movement through the Park as well as the security threat that this has on the Park. There is also a concern with regards to the quality of water as the Park produces relatively good quality water and this is impacted on as soon as the streams leave the Park.

Descriptive Narrative of the Interview:

The interviewee was then informed that the interview was now progressing to the questions and the use of the interview guide was explained. The researcher also requested that as he was taking notes, that he might interrupt to ensure that a point made is captured clearly.

EXPECTATIONS AND PERCEPTIONS OF CO-MANAGEMENT

- 1. What is your understanding of the concept of co-management and the implementation thereof? There is an ownership aspect or a change of ownership which involves formalisation through a formal agreement to manage the land, the one being the "owner" in brackets and the other the manager to manage it in a co-operative manner. Current management as a wider concept involves all conservation outside protected areas that can only be achieved is there is partnership between the stakeholders. Win-win situation between parties. Implementation requires proper planning and the implementation does not in any sense what so ever does not negatively impact on the PA. There are many pitfalls to take note of and an important aspect is the follow-up. The concern is that we can not hand out land or the ownership thereof without proper training and facilitation. Accountability is extremely important and there should be continuous monitoring and evaluation throughout the process. If it is not effective adaptive management should be applied to ensure that the process works. The interviewee also indicated that he believe that as in many conservation constructs, is this just a temporary wave that will come to pass as well with some sort of cooperation that will have to remain.
- **2.** Do you think there are different expectations in EKZNW as to how people see comanagement?

There certainly are different expectations. There is an expectation around black members that comanagement should have happened long time ago and should happen right now and these people do not no the full impact of the implementation of co-management. There are people that believe that the control of some protected areas should be handed back to the communities without any recourse. The interviewee also explained that there are the perceptions with regards to the older white managers that believe that co-management is an evil that is doomed to fail and that it never should have started. However, he indicate that with the development of a better understanding that there will be a better synergy and the groups coming together and seeing the benefits if implemented properly. The interviewee indicated that co-management very important and that it is with us and will never go away and he would like to see that the conservation values persist in the future and that we have to engage it correctly.

- **3.** How would you see your involvement in co-management implementation/structures? As a protected area manager he indicated that he would be seen as one of the main role players as he is the manager of the park and in leading role guiding the process as the catalyst that brings the process together. The interviewee indicated that the manager need to be involved right from the start as very important decisions will be made in the planning phase.
- **4.** What are the objectives or future vision of co-management in EKZNW The interviewee indicated that there are probably a few of them and that it would contribute to the vision / mission of the organisation. There is probably crisis and adaptive management as this was brought onto protected areas by government in a sudden manner.
- **5.** What are the expectations in terms of conflict around the implementation of co-management?

There would definitely be conflict due to opposing viewpoints on land use. Utilisation vs. preservation land use mindset. There would be a level of conflict based on varying expectations. The conflict would vary especially where there are huge expectations from the community.

6. Do you think the implementation of co-management will have an impact on the sustainability of biodiversity conservation?

Absolutely and it has an impact already even without it being implemented. Goals and objectives changes - utilisation might change, people's perceptions on land use differ and that will impact on our natural resources. It will change positive if there is proper implementation, monitored assessed and adapted, but it will be negative if it is not implemented properly.

7. What do you know about EKZNW current efforts to implement co-management?

Long arduous difficult public participative process with getting everyone on board. Fractured communities complicate processes. The interviewee indicated that even to this day that he is getting mails from consultants with regards to his involvement in a co-management process in his previous position. Huge drain on resources and time of many staff involved that could have been spend on basics. The interviewee indicated that we do not know what the long term implications will be and for that reason the need to evaluate and assess. In his experience the interviewee indicated that the setting up of the one that he was involved took a plenty time and resources. The interviewee did indicate that there were some problems with getting some departments involved due to time and resource requirement. Certain critical departments failed to get involved. There was a lot of commitment as the organisational stakeholders involved new that the biodiversity was at stake if the implementation should fail.

ORGANISATIONAL BARRIERS

8. How do you experience your organisations management system, i.e., how would you describe it?

The interviewee indicated an open management, holistic; socio centred, have not yet lost the plot with regards to our mandate. It is a relaxed style, not really autocratic top down as opposed bottom up as his expectation is that it will always be top down, however with some input from the bottom. The interviewee indicated that the last couple months have been very top down and that is the way that he expects it.

9. How are new projects implemented in your organisation?

Projects take time in implementing and indicated that the projects should be driven by strategy and integrated management plans. Don't have people that can make a decision and decisions have to be signed of by many people thus indicating a level of bureaucracy.

10. Are you involved in cross-departmental management; how are you experiencing it? Is this limited to internal departments or does it extend to external groups also?

The interviewee indicated that there are varying levels of efficiency, very bureaucratic, however he see the need for it to the extent that it stifles efficiency that is frustrating. The quality of the work or the service that should be given to the field as the mandate is not up to standard. Communications have improved with regards to a flow of information from the top down as this has been a problem for some time. Reference was once again made to service department ranging from very poor to average.

11. Is your work assessed or measured and what are your experiences with regards to this performance management?

The interviewee indicated that his work is not currently assessed. Interviewee indicates that it is dependant on individuals as some people are self motivated but it is necessary to evaluate people's efficiency however this requires goal driven annual plans that people can be managed against. Goals should be quantifiable and measurable and it is lacking. The current system for reporting is not pragmatic. There are people however that require personal appraisal. Accountability is also an issue that needs to be addressed. There is a need to recognise cultural diversity.

12. How do you communicate difficult issues in your organisation?

The interviewee indicated that issues are addressed head. The problem needs to be address without being personal about them.

13. How would EKZNW react to repeated failures in the implementation a specific comanagement system?

The interviewee indicated that the organisation will try to adapt as the executive understand adaptive management and that he would like to see that there is a process of how this is being addressed, but indicated that he is not aware of such a formal adaptive management process. The interviewee indicated that adaptive management consists of various steps and that he does not see that happening.

14. Do you feel there has to be a separate resource allocation to the development and implementation of a co-management structure?

With out a doubt there must be. However it is essential that there are sufficient resources. Resources has to be allocated to the long arduous process, public participation, training and capacitating that requires resources of both beneficiaries as well as all the staff members involved. Additional resources however need to be allocated to the operational unit. It does happen that comanagement is just handed over which causes confusion and delay that might end in the process going in the wrong direction with dire implications for biodiversity conservation.

RESOURCE REQUIREMENTS

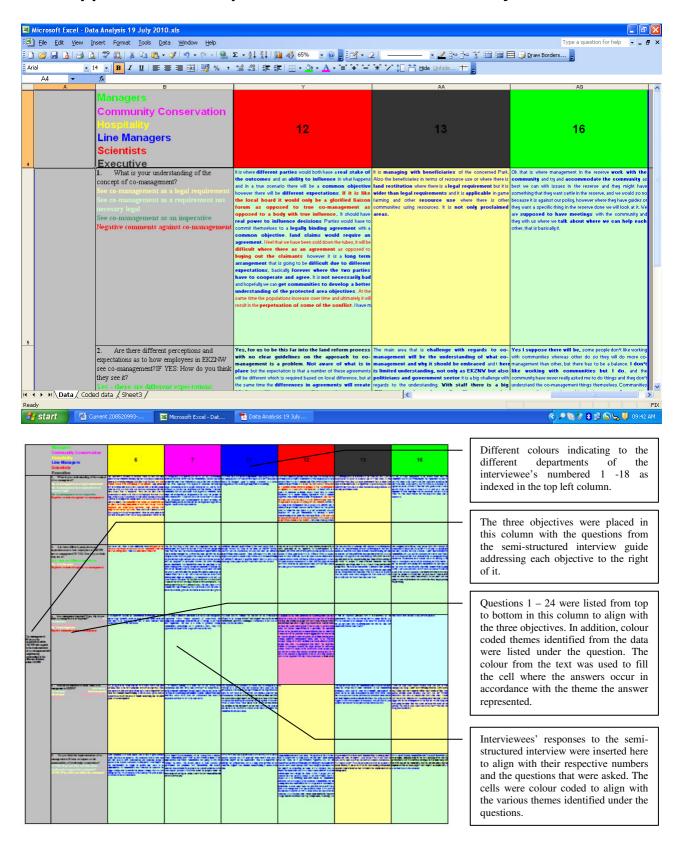
15. Do you feel that you have all the resources required at the moment to effectively address your Key Performance Areas

No. The capacity does exist to spend resources. There are however constraint that restricts the effective use of resources.

16. If you has unlimited resources, how would implement co-management?

Interviewee indicated that in being frank that he will buy the land from the community and continue to manage the park. The interview indicated that resources will not be the paramount determining factor. The main important this is a paradigm shift that needs to happen that will determine whether we will succeed or not.

Appendix E: Example of the Method used to Analyse the Data



Appendix F: Chain of Evidence - Example of Interview Schedule

PLEASE NOTE: This is the actual Interview Schedule, for anonymity, the actual name of the interviewee and relevant protected areas and positions were blocked out.

Stakeholder Group	Job Category / Description	Informed Consent	E-mailed Letter	Response Received	Scheduled Interview	Interview held date
		send - date		1000	Telephonic	48000
Hospitality/	Hospitality Manager	27 Nov 09	28 Nov 09	No	No	No
Camp	2. Hospitality Manager	27 Nov 09	28 Nov 09	No	No	No
Managers	Hospitality Manager	27 Nov 09	28 Nov 09	No	No	No
8 98	4. Hospitality Manager	27 Nov 09	28 Nov 09	No	No	No
Line Mngmt.	Eco-Tourism Manager	27 Nov 09	28 Nov 09	01 Dec 09	02 Dec 09	08 Dec 09 - 08:45
	District Conservation Officer	27 Nov 09	28 Nov 09	05 Dec 09	10 Jan 10	21 Jan 10 - 09:00
Community	7. Community Conservation Officer	27 Nov 09	28 Nov 09	30 Nov 09	No	no
Conservation	8. Community Conservation Officer	27 Nov 09	28 Nov 09	No	02 Dec 09	09 Dec 09 - 08:00
	Community Conservation Officer	27 Nov 09	28 Nov 09	No	No	No
Line Mngmt	10. Community Conservation Manager -	27 Nov 09	28 Nov 09	03 Dec 09	03 Dec 09	07 Dec 09 - 13:00
	11. Conservation Manager	22 Nov 09	28 Nov 09	29 Nov 09	01 Dec 09	03 Dec 09- 14:00
	12. Conservation Manager	22 Nov 09	28 Nov 09	No	02 Dec 09	03 Dec 09 - 15:30
	13. Conservation Manager	22 Nov 09	28 Nov 09	26 Nov 09	02 Dec 09	04 Dec 09 - 09:00
	14. Conservation Manager	22 Nov 09	28 Nov 09	No	No	No
	15. Conservation Manager	22 Nov 09	28 Nov 09	23 Nov 09	02 Dec 09	04 Dec 09 - 12:00
Protected	16. Conservation Manager	27 Nov 09	28 Nov 09	No	No	No
Area	17. Conservation Manager	27 Nov 09	28 Nov 09	No	No	No
Managers	18. Conservation Manager	27 Nov 09	28 Nov 09	29 Nov 09	No	No
	19. Conservation Manager	27 Nov 09	28 Nov 09	No	No	No
	20. Conservation Manager	27 Nov 09	28 Nov 09	No	10 Jan 10	21 Jan 10 - 11:00
	21. Conservation Manager	27 Nov 09	28 Nov 09	01 Dec 09	10 Jan 10	20 Jan 10 - 09:30
	22. Senior Conservation Manager	27 Nov 09	28 Nov 09	No	No	No
	23. Senior Conservation Manager	27 Nov 09	28 Nov 09	01 Dec 09	10 Jan 10	20 Jan 10 - 09:30
	24. Biodiversity Conservation Co-ordinator	27 Nov 09	28 Nov 09	30 Nov 09	02 Dec 09	09 Dec 09 - 13:00
Line Mngmt	25. General Manager	27 Nov 09	28 Nov 09	01 Dec 09	No	No
H Resources	26. Human Resources Manager	27 Nov 09	28 Nov 09	No	No	No
	27. Ecologist	27 Nov 09	28 Nov 09	27 Nov 09	02 Dec 09	09 Dec 09 - 09:30
Scientific	28. Ecological Advice	27 Nov 09	28 Nov 09	30 Nov 09	02 Dec 09	12 Dec 09 - 14:30
Services	29. Planning -	27 Nov 09	28 Nov 09	30 Nov 09	02 Dec 09	07 Dec 09 - 15:00
	30. Ecologist -	27 Nov 09	28 Nov 09	30 Nov 09	02 Dec 09	12 Dec 09 - 14:30
	31. Executive	27 Nov 09	28 Nov 09	30 Nov 09	7 Dec 09	No
	32. Executive	27 Nov 09	28 Nov 09	30 Nov 09	no	11 Dec 09 - 11:00
Executive	33. Advisor to Chief Executive Officer -	27 Nov 09	28 Nov 09	02 Dec 09	03 Dec 09	12 Dec 09 - 10:00