

**ANALYSIS OF A MODEL DESIGNED FOR LAND RESTITUTION IN
PROTECTED AREAS IN SOUTH AFRICA**

by

MARIA ADRIANA IMELDA DE KONING

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Table of acronyms

ABS	Access and Benefit Sharing
BEE	Black Economic Empowerment
BOT	Build Operate Transfer
CBD	Convention on Biological Diversity
CBNRM	Community-Based Natural Resource Management
CCO	Chief Conservation Officer
CDM	Clean Development Mechanism
CEO	Chief Executive Officer
CIFOR	Centre for International Forestry Research
CLCC	Chief Land Claims Commission
CMA	Catchment Management Agency
CMC	Co-management Committee
CMP	Conservation Measures Partnership
COO	Chief Operations Officer
CPA	Communal Property Association
cPPP	Community Public-Private Partnership
CRLR	Commission on Restitution of Land Rights
CSIR	Council for Scientific and Industrial Research
DEAT	Department of Environmental Affairs and Tourism
DED	Deutscher Entwicklungsdienst
DEDET	Department of Economic Development Environment and Tourism
DLA	Department of Land Affairs
DM	District Municipality
DWAF	Department of Water Affairs and Forestry
EE	Environmental Education
EIA	Environmental Impact Assessment
EMC	Executive Management Committee
ES	Ecosystem Service
EXCO	Executive Committee
GPS	Global Positioning System
GDP	Gross Domestic Product
GTZ	Gesellschaft für Technische Zusammenarbeit
HH	Household
HR	Human Resources
IDP	Integrated Development Plan
IUCN	World Conservation Union
IWM	Integrated Water Management
K2C	Kruger to Canyons
KZN	KwaZulu-Natal
LCC	Land Claims Commission
LM	Local Municipality
LED	Local Economic Development
LEDET	Limpopo Economic Development, Environment and Tourism
MAB	Man and the Biosphere
MBCP	Mpumalanga Biodiversity Conservation Plan
MDG	Millennium Development Goal
MEC	Member of Executive Council
M&E	Monitoring and Evaluation
MoA	Memorandum of Agreement

MP	Management Plan
MTPA	Mpumalanga Tourism and Parks Agency
MW	Megawatt
NEM:BA	National Environmental Management: Biodiversity Act
NEM:PAA	National Environmental Management: Protected Areas Act
NERSA	National Energy Regulator South Africa
NGO	Non-Governmental Organisation
NTFP	Non-Timber Forest Product
PA	Protected Area
PDT	Pilgrims Rest Development Trust
PES	Payment for Ecosystem Services
PFM	Participatory Forestry Management
PFMA	Public Finance Management Act
PGDS	Provincial Growth and Development Strategy
PGIS	Participatory Geographical Information System
PLA	Participatory Learning and Action
PPP	Public-Private Partnership
PRA	Participatory Rural Appraisal
R	Rand
REDD	Reduced Emissions from Deforestation and Degradation
REFIT	Renewable Energy Feed In Tariff
Regional M	Regional Manager
Reserve M	Reserve Manager
RLCC	Regional Land Claims Commission
SANParks	South African National Parks
S42d	Section 42d of Restitution of Land Rights Act 22 of 1994 as amended
Section R	Section Ranger
SMME	Small Medium Micro Enterprise
SMPA	Senior Manager Protected Areas
SWOT	Strengths Weaknesses Opportunities Threats
TA	Tribal Authority
TFCA	Trans Frontier Conservation Area
TIES	The International Ecotourism Society
ToR	Terms of Reference
TRANSFORM	Training and Support for Resource Management
UNESCO	United Nations Educational Scientific and Cultural Organisation
UNISA	University of South Africa
WNBR	World Network of Biosphere Reserves
WPC	World Parks Congress
WTO	World Tourism Organisation
WUA	Water Users Association
WWF	World Wildlife Fund

Key terms

Key terms (first used in section...)	Definition
Benefits beyond boundaries (1.3)	The benefits (tangible and intangible) accrued beyond the physical borders of the protected area
Bio-cultural protocol (1.4)	A document that is established in conjunction with the relevant stakeholders that clearly outlines the aspects of the community involved and their approaches and vision on conservation and sustainable use, access, benefit sharing and traditional knowledge
Biodiversity conservation (1.1)	The conservation of the totality of genes, species and ecosystems of a region
Biosphere reserves (1.6)	Areas of terrestrial and marine ecosystems or a combination of these, promoting solutions to reconcile the conservation of biodiversity with its sustainable use, which are internationally recognised within the framework of the Man and Biosphere (MAB) programme
CBNRM (1.6)	Community-based natural resource management (CBNRM) is about local people coming together to protect their land, water, animals and plants, so that they can use these natural resources to improve their lives and the lives of their children and grandchildren. It is a tool to enable every willing member of the community to play a part in improving the quality of people's lives – economically, culturally and spiritually
Co-management (1.1)	A middle-range management option between state and community management suggesting and encouraging participatory democracy, sharing of power, local incentives for local use of natural resources, and decentralisation of resource management decisions
Corridor (1.4)	A passage that links areas/compartments. In the context of this initiative a corridor is understood to mean 'a passage that provides links for biodiversity, ecological services and sustainable, local economic development' within a larger catchment area
Land restitution (1.1)	Restitution of land rights to persons or communities dispossessed after 19 June 1913 as a result of past racial discriminatory laws or practices without equitable compensation
Local economic development (1.1)	An ongoing process by which key stakeholders and institutions from all spheres of society, the public and private sector, as well as civil society, work jointly to create a unique advantage for the locality and its firms, tackle market failures, remove bureaucratic obstacles for local businesses and strengthen the competitiveness of local firms
Management plan (1.8)	The management plan pertaining to the nature reserve that stipulates what needs to be managed, as compiled and reviewed from time to time by the conservation agency in consultation with other stakeholders, in terms of Sections 39 and 41 of the National Environmental Management Protected Areas Act (No 57 of 2003)
Protected area (1.1)	An area of land and/or sea specially dedicated to the protection and maintenance of biodiversity, and of natural and associated cultural resources and managed through legal or other effective means
Social ecology (1.7)	Unit within conservation agencies responsible for the interface between biodiversity conservation and people (communities and external stakeholders)

Summary

This thesis investigates the design of a model, methods and guidelines that may assist government agencies in South Africa to find a balance between the objective of biodiversity conservation and increased local economic development in cases of land restitution in protected areas. The data collection that was needed for this study took place from 2007 to 2009 and was limited to seven priority protected areas in Mpumalanga Province. The general model design was established via an extensive literature review and analysis of the legal background and formed the theoretical concept of this thesis. The general model design was used to devise the guidelines for co-management to be used by government agencies in South Africa for the possible implementation of the biodiversity conservation and local economic development mandates in cases of land restitution in protected areas, within their financial and institutional limitations. From the results, it is clear that a consolidated government position, agreed upon by all relevant government stakeholders, assists in keeping the land restitution process in protected areas within the legal framework. Through the analysis of the model design in the seven priority protected areas it was identified that additional information is needed to reach the preferred land claim settlement option per protected area such as the actual tourism record, a socio-economic assessment of the environment in which each protected area is embedded, and financial figures to make projections on current and future net profit calculations. Government should support all the land claim settlement options, as elaborated in the model design, which is not the case at the moment, and most alternative options, other than co-management, are currently still unclear and/or not feasible. This might have serious negative implications for the conservation agency, with the risk of compromising its mandate to manage areas of high biodiversity effectively. The methods that were developed to workshop the generic agreement frameworks with the land claimant representatives proved to assist in the land claimants making an informed choice within the legal framework and to tailor the land claim settlement option and agreements to their specific situation.

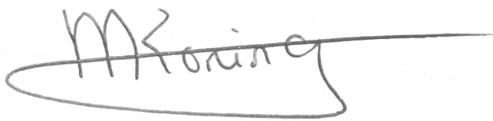
Key terms: benefits beyond boundaries; bio-cultural protocol; biodiversity conservation; biosphere reserves; CBNRM; co-management; corridor; land restitution; local economic development; management plan; protected area; social ecology

Signed declaration

Student number: **4599-943-0**

I declare that 'analysis of a model designed for land restitution in protected areas in South Africa' is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

The German development service Deutscher Entwicklungsdienst (DED) has seconded me to the Mpumalanga Tourism and Parks Agency (MTPA) since August 2006. My advisory services were requested by the MTPA to assist the organisation in the design of a model for land restitution and co-management in protected areas. As an advisor I guided the organisation in this process and developed most of the models and methods myself as illustrated in figure 1, figure 4, figure 12, table 5, table 6, and table 9. In close cooperation with the relevant government officials I implemented the designed model and methods in seven priority protected areas managed by the MTPA. Some of the methods I implemented myself and some of the methods were implemented by the relevant government officials whom I guided and coached. The analysis of the implementation results in the seven priority protected areas was entirely done by myself.



10 October 2010

SIGNATURE

Mrs M A I de Koning

DATE

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Chapter 1: Introduction and research design

1.1 Background of the study

The title of this thesis is ‘Analysis of a model designed for land restitution in protected areas in South Africa’. The model design includes methods and guidelines that are developed and contribute towards the balancing of biodiversity conservation and local economic development. Land claims in terms of the Restitution of Land Rights Act (No 22 of 1994 as amended) affect quite a number of South Africa’s protected areas and world heritage sites (South Africa 1994). The act provides for the restitution of land rights to persons or communities dispossessed after 19 June 1913 as the result of past racial discriminatory laws or practices without equitable compensation. Because of the history, in South Africa protected areas were often strictly fenced off, with little or no positive interaction between protected areas and neighbours. It was in most cases illegal for communities to gather resources such as traditional food, medicinal plants or firewood. A considerable number of the protected areas managed by conservation agencies are partially or completely under land claim, and land restitution and co-management is promoted by government as the preferred settlement option for the land claimants. The topic of land claims on protected areas was addressed at the 5th World Parks Congress (WPC) in 2003 in Durban (DEAT 2004:9–10). Representatives from 12 rural communities who live in or near protected areas and had made restitution claims in South Africa met at Cape Vidal on the eve of the 5th WPC to share experiences and raise issues regarding the role protected areas play in local economic development and poverty alleviation (DEAT 2004:9–10). Issues were identified with regard to the implementation policy designed to integrate conservation programmes and to improve rural livelihoods. These issues and the resolutions taken are contained in the Cape Vidal Memorandum.

The Cape Vidal Memorandum outlines clear actions to address the following issues of importance to communities affected by forced removals in the past:

- Clear land ownership and rights are the basis for secure access to resources and the ability to unlock the benefits that can come from partnerships.
- Lack of capacity in both communities and conservation agencies poses one of the greatest challenges to effective co-management.

- Appropriately structured tourism businesses can play a key role in delivering economic benefits linked to the conservation of biodiversity (DEAT 2004:9–10).

The 5th WPC gave an enormous boost to the so-called People and Parks programme. The People and Parks programme generally entails making people (claimants and non-claimants) – especially the historically disadvantaged communities living near or adjacent to parks – part of conservation and providing benefits to them. At the Cape Vidal meeting the director general of the Department of Environmental Affairs and Tourism (DEAT¹) agreed to convene an annual meeting of conservation agencies, government and communities so that progress could be assessed (DEAT 2004:9).

1.2 Problem statement

At this stage the main focus and priority of the People and Parks programme is on land restitution in protected areas, leading to co-management, access and benefit sharing, and community public-private partnership (cPPP) models with the aim of balancing the objective of biodiversity conservation with increased local economic development and poverty alleviation. The right of participation in protected area management increases with land ownership (Borrini-Feyerabend, Farvar, Nguinguiri and Ndangang 2000:24; Turner, Collins and Baumgart 2002:3; Wolmer and Ashley 2003:37). However, it is seldom easy to balance different and often competing interests when land is set aside for conservation, especially if the debate on land reform and the restoration of land rights is as heated as it is in South Africa (de Villiers 2008a:1).

The models of community-based or pro-poor tourism (including eco-tourism and ethno-tourism) being promoted as development options have very limited, and very mixed pedigree, and it remains to be seen whether they can deliver the anticipated benefits. If they fail to succeed on sufficient scale, or if the benefits are not widely distributed within communities, the pressure for direct access to land for subsistence that drove many of these claims in the first place is likely to resurface (Lahiff 2002:20).

However, economic benefits from protected areas need to be compared with potential benefits derived from other development schemes.

¹ DEAT was transformed into the Department of Environmental Affairs (DEA) after the elections in April 2009.

South Africa's protected areas do not consist of quality land, having originally been established in remote parts of the country or in places unsuitable for agriculture. Increasingly, South Africa's protected areas are envisaged as cash cows for economic development and service delivery, rather than biodiversity protection or ecosystem services luxuries (Carruthers 2007:296–297).

Protected areas are less and less subsidised by the government, and conservation agencies/management authorities rely more and more on own income generation to sustain operations and to fulfil their mandate of biodiversity conservation. It is questionable whether they manage to do so with the additional expectations of benefit sharing by land claimants. In summary, the problem to be addressed in this thesis is the lack of a clear model, methods and guidelines that may assist government agencies in South Africa to find a balance between the objective of biodiversity conservation and increased local economic development in cases of land restitution in protected areas.

1.3 Aim and objectives of the study

It is the aim of this thesis to investigate the design of a model, methods and guidelines to be used by government agencies in South Africa for the possible implementation of the biodiversity conservation and local economic development mandates in cases of land claims, within their financial and institutional limitations. The topic is complex because of its interdisciplinary character (social, economic, biodiversity conservation and legal). Therefore it is necessary to subdivide the broad aim of the thesis into several objectives:

1. To design a model that conservation agencies can use to facilitate the establishment of a consolidated government position and strategy leading to the optimum land claim settlement choice and the creation of good generic settlement and co-management agreement frameworks.
2. To explore options for additional income generation beyond nature-based tourism and to give recommendations for so-called benefits beyond boundaries to make the proposed beneficiation models more feasible over a long period. The term 'benefits beyond boundaries' refers to benefits accrued beyond the physical borders of the protected area (DEAT 2006:54).
3. The development of methods to balance the objective of biodiversity conservation with the beneficiation expectations of the land claimants in order to come to a mutual beneficial model for both the claimants and the conservation agency.

1.4 Limitations, timeframe and scope of the study

The data collection for the study takes place from 2007 to 2009 and is limited to seven priority protected areas in Mpumalanga Province, managed by the Mpumalanga Tourism and Parks Agency (MTPA). The seven priority areas are selected by the MTPA as they are considered to have a relatively high biodiversity and high tourism value, and therefore have potential for successful co-management. The seven selected priority areas are Mdala Nature Reserve, Loskop Dam Nature Reserve, Mabusa Nature Reserve, Songimvelo Nature Reserve, Mthethomusha Game Reserve, Manyeleti Game Reserve and Blyde River Canyon Nature Reserve. These priority areas are used to study two of the objectives, that is, to design a model and methods that can be used by the conservation agency to come to an agreed government position and strategy, resulting in a mutually beneficial situation for the land claimants and the conservation agency. The target set by the management of the MTPA is to settle the land claims on these priority areas by the end of 2009, so that the commercialisation process on these protected areas can start. Blyde River Canyon Nature Reserve is used as a pilot site to investigate options for additional income generation beyond nature-based tourism and to give recommendations for the realisation of benefits beyond boundaries to make the proposed beneficiation models more feasible over a long period (objective 2). The pilot site is selected because of its location in a biosphere reserve (see 1.6.3). The feasibility studies of three proposed projects (hydropower, river corridor and bio-cultural protocol) are all planned to be finalised by the end of 2009 (see chapters 3 and 5).

The study limits itself to the description and analysis of the process of the settlement and co-management negotiations, and to the design of a model, methods and guidelines towards this goal. The implementation of the agreements and proposed projects falls outside the scope of this study. The People and Parks programme provides the background and states the importance for the study subject, and is therefore discussed in more detail in this chapter for national level and specifically for the MTPA in Mpumalanga. The People and Parks programme gives the framework of the study subject and explains the bigger picture in which the study takes place. However, the People and Parks programme itself is not within the scope of the study.

1.5 Literature review

The development model for tourism-related activities in protected areas promoted by government supports an investment-led approach, with the role of the state being to provide an enabling environment to stimulate private sector involvement. In this approach communities are encouraged to enter into formal partnerships with the private sector. This more market/growth focused approach aims for socio-economic benefits as an end in themselves, and not just as an incentive for conservation. The anticipated benefits for the communities include community equity stakes in tourism concessions; payments of lease fees or revenue shares to communities for use of their land; preferential employment for local people; local outsourcing, procurement and contracting; and local enterprise opportunities and business training (Wolmer and Ashley 2003:34–39; Carruthers 2007:297). The risk is that the private partner is normally the stronger partner and that the processes are not always transparent and therefore can lead to benefits accruing to the local elite, private sector and the state more than the poor (Wolmer and Ashley 2003:34–39).

As happened with the Makuleke community, ‘landowner’ communities soon learn that attracting investors and tourists to their ventures is more challenging than they were made to believe. Institutional capacity at state and community level often appears to be one of the key constraints in such nature-based tourism projects (Kepe, Wynberg and Ellis 2005:14).

It is important to find a balance between the short-term profit generation and market oriented priorities of the private sector and the local benefits for land claimants and neighbouring communities related to sustainable natural resource use, justice and equity. The state has an important role to play to ensure maximum benefits for communities in the move towards privatisation and market liberalisation in economic development programmes linked to the utilisation of the region’s rich natural resource base (Isaacs and Mohammed 2000:19). Especially in cases where communities have firm legal rights over land and where the state controls competitive sites, there is hope for improving rural livelihoods (Wolmer and Ashley 2003:34–39).

In many cases protected areas have been established with little or no regard for communities living in or adjacent to such areas. This has affected the livelihoods, social cohesion, and customary rights and practices of many people. Considerable conflicts have developed between local people and conservation agencies, often undermining the viability of the affected protected area. However, local people are increasingly recognising protected areas as important catalysts for economic development. Under the new National Environmental

Management Protected Areas Act (NEM:PAA), sustainable utilisation of protected areas for the benefit of local people is promoted (South Africa 2003:11). Thus conservation agencies are frequently being required to take on the dual, and sometimes conflicting, roles of being promoters both of biodiversity conservation and of rural development. It is a concern that in South Africa until now co-management has been the sole strategy to reconcile land reform, economic development and biodiversity conservation. In certain cases co-management is not a viable option and it will not lead to a mutual beneficial situation. (The definition of co-management and its requirements to make it a viable option are discussed in detail in chapter 2.) The nature of the relationship between the community and protected area management must change fundamentally. Flexible strategies are needed to enhance multiple livelihood strategies, which may include land uses other than nature-based tourism, and broader bioregional strategies for conservation that look beyond protected areas in terms of planning, conservation and economic development. Nature-based tourism should not seek to replace the complex and diverse portfolio of livelihoods available to rural people. Addressing the immediate and long-term needs of the poor, while simultaneously conserving the country's biodiversity is not an easy task, requiring the creativity, and above all the commitment, of all players to compromise where necessary and get it right (Kepe et al 2005:3–16). ‘Policy decisions regarding natural resources are increasingly less a matter of technical expertise, and more a question of negotiation and agreement among stakeholders’ (Armitage, Berkes and Doubleday 2007:4).

At the national People and Parks conference in Mafikeng in 2008 it was stated that there is a need for case studies and best practice models to serve as an example for successful implementation of land restitution and co-management in protected areas (DEAT 2008:34). The need for more case studies and best practice models was also identified by Kepe (2008:319), Kepe et al (2005:3), Carruthers (2007:293) and Venter (2008). Until now, most studies approached the topic through a sector approach, focusing either on social and ‘land’ rights (McNeely 2008:106; Turner et al 2002:29–31), biodiversity conservation (Fischer 2008:103) and/or economic issues (Job 2008:141; Koch and Massyn 2003:32–33; Mahony and Van Zyl 2001:1–5; Spenceley and Goodwin 2007:1). To really address the complexity of the problem, there is a need to look at the specific case by case scenarios from a social, biodiversity conservation and economic angle at the same time within the restrictions of the legal framework to be able to come to a mutually beneficial situation (Hauck and Sowman 2005:7; Isaacs and Mohamed 2000:11–16; Kepe 2008:315–319; McNeely 2008:106). There are few examples in which the financial and institutional feasibility of the conservation agency have been taken into account in order to be able to address the issue of land

restitution and co-management in protected areas adequately like in Reid, Fig, Magome and Leader-Williams (2004:395–397).

1.6 Clarification of terms

It is necessary at this stage to clarify some terms used in this thesis. First of all biodiversity conservation and local economic development are defined. Biosphere reserves are briefly described as the priority area in which objective 2 is investigated, that is, additional income generation beyond nature-based tourism and benefits beyond boundaries, is situated within a biosphere reserve. The terms of sustainable livelihoods and community-based natural resource management (CBNRM) are closely linked and are therefore discussed in a separate section. CBNRM can be used as a strategy for sustainable livelihoods and it brings together the interdisciplinary topics of social and land rights, as well as biodiversity conservation and economic development, all within their own legal frameworks.

1.6.1 Biodiversity conservation in South Africa

The definition of biodiversity conservation used by the Convention on Biological Diversity (CBD) is the conservation of the totality of genes, species and ecosystems of a region (Haber 2008:92). Globally, the number of protected areas has been increasing substantially over the years. Biodiversity conservation is now one of the most significant land-use options throughout the world and 12 per cent of the earth's land surface is covered by protected areas (Emerton, Bishop and Thomas 2006:5). South Africa is considered one of the most biologically diverse countries in the world. This biological diversity includes biomes such as deserts, fynbos, succulent Karoo, grasslands, savannas, forests and wetlands. Although South Africa accounts for only 2 per cent of the world surface area, it is home to nearly 10 per cent of the world's plants and 7 per cent of the world's reptiles, birds and mammals. In terms of the number of endemic species of mammals, birds, reptiles and amphibians, South Africa is ranked fifth richest country in Africa and 24th richest in the world (DEAT 2008:9). According to Kepe et al (2005:3) and Carruthers (2007:296), South Africa is the third most biodiverse country in the world, after Indonesia and Brazil.

In addition, South Africa is committed to expanding the conservation estate to cover 10 per cent of the land surface area and 20 per cent of the marine areas by 2010. Despite the success in biodiversity conservation and expansion of the conservation estate, South Africa is still faced with serious challenges, such as the threat to globally recognised biodiversity hotspots,

endemic and endangered species, river ecosystems and wetlands. The success in achieving sustainable protection of these hotspots, species and ecosystems depends largely on the extent to which local people are involved whose livelihoods depend on these resources. Most of those species and ecosystems that are threatened with extinction are found outside protected areas, usually in communal lands that are subjected to a variety of uses by local people. To sustain the efforts in the protection of threatened, endangered and endemic species, support to community-owned parks and game reserves is needed. Provincial governments and their public entities have a greater role to play in supporting community-based parks and game reserves as they are often the immediate neighbours of local communities (DEAT 2008:9).

The conservation of biodiversity is not only important in terms of protecting vulnerable species and ecosystems, but it is also a cornerstone for the achievement of key Millennium Development Goals (MDGs) such as halving poverty and significantly reducing the incidence of hunger by 2015. South Africa's biodiversity provides an important basis for economic growth and development and is also vital for ensuring the ongoing provision of ecosystem services, such as production of clean water through good catchment management, prevention of erosion, carbon storage (to counteract climate change) and clean air. Loss of biodiversity puts aspects of the South African economy and quality of life at risk, and reduces socio-economic options for future generations (DEAT 2007:12).

1.6.2 Local economic development in South Africa

There are numerous definitions of local economic development (LED), most of which underline two important aspects. The first aspect is that LED is an ongoing process, and the second is that it is driven by local actors from different societal sectors. This implies collaboration and even co-responsibility between the public and private sector for the economic development of a region or location.

The German agency for development cooperation GTZ defines LED as an ongoing process by which key stakeholders and institutions from all spheres of society, the public and private sector as well as civil society, work jointly to create a unique advantage for the locality and its firms, tackle market failures, remove bureaucratic obstacles for local businesses and strengthen the competitiveness of local firms (Ruecker and Trah 2007:15).

In South Africa, LED is a post 1994 phenomenon. Under apartheid, South Africa had a distinct regional planning policy for settlement patterns, with all residential areas

underpinned by racial segregation. As a result, the majority of the population were displaced and lived in marginal townships and homelands. Strong central government control suppressed the emergence of LED initiatives, which led to the erosion of local autonomy. With democratisation in 1994, however, came a new vision of development, and the concept of LED attracted more and more attention in government circles and among policy makers, to the point of being an explicit government priority today (Patterson 2008:4). However, the implementation of the LED policy and strategy as developed by government has not lived up to the expectations so far. A lack of intergovernmental coordination and capacity in the local and district municipalities is seen as the main cause for this (Ende 2007:17).

1.6.3 Biosphere reserves to study benefits beyond boundaries

Biosphere reserves are conceived as a worldwide network of representative landscapes, with the primary goal of serving as learning sites for information exchange on conservation and sustainable development. Therefore, biosphere reserves are excellent pilot sites to investigate the concept of benefits beyond boundaries (Stoll-Kleemann and Job 2008:86–89). The term ‘benefits beyond boundaries’ includes amongst others sustainable resource harvesting, tourism ventures established just outside the borders of the protected area, and payments for ecosystem services. (The concept of benefits beyond boundaries is discussed in more detail in chapters 2, 3 and 5 of this thesis.)

UNESCO (United Nations Educational, Scientific and Cultural Organisation) launched the Man and the Biosphere (MAB) programme in 1970 as a long-term intergovernmental and interdisciplinary endeavour that focuses on research, training, monitoring, education, and pilot projects. It seeks trade-offs and a balance between the human responsibility to maintain nature and the human need to use natural resources for enhancing the social and economic wellbeing of people. The Seville Strategy and Statuary Framework (UNESCO MAB 1996) forms the foundation for the establishment and management of biosphere reserves. In the latest official documents adopted by the Madrid Declaration (UNESCO MAB 2008a) and the Madrid Action Plan (UNESCO MAB 2008b) at the 3rd World Congress of Biosphere Reserves, the potential for action of biosphere reserves to address new challenges was discussed. In particular,

... the loss of traditional knowledge and cultural diversity, demography, loss of arable land, climate change, biodiversity and sustainable development; and, in particular, as places for investments and innovation to mitigate and adapt to climate change, to promote the greater use of renewable energy in sustainable futures of rural and urban

areas and to enhance and capitalise upon ecosystem services and products in sustainable development for human wellbeing (Stoll-Kleemann and Job 2008:87).

1.6.4 Sustainable livelihoods and community-based natural resource management

In this thesis the topic of sustainable livelihoods is closely linked to CBNRM. CBNRM is about local people coming together to protect their land, water, animals and plants, so that they can use these natural resources to improve their lives and the lives of their children and grandchildren. It is a tool to enable every willing member of the community to play a part in improving the quality of people's lives – economically, culturally and spiritually. CBNRM is a way for communities to work together to protect their natural resources and at the same time bring long-lasting benefits to the community (DEAT 2003:11). Seven key principle of a successful CBNRM programme were identified by DEAT (2003:21):

1. A variety of ways of earning a living are maintained, to minimise risks in case of natural and economic disasters.
2. The natural resource base is maintained and even improved, so that the natural resources can continue to provide livelihoods to people now and in the future.
3. Local organisations, including local government and community organisations, work effectively to manage local resources for the benefit of local people and the environment.
4. People receive benefits – economic, social, cultural and spiritual – from managing the natural resources wisely.
5. There are effective policies and laws, and these are implemented, wherever possible, by local people's legitimate and representative organisations.
6. Outside assistance is provided to facilitate local projects. Local people's knowledge and experience is respected.
7. There is good understanding of local leadership and local leadership fully supports CBNRM projects.

(DEAT 2003:21)

As stated by Mitchell (2007:6–7) the following categories of CBNRM projects typically occur in the African context:

- Sustainable use of existing natural resources (medicinal plants, grass, trees, wild animals, fish)
- Forestry and agro-forestry
- Community-owned and managed conservancies and protected areas

- Co-management of protected areas with official conservation agencies
- Nature tourism (community-based tourism, community private partnerships)
- Integrated rehabilitation of arable land and wetlands
- Integrated management of water catchments areas

These kinds of activities and projects can be carried out separately or combined. For example, the management of community conservancies is often linked to nature tourism to create economic benefits and for empowerment. CBNRM can be used as a strategy to come to sustainable livelihoods as it brings together the interdisciplinary topics of social and land rights and biodiversity conservation and economic development, all within their own legal frameworks. Objectives shared by CBNRM and LED are economic growth, job creation, participation, skills transfer and poverty alleviation. Both disciplines have often been treated in isolation. It is important to start to link discrete CBNRM projects such as water catchment management and tourism development into an overall regional economic strategy that works to create as many jobs and as much revenue as possible for the alleviation of poverty, while at the same time regional and local economic planners must take the importance of (community used) natural resources into account when doing LED. The principle stated above forms an integral part of the model design and recommendations in this thesis.

1.7 Relevance and framework of the study in the Mpumalanga context

It is necessary to place the study subject in a more comprehensive framework elaborating on the political and socio-economic context, legislation and institutions involved. The People and Parks programme aims to implement the WPC outcomes (WPC outputs 2003) and targets element 2 of the CBD programme of work on protected areas as well as the Cape Vidal Memorandum. Element 2 of the CBD programme deals with governance, participation, equity and benefit sharing, and explicitly invites parties to promote equity and benefit sharing, to enhance and secure the involvement of indigenous and local communities and relevant stakeholders, with their full effective participation and in full respect of their rights and recognition of their responsibilities. A steering committee has been established at national level to guide the implementation of the People and Parks programme. Representatives from the various departments and conservation agencies are included, as well as officials from the Land Claims Commission (LCC) and the Department of Land

Affairs (DLA²). Between 2003 and 2008 three national People and Parks conferences were organised. At the Beaufort West conference in 2006 it was decided to include community representatives in some of the national steering committee meetings and two representatives per province were selected (DEAT 2006:12–13). At the 2008 conference in Mafikeng it was decided that each province has to establish a separate strategy and provincial forum to guide implementation at provincial level (DEAT 2008:16–17). The broad national aim of the People and Parks programme can be divided into six specific objectives and/or key focus areas. These are the areas that are also used in the provincial planning and reporting formats that are discussed in the national steering committee meetings. The six key focus areas are summarised below (DEAT 2004:21):

- Access and benefit sharing (ABS)
- Co-management
- Conservation and land reform
- Community public-private partnerships (cPPP)
- Expanding and strengthening the protected areas network
- Implementing the new NEM:PAA (South Africa 2003:1–55)

The broad aim and six specific objectives are all relevant in the Mpumalanga context. From the 19 fenced and staffed protected areas managed by the MTPA, 17 are partially or completely under land claim. It is reckoned that at least 65 per cent (30 out of 47 are already confirmed) of the protected areas managed (or to be managed) by the MTPA is under claim and around 70 per cent of the total surface of the protected areas is claimed. Co-management is promoted by government as the preferred land claim settlement option for the land claimants. When co-management is chosen as the settlement option, the land rights are restored to the claimants and their rights to access and benefit sharing increase. The issue of cPPPs and other beneficiation models plays a key role in making co-management a success and in balancing the conservation and development interests in a sustainable manner. In the MTPA, the topics of access and benefit sharing and cPPPs are translated into CBNRM. This thesis addresses the complexity of the study subject by using an interdisciplinary approach and creating linkages between the sectors. The recommendations of this thesis may assist the MTPA in its mandate as reflected in its mission statement, namely to provide an integrated tourism and biodiversity conservation management system in order to stimulate sustainable economic growth for the province. The recommendations are valuable for other conservation agencies and provinces in South Africa as the situation is similar in all protected areas under

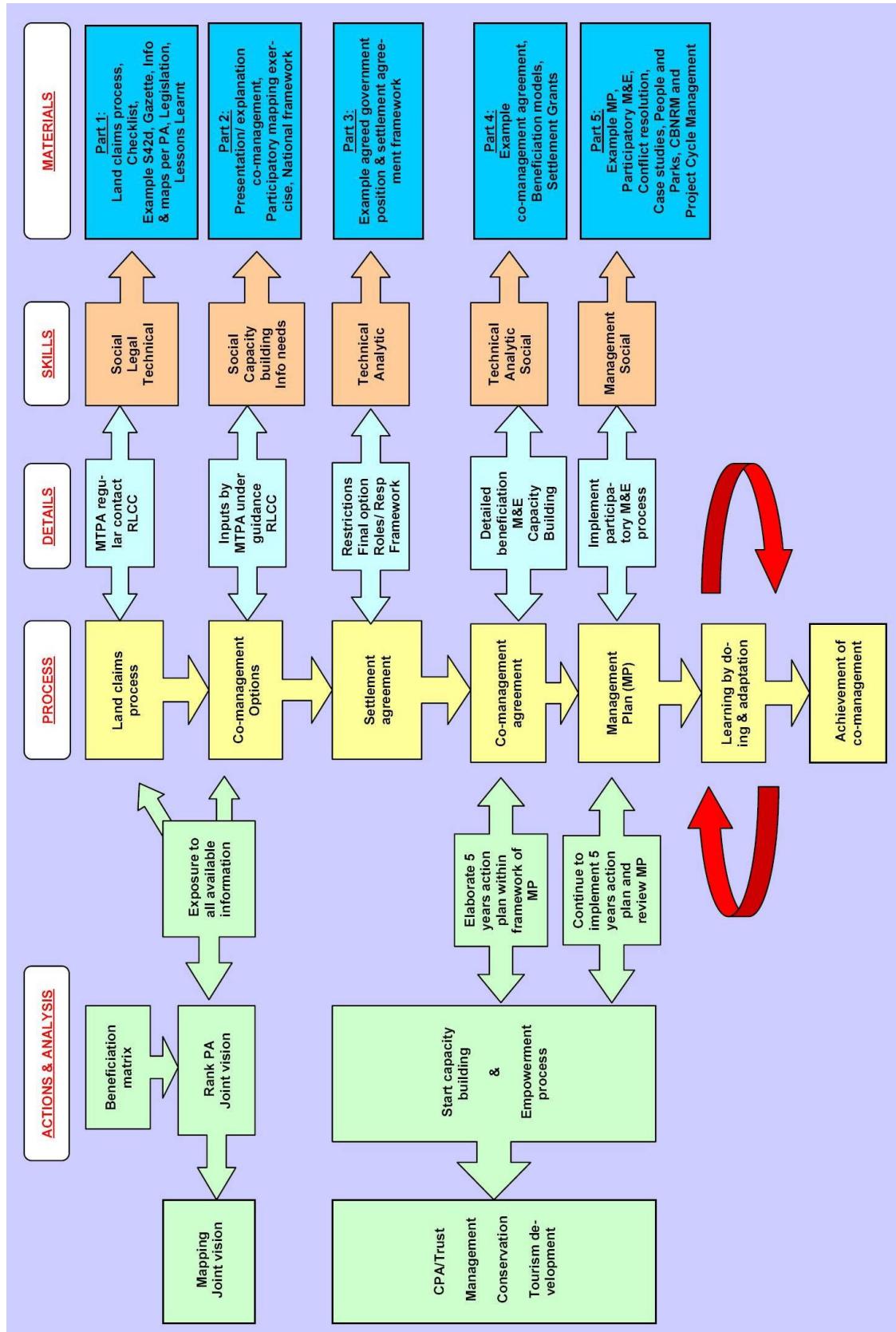
² DLA was transformed into the Department of Rural Development and Land Reform after the elections in April 2009.

land claim. Land restitution and co-management are cross-cutting issues within the MTPA. Inputs from social ecology, protected areas, park establishment and expansion, scientific services, tourism business development and others are needed to address the key focus areas. In addition, social ecology³ provides a coordinating and facilitating role (de Koning and Marais 2009a:8).

1.8 Broad outline of land restitution and co-management model design

The interlinkages between the key focus areas of the People and Parks programme related to land restitution and co-management are illustrated in the flow diagram in figure 1. The yellow colour indicates the steps in the land restitution and co-management process and forms the central axis of the model design in this thesis. First of all, the land claims process and co-management options should be well understood by all the parties involved. After making an informed choice of the most suitable option, the settlement and co-management agreements can be established. The co-management agreement must be aligned with the management plan (MP) of the protected area, as required under NEM:PAA (South Africa 2003:25–28). Co-management among the parties can start under an adaptive learning process after all agreements and plans are in place and the anticipated mutually beneficial relationship can be achieved. The green colour indicates the analysis and actions required for the land claimants to come to the best land claim settlement option and to arrive at realistic expectations with regard to beneficiation. The materials and skills are illustrated in the blue and brown colours, and indicate some of the institutional procedures and resources that are needed in the process. The broad outline of the model, as illustrated in figure 1, is refined in this thesis via an extensive literature review, an analysis of the legal framework and methods that were developed. The refined model that was designed is illustrated in figure 4 in section 3.5. The refined model is tested in the seven priority protected areas and an analysis of the test results is made and presented. The actions, skills and materials that go together in each stage of the land claims process are discussed in chapters 3, 4 and 6 of the thesis. These actions, skills and materials that are described form the guidelines that may assist the government agencies to find a balance between the objective of biodiversity conservation and increased local economic development in cases of land restitution in protected areas.

³ Social Ecology in the MTPA is responsible for the interface between biodiversity conservation and people (communities and external stakeholders). In other conservation agencies in South Africa this unit is called Social Ecology, People and Parks, Community Development and/or People and Conservation.



(de Koning and Marais 2009b)

Figure 1: Interlinkages between the key focus areas illustrated in a flow diagram

1.9 Research methodology, techniques and outcomes

A detailed literature review is done to provide the background and legal context of the study. Both the land restitution process and options and the co-management process and options are studied in detail, as well as possible beneficiation models related to tourism and other conservation-related activities. Literature on the interlinkages between the sectors is included in the literature review. Literature is gathered from within South Africa as well as internationally.

The study itself is based on a combination of field and literature research. The study takes place in the MTPA as an organisation and more specifically in the seven priority protected areas and selected case study site. The research data on the model design and on methods used for negotiations on the settlement and co-management process and the projects is gathered via internal workshops and meetings in the MTPA, workshops and meetings between the MTPA and other relevant government departments, and workshops and meetings between the MTPA and the land claimant representative structures. The methods used in the negotiation process are developed according to the principle of adaptive learning and are improved upon while implementing. The results of these participatory methods are analysed only in a qualitative way in this thesis. This is because each situation is specific to each priority protected area and land claimant group, and therefore no quantitative analysis can be conducted (Chambers 2008:1–2; Barahona and Levy 2003:46). Primary (minutes of meetings, audit of protected areas, unpublished consultancy reports, unpublished feasibility studies, etc) and secondary literature (existing management plans (MPs), Mpumalanga Biodiversity Conservation Plan (MBCP), case studies, strategies, policies, regulations, agreements and acts, etc) are used to assess the biodiversity conservation value and economic development potential for the seven priority areas and the selected case study site. A more detailed proposal of research methodologies and techniques for each outcome in the study is presented in table 1.

Table 1: Research methodology and techniques for the various outcomes of the study

Outcome	Methodology/Technique	Literature/Material
Literature review	Secondary literature research	Articles, books, case studies
Legal framework	Secondary literature research	Acts, regulations, agreements
Model for internal position conservation agency	Primary and secondary literature research, Field research such as ranking exercises	Minutes of meetings, results of workshops, consultancy reports, MPs, MBCP, strategies, digital pictures
Model for consolidated government position and strategy	Primary and secondary literature research, Field research	Minutes of meetings, results of workshops, PowerPoint presentations
Settlement and co-management agreement frameworks	Primary and secondary literature research, Field research	Framework agreements and agreed agreements
Feasibility study of projects for benefits beyond boundaries	Primary and secondary literature research, Feasibility studies	Terms of references and consultancy reports
Methods to facilitate negotiation process of agreements in 7 priority areas	Capacity building, ranking exercises, participatory mapping, study tours, roleplays, socio-economic assessment	PowerPoint presentations, participatory maps, digital pictures, study tour reports, workshop results

The negotiation process of the settlement and co-management agreements with the land claimant representative structures is facilitated by using methods such as ranking (Mutter 1994:51–52), participatory mapping with communities, exposure to other case studies, roleplays, socio-economic assessments and capacity building. These methods are developed and used to manage the expectations of the claimant community and to come to realistic solutions. It is important to note that ‘[t]he long delays and bureaucratic inadequacies in the land restitution process have led to heightened emotions, tensions, overblown rhetoric and unrealistic levels of expectations’ (Carruthers 2007:298). Participatory mapping with communities can be used as a basis for discussion, negotiation, conflict management and resolution. This method provides a visual picture of landscapes that everyone can understand, from illiterate people to government officials, allowing everyone to participate in reasoned discussions of often contentious issues, such as land rights and ownership of resources (Chapin 2006:94). These methods also allow for active participation by women in the negotiation process, which is important as they play a major role in the governance of natural resources (Brody 2009:1). An overview of the land claimant representative structures per priority protected area is given in table 2.

Table 2: Land claimant representative structures per priority area

Name of priority area	Name and legal entity land claimant representative structure	Number of verified land claimants ⁴ in households (HHs)
Blyde River Canyon Nature Reserve	Pilgrims Rest Development Trust (PDT) Mahubahuba a Bokone CPA Sethlare CPA Moletelle CPA	5,000 (in total about 15,000 for the 4 groups) 2,300
Manyeleti Game Reserve	Mnisi Conservation Trust	253
Mthethomusha Game Reserve	Mhlumeni CPA	100? (still needs to be confirmed)
Songimvelo Nature Reserve	Ekuphileni Kwesive Songimvelo CPA	2,578
Loskop Dam Nature Reserve	Rampholodi CPA Mamoromo CPA	21 ?
Mdala Nature Reserve	Mmahalabane Trust Moutse Game Park CPA	400 186
Mabusa Nature Reserve	Mamatsedi Magwari Trust Somakhala CPA	19 33

In general, the negotiation process follows a series of five to six workshops, separate exposure visits and special meetings, if necessary. Most of the methods used in the workshops were developed from the beginning of 2007 onwards within the framework of this study. The methods are based on need and aligned with the negotiation process, as agreed upon by the MTPA, RLCC and land claimant representatives. However, it is an open process and the same methods or sequences of methods are not used in each series of workshops. Each workshop is tailor made, depending on the specific protected area, internal community dynamics, knowledge base of the participants, and the need for additional explanation. In general, the series of workshops begins with an explanation of the land restitution process in protected areas, the legislation involved, the link to international conventions and the land claim settlement options. This explanation is facilitated by the use of PowerPoint presentations, posters and/or drawings on flip charts. Subsequently a participatory mapping exercise is done with the land claimant representatives so they can explain their area, the history, the institutional setting, their knowledge and expectations around the area in detail. This exercise is also used to create a basis for discussion and negotiation. With regard to the mapping, the methodology of Participatory Geographical Information System (PGIS) is followed. PGIS has its roots in Participatory Learning and Action (PLA) and in Participatory

⁴ Verified land claimants are confirmed by the RLCC as valid land claimants, that is, persons and/or direct relatives of deceased persons who were dispossessed of rights in land after 19 June 1913, as a result of past racially discriminatory laws or practices.

Rural Appraisal (PRA). It combines participatory mapping visualisations, spatial information technologies, spatial learning, communication and advocacy (Rambaldi, Chambers, McCall and Fox 2006:106). A ranking exercise is conducted to facilitate the understanding of the importance of the stakeholders involved in the process and to be able to distinguish between primary and secondary stakeholders. In the second series of workshops, the settlement principles of land restitution in protected areas are explained as well as the co-management options and their viability in specific situations. These explanations are facilitated mainly by using PowerPoint presentations and posters. In most cases at this stage an exposure visit is facilitated for land claimant representatives, staff of the conservation agency and responsible officers from the Regional Land Claims Commission (RLCC) to emphasise some of the lessons learnt in the first two workshops and to build trust and joint learning.

In the third series of workshops, the settlement agreement framework is discussed with the land claimant representative structures, together with legal experts and management of the conservation agency and RLCC. Areas of concern and necessary actions are noted and attended to, such as the details of the claimed properties and land claimant name verification. In the fourth series of workshops, co-management is explained in detail as well as its estimated viability in the specific case by using PowerPoint presentations, posters and/or flip charts. If needed, a socio-economic assessment is conducted of the region in which the protected area is located, by using a questionnaire to look into more detail around the viability and feasibility of the chosen co-management option and to note the areas of possible concern. If there is a need, roleplays are used to facilitate understanding of the role of each stakeholder in the co-management arrangement and possible areas of confusion such as differences between strategic and operational management. The proposed beneficiation structure is explained in a PowerPoint presentation and/or by using flip charts. In the fifth series of workshops, the co-management agreement is discussed with the land claimant representative structures, together with legal experts and management of the conservation agency and RLCC. Areas of concern and necessary actions are noted and attended to. An introduction is given to the land claimant representative structures around the process in order to establish new MPs according to NEM:PAA, including joint visioning. The processes of obtaining community resolutions around the mandate of the land claimant representatives to negotiate and sign the agreed settlement and co-management agreements on behalf of the wider claimant community are initiated and finalised under guidance of the RLCC. (The detailed methodology of the negotiation process for the seven priority areas is explained in chapter 3.)

1.10 Chapter layout and conclusion

In summary the thesis contains the following chapters:

1. Introduction and research design
2. Literature review and legal framework
 - Land restitution and its options in protected areas⁵
 - Co-management and its options in protected areas⁶
 - Possible beneficiation from nature-based tourism
 - Non-tourism beneficiation models linked to conservation
 - Balancing community-based natural resource management and local economic development
3. Methodology
 - Design of a model for a consolidated government position and strategy
 - Conservation-related benefits compared to benefits from tourism
 - Methods to balance the objective of biodiversity conservation and beneficiation expectations
4. Results of model design for a consolidated government position and strategy
5. Results on possible beneficiation from projects compared with tourism
6. Results of methods to guide the negotiation process between government and land claimant representative structures
7. Summary, conclusion and recommendations

It is important to have a clear understanding of the land restitution process in protected areas and the settlement options and scenarios involved, that is, land restitution, alternative land, financial compensation and/or a combination of these. Besides understanding the legislation and policies, it is important to know the roles and responsibilities of the stakeholders and the ideal logical sequence of the process (chapter 2). The definition, global trends, legal framework, process of co-management and types of co-management are studied in detail in chapter 2 as well. Tourism and other conservation-related activities are studied in secondary literature as possible beneficiation models. The interlinkages between CBNRM and LED are studied to be able to give recommendations on how the proposed beneficiation models can become more feasible in the long run so that they can bring a substantial contribution to sustainable livelihoods.

⁵ This thesis builds on the work published in *Africanus* 39 (1):66–79.

⁶ This thesis builds on the work published in *Africanus* 39 (2):5–17.

Chapter 3 describes how the model design is arrived at that is developed and proposed to facilitate the land claims and co-management process in order to achieve the most appropriate land claim settlement option and settlement and co-management agreement frameworks. To arrive at options and recommendations for beneficiation models that are more feasible over a long period, the set-ups of three proposed projects are outlined to look into the aspect of diversification of socio-economic benefits that go beyond the boundaries of the protected areas and beyond tourism as sole beneficiation model. The terms of reference for the investigation of the feasibility and beneficiation structures of the three proposed projects are described in chapter 3. Possible capacity building, exposure, ranking and participatory mapping interventions are developed and described to guide the stakeholders involved in the negotiation process of the proposed government agreements with the land claimant representative structures.

In chapter 4 the general results of the model design and lessons learned from the seven selected priority protected areas are given. The results of the feasibility studies and proposed beneficiation structures of the three projects are given in chapter 5, including recommendations for the way forward. In chapter 6 the results are given of the methods to guide the negotiation process between the government and the land claimant representative structures. The study is finalised with a comprehensive summary, conclusion and recommendations (chapter 7) on the research findings, that is, the proposed model, settlement and co-management agreement frameworks, methods to manage the expectations of the land claimants and options, and recommendations for possible beneficiation models for land restitution in protected areas in South Africa to try to reach a rightful and mutually beneficial balance between the objective of biodiversity conservation and local economic development within the financial and institutional constraints of the conservation agency.

This chapter highlighted the background, problem statement, aim and objectives, relevance, and research design of the study. In conclusion this thesis investigates the design of a model, methods and guidelines that may assist conservation agencies and land claimants to come to an agreement on land claim settlement and co-management agreements for each specific situation. The analysis of the testing of the designed model in seven selected priority protected areas is an integral part of the thesis. In chapter 2 a detailed literature review and legal background of the context of this thesis is given.

Chapter 2: Literature review and legal framework

2.1 Introduction

This chapter gives a broad outline and literature review of the disciplines involved in this thesis. First of all, the land restitution process and the land claim settlement options in protected areas are reviewed in detail, including land and socio-economic rights and biodiversity conservation obligations (see 2.2). Second, co-management, and its options as a mechanism for the management of biodiversity conservation, is reviewed and discussed (see 2.3). Possible socio-economic benefits from nature-based tourism operations in and just outside protected areas and their contribution to local economic development (LED) are studied in detail in section 2.4. The legal framework in South Africa in which each discipline is embedded is included in the description and review of the disciplines. Possible benefits from non-tourism conservation-related activities in and just outside protected areas are described in section 2.5. In section 2.6 the linkages and differences between community-based natural resource management (CBNRM) and LED are highlighted to give insight into how to balance the objective of biodiversity conservation and LED. The literature review focuses mainly on tangible benefits that can be expressed in a monetary value. However, the importance of intangible benefits is recognised in this thesis. This chapter is finalised with a summary and conclusion stating the issues that need to be considered and studied in more detail in the rest of the thesis.

2.2 Land restitution and its options in protected areas

2.2.1 Background of land restitution in protected areas

Forced removals in support of racial segregation caused enormous suffering and hardship in South Africa, and no settlement of land issues can be reached without addressing such historical injustices. The extent of dispossession, the low quality of land in communal areas, and the violence that accompanied resettlement, coupled with the overpopulation of such areas, impacted more severely on South Africa's black population than in Zimbabwe, Namibia or possibly any other part of Africa (de Villiers 2003:46). The interim constitution provided a framework for the restitution of land rights. Accordingly, parliament enacted the Restitution of Land Rights Act, 22 of 1994, creating the Commission on the Restitution of Land Rights (CRLR) and the Land Claims Court (DLA 1997:23). The Constitution and the

Restitution of Land Rights Act created the right for certain dispossessed people to claim restitution. Claimants had to apply to the CRLR before 31 December 1998. Currently 80,000 land claims all over South Africa have been lodged with the CRLR (CRLR 2007:1). The relevant legislation is the Restitution of Land Rights Act, No 22 of 1994, as amended. The main impetus of the act was to provide for the restitution of land rights to persons or communities dispossessed after 19 June 1913 as a result of past racial discriminatory laws or practices without equitable compensation. The government is committed to reversing the effects of colonialism and apartheid. Until now restitution is considered the success story of the land reform process, because most claims have been settled. The vast majority of these claims were located in urban and peri-urban areas and were settled through cash transfer, while the most intractable, costly, complicated, and potentially conflicting claims in the rural areas are still pending (Riedel 2007:5). This is also true of land claims in protected areas, of which only a limited number have been settled, with varied outcomes and successes, such as Makuleke, Mkambati Nature Reserve and the Kalagadi Transfrontier Park (Turner et al 2002: 44–49; Kepe 2008:313–318; de Villiers 2008a:37). An estimated 122 land claims are outstanding on protected areas (CRLR 2007:6). A considerable number of the protected areas managed by conservation agencies are partially or completely under claim. The appropriate settlement of these claims can have enormous impact on the local economic development of rural areas, where most people still rely heavily on natural resources to keep poverty at bay (Shackleton and Shackleton 2004:658–664). The way in which the claims are settled also has an impact on the conservation agencies involved. Conservation agencies are mandated to ensure that protected areas are conserved according to legislation. In the end, the land restitution process in protected areas will be successful only if a good balance between conservation and development is achieved (de Koning and Marais 2009c:66).

To align the land restitution process in protected areas, a memorandum of agreement (MoA) was reached in May 2007 between the two responsible ministers of the Department of Land Affairs (DLA) and the Department of Environmental Affairs and Tourism (DEAT), based on National Cabinet Memorandum No 5 of 2002, dated 13 September 2002.

The MoA states that the Agreed Position between DLA and DEAT to the settlement of land claims in protected areas shall be based on the following:

- Where feasible and applicable, title in land shall be transferred to claimants without settlement rights and conditions of land use shall be registered against the title deed in respect of restored land.

- All the claimants for a protected area will be required to form one association to ensure representation into management structures appointed by the DEAT minister in accordance with the applicable legislation.
- The existing conservation agency shall continue to manage the land situated within the protected area after restitution until the DEAT minister reviews it.
- Beneficiation of the claimants shall be structured in such a way that it may be tangible, realistic and optimal, though not compromising the financial sustainability of the said protected area.
- The land restored in a protected area may not be alienated other than to an organ of state.

(South Africa 2007:8–12)

The MoA is not a legal document and addresses situations mainly at national level. In politically sensitive circumstances there is a risk that agreements may be reached outside the MoA, and that land claimants can challenge certain issues legally, such as the restrictions on the title deeds and the alienation of land (Williams 2008). Besides the engagement with land claimants, the conservation agency is obliged to continue with public participation procedures as stated under the National Environmental Management Protected Areas Act (NEM:PAA) and involving local communities (also non-claimants) in the work related to protected areas (South Africa 2003:27).

2.2.2 Land restitution process in protected areas

Conservation agencies/management authorities must have a good understanding of the land restitution process in order to be proactive in dealing with land claims. In 2007 the land restitution process in protected areas was described in detail through extensive consultation with Mpumalanga Regional Land Claims Commission (RLCC), Mpumalanga Tourism and Parks Agency (MTPA), DLA, the Chief Land Claims Commission (CLCC) and DEAT (de Koning and Marais 2009c:67–75). Future landowners need to be capacitated on this process so that they can make informed decisions in their best interests. The steps involved in processing a land claim as established by de Koning and Marais (2009c:67–75) via an extensive stakeholders consultation process are:

- **Pre-settlement**
 - *Lodgement* and registration of land claim with CRLR before 31 December 1998 by using a so-called land claim form
 - *Validation* (screening and categorisation) of the lodged claim to determine whether the claim is valid, decide the exact extent of claimed land, start the

land claimant verification process and form an interim land claims committee.

These results are captured in a research report

- *Gazetting* of the land claim by sending a notice to the government printers
 - *Facilitation* (negotiations) on the land claim settlement option and establishment of a legal entity representing the verified claimants so that the land claim can be finalised
 - *Settlement* of land claim through the approval of the Section 42d submission and the settlement agreement
- **Post settlement**
 - *Implementation* of the process for the disposal of state land and implementation of the settlement agreement

(de Koning and Marais 2009c:69)

The land restitution process in protected areas must be followed in logical sequence to achieve successful post settlement. The roles and responsibilities of the stakeholders should be thoroughly understood in order to achieve a mutually beneficial situation. A proactive approach and the early engagement of the conservation agency in the process with the appropriate staff are very important in reaching this desired situation. Social ecology staff should play an important role in negotiating and resolving land claims as their mandate is around CBNRM and access and benefit sharing (ABS). Basic knowledge about the socio-economic setting around the park is essential for establishing robust partnerships (Magome and Søndergaard 2001:1–7). This is also in the interests of the RLCC, and an ‘agreed position’ between the state partners should be in place before going into the negotiations with the claimant community. Table 3 summarises the steps of the process and the information/products that belong to each phase. The steps from the facilitation process onwards are explained in detail in section 2.2.3 and 2.2.4.

Table 3: Steps of land restitution process and information/products belonging to each step

No	Steps/stages in logical sequence	Information/products
1	Lodgement	Land claim form
2	Validation	Interim Land Claims Commission
3	Gazetting stage	Research report Government gazette notice
4	Facilitation process	Legal entity land claimants established (CPA/trust) Feasibility study (if available) Management plan
4	Settlement	Agreed government position Section 42d Settlement agreement Co-management agreement
5	Post settlement	Post settlement action plan (5–10 years) Transfer of title deeds Commercialisation

(de Koning and Marais 2009c:77)

2.2.3 Facilitations process and land claim settlement options

The representative structure of the claimant community is normally a communal property association (CPA). Sometimes the land claimants decide to form a trust, but this is not promoted by the RLCC in Mpumalanga. Because CPAs are registered by the director general of DLA, it is easier for the RLCC to guide the land claimants in the process. A trust is registered under the Master of the High Court and this does not allow the RLCC to mediate the process. In the transfer of land, a CPA might be the best option, but this entity has legal restrictions when it comes to the commercialisation process, such as holding shares (Turner et al 2002:33; De Beer 2008). If the claimant community, with representation of all claimant groups, decides to go into business, it is often necessary to form another legal entity. It is crucial that the claimant community should receive guidance and training in this process so that they can make an informed decision that suits their situation. Little of this support has been available, as DLA often assumed that the job had been done when land title was transferred to the CPA (Turner et al 2002:31). The claimants need to be capacitated on the land restitution process in protected areas and should be aware of the options, restrictions, policies and legislation. This can reduce unrealistic expectations of the claimant community. It is possible for the claimant community to make an informed decision in their best interests only if they receive valuable inputs such as feasibility studies and management plans. This process is preferably guided by a neutral body. Unfortunately, the RLCC, which is playing this role, often seems biased towards the restoration of land rights (de Koning and Marais 2009c:71).

To make an informed decision it is necessary for the claimant community to obtain capacity building in conservation, tourism and business development in protected areas. After the claimants have made their choice, this capacity-building programme should continue and be tailor-made to each situation. It is up to the RLCC and the conservation agency jointly to provide the necessary information. Only if this process is done in the right sequence, and with the necessary time allocation, is it possible to achieve a mutually beneficial situation between the claimant community and the conservation agency (de Koning and Marais 2009c:72).

Land claim settlement agreements rarely reflect the complexities of the preceding negotiations, whereby the negotiating elite local people, seeing opportunities for themselves, may enter into agreements with state agencies which do not necessarily reflect the needs of the majority (Kepe 2008:319).

The finalisation of the negotiations between the claimant community, the RLCC and the conservation agency can then be translated into the Section 42d (S42d) submission,⁷ in accordance with the Restitution of Land Rights Act 22 of 1994 as amended, that is sent to the minister for approval. The role of the stakeholders is stipulated in the settlement agreement, which should be attached to the S42d. Ideally the S42d needs to be submitted with the settlement agreement so that the roles of the stakeholders are unambiguous. It is crucial that the land claimants groups should unite to be able to go into co-management with the conservation agency because the reserve needs to be administered as one unit (de Koning and Marais 2009c:72).

In the facilitation process the onus lies on the claimant community to make an informed decision on the options. The choices are alternative land, land restitution, financial compensation and/or a combination of these options. Politically, financial compensation is not a preferred alternative because the government wants people to own land. However, if financial compensation is well planned and guided, it could be a beneficial option for the claimant community, especially when other options are not possible or viable. It all depends on the situation per protected area and that of the claimant community. The state and claimants, with the assistance of experts, consider whether the restitution of rights on a specific piece of land is indeed the most appropriate option in the settlement of a particular claim. Although the symbolic significance of the return of ancestral land is important, in

⁷ A submission in accordance to Section 42d of the Restitution of Land Rights Act (No 22 of 1994) to award to the claimant land, a portion of land or any other right in land and/or payments of compensation to such claimant.

many instances this has not lived up to expectations (de Villiers 2003:82). As observed in a case study on the Kalahari Gemsbok national park:

It did not take long for the community that had united to fight the claim to become divided into ‘traditionals’ (who wanted to revert to a forager lifestyle) and ‘moderns’ (who wanted to engage with the tourist industry and other enterprises). Leadership and organisation was poor (Carruthers 2007:301–303).

This again stresses the importance of having clear objectives (poverty alleviation and employment generation versus rectification of a historical wrong) prior to the restitution of a right. In the cases of Riemvasmaak and the Makuleke community, ancestral land was returned, but it is debatable whether the benefits from the return are the best the communities could have opted for. In the case of the Makuleke, only a small number of people have permanent employment in the protected area, leading to discontent among those community members who are not employed (Kepe et al 2005:5). In both instances the communities’ needs might have been better addressed by securing access rights to the national parks and having alternative land where farming, grazing and other employment-generating enterprises could have been pursued (de Villiers 2003:83).

2.2.4 Settlement and post-settlement

As described in de Koning and Marais (2009c:74–75), settlement means that the S42d has been approved by the authorities. This milestone is celebrated under the guidance of the RLCC. Unfortunately this celebration can cause confusion and frustration as it is seldom clear to the claimant community that the land is not yet theirs, and that the process of the disposal of state land and the transfer of title deeds still needs to be finalised. Land restitution and disposal of communal land is difficult because communal land is often un-surveyed and lacks adequate maps (Carruthers 2007:294). Because communal land is not held in individual tenure, but is allocated by traditional leaders, there is often dispute between traditional leaders and individuals and/or groups that are claiming. The process of disposal of state land, and thus commercialisation, can only start after the settlement agreement is signed. The post settlement process is driven by the landowner (DLA and/or Public Works) of the state land that needs to be transferred to the claimants. The RLCC submits a request for the disposal of state land to the landowner and the landowner ideally forwards the submission to the National or Provincial Land Disposal Committee. The landowner follows some investigative steps before submitting the request to the Land Disposal Committee. The disposal of state land (land release process) contains five steps and ideally takes 4–6 months, but can be done within this timeframe only if everything is in place, such as the exact geographic description of the area to be transferred (De Kock 2007). The restrictions on land use in protected areas

should be formulated in the S42d and be signed off by DEAT and/or the relevant provincial authority as indicated under NEM:PAA. This facilitates the process of the disposal of state land and the handing over of the title deeds. After finalisation of the five steps, the landowner has to make a recommendation to the minister for disposal of state land (transfer of title deed with certain restrictions on land use in protected areas according to the MoA). As stated in de Koning and Marais (2009c:75), it should be clear to the claimant community that the starting date of the implementation of the settlement agreement legally takes place only after the handing over of the title deed. Some people state that the settlement agreement can be implemented before the transfer of the title deed, but the legal implications for the conservation agency, the current landowner of state land, and the investor should be investigated. The operational protocol of the MoA states that ‘once the final settlement agreement has been finalised, the responsibility for implementation of the settlement agreement transfers from DLA to DEAT’ (South Africa 2007:20).

2.3 Co-management and its options in protected areas

2.3.1 Background of co-management

This section focuses not only on cases of land restitution in protected areas, where co-management is often seen to be applicable, but on co-management in protected areas in general. However, its recommendations are aligned with the MoA between DLA and DEAT, signed in May 2007, facilitating a cooperative national approach to the resolution of land claims in protected areas (South Africa 2007:4). The use of co-management is the only strategy in the MoA to reconcile land restitution in protected areas (Kepe 2008:312). This section gives an overview of the definition, global trends, legal framework in South Africa, and the co-management process, as well as an explanation of the various types of co-management.

Co-management is sometimes referred to as participatory, collaborative or joint management (Berkes and Henley 1997:29; Kepe 2008:314). There are many definitions of the term ‘co-management’ but in general it is regarded as a middle-range management option between state and community management (Isaacs and Mohamed 2000:2) suggesting and encouraging participatory democracy, power sharing, local incentives for local use of natural resources, and decentralisation of resource management decisions (Kepe 2008:314). These are so-called cooperative arrangements in which the groups and the government work together as equal partners and have decision-making powers based on an agreed ratio. Because there is no

blueprint for co-management, various types of co-management/governance can be identified. The essential difference between management and governance is that management is about what is done, while governance is about who makes decisions and how (Borrini-Feyerabend 2008:1).

‘The ability to move beyond the limitations of either state, private or community management is seen as a key benefit of co-management’ (Isaacs and Mohamed 2000:2).

Increasingly, co-management is seen as a promising alternative to resource management that merges the interests of government (to achieve efficiency and sustainability) with those of landowners and resource users (who have concerns for self-governance, active participation and a variety of livelihood issues) (Hauck and Sowman 2005:7).

Co-management might for example reduce transaction costs of patrolling (Leach, Mearns and Scoones 1999:237). Greater participation by resource users and landowners in management activities and the integration of local values and knowledge in decision-making processes are recognised as necessary and beneficial (Berkes and Henley 1997:31; Hauck and Sowman 2005:2). Policy directions in environmental governance move away from regulatory control towards cooperative models founded on collaborative relationships, negotiation and agreement among stakeholders (Armitage et al 2007:4; Plummer and Armitage 2007:2). The potential of decentralisation to be efficient and equitable depends on the creation of democratic institutions with significant resources and discretionary powers. Because co-management often hides continued state hegemony of protected areas, there are only a few cases in which these principles are being implemented and therefore a backlash is forming in some countries against the concept of co-management and the decentralisation of powers over natural resources (Kepe 2008:312; Ribot 2002:18). These calls to recentralise control over natural resources are premature, according to Ribot (2002:18).

2.3.2 Legal framework of co-management in South Africa

The transition of South Africa to a participatory democracy in 1994 led to a number of new policies and laws for natural resource management. Influenced by global debates and trends, these policies and laws support the principles of equity, social justice, participation, environmental sustainability, accountability and transparency (Hauck and Sowman 2005:11). Co-management is described in Section 42 of NEM:PAA (South Africa 2003:28–29). Although it does not define co-management, it provides guidance on co-management in protected areas in South Africa. In accordance with Section 42, the conservation agency of the protected area may enter into a co-management agreement with another organ of state, a

local community, an individual or other party but the co-management may not lead to fragmentation or duplication of management functions. Furthermore, it is at the discretion of the conservation agency to delegate certain powers to the other co-management party and to come to an agreement for benefit sharing between the parties such as the sharing of income, the use of biological resources and access. Section 41 of the act indicates the requirements of a management plan (MP) for a protected area established via a public participation process involving affected and interested stakeholders, including the owner (if applicable), and any local community. In Section 39 the importance of incorporating the MP in the integrated development plan (IDP) of the area, such as the local municipality (LM) and district municipality (DM), is stated to ensure the alignment of activities in the protected area with proposed developments adjacent to it. Protected areas should no longer be treated as islands, but as an integral part of the socio-economic environment (Borrini-Feyerabend 2008:1; Kepe et al 2005:8). The establishment of tourism facilities adjacent to the protected area could be an example of such envisaged benefits beyond boundaries. Only by planning in a coordinated way can maximum benefits be achieved for the local economic development of the area. The protected area is to be managed in such a way that there is provision for a sustainable flow of natural products and services to meet the needs of a local community, to enable the continuation of sustainable traditional consumptive uses, and to provide for nature-based recreation and tourism opportunities.

That the conservation agency remains responsible and accountable for the management of the protected area is in contradiction with the international definitions of co-management, which state a partnership of equals and the sharing of authority, responsibility and decision making (Berkes and Henley 1997:29; Kepe 2008:314). This discussion is related to statements made by Isaacs and Mohamed (2000:1), Kepe (2008:312) and Kepe et al (2005:13) that co-management in South Africa possibly represents a camouflage for the continuation of state hegemony regarding the protected area or national park idea and evolved from an apartheid-era strategy of entering into legal agreements with white private landowners to expand national parks. As good as the intentions might be, one needs to question whether co-management in its current form in South African legislation can work to reconcile the objectives of land restitution and conservation. According to Kepe (2008:315–319), government departments dealing with land rights tend to disengage from the co-management process because it has its origin in the conservation of high-value resources and not in resource and/or land rights.

While it should be appreciated that biodiversity conservation is a national and international imperative, the current co-management model has emphasised conservation interests over the land rights of claimants (Kepe 2008:315–319).

Especially in protected areas with irreplaceable biodiversity and limited development potential, it is questionable whether the proposed co-management model in South Africa is sustainable and whether the government responsibility of biodiversity conservation can be restored.

2.3.3 Types of co-management

There is no single appropriate definition of co-management because there is a continuum of possible co-management arrangements in the degree of power sharing (Armitage et al 2007:3). The levels of participation in the different types of co-management depend on various factors and range from government driven to community driven (privately managed).

Co-management can thus range from an agreement between government and resource users/landowners groups, in which the government consults with these groups, but makes all the decisions, to one in which the groups have been delegated most of the power to develop, implement and enforce rules, and are required only to inform government of their decisions (Hauck and Sowman 2005:3–4).

Normally, the right of participation in protected area management increases with land ownership (Borrini-Feyerabend et al 2000:24; Turner et al 2002:3). The management capacity of the landowners also determines the level of participation. Other factors are the group size and group coherence of the landowners, the connectivity to the land, the development potential of the protected area, and the possibilities for outside support. These factors influence the landowners' decision on how much they want to or can be involved in the management of the protected area. Landowners also have to choose how much they can/want to invest in co-management, and thus how much risk they are willing to take. According to Berkes (1997:6), co-management is feasible only if at least four conditions are met. These are the presence of appropriate institutions, trust between partners, legal protection of local rights, and economic incentives for local people. Most types of co-management in the continuum are based on different levels of community participation (Hauck and Sowman 2005:3–4; Borrini-Feyerabend 2008:4; and Isaacs and Mohamed 2000:4). Owing to land restitution, land ownership in protected areas in South Africa often changes from state land to private land and therefore this aspect needs to be taken into account as it influences the resource and land rights. Eight types of co-management were identified and described in more detail by de Koning (2009a:8–12), combining differences in

land ownership (from state to private) and the various levels of community participation. The models form a continuum and should not be treated separately because various combinations of these types of co-management can occur. The eight identified types of co-management are:

- Ad hoc benefit sharing
- Consultation benefit sharing
- Lease
- Part lease / part co-manage
- Cooperative co-management
- Part co-manage / part delegated management
- Delegated management
- Privately managed

Under pressure from the 5th World Parks Congress (WPC) in Durban in 2003, the People and Parks programme and the land restitution process, South Africa is moving from the ad hoc and consultation benefit-sharing models towards the lease, part lease / part co-manage and the cooperative co-management models. These three models are currently supported under NEM:PAA (South Africa 2003:1–55) and were therefore selected to form the basis of the national co-management framework (DEAT and CRLR 2008:1–6). It is unrealistic to think of the other models at the moment because NEM:PAA requires the appointment of a conservation agency recognised by the state. It takes a lot of capacity building and empowerment of future landowners to reach the stages of delegated and/or privately managed. However, it is clear from consultations with land claimant representative structures that future landowners expect to move in the direction of the delegated and privately managed models. This expectation has been supported by recent thinking in the conservation world in which the various IUCN (World Conservation Union) protected area categories (from strict nature reserve to managed resource protected area) and governance types (from state driven to community driven) are described in the so-called IUCN protected area matrix (Borrini-Feyerabend 2008:4).

The IUCN defines a protected area as an area of land and/or sea specially dedicated to the protection and maintenance of biodiversity; and of natural and associated cultural resources and managed through legal or other effective means (Emerton et al 2006:5).

The principle in the IUCN protected area matrix is that every governance type can exist in each IUCN protected area category, including national parks, strict nature reserves and wilderness areas (Borrini-Feyerabend 2008:4). This means that in certain situations and

countries, national parks can be managed by communities. The question is whether and when South Africa wants to move into this direction. A first step is to allow for a genuine cooperative co-management approach, as defined in the international context, where there is real sharing of power, responsibilities and decision making. The co-management model, currently promoted in South Africa, comes closer to the consultation benefit-sharing model than the cooperative co-management approach as understood in the international context (de Koning 2009a:12). Co-management is a long-term commitment that requires adequate time and resources if the objectives are to be achieved. The planning stage in itself is a time-consuming process, for which significant resources are required before management decisions can be negotiated. In many cases, co-management arrangements are established over a five-to-seven-year period, particularly when local organisations need to be developed and empowered. Other studies of co-management show that the operational budget often increases by 25–50 per cent on top of the ideal budget, depending on the type of co-management and the specific situation (Reid et al 2004:395–397). Government must recognise that adequate time and resources are required to establish co-management, and ensure that the commitment and funding are in place, including adequate support structures and training facilities (Hauck and Sowman 2005:15–18). This is in contrast with the political urge to settle most of the outstanding land claims as quickly as possible.

2.3.4 Co-management process

In South Africa cooperative co-management is promoted as the preferred settlement option within the land restitution process in protected areas. In order to give guidance to the co-management partners the cooperative co-management process is outlined below. It is important to acknowledge that co-management is not a linear process and therefore these stages can overlap or differ in sequence, depending on the situation. The co-management process is ideally facilitated under guidance of a neutral broker:

- Assess among the stakeholders whether there is a need for co-management
- Establish whether co-management is feasible/viable in the specific situation
- Clarify responsibilities, rights and power relations of co-management partners
- Bring landowners together under one structure
- Clarify expectations (vision) and understanding of co-management among co-management partners
- Begin to build capacity of co-management partners
- Establish co-management structures and organisations

- Establish first co-management plan (including joint vision) and co-management agreement
- Pilot first co-management plan and co-management agreement and learn by doing
- Modify co-management plan and co-management agreement and continue adaptive management (adapted from Borrini-Feyerabend et al 2000:14–62).

Within the legislative framework in South Africa, the management of the protected area is guided by the approved MP, which will be amended from time to time. Ideally the MP for the protected area is already in place when the co-management partners come together as it provides a framework for the discussions in the pilot phase. After this first learning phase, the co-management partners can revise the MP together. The way in which the co-management partners work together is described in the co-management agreement. The establishment and maintenance of strong local organisations that are representative and legitimate are ongoing processes. It is critical to identify community power issues that might impact negatively on the legitimate representation. Developing leadership is of paramount importance. Strong, dedicated leaders are needed for co-management to be a success. Government agencies and local communities all need ongoing support during the implementation stage to strengthen leadership and ensure fair representation in the community (Hauck and Sowman 2005:41). Capacity building, especially on the community side, should start in the early stages of the land restitution and co-management process. Community leadership skills, communication procedures, benefit-sharing mechanisms, monitoring and conflict resolution mechanisms are very important to the success of co-management (Turner et al 2002:29). These types of training are normally not within the capacity of the conservation agency, and should be arranged through the relevant government departments that are supervising the registered representative community structures with the assistance of NGOs and/or universities. In the case of land restitution, little of this support has been available, as DLA has often assumed that the job was done when land title was transferred (Turner et al 2002, 31). At this stage it is also important for the conservation agency to continue training in conservation, tourism and business development as it is important that community members are able to understand the MP. In a case study on the Makuleke contractual national park it was stated that:

Some community members who serve on the Joint Management Board commented on the difficulty they had during the initial years to come to grips with the technical expressions and jargons used by the Kruger National Park officials (de Villiers and van den Berg 2006:20).

The Makuleke land claimants received a lot of external support and it is generally agreed among the Makuleke that without the technical assistance received, the CPA would not have been able to cope with the complex legal, commercial and environmental issues that had to be dealt with.

If the co-management scenario is chosen in land restitution, the claimant community must thoroughly understand co-management and its implications. The co-management structure normally consists of a co-management committee (CMC), comprising selected members of the land claimants' representative structure(s) and the conservation agency. The CMC takes decisions on the strategic management and development of the protected area, in line with the existing MP for the area, which is to be reviewed regularly (NEM:PAA). The day-to-day management (management team of conservation agency) carries out the decisions made by the CMC (Turner et al 2002:45). All stakeholders on the CMC share in the costs and benefits of operations in the protected area according to an agreed ratio. Each co-management agreement has to be tailor-made to the situation. There is no universal blueprint for analysing such 'wicked problems' (Ludwig 2001:758–764).

2.4 Possible beneficiation from nature-based tourism

2.4.1 Pro-poor tourism concepts in protected areas in South Africa

This section provides an overview of general pro-poor tourism concepts previously established in South Africa. According to the World Tourism Organisation (WTO), sustainable tourism should make optimal use of environmental resources that help conserve natural heritage and biodiversity, respect the socio-cultural authenticity of host communities, and provide socio-economic benefits to all stakeholders. The International Ecotourism Society (TIES) defines eco-tourism as 'responsible travel to natural areas that conserve the environment and improves the welfare of local people' (Gutierrez, Lamoureux, Matus and Sebunya 2005:4). Both sustainable tourism and eco-tourism have the potential to link the conservation of nature with the wellbeing of local communities through a number of positive benefits, including revenue generation, cultural preservation and capacity building (Gutierrez et al 2005:5). Other research confirms that the extent to which economic empowerment of local communities takes place is directly linked to the nature and extent of the land rights of these rural communities (Wolmer and Ashley 2003:34–39). If the communities have ownership of an asset base, there is potential for strong economic and social empowerment. Where they do not, communities may still benefit from the tourism process, but to a lesser

degree (Mahony and Van Zyl 2001:1). At project level, empowerment of communities takes place through:

- Involvement and responsibility in the planning and decision-making processes related to tourism development
- Involvement in the management of tourism and tourism-related enterprises
- Control over the use of their land and assets
- Equity sharing in tourism and related activities
- Access to small medium micro enterprise (SMME) opportunities and support
- Capacity building

(Mahony and Van Zyl 2001:5)

The 1998 Job Summit recognised the tourism sector as having the greatest potential to reduce unemployment in the country, and thus its expansion is one of the key initiatives pursued by the government (Mahony and Van Zyl 2001:4). The South African government has adopted the principle that it should not operate tourism businesses, but rather should promote an enabling environment that stimulates private sector participation in the tourism industry. This trend is most evident in the policy shift of South African National Parks (SANParks), where the private sector was invited to build and operate tourism facilities on state-owned land. This policy is closely linked to the need to manage government expenditure more carefully, and, if possible, promote the self-sufficiency of protected areas in South Africa, in order to allow scarce government resources to be allocated to other national priorities. In this scenario it is envisaged that the private sector should act as the investor, developer, operator and principal risk-taker in the project. The private sector provides skills and capital to establish the investment to realise profit. Another reason for pursuing commercialisation is to create an income stream for government to fulfil its environmental obligation. Almost all of the environment management departments in the provinces have experienced budget cuts, leading to some serious deterioration in the environmental management function. Although there are some (healthy) tensions between tourism practitioners and environmental professionals about how to balance environmental obligations and tourism demands, it is generally accepted that careful tourism investment is a sensible way to generate an income flow that can be used for environmental management (Mahony and Van Zyl 2001:4–5; Job 2008:141). In a number of countries many protected areas charge fees for entrance, camping or commercial tours, in order to balance a lack in government funding and also to control visitor numbers (Job 2008:135). Primarily, two variables influence the regional economic impact significantly, that is, the total number of visitors and the extent of their daily

expenditures during the stay. Overnight tourists cause a higher added value than day-trippers (Job 2008:140–141).

When going into a community public-private partnership (cPPP) and/or public-private partnership (PPP) and the proposed tourism development is on state land, Treasury Regulation 16 must be followed as well as Section 76(4)(g) of the Public Finance Management Act (PFMA) No 1 of 1999, which is a lengthy process. If the proposed tourism development is on claimed land, then the so-called PPP route does not need to be followed. The PPP unit in the National Department of Finance acts as a resource to agencies preparing commercial deals, and it also ensures that the projects conform to the requirements of the PFMA (Mahony and Van Zyl 2001:21). The conservation agency is allowed to enter into PPP in consultation with the respective member of executive council (MEC) in the case of a provincial nature reserve. A PPP toolkit for tourism was developed by National Treasury, which consists of six phases. The toolkit prescribes a 20-year project period. The communities are encouraged to take up equity in the business, and funds to take up equity ideally need to be secured by the community before the investors are targeted (Kusimama Consulting 2009:44). Government often plays a role as sponsor or investor in basic infrastructure such as roads, provision of water and electricity through the social responsibility or poverty alleviations programmes (Mitchell, Coelho, Baumgart and Snel 2008:41). However, one needs to remain realistic about the capacity of tourism projects to accommodate strong pro-poor tourism requirements. The experience with private sector investors is that many of these requirements are simply considered costs and are included in feasibility models. If the costs (including complicated negotiation processes and uncertain institutional arrangements) are too high, investors are quick to leave such projects. The extent to which tourism projects can be burdened with certain socio-economic objectives is dependent on the attractiveness of the asset. Projects should thus be carefully assessed in terms of their ability to carry objectives as promoted by pro-poor tourism and the potential can be limited in the protected areas where there is a lack in competitiveness between investors. More efforts are needed from investors than simply corporate responsibility and it is important to base the empowerment of local communities on their contribution to the transaction. Certain very practical measures can be included at the project level:

- A series of strategic research and planning studies to identify opportunities and requirements, including training needs, marketing strategies and potential sources of capital
- Establishment of a bid evaluation committee

- Preparation of a code of conduct for commercial operations in the project area
- Production of a commercial prospectus setting out the development opportunities and calling for expressions of interest from the private sector
- Inclusion of pro-poor tourism requirements and evaluation criteria in request for proposals, tender documents and tender procedures
- Ensuring that the basic project structure or business model is essentially pro-poor such as a fair equity stake, immediate benefit flows for the communities, use of local labour and materials and including the landowners in the managerial decision-making levels of the business
- Capacity building for the communities involved
- Innovative financing mechanisms because owing to the land tenure regime, the normal financing products which are secured against the individual title deed cannot be used. (Mahony and van Zyl 2001:6; Mitchell et al 2008:42; Magome and Søndergaard 2001:7)

It is further recommended that around 80 per cent of the weighing of the bidding should focus on price and the remaining 20 per cent should deal with the evaluation for socio-economic criteria. Because the deals do not require substantial investment to purchase the land, there is a real danger that unscrupulous or inexperienced bidders could enter the process. Some fairly strict requirements in terms of bid guarantees, the deposit of the request for proposal document and performance bonds can counter this risk (Mahony and Van Zyl 2001:14).

Bidders normally propose the establishment of a dedicated operating company to act as the principal contracting party with government. Many of the preferred bidders consist of a consortium of companies (many of them black owned), each bringing a set of skills and experience to the deal. Essentially two types of empowerment models are presented, that is, the ‘equity’ model and the ‘benefit’ model. The equity model allocates a percentage of equity to a separate, community-owned legal entity; and the benefit model allocates a percentage of turnover to a separate community-owned legal entity, making available training opportunities and investing in infrastructure. Most bidders commit themselves to maximising local employment and to using local SMMEs (Wolmer and Ashley 2003:34–39; Carruthers 2007:297). The proposals for the concession fee are typically based on a percentage of the turnover and often range between 8 and 12 per cent. The concession fee can also contain a fixed rate at an agreed level and a variable portion that enables it to benefit as the business operation matures and increase turnover. Both the equity and benefit models can yield a

fairly good income and benefit stream to local communities. Therefore it is important to ensure that the proposals are firmed up in the negotiation process and included in the final contracts so that they may be monitored and enforced. There are, however, opportunity costs associated with the promotion of pro-poor tourism, the most notable being the high transaction costs (Mahony and Van Zyl 2001:23–24). In order to maintain the community's commitment to the project, it is essential to demonstrate the short-term benefits. The benefits that accrue to the community in the short term are fairly diluted if they need to be shared among large communities. Unless specific measures are put in place, it is unlikely that the economic benefits will flow directly to the most marginalised sections of the community. The tourism projects thus should not be regarded as the only solution for rural development, but rather be a component of a larger rural development programme for the area (Mahony and Van Zyl 2001:43–45; Wolmer and Ashley 2003:34–39).

2.4.2 Commercialisation of tourism operations in South African National Parks

SANParks introduced an extensive commercialisation policy in 2000 on the basis that the organisation would increasingly be required to fund its activities from its own resources owing to declining government subsidies (de Villiers 2008a:22). The commercialisation strategy has led to concessions being granted for lodges, shops and restaurants and several PPPs. All these ventures require compliance with Black Economic Empowerment (BEE) targets. The main employment and contracting programme by SANParks is the Expanded Public Works Programme, namely poverty relief, coast care, working for water, working for wetlands and DEAT's social responsibility programme. Owing to the high profile and potential controversy of its decisions, SANParks might be seen to respond slowly to new challenges (de Villiers 2008a:22). In SANParks' Strategic Plan for Commercialisation the benefits experienced and the lessons learnt from commercialisation are discussed. These benefits are:

- *Strategic value*: Increased market segmentation and product and price differentiation, resulting in more economic activity and foreign exchange. It also improved the attractiveness as better restaurants and other facilities attract more visitors. An overall increased image was experienced
- *Monetary value*: Net income from commercialisation was R82 million
- *Increased infrastructure*: Increased infrastructure of R270 million that finally reverts back to SANParks
- *Risk transfer*: Significant risks were transferred to the private sector

- *Socio-economic value*: PPPs resulted in job creation, BEE equity in excess of the requirements of the BEE Charter and Scorecard, local community SMMEs, skills transfer and training, etc
- *Environmental value*: Commercial operators have to comply with a higher standard of environmental regulations than the public sector, thereby raising the overall standard of conservation in parks

(Kusimama 2009:33)

The lessons learned as summarised by Kusimama Consulting (2009:34–35) are:

- *Fundamental shift to responsible tourism and conservation*: Budgetary constraints necessitated the entity to make a shift to more responsible tourism and conservation. It must be kept in mind that SANParks generates 80 per cent of its own operational revenue and only 11 per cent of tourism revenue is from commercialisation.
- *Adopt an increased institutional consultative approach*: A defined process has been mapped out for project initiation with the private sector. Strong contract-management interventions are vital in this process.
- *Selecting a wrong vendor – relative weighing of financial model with bid evaluation*: The vendor selection process needs to be critically analysed. Financial forecasting should not take priority over other fundamental indicators, such as proven operational ability, existing client base and proven marketing ability. Technical ability should, therefore be increased in the bid weighing process to ensure that suitable operators are chosen. Staff responsible for the bid evaluation should be skilled in technical tourism operation and should not only include legal and financial people.
- *Outsourcing activities that should not have been outsourced*: All decisions regarding outsourcing should follow a transparent and collective strategic management approach, including analysis, choice, recommendations and implementation.
- *Losing control over activities*: Activities that are outsourced should be monitored throughout the project cycle by skilled staff that are able to measure technical performance and service delivery. The agreement should make provision for the agency to take over the functions of the activity when performance is poor or unacceptable. The entity should retain the skills to be able to take over the functions when necessary.
- *Over-optimistic demand*: A realistic expectation of private sector demand and the associated financial returns of a project should be considered prior to its ‘commercialisation’.

- *Financing constraints:* A due diligence audit needs to be performed on bidders to ensure that they have access to the necessary funding to implement their proposed projects.
- *The need for centralised effective contract management:* Effective contract management by skilled and competent staff not only protects the entity, but also provides some confidence to investors in the ability of the entity to manage the project throughout its life cycle.
- *Functionary level institutional buy-in:* The competency of functionary staff in terms of tourism and commercial developments should be strengthened. Furthermore, the attitude of functionary staff in the parks often appears to be in conflict with the commercialisation policy and this in turn impact on investor confidence.
- *Overlooking hidden costs:* PPP projects are inherently high-risk projects that if successful can yield high returns. Possible contract termination costs are frequently disregarded, since it is difficult to forecast, but liquidation costs and loss of rentals can have a great impact on budgetary requirements once it occurs.
- *Understanding risk transfer:* The main objective of PPPs is the transfer of risks and it must be borne in mind that should the private partner not be successful in its operation, most or all of the risks reverts back to the entity.

With regard to the involvement of communities, it is often better to concentrate on community benefits in the outsourcing and procurement rather than to kick-start over-ambitious economic enterprises. SANParks should not attempt to take full responsibility for socio-economic development of communities' neighbouring protected areas. They should rather play a facilitating role in forming synergetic linkages between community groups, local NGOs, local government departments and local private sector bodies dealing with socio-economic development and focus on projects directly related to the protected area (Magome and Søndergaard 2001:7).

2.4.3 Tourism-related benefits in Kruger National Park

The department of people and conservation of Kruger National Park faces a huge challenge. Kruger National Park is expected to lead the way in the economic upliftment of communities, while at the same time the economic viability of the park is essential since it cross-subsidises other national parks and has a huge direct and indirect impact on the economy of South Africa (de Villiers 2008a:25). Research by Spenceley and Goodwin (2007:1) in Kruger National Park, which involved community members and the businesses, showed:

- Most employees of the private businesses lived locally. The majority of people wanted to work locally in rural areas (rather than move to cities) and were interested in working in tourism.
- In one community, tourism had lifted about four percent of the local population from poverty. This effectively doubled the proportion of local people living above the poverty line.
- All of the businesses collect donations and/or give a percentage of their turnover to community projects, most notably environmental education. Donations from tourists provided most of these funds.

The research further indicated that most community members did not feel that they were dependent on tourism, largely because they saw few benefits from it. They also identified several key barriers to greater involvement in tourism. These included lack of education, lack of training and information about employment opportunities and few opportunities to provide goods and services to tourism businesses. For more poor people to benefit from tourism in the region, these businesses could make employment opportunities more equal by advertising employment vacancies openly, rather than asking existing staff for recommendations; help local people to develop goods and services that meet the needs of the tourism industry, for example through micro-credit or training to local entrepreneurs; buy more local agricultural produce and target money from tourist donations and development funds at education and training (Spenceley and Goodwin 2007:1).

2.4.4 Tourism-related benefits in Madikwe Game Reserve

From the commercialisation process in Madikwe Game Reserve, it is clear that there is a need for a clear strategy for community-based tourism as the implementation is not as evident as thought. Social ecologists (community development officers) of the conservation agency often find themselves between the community and the rest of the conservation agency and other government departments. They are often the only human face of government in/around protected areas. There is a need for communities to organise in legal entities and obtain training (de Villiers 2008a:99). To optimise the local benefits it is important to focus on these recommendations by Koch and Massyn (2003:32–33). The wages from the formal lodge industry in a protected area remain the single most significant contribution to poverty alleviation and it needs skills development to maximise the local benefits. Learnership-style interventions are good. Community-owned enterprises with long-term concession rights can be beneficial for communities. One main project can create many spin-offs and SMME benefits can be substantial if there is enough quantity of scale. There is a need for business

training to establish good functioning SMMEs. It is important to have a clear steering committee for strong and stable governance. A significant level of support from outside agencies is needed for capacity building of community institutions to come to an equal partnership.

Early concession agreements in Madikwe Game Reserve did not follow the PPP route (Treasury Regulation 16 as well as Section 76(4)(g) of PFMA No 1 of 1999) as stipulated by government, which was good to build the confidence of the investors and to get Madikwe going. From now on, however the PPP route is being followed as it is more open, fair and transparent, but also less flexible and more expensive for the state and the investor (Davies, Trieloff and Leitner 2003:2). In Madikwe the concession fees are used for maintenance and game management (de Villiers 2008a:103). The rental (concession fee) payable linked to turnover of business, however, is only good for commercial tourism ventures and not for so-called time-sharing. For time-sharing a fixed rental is better because the aim of the business is not to have a maximum annual turnover. It is good to have both commercial tourism ventures and time-sharing developments because the diversification of income is good and reduces the risks for the private sector (Davies et al 2003:3–6). Most of the concessions in Madikwe Game Reserve have a maximum of 45 years and focus on a fully catered, all-inclusive market at affordable rates and the top-end market, and not on camping, self-catering and self-drive. This results in less road maintenance. Madikwe Game Reserve expanded considerable in size as more neighbouring land was incorporated (Davies et al 2003:5–7). General issues related to the concessions are managed through quarterly concessionaires meetings chaired by the park warden. Discussion points are normally on traversing rights between concessionaires with regard to game viewing and balancing predators with other species (Goosen 2008).

The financial and economic cPPP models of Madikwe Game Reserve to date have indicated that ventures of this nature are financially and economically viable (ratio of approximately R1 of state investment to almost R1.5 of private sector investment). The estimated net profit is R10 million per annum from concession fees and other fees associated with the reserve and an estimated 1,200 permanent jobs to be created (Davies 1997a:43–47). The net profit is paid into the Madikwe Trust, which is a Section 21 company. About half of the net profit goes to communities for community projects and half to the conservation agency to sustain activities. For the conservation agency the breakeven point was estimated to be 8 years and for the project 10 years (Davies 1997a:43–47). In reality the breakeven point for the conservation agency was realised only in 2008, which is 17 years after the initiation of Madikwe Game

Reserve (Goosen 2008). The advantages of working in partnership are spreading risks between partners; diversity and expertise; and synergy between partners. The partners each have their roles and functions and one must be aware that supporting non-governmental organisations (NGOs) and strategic partners always have their own objectives (Davies 1997a:49). In these kinds of operation there is a need for successful joint resolution of conflicts and problems as stakes are high. Conservation agencies have a history in conservation, but business and other skills are required when going into these partnerships (Davies 1997a:51). Distribution of benefits to local community should be via legally registered community institutions. Public tendering is recommended for leases/concessions of five years and more, but not for short-term leases. For short-term leases it is best to work with a fixed rental payment and for long-term leases a variable rental payment is the preferred option (Davies 1997a:53–55).

From the Madikwe Game Reserve case study it can be concluded that people-based wildlife conservation should be considered a viable development option elsewhere in South Africa and in developing countries in general, especially in rural areas where development options are limited. Following a land feasibility study, wildlife-based tourism was found to be the most economically efficient and environmentally appropriate form of land-use for Madikwe (Davies 1997b:1). Previously the area was used for cattle grazing, but the livestock ownership was heavily skewed to a small minority owning over 100 heads of cattle each (Davies 1997b:13).

2.5 Non-tourism beneficiation models linked to conservation

2.5.1 Benefits from protected areas and beyond

The concept of linking biodiversity conservation to development has received increased recognition since the 1972 Stockholm Conference on the Human Environment, which recognised natural resources as essential assets on which economic growth must be based (Kamoza & Associates Eco-Consultants 2009:32). This recognition has been given further emphasis by the adoption in 2000 of the United Nations Millennium Development Goals (MDGs), which aim to implement measures to reduce the number of people earning US\$2 or less/day by 50 per cent in developing countries by 2015. The tourism industry, being labour intensive and a primary source of income in many developing countries, has been identified as a key sector in meeting the MDGs (Kamoza 2009:32). The explicit construct linking biodiversity to human wellbeing is the framework system of ecosystem services developed

through the work of the Millennium Ecosystem Assessment. The Millennium Ecosystem Assessment framework links the environmental pillar of sustainable development to the MDGs (Millennium Ecosystem Assessment 2003; Millennium Ecosystem Assessment 2005:57).

Protected areas in Africa are managed on less than US\$150 per square kilometre on average, which is below the benchmark required for adequate conservation. Government funding of management authorities/conservation agencies in developing countries amounts to only one third of the funding required to achieve their stated conservation objectives (Kloss 2001:21; Emerton et al 2006:12). Humankind depends heavily on nature, natural processes, and hence on protected areas. Therefore the sacrifice needs to be made and negative effects mitigated, through direct payments for conservation or new tools to be developed in the future (Fischer 2008:102; Aronson, Milton, Blignaut and Clewell 2006:262; McNeely 1999:2). Protected areas are affected by what happens in their surrounding lands, so managers need to know what is happening outside the protected area as part of their strategy to attract new supporters, mobilise new funding sources and negotiate ecologically compatible land use practices with landowners in the surrounding land (McNeely 2008:105; Kloss 2001:11–12).

These sources of potential revenue are seen to have the biggest potential to mobilise finance for protected areas: tourism; resource utilisation, including bio-prospecting; ecological services and existence values such as media rights and international donations. The most direct are the so-called user-pays mechanisms (Kloss 2001:24). Three broad categories can be established when analysing the potential of conservation-related land use activities generating money and/or other benefits, that is, non-consumptive land use such as tourism; direct consumptive land use such as the collection and harvesting of non-timber forest products (NTFPs) and timber; and indirect consumptive land use such as carbon sequestration, water purification, pollination, and ecosystem resilience. With regard to sustainable livelihoods, it is also important to include safety net values describing the altered or increased use of natural resources to cope during times of stress and shock (Blignaut, Marais, Rouget, Mander, Turpie, Preston, Philip, du Plessis, Klassen and Tregurtha 2008:31; Shackleton 2008a:31; Blignaut and Moolman 2006:239). Possible beneficiation from nature-based tourism has been discussed in detail in section 2.4. The tourism ventures must be planned and analysed in a regional approach and not be limited to the protected area boundaries so that maximum jobs and income can be generated. Income from tourism is an important element of protected area funding in many countries, but the industry can be insecure and subject to fluctuations. Building a diverse funding portfolio, going beyond

conventional mechanisms and including multiple funding sources are key elements of protected area financial stability and sustainability as risks are spread (Emerton et al 2006:17). In the following part, other benefits (within and beyond boundaries) are discussed, based on direct consumptive land use and indirect consumptive land use. Looking at the various values of non-consumptive, direct consumptive and indirect consumptive land use allows for more informed comparisons of the economic viability of different land uses in particular the returns to conservation land use (Blignaut et al 2008:31; Blignaut and Aronson 2008:12; Shackleton 2008a:2; Blignaut and Moolman 2006:238; Pearse and Moran 1994:12).

2.5.2 Benefits from natural resources

Direct consumptive use can be easily expressed in economic terms because the NTFPs extracted can be multiplied by unit price minus the costs. The IUCN defines the term 'NTFPs' as encompassing all biological materials, other than timber, which are extracted from forests for human use. These include foods, medicines, spices, essential oils, resins, gums, latexes, tannins, dyes, ornamental plants, wildlife (products and live animals including fish), fuel wood, and raw materials, notably rattan, bamboo, small wood and fibres. NTFPs operate often in the informal sector (rural subsistence, local markets) and are therefore often unrecorded in official statistics (de Beer and McDermott 1996:1–10; McNeely 1999:35). Studies in Limpopo, KwaZulu-Natal and Eastern Cape indicate the gross annual direct use value of NTFPs at R7,000 per household. Natural resource harvesting in communal lands in South Africa contributes to around 25 per cent of the household income, which is more than the contribution by cropping and or livestock (Shackleton 2008a:8–16). Especially poor families rely on NTFP use for survival, providing a safety net which reduces the costs of social services to the state. It is accepted in social science literature that serious attention to social difference and its implications is needed, which has been remarkably absent from the recent wave of 'community' concern in environmental policy debates (Agrawal and Gibson 1999:629; Kumar 2005:275; Edmunds and Wollenberg 2002:1; Leach et al 1999:230). First of all, it is important to understand which social actors see what components of variable and dynamic ecologies as resources at different times. Second, how the various social actors gain access to and control over such resources must be assessed and whether natural resource use transforms the components of the environment. A differentiation between endowments and entitlements must be made. Endowments are rights and resources that social actors have (customary law, kin networks) and entitlements are legitimate effective command over alternative commodity bundles (Leach et al 1999:230–233). Furthermore, different social actors have different capacities to voice and stake their claims (Leach et al 1999:241). The general public must benefit from protected areas, rather than perceive them as playgrounds

for the wealthy. A balance between ‘power’-based rights and ‘interest’-based rights should be found. For protected areas to survive and to remain relevant in the rapidly changing world, interest-based rights may need to become a more integral part of decision-making processes (McNeely 2008:106). The commercial potential of biological resources is expanding owing to the growing demand for products which use them as essential inputs, such as cosmetics, dietary supplements and pharmaceuticals. Protected areas can be an important source of wild biological material for commercial use, where this is consistent with their management objectives. In some cases, protected areas have expanded their range of uses and users, and added a new source of revenue by introducing fees for the right to collect biochemical or genetic materials from organisms found within protected areas. A variety of up-front payments, royalties and profit-sharing agreements for such ‘bio-prospecting’ activities have been developed in several countries, including the protection of indigenous knowledge (Emerton et al 2006:62).

Through the Convention on Biological Diversity (CBD) it is acknowledged that:

- States have sovereign rights over their biological resources
- Indigenous and local communities have through their cultures and traditions helped conserve biological diversity
- Any commercial or non-commercial use of indigenous biological resources or traditional knowledge associated with it would require the consent from the state or the community
- All benefits generated from such use should be shared with the providers of the resource or knowledge

To fulfil its obligations under the CBD, South Africa passed the National Environmental Management Biodiversity Act (NEMBA) No 10 of 2004. The regulations for implementation of the act were approved in February 2008. Chapter 6 of the act deals with bio-prospecting and access and benefit sharing (ABS) and it states:

- Any research, development or commercial application of indigenous biological resources or traditional knowledge would require a permit called a ‘bio-prospecting permit’
- To get a permit, the potential user must have permission to access the biological resource or knowledge from the owner of it
- And have an agreement with them to share any benefits that arise from the use of the resources or knowledge
- This is called an ABS agreement

Medicinal plants are seen as the most promising resource for possible ABS agreements. The rising demand for medicinal plants in South Africa has led to increased pressure on wild plant populations. The bulk of plants traded in South African medicinal markets are harvested from wild populations, which combined with increased pressure on habitats, has resulted in numerous extinctions. Trade is not as extensive in the rural areas of Mpumalanga as in major urban markets such as Durban and/or Johannesburg. Despite the lower levels of local trade, increased harvesting pressure is being experienced regionally, to meet the demand in urban centres. For example, in Mpumalanga the total value of the commercial trade in marula products to local community suppliers is estimated to be worth R1.1 million a year. This is relatively small in comparison with other natural plant products traded in the region, with the value of the trade in medicinal plants ranging between R62 million and R92 million (in 1997 prices) (Mander, Cribbins, Shackleton and Lewis 2003:49). Cooperation in conservation strategies and policies is required at regional, national and international level, while ensuring that management initiatives take into account local market conditions and the socio-economic realities facing both consumers and those who depend on the trade for their livelihoods. The rural poor are major stakeholders in the medicinal plant trade, particularly women and sectors of the community with limited alternative income generating opportunities. Unprocessed medicinal plants play a vital role in the health of people in developing countries, where the World Health Organisation estimates that 70–80 per cent of the population use traditional medicine (Botha, Witkowski and Shackleton 2004:38). This also applies to South Africa, where traditional medicine is considered complementary to Western medicine. The value of the trade in indigenous plant species for traditional medicine in South Africa is estimated at R270–496 million per annum, with another R2.5 billion in value added as prescriptions. Some 20,000 tons of plant material are sold each year (Botha et al 2004:38; Mander, Ntuli, Diederichs and Mavundla 2008:97).

2.5.3 Benefits from ecosystem services

Recently there has been a trend to recognise the importance of ecosystem services for the functioning of the life-support systems on earth and many aspects of human wellbeing. It is also recognised that environmental degradation results in the loss of these services. Efforts must therefore be made to place an economic value on these services and sell them in an emerging market creating a direct incentive for their conservation/restoration. This is called payment for ecosystem services (PES). These direct payments are often seen as the way forward for conservation and poverty alleviation especially outside of protected areas. At this moment there is a wide promotion occurring mainly through the climate change agenda via

the so-called Clean Development Mechanism (CDM) and Reduced Emissions from Deforestation and Degradation (REDD). CDM pays for additional carbon sequestration and storage through restoration, for example tree planting. REDD is looking to pay for avoided deforestation/forest maintenance (Shackleton 2008b:2; Santilli, Moutinho, Schwartzman, Nepstad, Curran and Nobre 2005:47–48; de Koning, Olschewski, Veldkamp, Benitez, Lopez-Ulloa, Schlichter and De Urquiza 2005:224; Smith and Scherr 2002:2; Brown, Swingland, Tenison, France and Myers 2002:1594; McNeely 1999:10).

The World Bank and many other organisations recently identified markets for ecosystem services as a potential tool for sustainable environmental management and poverty alleviation (Shackleton 2008b:7). Three international conventions are important in this regard, that is, the CBD, the Convention to Combat Desertification and the United Nations Framework Convention on Climate Change. PES is one of the steps for action emerging from the global Millennium Ecosystem Assessment, that is, to introduce payments to landowners in return for managing their lands in ways that protect ecosystem services such as water quality and carbon storage that are of value to society. It is further recognised that protected areas can provide capacity to adapt to climate change and must be designed as part of a system with appropriate connections between the parts (McNeely 2008:106; Blignaut et al 2008:ii; Millennium Ecosystem Assessment 2003; Emerton et al 2006:7). A PES is a voluntary transaction where a well-defined ecosystem service (ES) (or a land use likely to secure that service) is being ‘bought’ by a minimum of one ES buyer from a minimum of one ES provider if, and only if, the ES provider secures ES provision (conditionality). PES is a voluntary, negotiated framework, which distinguishes it from command and control measures. Four ES types currently dominate commercial PES schemes, that is, carbon sequestration and storage; biodiversity protection and restoration (such as stewardships, biological corridors and protected areas); watershed protection and landscape beauty (Grieg-Gran and Bann 2003:31–36; Wunder 2005:2–3; Kloss 2001:31). The total value of ES worldwide is estimated to be above US\$33 trillion/year (Costanza, d’Arge, de Groot, Farber, Grasso, Hannon, Limburg, Naeem, O’Neill, Paruelo, Raskin, Sutton and van den Belt 1997:259). Schemes can be driven by the public sector, by the private sector, or any combination of the two with NGOs often acting as intermediaries between buyers and sellers. People can be paid for conservation of an ES (use-restricting schemes), or for its restoration (asset-building schemes). Whether PES is for doing something or for not doing something has likely implications for local economic activity, employment, and thus also for poverty. Payments could be made directly in proportion to the ES delivered (eg tons of carbon stored), but are more common for land- or resource-use caps or incentives (eg forest conservation or

tree planting) that supposedly generate the desired service. Most PES schemes are area based, where land use and payment are contractually fixed per area unit. Other PES schemes are product based. Sometimes several services can be provided in a synergistic way and a ‘bundled’ payment scheme can enable several service users to package their payments to service providers. But not all services are truly threatened and scarce, and not all users are willing to pay. PES can contribute to poverty alleviation through pro-poor benefits but the prime focus of PES should remain on the environment, not on poverty (Wunder 2008:279; Wunder 2006:2–5; Wunder 2005:2–3).

Blignaut et al (2008:13–14) found a high degree of overlap between ES production, biodiversity importance and poverty rates in various areas in South Africa including the area around Blyde River Canyon Nature Reserve in Mpumalanga. As there is quite a geographical distance between the supply side and the demand side, it is important to reduce transaction costs by working via existing structures. The way for introducing PES as a broad-scale conservation tool for biodiversity conservation as well as ES delivery in South Africa has been paved by programmes such as working for water; working for wetlands; working on fire and working for woodlands. Invasive alien plant management; restoration of wetland and riparian; natural resource use management; integrated grazing, land use and forest fire management regimes are seen as activities that could institute the supply side of the PES market in South Africa. In this regard PES can be an opportunity to compensate landowners for supplying ES; provide sustainable financing of the publicly and privately owned protected areas or leveraging the management costs of these conservation areas into perpetuity and to provide incentives for private and communal landowners to engage in biodiversity conservation in order to meet conservation targets that cannot be reached by the protected area system (Blignaut et al 2008:9–10; Turpie, Marais and Blignaut 2008:788). Until now the greatest challenge in PES are the transaction costs with regard to the design, consultation, negotiation and monitoring (Emerton et al 2006:91). PES programmes differ substantially from one another. Some of the differences reflect adaptation of the basic concept to very different ecological, socio-economic or institutional conditions; others reflect poor design, due either to mistakes or to the need to accommodate political pressure (Wunder, Engel and Pagiola 2008:834).

2.5.4 Importance of water

Aquatic ecosystems generate numerous ecosystem services that are valuable to a range of stakeholders. In poor rural areas, populations tend to concentrate around rivers and wetlands. People depend on these assets for grazing, agriculture and harvesting natural resources for

food, water, medicine and raw materials and provide for an estimated 25 per cent of household income (Blignaut et al 2008:25). However, the monetary value of harvested wetland resources still undervalues these resources, as it does not reflect its importance of reducing risk, such as in times of drought, or as a safety-net to families that have suffered shocks such as job losses. These are crucial functions in countries where governments provide very little in terms of social welfare such as South Africa, where the provisioning services of aquatic systems are estimated to be R1.8 billion/year. Aquatic ecosystems also provide a range of regulating services, including flow regulation and water purification. In South Africa, the regulating services of rivers and wetlands are estimated to be billions of rand. They also have a cultural, spiritual, scientific, educational and recreational value (tourism and property value) (Blignaut et al 2008:25).

Water is critical for development. Economic growth and development can be severely constrained owing to water shortages and poor water quality. Currently South Africa's most limiting natural resource is water. Scarce water resources in Mpumalanga need to be well managed to meet future demand and to ensure sustainable development as well as the ecological integrity of the water systems (Mpumalanga Provincial Government 2008:13). South Africa is an arid country with an average rainfall of 450 mm/year which is just more than half of the global average of 860 mm/year. The eastern parts of the country are wetter and it is drier in the west. It is predicted that this will become even more extreme through climate change. The impacts of invasive alien plants on water resources are the best known. Invasive alien trees in the water management areas constitute an estimated reduction in water yield. Should the spread of the invasive alien species not be controlled, the impact on the economy is likely to be between R1.95 billion and R9.16 billion (Blignaut et al 2008:22–24). As South Africa is currently in the grip of its most serious energy crisis, the possibility of the generation of hydropower on existing dams should be explored as it can assist in both the generation of renewable energy and contribute to the protection of the important water sources leading to the energy generation. In doing so, it is essential to ensure minimum environmental impact, which is most likely to happen when the possible options around existing dams are looked at. Furthermore it is important to ensure that benefits from the hydropower plant flow back to the conservation of the important water catchments area.

2.5.5 Importance of bioregional approach

If biodiversity targets are to be met, biodiversity conservation needs to take place both inside and outside protected areas. The structure of biodiversity conservation should be focused on bioregional landscape management as ecosystems are often interlinked inside and outside

protected areas. Changes in land use outside protected areas can alter ecological function inside protected areas and result in biodiversity loss, given that protected areas are almost always part of larger ecosystems. The total area under conservation-friendly land use of one kind or another may be functionally crucial. Biodiversity mainstreaming outside protected areas entails changing the behaviour of individuals and organisations to adapt norms, values and practices which promote biodiversity. One of the mechanisms of mainstreaming is effective communication of the issues to key stakeholders. While many factors might affect biodiversity conservation, the use of incentives is potentially one of the most effective mechanisms for mainstreaming biodiversity conservation in bioregions.⁸ These economic incentives generated outside the protected area, but directly linked to the protected area, fall within the category of benefits beyond boundaries. Economic incentives refer to mechanisms that change the behaviour of actors with respect to economic choices by altering their economic conditions. Positive economic incentives reward actors with complying with required actions, while negative economic incentives punish actors for non-compliance. It is the trade-off between the costs and benefits that determines people's land use decisions. Institutions are often left out as an important class of socio-economic arrangements directly associated with economic incentives. Institutions are thus likely to be a major determinant of the vulnerability or success of biodiversity conservation (Muchapondwa, Biggs, Driver, Matose, Mungatana and Scheepers 2009:3–5). It must also be acknowledged that external factors can impact on biodiversity conservation in the bioregion. These external ecological factors include natural disasters such as droughts, floods, biological invasions and climate change, which can have direct impacts on land use choices. External socio-economic factors, including political change, economic change and institutional change, can influence tenure arrangements, development opportunities and land use options. There is a need to constrain or synergise human and enterprise actions with regards to their interaction with biodiversity. One could do this by use of command-and-control or economic incentives. Each of these options is likely to be better in particular circumstances – it depends mainly on the nature of the threat to biodiversity. However, while a command-and-control system imposes certain restrictions on people's access to, and use of resources, in a top-down approach to conservation-oriented regional management, economic incentives work with human behaviour to influence people's land use choices in a more subtle and bottom-up approach. Consequently, the control-and-command system requires greater enforcement and policing than economic incentives. The more biodiversity is conserved through economic incentives,

⁸ The definition of bioregion in South Africa's National Environmental Management Biodiversity Act (Act 10 of 2004), contains 'whole or several nested ecosystems and is characterised by its landforms, vegetation cover, human culture and history'.

the more resources remain to conserve economically unviable and institutionally unprotected ecosystems (Muchapondwa et al 2009:9–10).

Biosphere reserves follow a bioregional approach and are seen as sustainable development initiatives at local level that can serve as a mechanism to assist in the land restitution process and socio-economic development in the rural areas of South Africa in particular (South African Biosphere Reserves 2008:16). Biosphere reserves are areas of terrestrial and coastal/marine ecosystems or a combination of these, which are internationally recognised within the framework of United Nations Educational, Scientific and Cultural Organisation's (UNESCO) Man and the Biosphere (MAB) programme. They fulfil three complementary functions (a conservation function, a development function, and a logistic support function) and are organised according to a zonation system that includes core, buffer and transition areas. Biosphere reserves have three characteristics that, at least in principle, differentiate them from the traditional notion of protected areas:

- Biosphere reserves are part of an international network of sites designated by UNESCO rather than by national governments.
- The outer boundary of a biosphere reserve is flexible, rather than being legally and cadastrally defined.
- The land and water contained in a biosphere reserve are administered and managed in co-operative fashion by more than one agency or owner.

(South African Biosphere Reserves 2008:8)

The World Network of Biosphere Reserves (WNBR) currently consists of 531 biosphere reserve sites, representing 105 countries (South African Biosphere Reserves 2008:3). The biosphere reserve concept has proved its value beyond protected areas, and is increasingly embraced by scientists, planners, policy makers and local communities to bring a variety of knowledge, scientific investigations and experiences to link biodiversity conservation and socio-economic development for human wellbeing. Individual biosphere reserves remain under the jurisdiction of the states where they are situated, which take the measures they deem necessary to improve the functioning of the individual sites (South African Biosphere Reserves 2008:4).

2.6 Balancing community-based natural resource management and local economic development

2.6.1 Legislative framework

At national level, South Africa has various policy and legal instruments which emphasise the need to integrate biodiversity conservation with socio-economic development. These include DEAT's 1996 White Paper on the Development and Promotion of Tourism, which recognises tourism as an engine of growth, capable of creating a spin-off in other sectors of the economy; Integrated Sustainable Rural Development programme; National Small Business Act of 1996; and DEAT's Social Responsibility projects (Kamoza 2009:33). With regard to LED, the following range of key policies and policy papers, either directly or indirectly, contributed to the LED debate in South Africa:

- The Constitution (1996)
- White Paper on Local Government (1998)
- Local Government: Municipal System Act (2000)
- A Policy Paper on Integrated Development Planning (2000)
- LED Guidelines to Institutional Arrangements (2000)
- Draft LED Policy (2002)
- Policy Guidelines for Implementing LED in South Africa (2005)
- National Framework for LED in South Africa (2006–2011)

(Patterson 2008:4)

With regard to CBNRM the CBNRM guidelines were officially adopted by DEAT in 2003 (DEAT 2003:1-64).

At Mpumalanga provincial level, the need for biodiversity conservation to contribute to socio-economic development is fully recognised, as demonstrated in the MTPA Act of 2005, and various policies and strategic plans, including the Revenue Generating Strategy of 2009 and Tourism Growth Strategy of 2007. Mpumalanga has about 3.5 million people, representing about 7.5 per cent of the country's population; 40 per cent of the province's population are younger than 15 years; 27 per cent of the population older than 16 years are not economically active, representing a very high dependency ratio (67 per cent), which is aggravated by lack of opportunities. Tourism has potential to be the driving force for local employment, economic growth and community capacity building (Kamoza 2009:33). In the MTPA's business case, an estimation of the biodiversity economy is given of R1.6 billion in

2007. The total market size for the main tourism segments in Mpumalanga was estimated on R1.5 billion/year (MTPA 2009a:11).

The Mpumalanga Biodiversity Conservation Plan (MBCP) (Mpumalanga Provincial Government 2006), endorsed by the provincial cabinet, highlights the inadequacy of the province's protected area system to conserve a representative sample of the biodiversity. Much of the critical biodiversity needed to achieve biodiversity targets for the province is on privately and communally owned land. Because irreplaceable biodiversity is not sufficiently protected in Mpumalanga, it is important to expand and strengthen the protected areas network. The land reform process can be an opportunity to achieve the biodiversity targets by incorporating new land into the protected areas network. A key focus area of the Mpumalanga Provincial Growth and Development Strategy (PGDS) is 'Strengthening sustainable development'. One of the options in support of this focus area of the PGDS is 'to target the protection of endangered biomes, especially grasslands threatened by new commercial developments'. Environmental sustainability is particularly important in South Africa as the need to address social and economic imbalances of the past and the priority for poverty alleviation and job creation place increasing pressure on natural resources and the environment. In addition a healthy environment is crucial to ensuring human health and wellbeing. The poor are also more susceptible to environmental catastrophes and environmental degradation and rely more directly on the natural environment for their survival. Environmental rights are also enshrined within the Constitution of South Africa, which states that all people have the right to a safe and healthy environment and to have the environment protected to secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development (Mpumalanga Provincial Government 2008:4). Municipal structures, such as LED units, are suitable to take the lead in cross-sectoral work as they have not been set up along sectoral lines and therefore there is a need for sufficient resources for LED units. In terms of the MTPA Act 2005, the MTPA is required to promote and create socio-economic growth and transformation within the tourism and conservation industry, thereby creating economic and employment opportunities for previously disadvantaged individuals and local communities in the province. As a public entity, the LED role of the MTPA needs to comply with the PGDS and IDPs, cooperation with local institutions of government and with NGOs, formal partnerships with local communities and with investors and entrepreneurs in the private sector. The assessment of the MTPA's role in LED focuses on four intervention areas: LED actors; LED governance and management structures; locational factors for LED; and strategy and learning (MTPA 2009a, annex 3).

2.6.2 Linkages and differences

The three most notable principles underpinning conservation and socio-economic development are participation, transparency and accountability (Graham, Amos and Plumptre 2003:3). In South Africa there are still obstacles to overcome in racial division, distrust among public officials and business people and other historically founded issues. The establishment of LED forums in local municipal areas has become a means for networking and participation and can act as a valuable platform for public-private dialogue (Ende 2007:7). In South Africa, LED was historically driven by the public sector and is, till today, still very dominated by the public sector. The concepts of LED and social and community development have often been mixed up in the past and therefore led to the breakdown of unsustainable government-driven projects. The former policies and strategies have not managed to overcome the multiple obstacles of local skills levels, lack of entrepreneurial culture, weak support mechanisms, lack of access to business development services and finance, spatial marginalisation and market failure and could not ensure that the majority of the population would benefit from economic growth. Willingness to reform is hampered less by a lack of financial resources than by low administrative capacities, a shortage of management and professional skills and bureaucratic friction (Ende 2007:17). Nowadays, there is a shift in approach towards enterprise development, investment promotion and small business development with the role of the local government as a facilitator to connect the divergent LED institutions (Patterson 2008:40; Ruecker and Trah 2007:24).

There is common understanding among CBNRM and conservation practitioners, politicians and development workers that the long-term sustainability of conservation and protected areas requires the support of communities. This support from communities can be achieved via tangible benefits from the conservation land use (Mitchell et al 2008:43; Aronson et al 2006:262). From an economic perspective it is important to be realistic and to recognise that CBNRM is unlikely to transform rural areas from poverty to prosperity. There are some success stories in neighbouring countries, such as the conservancies in Namibia and community wildlife management in Botswana and Zimbabwe, but the benefits often translate into modest sums per household. When it comes to sharing the benefits, a choice must be made between sharing the income in cash per household or for community projects. In most cases the CPAs and community trusts have chosen to use the income for supporting projects. The key lessons concerning benefit sharing, among others, are that the income is always less than the community needs; there is a need for transparent institutional arrangements for decision-making, accounting and distribution of benefits. If not, conflict may arise and

equitable distribution of benefits is critically, especially since communities can be dispersed over a great area (Mitchell et al 2008:43–44; Holmes and Cooper 2006:2). Furthermore it is important to see CBNRM not only on a project basis, but rather as a way of sustainable livelihoods on a day-to-day basis for example in sustainable resource harvesting. As mentioned in 1.6.4, objectives shared by CBNRM and LED are economic growth, job creation, participation, skills transfer and poverty alleviation. The major differences between the two disciplines are indicated in table 4 below:

Table 4: Differences between CBNRM and LED

LED	CBNRM
Uses a wide range of industries, goods and services for growth and job creation	Uses natural resources
Coordinated regional programme managed by agency or authority that represents a number of villages, settlements and communities	Discrete project driven managed by single community-based organisation/entity
All about the delivery of economic growth and job creation and need not have an ecological component	Seeks to combine ecological conservation with economic growth, to harmonise the environment with the economy of a region.

(Adapted from Mitchell 2007:7–9)

Mitchell (2007:16–37) also established that the two disciplines often have similar problems:

- Insecure land tenure and rights to resources
- Lack of co-ordination between government ministries and departments
- Bureaucracy and capacity problems in local government
- Danger of communities conflicting with local government
- Fragmented communities
- Under-valuation of natural resources and ecosystem services
- Lack of involvement by private and commercial sector
- The need for skills development
- No CBNRM awareness in key government departments responsible for economic growth and development
- The need for champions and change agents
- The need to set and enforce limits on the use of resources
- The need for monitoring, evaluation and adaptation

To come to sustainable livelihoods and sustainable beneficiation models it is necessary to address these issues within the model design for the creation of generic settlement and co-management agreement frameworks (see objective 1 of 1.3).

2.6.3 Lessons learned from case studies in South Africa

2.6.3.1 The Makuleke case

After land restitution, the Makuleke CPA went into co-management with SANParks in the Pafuri region of Kruger National Park and a joint management board was established. The Makuleke CPA established a successful communication mechanism to the wider community. There are three structures between the joint management board and the claimant community of 15,000 (de Villiers 2008a:74–75). The credibility of the board is sometimes questioned as it is not a legitimate structure and it does not have real decision power. Decisions are made through consensus and must be ratified by SANParks officials from Kruger National Park and by the CPA executive. In the case of the Makuleke co-management model, the CPA has full commercialisation rights and a trust receives the benefits from the tourism projects generated by the CPA and directs its resources to community projects rather than per capita distributions. However, there is concern that the municipalities now spend their money elsewhere, and not in the Makuleke area any more. The income generated by the CPA should not replace the responsibility of local government. It was observed that hunting can bring quick benefits until lodges are in place. As it is quite a leap to move from ‘claimant’ to ‘owner’, the beneficiaries must understand the rights and obligations that come with being owner and should understand the difference between landowners, shareholders, beneficiaries, trustees and employees. Furthermore the lesson has been learned from the Makuleke case that it is better to calculate rental from lessees based on gross turnover, rather than on profit sharing because profit is easy to manipulate by the private partner in the partnership. It is important to put mechanisms in place to ensure that the benefits flow to the entire community and not only to the elite (de Villiers 2008a:74–75).

2.6.3.2 Kalagadi Transfrontier Park

The joint management board set up after land restitution has led to increased understanding between park management and claimants in the case of Kalagadi Transfrontier Park. As in the Makuleke case, decision making on the spot is constrained for all parties as it requires communication back to others. More claimant groups in the joint management board complicate the decision-making process, especially if the levels of capacity are different. The traditional knowledge of the elders is included in the co-management process via story-

telling and identification of heritage sites. The decision by the joint management board on the location of a proposed lodge is determined by the two claimant groups and is based on emotional decision taking rather than informed decision taking on the best location, which would have probably been on the non-claimed land. Issues around resource use for subsistence and commercial purposes and the estimated value of these resources should be taken into account (de Villiers 2008a:37).

2.6.3.3 Richtersveld

According to the contractual agreement between the Richtersvelders and SANParks, a management plan was set up to guide the management of the established park. The park accommodated the seemingly competitive land uses of conservation, grazing and mining within its borders. Agreements were reached that existing mining operations could continue and that local stock farmers would be accommodated within the park. The farmers were allowed to graze 6,600 livestock in the park, a figure that would be reviewed and tested over the years (Isaacs and Mohamed 2000:13). SANParks would also compensate the stock farmers for the loss in grazing by providing two farms for their use. The contribution of the park can be seen in both direct and indirect benefits for the Richtersvelders. The national park is 162,000 hectares in size and about 7,000 people are living in four villages in the area (Isaacs and Mohamed 2000:12). In this case SANParks leases the park land from the Richtersvelders and the monies are then distributed by a charitable trust, the Richtersveld Community Trust. The trust, which consists of independent board members, administers the funds, which are spent primarily on educational and social upliftment programmes in the area. Currently, 16 residents of the Richtersveld are employed at the park in conservation and other positions (Isaacs and Mohamed 2000:13). The initial fears of the community that stock farming would be phased out have been allayed, and the park farmers that use the grazing land in the park obtain assistance and support from SANParks. These tangible benefits do not reflect all the objectives of the contractual agreement, but are nevertheless important signs that some benefits have filtered through to the community.

Though the park has brought important benefits to the Richtersveld, critical questions have emerged as to whether the park is truly a co-management arrangement. The first issue relates to the functioning of the management plan committee. There are many problems with the functioning of the park, such as lack of active participation in decision making by community representatives, as well as poor feedback to communities. The community representatives also have to attend management meetings at their own cost, and distances between the Richtersveld towns are very long. The poor functioning of the management plan committee

relates to lack of capacity to participate in decision making, as well as lack of community interest in the park. The second issue relates to the development of a management plan for the Richtersveld, which nine years since the signing of the agreement has not been concluded (Isaacs and Mohamed 2000:14). This is critical because the tenuous relationship between conservation, mining and stock farming, needs to be guided by sound management guidelines. Failure of SANParks to deliver on the promises made during the signing of the agreement and the social problems facing the Richtersvelders, such as unemployment and poor infrastructure, are a third issue impacting on the agreement. However, many of the promises made by SANParks were unrealistic and beyond the scope of a conservation agency. This has had serious implications in that it has created the perception that the park had not delivered on its promises.

At present a number of initiatives provide an opportunity for restructuring the co-management agreement in the Richtersveld National Park. Transfer of communal lands to the Richtersvelders, local government restructuring, opportunities for community-based tourism development and transfrontier conservation initiatives are a few of the processes currently impacting on the area. The participatory, community-driven integrated development planning process provides an ideal opportunity to set local development objectives, identify priority areas and develop an integrated vision for the Richtersveld. These processes have the potential to transform the Richtersveld National Park from a paper to a people's park in that they strengthen the proprietorship of the Richtersvelders, link conservation and development objectives through eco-tourism, and engage local people in setting development objectives and priorities. In this way, they can create opportunities for re-configuring the role of the park and incorporating conservation into broader rural development planning. The days in which parks were fenced and seen as islands of biodiversity are fast disappearing. For SANParks to avoid the legacy of mistrust and exploitation associated with mining companies in the area, the Richtersveld National Park must be reconfigured, in a practical sense, on the fundamental principles of co-management: power sharing, capacity building and equitable benefit distribution (Isaacs and Mohamed 2000:11–16). In 2001, SANParks agreed to the appointment of independent experts to prepare a second version of the MP via a participatory process. This version was eventually ratified by the management plan committee in 2002. The second edition of the MP clearly describes the powers and functions of a new structure to replace the management plan committee, a joint management committee, designed to give effect to real co-management as well as to ensure accountability of the community representatives. It also clearly allocates tourism concession rights to the community and day-to-day conservation management to SANParks, under the control of the joint management

committee. It remains to be seen, however, whether the situation will improve and whether effective co-management will in fact be achieved, along with a more significant flow of benefits to the greater community.

2.6.3.4 Ezemvelo KwaZulu-Natal Wildlife

From case studies in KwaZulu-Natal (KZN) it is observed that it is important to teach reserve managers how to interact with local communities and not only on flora and fauna. KZN has one local board per protected area, and it is therefore easy to have representation of claimants on the board, as suggested in the MoA. The local boards do not have executive power, but their advice must be taken seriously by the conservation agency to ensure a sustainable and healthy relation. The board loses credibility and legitimacy if the advice given by the local boards is not treated with respect (without necessarily being bound by it). The local boards also contain members of the wider community, and this causes often conflict with the new landowners (de Villiers 2008a:87).

2.6.3.5 Eastern Cape and Mkambati Nature Reserve

The Mkambati Nature Reserve is very rich in biodiversity, and many conservationists want to strictly protect this piece of pristine environment. Adjacent to the nature reserve are seven villages making up the Thaweni tribal authority. One of the villages lodged a claim as they were forcefully removed from the area in 1920 (Kepe 2008:313). The other villages, however, also wanted to be part of the claim as they used the area for winter grazing and they argued that they now all fall under one tribal authority. The households that were forcefully removed were financially compensated and land was restored to the Thaweni tribal authority. The Mkambati Trust was formed to go into co-management with the Eastern Cape Parks Board. Co-management has arguably added to a sense of unclear land rights following the successful land claim as most of the power remains with the state in the co-management model promoted in South Africa.

Besides the conflicts within the seven villages on the rightful claimants there is a history of mistrust between the conservation agency and the communities around Mkambati Nature Reserve as they were not allowed to use resources. With all these mistrusts and conflicts, it is unlikely that co-management of Mkambati Nature Reserve, which originates from a disputed land claim, will achieve the stated goals. With Mkambati Nature Reserve being only about 7,000 ha, but having about 6,000 households looking on it as one of the key sources of their complex and diverse livelihoods, its natural resource base clearly cannot support the potential demand (Kepe 2008:313–314) . Over the last 10 years Mkambati Nature Reserve has become

one of the focal points for a government-initiated ecotourism programme. However, this incentive is surrounded by many uncertainties. These include the lack of enthusiasm from potential investors, the sheer numbers of local people who need to share the revenue, and the absence of strong local institutions to manage equitable distribution of revenues among the local poor. Currently there is no evidence that there is a genuine common vision for the future of Mkambati. There is no evidence either of concrete attempts to ensure that this vision exists before embarking on a co-management arrangement (Kepe 2008:313–318).

2.7 Summary and conclusion

Major social reforms such as land reform are rarely an absolute success or an absolute failure and the outcome is usually more nuanced. It also depends on with what and how the success is measured (hectares, employment, poverty alleviation, etc). The government must publicly recognise the complexity of land reform and take steps to downscale expectations. The drive of government towards meeting what appear to be unrealistic land reform targets contributes to the many failures of communities on the ground (de Villiers 2008b:8–14). It is also important that the land restitution process is followed in the right sequence, with the RLCC acting as a neutral party, to try to ensure a positive outcome. This process needs time, resources and capacity building, which are not always available and/or possible because of political pressure. Roles and responsibilities need to be clearly defined and outside assistance should be sourced, if needed, for additional assistance on the community side that is not within the mandate of the conservation agency, such as the establishment of benefit-sharing mechanisms and communication procedures. The model design and reporting back on the results for the seven priority areas can assist in this regard (see chapters 3, 4 and 6). Holding land in a CPA is complex and challenging. Experience shows that the larger the community that holds land, the more challenging it is to manage the land effectively. This is not unique to South Africa, and other international examples demonstrate that community-held land is often subject to internal dispute, conflict and ineffective management practices (de Villiers 2008b:8). Therefore it is important to ensure that the leadership of the land claimant representative structures are the true representatives. The number and cohesiveness of people claiming a certain property impact on the success of land restitution and co-management in protected areas. Small family groups are usually more cohesive and patient, and therefore decisions are easier to make, roles are better clarified, resources better pooled and people are willing to work harder, since it is for their own benefit, so that a maximum number of people

can be employed (de Villiers 2008b:15). Each specific situation per claimant group has influence on the optimum co-management option from the continuum of eight options.

Biodiversity conservation remains a government responsibility that requires long-term subsidy. However, conservation agencies are now confronted with land restitution and benefit-sharing arrangements in co-management agreements without additional government funding, which makes them unsustainable, at least in the initial stages. This is in contrast to private nature reserves that have been claimed and in which the properties have been bought out by the government. This provided funds for the former management of the private nature reserves, which are often used to go into a back-to-back lease with the new landowners after land restitution (Venter 2008). Another contesting issue is the confusion in definition of co-management in the South African context in comparison with international literature on co-management. Legally it is understood as co-management in which the co-management partners consult each other on a strategic level, but the conservation agency remains responsible and accountable. The day-to-day operations remain the responsibility of the conservation agency appointed by the state and it is upon the discretion of the conservation agency to delegate certain powers. In cases of land restitution in particular this does not reflect the expectations of the new landowners and the reality of a change in resource and land rights. Kepe (2008:311) identified three key possible reasons for the unimpressive performance of co-management in reconciling land restitution and conservation. The first reason is that the origin of co-management is in the conservation of high-value natural resources (eg fisheries and forestry), rather than in or including concerns for resource and/or land rights. The second is the neglect of key conditions for successful co-management, as discussed in the co-management literature (see 2.3.3). The final reason is the ambiguity in settlement agreements, including the use of terminology and concepts that reinforce unequal power relationships, with the state emerging as the powerful partner. It has to be seen how best powers and decision making can be decentralised in co-management under the current South African legislation. Beneficiation from nature-based tourism can be one of the mechanisms to provide benefits to co-management partners and to come to a mutually beneficial arrangement. Partnerships with the private sector are crucial to making co-management beneficial to all the partners involved (Wolmer and Ashley 2003:31–40). Some protected areas under SANParks jurisdiction and in the North West (among other provinces) have tried to become more profitable money spinners and have given concession rights to private business to operate luxury lodges and other enterprises so that income is maximised, employment opportunities created, capacity building encouraged and Black Economic Empowerment (BEE) targets met (Carruthers 2007:297). This thesis gives recommendations

for the best possible ways to do so and to ensure some short-term tangible benefits for the land claimants to ensure their continuous commitment and engagement in the process. Intangible benefits should not be neglected, but are difficult to measure and often not the immediate priority for communities and are therefore not the main focus of this study. The optimum vehicle and timing for commercialisation must be well understood and decided upon. Socio-economic, strategic, risk transfer, infrastructure upgrade and environmental values should be taken into account beside the monetary value when going into commercialisation. Expectations around beneficiation for communities need to be carefully managed as the monetary value per household remains modest. The development of methods to manage these expectations forms an integral part of this thesis (chapters 3 and 6).

If protected areas are to survive, they need financial support. Creative thinking is required and probably most successful when based increasingly on the principle of user pays, including innovative sources such as payment for ecosystem services. Governments need to embrace the user-pays concept more enthusiastically, enabling protected areas to retain more of the income they generate; if not, they are obliged to continue subsidising protected area management. Financial flows are not always managed effectively, either in relation to protected area financing needs or conservation priorities. In many cases protected area funding is skewed towards recurrent costs, especially staffing, while critical investment needs remain under-funded. Cost sharing mechanisms have potential to improve protected area financial sustainability. Therefore it is necessary to look into possible partnerships and benefits beyond boundaries and to ensure the adequate integration of the MPs of the protected area into the IDPs. The feasibility study of the three proposed projects in and around Blyde River Canyon Nature Reserve assists in the formulation of recommendations in this regard (chapters 3 and 5). Another problem is that many protected areas are still subject to a centralised revenue system. Where income is not retained and budget allocations are not linked to earnings, there are few incentives for protected area managers to generate more revenue and little responsibility or accountability for them to do so. Some protected areas are unlikely to be able to generate sufficient income on their own, as their values are primarily in the form of public goods that benefit all people. Therefore they continue to depend on public funding or other innovative ways of being compensated for the ecosystem services they provide to society at large. Protected area managers must learn to justify their funding in terms of socio-economic benefits. Agencies also need to become more businesslike in their operations and co-management can be a possible way to put more pressure on conservation agencies to change into that direction. As in much else, diversity is the key to success in financing protected areas (McNeely 2008:106; Emerton et al 2006:18).

Chapter 3: Methodology

3.1 Introduction

As stated in section 1.3, the topic of land restitution in protected areas is complex and has an interdisciplinary character (social, economic, biodiversity conservation and legal). Until now, most studies have focused on one or two disciplines to approach the subject, instead of a more holistic and integrated approach. To arrive at the most beneficial model for all parties involved, it is necessary to break down some of the complex issues and to come to a general model design in which the mutual overlap between the disciplines is found. Each situation is specific and should be tailored to it. However, to facilitate an informed choice for the parties involved, a more generalised model is needed as a starting point, using certain tools, such as the ideal sequence of land claims process, the tourism/biodiversity ranking, and the beneficiation matrix, as explained in this chapter. The option from this process should be tailored to the specific situation with maximisation of benefits such as pro-poor tourism principles and benefits beyond boundaries as an ultimate goal to come to a more feasible model over a long period. This is in the interest of the conservation agency involved, such as the Mpumalanga Tourism and Parks Agency (MTPA), as its mission statement involves all these various disciplines.

The general research methodology, research methods and samples have been explained in section 1.4 and section 1.9. The methodology of the model design, including the methods developed and used for the testing and analysis of the model in the seven priority areas, is outlined below. The first part explains the methodology to come to a model design that can be used by the conservation agency to reach a consolidated government position and strategy. This process is divided into three steps, namely the establishment of an internal position of the conservation agency; the establishment of an agreed government position with other relevant government departments; and the establishment of generic settlement and co-management frameworks (see 3.2). An outcome of the 5th World Parks Congress (WPC) is that there is a need to introduce methods to recognise the total value of protected areas to economic activity, social wellbeing and environmental goods and services (de Villiers 2008a:14). This aspect is addressed in the second part of the methodology. Tourism-related benefits in a pilot site are estimated via literature research. Other conservation-related benefits, looking also beyond the boundaries of the protected area, are taken into account in various feasibility studies of projects (river corridor, hydropower and bio-cultural protocol)

in the same pilot site to be able to compare the estimated tourism-related benefits with the other estimated conservation-related benefits (see 3.3). The third part of the methodology explains the development of various methods that can be used to balance biodiversity conservation and beneficiation expectations in the negotiation phase with the land claimant representative structures (see 3.4). In the summary and conclusion (see 3.5) the overall model design for land restitution in protected areas is visualised and summarised in detail.

3.2 Design of a model for a consolidated government position and strategy

3.2.1 Model design for internal position conservation agency

3.2.1.1 Institutional set-up for following land restitution process

The ideal (logical) land restitution and co-management process as described in 2.2.2 is presented to relevant staff of the conservation agency through visualisation via a PowerPoint presentation. The importance of the alignment of the pre- and post-settlement process is highlighted in the presentation. The memorandum of agreement (MoA) (see 2.2.1) is translated into twelve basic land claim settlement principles, and these are presented as well (see 3.4.5). To have the right information at the right stage (see table 3 in 2.2.2), a land claims register is created to see what information is already available for each protected area. Following the ideal process of land restitution in protected areas according to the MoA ensures the linkages between the social and biodiversity conservation disciplines of this thesis within the legal framework. Mechanisms around the coordination of the land restitution and co-management process within the conservation agency are put in place through a proposed internal land claims task team chaired by the chief operations officer (COO) and social ecology (see note 3 under 1.7) as secretariat. The proposed internal land claims task team of the conservation agency are responsible for the day-to-day management around the land claims. This proposed team is put in place for the coordination of the activities around the negotiation workshops and capacity building of the claimants and staff of the conservation agency. The proposed team work within a mandate from the board of directors of the conservation agency and under the guidance of the Regional Land Claims Commission (RLCC) when interacting with the claimants. Only by working in a coordinated matter is the conservation agency able to talk in one voice to the RLCC and the claimants. This is important as different interests are involved and attempts might occur in which individuals want to divert from the ideal process. It is important that the employees of the conservation agency who are part of the proposed team are not part of the claimant

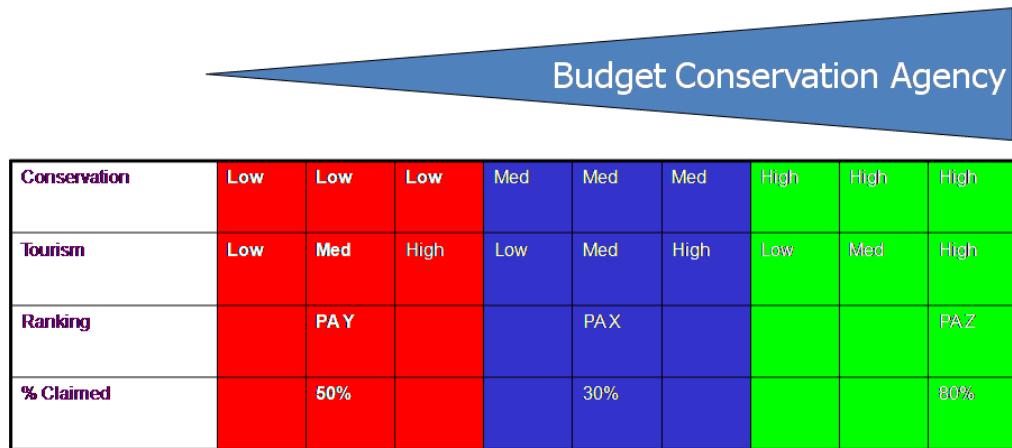
community themselves. This is an important requirement to avoid conflict of interest. It is proposed that the internal land claims task team should advise the executive management committee (EMC) of the conservation agency, and that the necessary interaction with other government departments should take place through joint government meetings (de Koning and Marais 2009d:9–10).

3.2.1.2 Ranking of biodiversity and tourism value

It is important for the conservation agency to be proactive in the facilitation stage of the land claims process. If not, there is a risk that not all settlement options will be thoroughly understood by the RLCC and the claimant community, and therefore the co-management option is chosen because the RLCC promotes the land restitution option. Co-management can work in certain protected areas, but is not necessarily the best option if there is low tourism potential. Furthermore, the claimant community should understand that co-management does not bring immediate benefits, and entails cost and risk sharing. If the claimant community and the conservation agency enter into an agreement with the wrong expectations, this causes unnecessary conflict. If co-management in a protected area is entered into from a conflict point, it is doomed to fail, which is not the desired situation for any of the parties involved. Therefore a more proactive approach by the conservation agency in the facilitation process is a necessity. As argued in de Koning and Marais (2009c:74), for the conservation agency to be more proactive in this process, it is necessary to make an analysis per protected area on biodiversity value, legal restrictions of land use and access, existing developments and development potential, and the size of the claimed portion per protected area. Most of this information is available within conservation agencies, but should be compiled into packages per protected area that can be shared with the claimant community. The use of maps can facilitate the interpretation by the claimant community. The conservation agency must formulate a vision of the preferred settlement option per protected area. Its mandate is to protect areas with high biodiversity value and manage these areas in a financially sustainable way. Therefore it is crucial for the conservation agency to do a ranking exercise of the biodiversity and tourism value of its protected areas and to see where the focus of its financial budget should be. This process should be led by an independent expert, on behalf of the conservation agency, without involving personal interests and emotions within the conservation agency. The biodiversity/tourism ranking exercise brings together the biodiversity discipline and the economic discipline in this thesis. The ranking process is illustrated in figure 2 below.

Pre Settlement:
• Lodgement
• Validation
• Gazetting stage
• Facilitation process
• Settlement
Postsettlement:
• Implementation

Ranking of reserves (claimed portion)



(de Koning and Marais 2009b)

Figure 2: Ranking exercise of the biodiversity and tourism value

PA X, Y, Z = Each Protected Area (PA) that is being ranked (eg X, Y, Z) should be categorised according to the ranking in tourism and conservation value. Furthermore the percentage of land claimed in that PA should be indicated.

The ranking exercise is used as a tool in two internal workshops of the conservation agency to come to a quick overview of the biodiversity value and tourism value of the concerned nature reserves. The quick assessment is made in two groups, that is, by biodiversity conservation-related staff (reserve management staff and ecologists) and tourism-related staff of the conservation agency. At the same time it is important for the conservation agency to do an external audit on the biodiversity value and tourism value (and potential) for the same concerned nature reserves. The results of the internal ranking exercise are compared with the external audit results (see chapter 4). This comparison provides an estimate between perceptions and facts on biodiversity and tourism value of the concerned nature reserves. The ranking exercise based on facts, together with additional information, is used within the model design to give guidance on the preferred settlement and co-management option. The results of the ranking exercise are also used in the negotiation and capacity-building workshops for the land claimants to come to more realistic beneficiation expectations.

3.2.1.3 Beneficiation matrix to determine co-management option

The beneficiation matrix was developed by de Koning (2009a:12–14) as a tool to facilitate the choice for the optimal and/or most appropriate co-management option for a certain situation. The beneficiation matrix brings together the social discipline and the economic discipline in this thesis. Table 5 illustrates the advantages and disadvantages for the neighbouring communities and/or landowners for each co-management type as described in section 2.3.3. If the protected area has high development potential, more rights and benefits (advantages) go to the landowners if they choose one of the models with a high level of participation, which is positive for them. However, the additional benefits and rights come with certain responsibilities and inputs such as in human and financial resources, which are negative for the landowners. If the landowners choose one of the models on the left side of the participation scale, then they have fewer rights and benefits, which is negative, but they have hardly any responsibilities and costs, which is positive for them. It depends on the unique situation per protected area and landowner group which of the co-management options is the optimum for the specific situation. A similar analysis can be done by the conservation agency and possible other co-management partners. Each co-management partner has to decide which co-management type is optimal for them. By combining and compromising the preferred option for each partner, the best mutually beneficial situation can be estimated. The eight co-management options can be used as a monitoring tool per protected area to see whether there is an increase in participation along the scale. However, the final stage or final ‘win-win’ situation is not necessarily on the extreme right of the scale. This point depends on a complex set of factors, such as the capacity and willingness of co-management partners, and the development potential of the area. As stated under 2.3.3, the lease, part lease / part co-manage and the cooperative co-management models are currently supported under the National Environmental Management Protected Areas Act (NEM:PAA) and were therefore selected to form the basis of the national co-management framework. The national co-management framework combines the social and economic disciplines of this thesis within the legal framework of biodiversity conservation management in protected areas.

Table 5: Beneficiation matrix as a tool to facilitate choice optimal co-management option

LANDOWNERS	Ad hoc benefit sharing	Consultation benefit sharing	Lease	Part lease, part co-manage	Co-manage	Part co-manage, part delegate	Delegated managed	Privately managed
Rights and benefits								
Immediate benefits	+	++	+++	++	-	--	--	---
Access rights	+	++	++	++	+++	+++	++++	++++
Resource use rights	+	++	++	++	+++	+++	++++	++++
Decision rights	-	-	-	+	++	+++	++++	++++
Equity (in business) rights	-	-	-	+	+	++	+++	+++
Commercialisation rights	-	-	-	+	+	++	+++	+++
Responsibilities and costs								
Capacity building	--	-	-	+	++	+++	+++	++++
Investment	-	-	-	+	++	+++	+++	++++
Risk taking	-	-	-	+	++	+++	+++	++++
Cost bearing	-	-	-	+	++	+++	+++	++++
Human resources	--	-	-	+	++	++	+++	++++
Monitoring and reporting obligations	-	-	-	+	++	++	+++	++++

(de Koning 2009a:14)

	= Positive	+	= more applicable
	= Negative	-	= less applicable

The various types of co-management and the beneficiation matrix are translated into a comprehensive PowerPoint presentation. The PowerPoint presentation is given to staff of the conservation agency and the beneficiation matrix is tested in two internal workshops. The assessment is made in two groups, that is, by biodiversity conservation-related staff (reserve management staff and ecologists) and tourism-related staff of the conservation agency. The staff are asked to estimate the optimum co-management option for the current situation, the potential optimum co-management option for when the claim is settled, and the optimum co-management option in the case that they themselves should be claimants. This exercise indicates how the staff of the conservation agency perceive their own role currently, whether they think that the priority areas are managed in the most effective and efficient way, and how they would like to manage the areas if they were the landowners.

3.2.2 Model design for agreed government position

It is envisaged to establish an internal position of the conservation agency through internal task team meetings and internal workshops, making use of the information gathered and the outcomes of the ranking and beneficiation matrix exercises. Inputs on co-management are given in alignment with Section 42 of NEM:PAA (see 2.3.2). The proposed internal position should then be presented in the EMC of the conservation agency for approval. The approved internal position of the conservation agency is visualised in a PowerPoint presentation to form the basis for negotiation in joint government meetings to guide the process towards an agreed consolidated government position. First of all, it is important that an in-principle agreement is negotiated with top management of the conservation agency, RLCC, Department of Land Affairs (DLA) and Public Works. The in-principle agreed framework needs to be discussed with officials responsible for the implementation to get their buy in and to tailor the in-principle agreed framework to the day-to-day issues encountered on the ground. The outcomes of this process are presented in chapter 4.

3.2.3 Model design generic settlement and co-management agreement frameworks

The outcomes of the first two phases of the model design (approved internal position of the conservation agency and agreed government position) are translated into generic settlement and co-management agreement frameworks. Legal inputs from the various government stakeholders are asked to make the agreement frameworks legally compliant with all relevant legislation. The core of the settlement agreement framework is based on the twelve land claim settlement principles distilled from the MoA signed between DLA and the Department of Environmental Affairs and Tourism (DEAT). The core of the co-management agreement framework is aligned with Section 42 of NEM:PAA and the same headings are used, such as

the delegation of powers, benefit sharing, use of biological resources, access, development of economic opportunities within and adjacent to the protected areas, development of local management capacity and knowledge exchange, and the structure and functioning of the proposed co-management structure. The settlement and co-management agreement frameworks are used as the basis for discussion with the land claimant representative structures. This is an integral part of the model design as it allows the government departments involved to talk in one voice and within a legal framework when engaging in the negotiation process with the land claimants. This approach can give guidance to a more informed decision-making process instead of decisions being made on the basis of emotions and perceptions rather than facts. The results of the last part of the model design are given in chapter 4.

3.3 Conservation-related benefits compared to benefits from tourism

3.3.1 Selection of case study site

According to David Mabunda, chief executive officer (CEO) of South African National Parks (SANParks), protected areas are not created to make a profit and it is wishful thinking to suppose that ecotourism in national parks is viable. According to him, parks are created to serve the nation by protecting the environment ‘as carbon sinks to provide fresh air and sources of clean water, and buffer zones against disaster such as floods’. This is indisputable evidence that parks are already benefiting communities in many ways in their current form (Hofstaetter 2008:48–49). The latter statement is true, but the challenge remains for conservation agencies and landowners to get more direct benefits from these so-called ecological services to sustain the conservation of these valuable areas. As stated in 2.5.1, the following sources of potential revenue are seen to have the biggest potential to mobilise finance for protected areas, namely tourism; resource utilisation, including bio-prospecting; ecological services; and existence values such as media rights and international donations.

The second objective of this thesis is to explore options and to give recommendations for so-called benefits beyond boundaries, in addition to possible sources of revenue inside the protected area to make the proposed beneficiation models more sustainable (see 1.3). As Blyde River Canyon Nature Reserve is located within Kruger to Canyons (K2C) biosphere reserve and because biosphere reserves are considered excellent learning sites for benefits beyond boundaries (see 1.6.3), this priority area was selected as the case study site for the

three proposed projects. The possible benefits from the feasibility study of the three proposed projects can contribute to the diversification of socio-economic benefits as opposed to the benefits coming solely from tourism and can therefore contribute to more sustainable livelihoods. Therefore besides the outcomes of the feasibility studies of the proposed projects, a projection of possible tourism-related benefits in Blyde River Canyon Nature Reserve is given.

3.3.2 Proposed beneficiation model from tourism

As stated in 2.4.1 it is generally accepted that careful tourism investment is a sensible way to generate an income flow that can be used for environmental management. Tourism to protected environments has recently been seen as one of the fastest growing tourism activities in many countries around the world. It is important to attract international as well as domestic tourists because both can contribute consistently to the local economy. Especially in remote and inaccessible places and/or places that are known for crime, the market relies more on domestic tourists (Kepe 2001:155–156). Blyde Canyon National Park Tourism Development Concept and Manual (Robford Tourism 2006a and 2006b) and Blyde River Canyon National Park Tourism Development Strategy (DEAT, Mpumalanga Department of Agriculture and Land Affairs and IUCN 2006) and Blyde River Canyon National Park Business and Development Plan (Busico cc 2005) are used to estimate the tourism-related benefits directly linked to Blyde River Canyon Nature Reserve. The revenue generating strategy of the MTPA (Kusimama 2009) and the external audit on the biodiversity and tourism ranking (Kamoza 2009) are also taken into account, as well as the current DEAT-funded social responsibility project (de Beer, d’Oliveiro and Jesche 2007). In 2001 it was proposed to extend the current nature reserve on the eastern side and to proclaim it a national park. The eastern side is currently managed by the Department of Water Affairs and Forestry (DWAF⁹) and contains both indigenous forest and plantation forests. In 2001, a cabinet decision was taken to de-commission the DWAF plantations in the Drakensberg catchment of the Sand River, and transfer the land to DEAT for the conservation of indigenous forests. The plantations were poorly managed and uneconomical, but provided jobs for poor people in the former ‘homelands’ between Blyde River Canyon Nature Reserve and the Kruger National Park during the apartheid regime. Two sawmills were operating in the area, but have been bought out by the government, as the idea is to rehabilitate the plantation areas so that the water catchment area of the Sand River can be re-established. Subsequently and upon request of neighbouring concerned communities, a study has been commissioned by DWAF

⁹ DWAF was transformed in the Department of Agriculture Forestry and Fisheries (DAFF) after the elections in April 2009.

to review the cabinet decision and to keep some of the plantations to sustain jobs in the region. In 2009 also an amendment of NEM:PAA took place in which it is stated that national parks can only be managed by SANParks and not by a provincial conservation agency, as agreed upon in 2001. Therefore the whole idea of the proclamation of the national park is still uncertain at the start of 2010. DWAF and the MTPA are still negotiating and finalising a process for the transfer of the management of the indigenous forests from DWAF to the MTPA. Therefore the estimated benefits from tourism are based on Blyde River Canyon Nature Reserve and the indigenous forests on the eastern side, including some of the neighbouring areas, to include possible benefits beyond boundaries from tourism as well. This is especially relevant for Blyde River Canyon Nature Reserve because tourism developments within the nature reserve are limited owing to physical constraints caused by the steep canyon. The estimated tourism-related benefits are presented in chapter 5.

3.3.3 River corridor project

To address possible benefits from ecosystem services and the importance of a bioregional approach as stated in 2.5.3 and 2.5.5 a terms of reference (ToR) for a feasibility study of a potential river corridor¹⁰ project in the K2C biosphere region is established through the river corridor steering committee that is set up. Until now the K2C has initiated and supported projects that aim to bring economic equity (in a sustainable manner) to the region. The philosophy of the K2C biosphere region is not to create more protected areas (and put up more ‘fences’ that exclude residents of the region), but rather to establish corridors to link existing protected areas while creating opportunities for livelihood improvement. The proposed K2C river corridor project would lead to regional-scale linkages between major protected areas in the savannah biome and the adjacent grassland and forest biomes on the escarpment. Connecting such a variety of ecosystems and cultural groups has rarely been achieved in any larger conservation area across the world. The first issue to address in achieving a K2C river corridor is the selection of an appropriate corridor. This should be undertaken based on its combined value to biodiversity conservation and local economic development, including but not limited to tourism and other natural resource-based enterprise opportunities, education, conservation and awareness of ecosystem services and job creation.

According to the established ToR, the feasibility study has as an outcome that all necessary information is on hand in order to facilitate an informed choice on the most suitable and

¹⁰ A corridor is defined as ‘a passage that links areas/compartments’. In the context of this initiative a corridor is understood to mean ‘a passage that provides links for biodiversity, ecological services and sustainable, local economic development’ within a larger catchments area.

practically to be implemented river corridor in which the contributions to biodiversity conservation, ecosystem services and local economic development are balanced. The design of the river corridor should maximise opportunities for biodiversity conservation, while minimising human-wildlife conflict and creating opportunities for local development. This baseline enables the development of an implementation plan and a fund-raising strategy for the next phases. The specific objectives for each potential river corridor, according to the established ToR, are to determine:

- The value of improving the provision of ecosystem services to residents of the region, particularly the poorer rural communities. Of particular interest is the provision of fresh water by the rivers and wetlands of the region, that is, how the creation of a particular river corridor improves the hydrology and water quality of the relevant sources of fresh water.
- The value of improving biodiversity conservation in particular in areas outside the formal protected areas. Attention should be given to connecting riverine habitats and allow the migration of fauna and flora beyond existing boundaries particularly in the context of climate change.
- The value of creating sustainable local economic development, through increased tourism and other natural resource-based opportunities, education, job creation and community public-private partnerships (cPPPs) outside current formally declared protected areas. Consideration should be given to how the corridors can unlock opportunities for land claims.
- An overview of the existing enabling policy environment and its bottlenecks for the river corridors (eg protected area expansion strategies and stewardship programmes).

According to the established ToR, additional objectives are:

- To identify critical issues with planning and implementation.
- To produce objective criteria that can be used to compare the river corridors and select the best option.
- To provide basic guidance for the next phases.
- To identify possible donors and funders for the future phases and provide the application criteria required by these prospective donors.

The established ToR is submitted to six possible service providers that are identified by the steering committee members, and the most appropriate service provider is selected by the steering committee via a scoring system on the submitted proposals. The results of the feasibility study are given in chapter 5.

3.3.4 Hydropower project

The importance of water and the possible generation of hydropower on existing dams via hydropower projects are stated in 2.5.4. As a result of the exchange trips and official partnership between the Rhön biosphere reserve in Germany and the K2C biosphere region, one of the most viable identified projects is the installation of a hydropower station on the Blyde River at Blyderivierpoort dam wall (de Koning 2009b:9). A project is planned for the set up of small water turbines in the Blyde river system for decentralised production of renewable electric energy. As the necessary constructions (dam, pipes) are already in place, the installation of two small water turbines at the dam itself (producing an estimated total of 1.68 million kWh) would require only moderate economic investments. A hydroelectric power plant could feed electricity into the grid of the regional supplier. Even with the currently low refunds for feeding energy into the national grid, the turbine could run profitably within 3–4 years. The project is expected to have the following results:

- A move towards environmentally sustainable energy production is initiated for the region.
- Local power supply, which is currently frequently suffering from power cuts, is stabilised and thus living standards of the local population are improved.
- Alternative income generation emerges, combined with the development of new employment opportunities such as job creation for the removal of alien plant species in the water catchment to improve the water supply.

(de Koning 2009b:9)

The idea is ultimately to link some of the possible beneficiation from the proposed hydropower project to the settlement and co-management process so that the proposed beneficiation model for co-management in Blyde River Canyon Nature Reserve becomes more feasible over a long period. A steering committee of organisations directly involved in the project is established to guide and oversee the process. Via the steering committee a ToR is established with the objective of conducting a comprehensive pre-feasibility study on the technical and financial feasibility of the proposed project with recommendations on the institutional set-up and beneficiation model. The ToR is distributed to several service providers and the best service provider is selected for the consultancy. The results of the consultancy are presented in chapter 5.

3.3.5 Bio-cultural protocol project

To study benefits from natural resources in more detail (see 2.5.2), a bio-cultural protocol project is set up in relation to the objectives of the Convention on Biological Diversity (CBD), which are conservation and sustainable use of biological resources and fair and equitable sharing of benefits realised from the use of these biological resources and associated traditional knowledge. Communities in South Africa have rights to access natural resources and to have their traditional knowledge protected (National Environmental Management Biodiversity Act No 10 of 2004). However, many communities remain ignorant of their rights and even when they know their rights, they lack the opportunities to discuss the issues within their communities. Drawing up bio-cultural protocols can assist communities in not only protecting their traditional knowledge and traditionally used resources, but also in assisting them in gaining access to historically used resources or areas for resource use/collection that have in recent years become unavailable to them. This is also in the interest of the conservation agencies and land claimants of the statutory protected areas as often the very informal access and resource use/collection can be more formalised. Providing formalised access and giving permission for the collection of resources, especially commercial use, can generate extra benefits related to the protected area as the benefits should be shared with the provider of the resource. A bio-cultural protocol is a document that is established in conjunction with the relevant stakeholders that clearly outlines the aspects of the community involved, and their approaches and vision on conservation and sustainable use, access, benefit sharing and traditional knowledge.

The project is set up around Blyde River Canyon Nature Reserve, covering all three zones of a biosphere reserve. The aim of the project is to improve on both conservation and sustainable livelihoods, with bio-cultural protocols as a tool to arrive at access and benefit sharing (ABS) agreements with commercial interests for the providers of the resource as well as the people with the traditional knowledge of the resource. The bio-cultural protocols provide certainty and clarity for the private sector that relies on the biological resource and/or traditional knowledge for its business. The long-term goal would be protocols such as this driving sustainable livelihoods and ensuring community-based natural resource management (CBNRM). The selected pilot site is described and visualised in detail in figure 3.

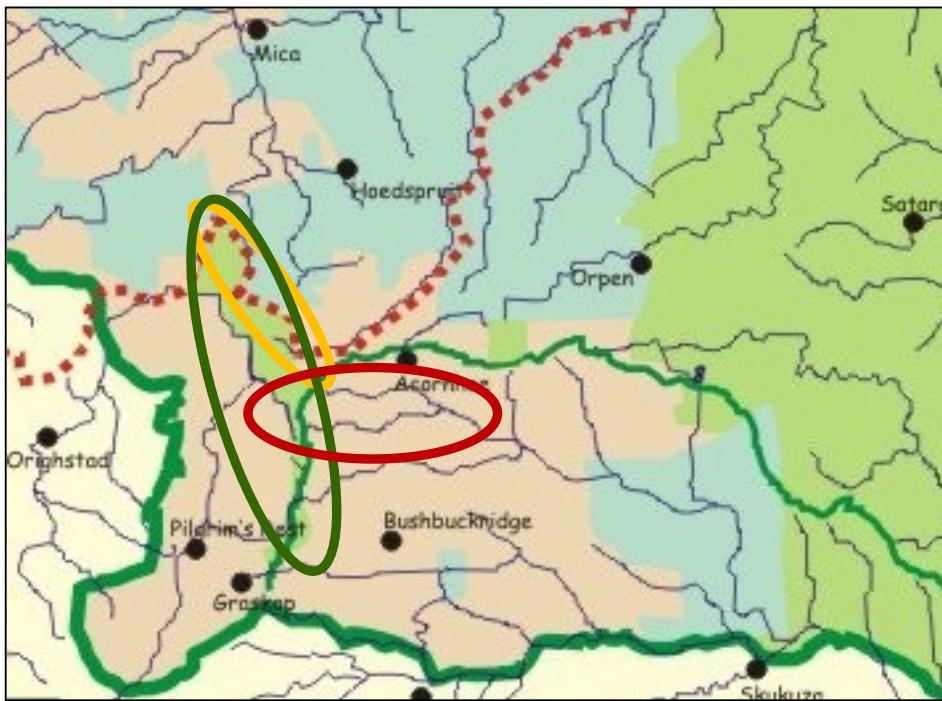


Figure 3: A map of the proposed pilot study sites for bio-cultural protocol project

Core zone Blyde River Canyon Nature Reserve

Buffer zone: The communal/state areas of non-transformed land on the eastern slopes of the escarpment, alongside Blyde River Canyon Nature Reserve, including the indigenous forests, grasslands and savannah foothills

Transition zone: The transformed areas (villages and communal land, etc, of the Sethlare, Moreispusho and Chiloane tribal authorities)

A quick field and desktop survey is used to give an indication of the best resource to start with for the study. Guiding considerations for determining the resource to start with in the bio-cultural protocol project include the following:

- The resource is of significant economic value in/and beyond the pilot site.
- The resource contributes significantly to the livelihoods of local people, especially within the pilot study sites and the immediate surrounds.
- The resource is one of those that are in the greatest demand in the region.
- For the purposes of this study the resource does not need to be ‘processed’ and it can be in demand for its natural state.
- The resource risks being overexploited and is under threat of illegal and unsustainable harvesting methods.
- There is substantial traditional knowledge around the resource.

The results of the bio-cultural protocol project are presented in chapter 5.

3.4 Methods to balance the objective of conservation with beneficiation expectations

3.4.1 Series of workshops and logical sequence

As stated in 2.2.3, the RLCC is often biased towards the restoration of land rights and the co-management model without fully understanding all the relevant environmental legislation as well as all the pros and cons of this model in the specific situation. Co-management is often promoted as the most beneficial model, which has led to high and unrealistic expectations. Therefore it is important for the conservation agency involved to be as proactive as possible and to share relevant information with the RLCC and the land claimant representative structures so that an informed choice can be made. The process of engagement between the conservation agency, RLCC and the claimant representative structures starts with the explanation of the land restitution process in protected areas, the legislation, including the link to relevant international conventions, and the various settlement options involved. Subsequently more information on the specific protected area is gathered via a participatory mapping exercise involving staff of the conservation agency, RLCC and the claimant representative structures. The land claimant representatives are given an opportunity to explain their area, the history, institutional setting, their knowledge and expectations in detail. This exercise is also used to create a basis for discussion and negotiation. A ranking exercise is conducted to facilitate the understanding of the importance of the various stakeholders involved in the process and to be able to distinguish the primary and secondary stakeholders. This process described above is done in the first series of workshops.

In the second series of workshops the twelve land claim settlement principles abstracted from the MoA are presented (see 3.4.5) as well as the various types of co-management (see 2.3.3) and the tool of the beneficiation matrix (see 3.2.1.3). If possible, an exposure visit is conducted at this stage, so that the stakeholders start to understand the settlement and co-management options better. After having formed a clearer picture of the specific situation, the settlement agreement framework negotiations take place in the third series of workshops. After the settlement agreement framework negotiations, a more detailed capacity building on co-management and the proposed beneficiation model takes place in the fourth series of workshops. The tourism and biodiversity value ranking results based on facts are presented and explained to the land claimant representative structures. In case of need for further clarification of the feasibility and viability of the chosen option, a participatory socio-

economic assessment is conducted so that the major risk areas can be identified and understood. Roleplays are conducted if a better understanding of role clarification in the proposed co-management model is needed. In the fifth series of workshops the co-management agreement framework negotiations take place, and feedback is given on the requested changes in the negotiated settlement agreement framework. After the in-principle agreement on the settlement and co-management agreement frameworks, a community resolution is facilitated by the land claimant representative structures, under guidance of the RLCC, to ensure that the land claimant representative structures are authorised by the broader claimant group to sign the agreements on their behalf. At this stage also the process of the establishment of management plans (MPs) according to NEM:PAA is explained by the conservation agency, including the process of joint visioning. The process of establishing and/or reviewing the MPs can be used as a capacity-building tool for the land claimants to better understand important issues and terminology around conservation, tourism and business development. The presentation and explanation of a proposed joint ToR for the co-management committee (CMC) to be established is part of the capacity-building process. The capacity-building process also includes a monitoring and evaluation strategy and communication strategy. After the presentation of the outcomes of the community resolutions, the settlement and co-management agreements can be signed, if all outstanding issues have been resolved.

The series of workshops, as described above, starts from the broad overview of the framework of land restitution in protected areas. Through a process of information sharing, the process narrows more and more towards the best settlement and co-management option for the specific situation. The chosen option is negotiated in detail within the settlement and co-management agreement frameworks as a basis. At the end of the series of workshops a start is made towards the implementation of the chosen settlement and co-management option. Implementation of the post-settlement process can start as soon as the settlement and co-management agreements are signed. In most cases where there are more land claimant representative structures per priority area, the series of workshops is given simultaneously by joining the groups into one workshop. In each stage of the process various methods are used to try to manage the expectations of the claimant representative structures with the requirements of biodiversity conservation. The developed methods are explained in more detail below. Recommended social research principles are taken into account while conducting the series of workshops and the development of the various methods, that is, the principle of respect; historical awareness; reciprocity, mutual benefit and equitable sharing; process; full disclosure; different needs and objectives; communication and due

acknowledgement and acknowledgement of different types of knowledge (Tapela, Buescher, Maluleke, Twine and Steenkamp 2009:10–11). If needed, the workshops are held in the local language with necessary translation so that all the participants can participate fully. The results of the application of the various methods as well as the entire process are given in chapter 6.

3.4.2 Land restitution process, legislation and settlement options

Under guidance of the RLCC the ideal (logical) land restitution and co-management process as described in 2.2.2 is presented to the land claimant representative structures through visualisation via a PowerPoint presentation and/or posters. The importance of the alignment of the pre-and post-settlement process is highlighted in the presentation. It is also made clear that the commercialisation process can only start after signing of the settlement agreement and legally only after the handing over of the title deeds. The land claimant representative structures are made aware of the length and legal requirements of this process so that the expectations can be adjusted to more realistic timeframes. It is also explained to the land claimant representative structures why land restitution in protected areas comes with a lot of restrictions on the title deeds. This is also related to international conventions in which the South African government committed itself to setting aside a certain percentage of land for conservation. Also the relationship between certain water catchments and the influence on the water quality and water quantity downstream across provincial and national borders is explained. Each specific protected area is being put into the bigger picture so that the land claimant representative structures understand why these restrictions on the title deeds are being imposed by the government. The various settlement options and their legal restrictions are explained as well, so that it is clear for the land claimant representative structures that change in land use can only happen in the cases where de-proclamation under NEM:PAA can be approved, and this requires a lengthy process with environmental impact assessment (EIA) requirements. The settlement options of financial compensation and/or alternative land require adequate funds from the government and/or the availability of alternative land. In cases where no budget and/or alternative land are available, these settlement options are not feasible. The information sharing as described above is done according to the principle of full disclosure because communities are entitled to be fully informed about the legislation, mandates (including roles and responsibilities), procedures, restrictions and various settlement options involved (Tapela et al 2009:10). The visualisation of the process in PowerPoint presentations and/or posters enables the community members to better understand the process. Depending on the needs and understanding of the specific land

claimant representative structure, the presentations are translated into the local language and/or additional explanations are given by making drawings on flip charts.

3.4.3 Participatory mapping exercise

As stated and explained in section 1.9 the Participatory Geographical Information System (PGIS) method (Rambaldi et al 2006:106) provides a visual picture of landscapes that everyone can understand, from illiterate people to government officials, allowing everyone to participate in reasoned discussions of often contentious issues, such as land rights and ownership of resources (Chapin 2006:94). A map of the specific protected area is attached to a pin board. In case no printed version of the map is available, an electronic version of the map is projected onto white paper attached to a pin board. In the case of the MTPA the maps of the protected areas in Mpumalanga are available via the Mpumalanga Biodiversity Conservation Plan (MBCP) (Mpumalanga Provincial Government 2006). In the case of the map being projected on white paper, claimants are asked to draw the boundaries of the specific protected area on the white paper to be able to use it as a working tool. The claimants are then asked to draw in specific information by using guiding questions as listed below:

- Which areas are you claiming and to which tribal authorities and municipalities do these areas belong?
- What can you offer the nature reserve?
- What cultural assets and biological resources are present in your claimed area?
- What other features are in the nature reserve like entrance gates, physical structures, river, roads, etc.
- What existing tourism takes place in your area?
- What other operations exist in your area?
- How do you see the relationship with other claimant groups? What about benefit sharing?
- What promises have been made with regard to the nature reserve?
- What skills are needed to manage the nature reserve and do you as claimants have these skills?

Additional questions are posed, depending on the discussion taking place in the group. Therefore the methodology is applied in a flexible matter. To assist the claimants in the exercise, farm names and boundaries can be included in the map. The projection of roads, rivers and mountains via MBCP can assist the land claimant representatives to orient themselves if needed. Comments and information by the claimants on the different features

and aspects are included in textboxes inside or outside the map, depending on space available.

After gathering all the information of the claimants, the reserve manager of the specific protected area is asked to comment and to give additional information if needed and available. The reserve manager, assisted by the regional manager of the conservation agency, is asked to clarify certain issues on existing physical structures and the state of the buildings and how the buildings are currently being used. Additional information is given on the number of staff working on the reserve, budget issues, conservation and wildlife issues, tourism issues, road and safety issues, etc. Enough time is allocated for discussions around many of these issues and information on mandates by the conservation agency and expectations by the claimants are shared. After gathering all the available information, the remaining information gaps are identified and an action plan is drawn up to address certain of these gaps. Other urgent issues that come out of the discussion are prioritised and included in the action plan. It is estimated that the whole exercise takes 3–4 hours, depending on each situation, and is finalised with the drawing up of the action plan. Various social research principles are taken into account through this participatory mapping exercise such as the principle of respect, the principle of historical awareness, the principle of disclosure, the principle of differential needs and objectives (older versus the younger generation) and the principle of acknowledgement of different types of knowledge (scientific versus local knowledge) (Tapela et al 2009:10–11).

3.4.4 Ranking of primary and secondary stakeholders

The land claimant representatives are asked to list all the relevant stakeholders that are involved in the settlement and co-management process. Each stakeholder category that is listed is written down on separate paper cards. The various cards are given to the land claimant representatives with the request for them to rank the stakeholder categories on a pin board in the sequence of most important to least important. Subsequently the land claimant representatives are asked to sort the stakeholder categories into primary and secondary stakeholders. Primary stakeholders have direct responsibilities and rights with regard to the management of the specific protected area, whereas secondary stakeholders have only indirect responsibilities and rights. This exercise and the discussion around the ranking results assist the claimants in understanding their rights and responsibilities in the management and beneficiation of the specific protected area and it clarifies the rights, roles and responsibilities of the other stakeholders involved.

3.4.5 Explanation of land claim settlement principles

Twelve land claim settlement principles are derived from the MoA between DLA and DEAT (see 2.2.1) and are presented to the land claimant representatives. This exercise is done to clearly articulate the legislative framework and restrictions related to land restitution and co-management in protected areas. As the twelve principles are derived from the MoA, the land claim settlement option is land restitution and co-management, as this is currently the only state-promoted strategy for land restitution in protected areas. The twelve land claim settlement principles are as follows:

1. Title in land shall be transferred to claimants without settlement rights (physical occupation), and conditions of use shall be registered by way of notarial deed of restriction against the title in respect of the restored land.
2. The ecological integrity of the nature reserve as a declared provincial protected area shall be upheld in perpetuity.
3. A co-management agreement, as provided in terms of NEM:PAA (No 57 of 2003) as amended, is to be entered into between the claimants' association and the responsible member of executive council (MEC).
4. All claimants on the properties identified for declaration as the provincial nature reserve are required to form one holding or umbrella association (land owners' association and/or broader co-management committee) to ensure representation on a CMC to be formed with the applicable conservation agency appointed by the DEAT minister and/or responsible MEC in accordance with NEM:PAA (No 57 of 2003) as amended.
5. Consideration shall be taken for the implementation of the Black Economic Empowerment (BEE) and all other empowerment legislation as vehicles for beneficiation.
6. Sustained economic and social beneficiation of the claimants shall be structured in such a way that it will be tangible, realistic and optimal, though not compromising the financial sustainability of the provincial nature reserve.
7. There shall be clear and regulated access rights to the properties identified for the provincial nature reserve within which the land is situated.
8. The conservation agency assigned to the management of the provincial nature reserve shall continue to manage the land situated within the provincial nature reserve.
9. Any development of whatsoever nature, including without limitation to commercial projects, tourism facilities and infrastructure, shall be subject to the provisions of the relevant Protected Areas Act, the tourism development and management plan prepared in terms thereof and the appropriate EIA legislation.

10. Leasing of clearly demarcated portions of land within the provincial nature reserve with conditional land use rights shall be possible for the securing of long-term concessions for the development of tourism products. This process, known as commercialisation, shall be subject to free, prior and informed consent from the land owners' association, which shall form part of the bid evaluation committee for the evaluation and awarding of such concessions. The conservation agency shall manage and administrate the commercialisation process.
11. The land restored in the provincial nature reserve may not be alienated other than to the state or a competent authority recognised by the state.
12. The management plan of the provincial nature reserve within which the land is situated shall recognise these principles of land claim settlement for all land restitution claims.

3.4.6 Various types of co-management and beneficiation matrix

The various types of co-management as described in 2.3.3 and the beneficiation matrix as described in 3.2.1.3 are visualised through a PowerPoint presentation and/or posters. The pros and cons of each co-management type are explained in detail, as well as the reality that increased participation means increased responsibilities and costs next to increased rights and benefits. The degree of participation depends on the percentage of land claimed and the capacity and willingness of the land claimants to be engaged in the management of the specific protected area. As stated in 2.7, experience shows that the larger the community that holds land, the more challenging it is to manage the land effectively. This means that the degree of participation also depends on the size, leadership and cohesiveness of the group and whether they have a strong connectivity to the land. Factors such as the development potential of the area, availability of possible outside support, available skills and the distance between the residential area of the claimants and the nature reserve also play a role. In general it is explained that smaller and cohesive groups with a strong established leadership living close to the specific priority area and with a strong connectivity to the land and a high development potential with many possibilities for outside support have better chances of success in the more participatory models than other groups. Currently legislation allows for the lease, part lease / part co-manage and the cooperative co-management model to take place and the choice of the land claimants should focus on these three options only at this stage (see 2.3.3). Because the MEC has to appoint the conservation agency for the management of the provincial nature reserve, it is unrealistic to think that a group of land claimants have enough skills and resources to execute this function. Over time, however, capacity could be built and the land claimants could form a structure that eventually would qualify to be

appointed by the MEC as the conservation agency. Under the current South African legislation this is only possible for provincial nature reserves, and not for national parks, as all national parks are managed by SANParks only. Through discussions around the PowerPoint presentation and/or posters land claimants are made aware that the process to grow from the cooperative co-management model to the privately managed model takes at least 15–20 years because claimants have to enter and finalise formal education courses and establish a proven management record first. This method adheres to the social research principle of respect as it takes into account the background, culture and life choices of the claimants and the wider community and/or organisations of which the claimants are part. It also adheres to the principle of process as it explains that the chosen option is not rigid and can change over time, according to the capacity and wishes of the land claimants. The principle of differential needs and objectives is also adhered to, as it is explained that each group is unique and therefore might have different needs and objectives. The different types of knowledge are also adhered to as a stronger connectivity to the land is normally linked to a higher degree of traditional knowledge (Tapela et al 2009:10–11).

3.4.7 Exposure visits

First of all, suitable learning sites are identified for each protected area, which is challenging as there are not many areas where the claims are fully settled and co-management is being implemented according to the MoA signed between DLA and DEAT. The methodology for the exposure visits is adopted from de Koning (2009b:1–13). In coordination with the hosting organisations, a range of possible visit elements are identified and presented to the land claimant representatives. The land claimant representative structures are asked to select 2–5 delegates to participate in the exposure visit, including at least one female representative. In some cases several protected areas and/or land claimant representative structures are lumped together to come to about 10 delegates. The delegates are accompanied by relevant staff of the conservation agency of the specific region/reserve as well as the RLCC officers involved. The various visit elements that are identified are analysed and divided into 2–3 thematic categories such as beneficiation and management. The delegates are asked to which thematic category they want to be allocated and are divided into sub-groups accordingly. The stakeholders (conservation agency, RLCC and land claimants) are equally divided among the sub-groups so that there is a mix of stakeholders per sub-group to enable mutual understanding, learning and trust building. Each sub-group formulates guiding questions around the thematic category they are allocated to and are encouraged to formulate as many questions as possible around the topics they are interested in. During the exposure visit each delegate can ask as many questions as he or she wishes, but to give more guidance to the

process and to ensure that all the information is gathered, each sub-group is responsible for gathering as much information as possible around their thematic category and also for reporting back to the rest of the group. Ideally the formulation of guiding questions is done in a separate meeting before the exposure visit takes place and/or on the first day of the exposure visit. The delegates are made aware that they have to report back to the group on the last day of the exposure visit and to the wider land claimant community on their return. The exposure visits are normally conducted within a working week with two travel days and two visit days. This method adheres to the social research principles of reciprocity, mutual benefit and equitable sharing as different stakeholder groups get the opportunity to learn together in an equal way. It also adheres to the principles of communication and due acknowledgement as joint reporting takes place within the group, which leads to co-authorship of the exposure visit report to be shared with the wider land claimant community and within the conservation agency and RLCC. The principle of acknowledgement of different types of knowledge is adhered to by the multi-stakeholder approach (Tapela et al 2009:10–11).

3.4.8 Settlement agreement framework

The settlement agreement framework is distributed to the land claimant representative structure in advance so that they can prepare themselves before the negotiations take place. If needed, staff of the conservation agency and RLCC officials are available to assist in the clarification of certain terminology and/or to clarify other questions. Relevant legal documentation is made available to the land claimant representative structures for reference. The settlement agreement framework is officially negotiated with the land claimant representatives in a meeting, together with higher management of the conservation agency, including people from the legal division, as well as senior RLCC officials. At the start of the meeting a quick re-cap of the twelve land claim settlement principles is given (see 3.4.5). The areas of concern, outstanding issues and the requests for modification around the settlement agreement framework are noted by the conservation agency and the RLCC. Where possible, the legal advisors explain directly whether certain issues can legally be changed or not and if not, why. The legal divisions are delegated to make the necessary amendments for approval by all the parties involved. Outstanding issues need to be followed up by the mandated officials involved.

3.4.9 Detailed explanation of co-management and proposed beneficiation

First of all a quick re-cap on the types of co-management and the beneficiation matrix is given. In a PowerPoint presentation the concept of cooperative co-management is explained. First of all the international definitions of co-management are given and compared with the explanation of co-management in NEM:PAA. The fundamental principles of co-management are explained, including the importance of neutral facilitation/mediation during the establishment of the co-management agreement, role clarification, relationship and trust building between the co-management partners, the establishment of monitoring and evaluation mechanisms, the inclusion of scientific versus indigenous knowledge, and the requirement that co-management must be mutually beneficial for all co-management partners involved to be viable. The steps in the co-management process, the time requirements and structures involved are explained. The difference between primary and secondary stakeholders is explained (see 3.4.4) as well as the rights for the stakeholders involved according to NEM:PAA. Furthermore, the requirements of the establishment of the management plan (MP), its five-year review cycle and its alignment with the integrated development plan (IDP) as stated in NEM:PAA are explained. Some examples are given to explain the difference between the MP (what needs to be managed), the co-management agreement (how/who is managing) and operational day-to-day management. Certain challenges, risks and role confusions are explained as well as the fact that each co-management partner comes from a different angle, that is, the priorities for the conservation agency are more linked to biodiversity conservation and legislation and the priorities for the land claimants are more related to tourism development and beneficiation. Therefore, to come to a good co-management model and agreement there is a need to establish a joint vision amongst the co-management partners and have clear monitoring, capacity building, communication and conflict resolution mechanisms in place.

The ranking results of the biodiversity and tourism value, established via the independent audit as mentioned in 3.2.1.2, are shared with the land claimant representative structures. The proposed settlement and co-management options for the specific protected area as well as the proposed development, management and beneficiation structure as determined in the consolidated government position are explained via a PowerPoint presentation. Additional flip charts are used, if needed, depending on the understanding of the participants involved.

3.4.10 Roleplays

To explain the roles of the co-management partners in the proposed co-management structure (CMC) some roleplays are conducted, if needed, especially to clarify the difference between strategic and operational management and the need for transparent decision taking and communication. Another roleplay is conducted to explain the impact of the proposed beneficiation model for claimant groups that only claim a small percentage of the nature reserve. Multi-stakeholder groups of around 2–4 people are established and a certain case is explained to them. Within the group the roles are divided and stakeholders are encouraged to choose a role that is unfamiliar to them so that a land claimant plays the role of the reserve manager, the RLCC official plays the role of the land claimant, and the official of the conservation agency plays the role of the RLCC. After the roleplay a small analysis of the roleplay is discussed within the broader group, that is, players and spectators. About 2–3 cases are played so that each individual has a chance to play. The roleplays allow for further trust building, mutual understanding and joint learning.

3.4.11 Socio-economic assessment

An estimation of the feasibility and viability of the proposed settlement and co-management option in the socio-economic context is needed to be able to manage expectations from the claimant community in the negotiation phase. Issues that need to be looked into are the number of claimants and the number of wider community members depending directly on the protected area. Age and gender structure and alternative job opportunities in the area need to be looked into as well to estimate the expectations on job opportunities. Other issues that might influence the anticipated success of the proposed settlement and co-management option are the absence or presence of physical, human, financial and social capital of the poor; the compatibility with existing livelihood strategies; land ownership/tenure; focus of planning process inside or outside the region; regulations and red tape; income distribution within the community; linkages between formal and informal sectors/local suppliers and proactive government support for involvement by the poor (Mahony and Van Zyl 2001:25–26; Muchapondwa et al 2009:6–7). The absence or presence of strong community and leadership structures; community cohesion; access to infrastructure, education, information, services and non-governmental organisation (NGO) support influence the success of the proposed settlement and co-management option. All these factors are brought into a scoring matrix, including perceptions and facts that exist in the community. The land claimant representatives are asked to give a score for each factor/category. The areas that score poorly are a matter of concern that might endanger the feasibility and viability of the proposed settlement and co-management option and land claimant representatives are made aware of

this so that they can start to address the issue and expectations can be managed. This exercise can be seen as a kind of baseline assessment and can be repeated over time to see whether there is improvement in certain risk areas. The scoring matrix used in the socio-economic risk assessment exercise is presented in table 6 and is adapted from Mahony and Van Zyl (2001:25–26) and Muchapondwa et al (2009:6–7).

3.4.12 Co-management agreement framework

The co-management agreement framework is distributed to the land claimant representative structures in advance so that they can prepare themselves before the negotiations take place. If needed, staff of the conservation agency and RLCC officials are available to assist in the clarification of certain terminology and/or to clarify other questions. Relevant legal documentation is made available to the land claimant representative structures for reference. The areas of concern, outstanding issues and the requests for modification around the co-management agreement framework are noted and the comments are referred to the legal divisions of the conservation agency and the RLCC. The legal divisions are delegated to make the necessary amendments for approval by all the parties involved. Outstanding issues need to be followed up by the mandated officials involved.

Table 6: Scoring matrix for socio-economic risk assessment

FACTS /PERCEPTIONS	Positive 1	2	Neutral 3	4	Negative 5
# of claimants	<500	500–1,000	1,000–2,000	2,000–2,500	>2,500
# of wider community	<5,000	5,000–10,000	10,000–15,000	15,000–20,000	>20,000
Distance claimants to PA	little		medium		far
Age structure in relation to expectations for jobs	older		medium		young
Gender structure in region (females) in relation to expectations for jobs	many		medium		few
Alternative jobs in the area	many		medium		few
# of community institutions (social capital)	many		medium		few
Skills available in the area (human capital)	many		medium		few
Education possibilities in area	many		medium		few
Access to financial capital in area (micro-credit; revolving loan)	close		medium		far (>20 km)
Location of the PA	accessible		medium		inaccessible
Access to services	access		medium		no access
Regulations, red tape (LM)	low		medium		high
Access to NGOs	access		medium		no access
Wealth distribution (rich / poor)	equal		medium		unequal
Compatibility existing jobs with tourism and conservation	compatible		neutral		non-compatible
Relationship between tribal authority and claimants	good		medium		bad
Connectivity to the land	high		medium		little
History of leadership in area	long		medium		young/new
Community cohesion	cohesive		medium		fragmented
Community pride	high		medium		low
Relationship tribal authority and LM/DM	good		medium		bad
Relationship with LM/DM	good		medium		bad
Expectations claimants of protected area	low		medium		high
Expectations wider community of protected area	low		medium		high
Linkages formal and informal sectors (local suppliers)	high		medium		low

3.4.13 Community resolutions to delegate authority

To ensure that the land claimant representatives have the mandate to negotiate and sign the settlement and co-management agreements on behalf of the wider claimant community, a community resolution process is proposed under guidance of an authorised officer from the RLCC. A community resolution under the Communal Property Association (CPA) Act (No 28 of 1956) must follow certain steps such as proper notification of the community concerned not later than seven days before the applicable meeting. The authorised officer's report must include a copy of the minutes of the meeting with the community's resolution and, if the proposal was adopted at the meeting, a copy of such proposal. It shall also include a list of the names and, where readily available, the identity numbers of all members of the claimant community and proof to the authorised officer's reasonable satisfaction that the notice of the applicable meeting has been given as determined.

3.4.14 Management plan and co-management committee establishment process

As stated in 2.3.4, ideally the MP should be in place before embarking on the co-management process so that the management framework and restrictions such as zoning are agreed upon before signing the co-management agreement. For certain conservation agencies, such as the MTPA, MPs are in place, but not yet according to the new legislation of NEM:PAA. However, this creates an opportunity to use the process of the establishment of the new MPs as a capacity-building exercise for the land claimants, including the important process of visioning and the creation of communication and monitoring strategies. The process to establish the new MPs should be aligned with the establishment of the proposed CMC and the capacity building on the proposed ToR for the CMC, including a monitoring and communication strategy, role clarification and a clear understanding of the difference between strategic and operational management. For the purposes of this thesis only the design of the MP and CMC establishment process is taken into account and not the actual implementation.

3.5 Summary and conclusion

The various tools and legislation involved to reach the mutual overlap between the disciplines of this thesis are explained in chapters 2 and 3. The general model design includes and combines these tools and legislation to facilitate the choice of the preferred land claim settlement option from a basis of informed decision taking to come to the most mutual

beneficial situation. The option from this model design should be tailored to the specific situation with maximisation of benefits such as pro-poor tourism principles and benefits beyond boundaries as an ultimate goal to come to a more feasible beneficiation model over a long period. The expectations of the land claimants involved should be managed in accordance to their specific situation as established via the model design. First of all, the model design tries to ensure that the land claims process is followed in the right sequence, and that proper validation and verifications of the claims are done. This leads to the rightful ownership of the claimed properties and it addresses the social discipline of this study within the legal framework of land restitution. Because land restitution in protected areas is guided by a special MoA, there are limitations to the social and land rights, which should be taken into account in the process. As a second step, the ranking exercise on tourism and biodiversity value should be done to give an indication of the preferred land claim settlement option. In other words, the optimal overlap between biodiversity and economic development is analysed. In the case that land restitution is the preferred land claim settlement option, and depending on the differences in social situation, the right co-management type needs to be identified for each given situation as determined via the beneficiation matrix. The beneficiation matrix is a tool to establish the mutual overlap between the social and economic disciplines of this thesis. Because of the legal requirements around protected areas, the co-management models that can be chosen are currently limited to lease, part lease / part co-manage and cooperative co-management, as stipulated in the national co-management framework. If the optimum co-management type is selected, the legal requirements on tourism developments are to be adhered to, that is, following the PPP route in case the development is situated on state-owned land. To increase the social benefits for the claimants involved, as many pro-poor tourism principles should be negotiated in the cPPP contracts as possible. The ability to do so, however, depends on the competitiveness of the proposed developments. A socio-economic assessment can help to identify the major risk areas for the proposed settlement and co-management option. To increase the possibility of sustainable livelihoods, other conservation-related benefits should be created, if possible, and the options of benefits beyond boundaries should be explored. The above principles of the general model design are summarised in figure 4 below.

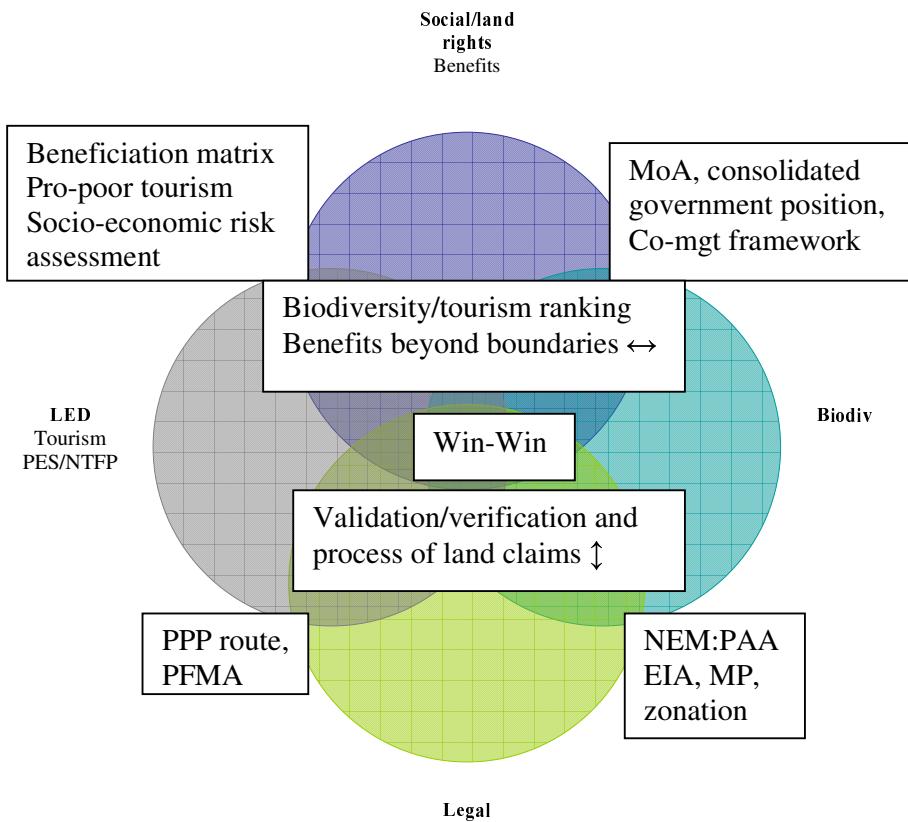


Figure 4: General model design for land restitution in protected areas

The broad outline of the model design as illustrated in figure 1 in section 1.8 was refined in this thesis via an extensive literature review, an analysis of the legal framework and methods that were developed. The refinement resulted in figure 4. The refined model design is used to facilitate a consolidated government position and strategy for land restitution in protected areas in general for the conservation agency, and is tested in seven selected priority protected areas. The practical experiences of the application of the model design in the MTPA contribute to a further refinement of the model design and the results are presented in chapters 4, 5 and 6. The results of using the model design to facilitate a consolidated government position and strategy in general for the conservation agency are presented in chapter 4. The results of the estimated benefits from tourism and other conservation-related activities in the pilot site and beyond the physical boundaries of the protected area are presented in chapter 5 and lead to recommendations on how to increase the feasibility of the proposed beneficiation model over a long period. Chapter 6 presents the results of the various methods that can be used to balance biodiversity conservation and beneficiation expectations in the negotiation phase with the land claimant representative structures.

Chapter 4: Results of model design for a consolidated government position and strategy

4.1 Introduction

The results of the first part of the model design for a consolidated government position and strategy on land restitution in protected areas are based on three internal Mpumalanga Tourism and Parks Agency (MTPA) workshops (6–7 February 2007; 3–5 June 2008; and 29 May 2009) and several internal MTPA task team meetings. This process, as described in section 4.2, resulted in an internal position by the conservation agency that was approved in an executive management committee (EMC) meeting on 11 June 2009. The various results were discussed in several joint meetings between the conservation agency, Regional Land Claims Commission (RLCC) and other government departments such as the Department of Land Affairs (DLA) and provincial and national Public Works. In a workshop held on 25 June 2009 an in-principle agreed consolidated government position was established by the decision makers of the various government departments involved on how to settle the land claims on the MTPA managed protected areas including a broad strategy for the seven priority areas (see 4.3). This in-principle agreed consolidated government position and strategy was presented and discussed at a workshop with all the officials involved held on 16 July 2009. This resulted in the establishment and approval of agreed generic settlement and co-management agreement frameworks (see 4.4). This chapter ends with a detailed summary and conclusion of the presented results (see 4.5).

4.2 Results of model design to facilitate an internal position conservation agency

4.2.1 Results of institutional set-up for following land restitution process

Land claims in terms of the Restitution of Land Rights Act (No 22 of 1994 as amended) affect protected areas managed by the MTPA (see 1.7). The new National Environmental Management Protected Areas Act (NEM:PAA) (No 57 of 2003), and the World Heritage Convention Act (No 49 of 1999), Section 31 (3) provide specific powers to the Minister of Environmental Affairs and Tourism¹¹ on the use of land falling within the ambit of these laws. Similarly those laws are reflected by the Mpumalanga Conservation Act 10 of 1998

¹¹ The Ministry of Environmental Affairs and Tourism transformed into the Ministry of Water and Environmental Affairs after the elections in April 2009.

and the Mpumalanga Tourism and Parks Agency Act 5 of 2005. The MTPA is a Schedule 3C public entity, accountable through its board to the Member Executive Council (MEC) for the Department of Economic Development Environment and Tourism (DEDET), with the following mandate:

- Management of approximately 1.1 million hectares of protected areas in Mpumalanga Province with the purpose of conserving biodiversity and the extension of such management to other natural habitats in the production landscapes of the province through biodiversity stewardship
 - Management of tourism facilities within the agency's protected areas with the purpose of maximising tourism income from these facilities
 - Promoting and enabling all forms of tourism within Mpumalanga Province with the purpose of contributing to the economic development goals of the Mpumalanga Provincial Growth and Development Strategy (PGDS)
 - Management of all MTPA activities so as to promote local economic development.
- (MTPA 2009a:2)

The model design to facilitate the internal position for the conservation agency is based on the memorandum of agreement (MoA) signed in May 2007 between DLA and the Department of Environmental Affairs and Tourism (DEAT) and the National Cabinet Memorandum No 5 of 2002, dated 13 September 2002 (see 2.2.1). Land restitution is the mandate of the RLCC. In Mpumalanga conservation is the mandate of the MTPA. The way in which the RLCC therefore deals with land to be restituted, but that consists of conservation land, is dealt with by the RLCC in a special manner, according to the MoA and Cabinet Memorandum. In the end, the purpose is to bring effect to an agreed consolidated government position regarding the settlement of restitution land claims in proclaimed protected areas, state forests and world heritage sites, under national or provincial government and as contemplated in the mandate of both the RLCC and the conservation agency. This is necessary to ensure that government's policies and legislation with regard to restitution, conservation and tourism are applied consistently in meeting government objectives and in restoring rights to communities.

In the light of this, the MTPA established an internal task team under the chair of the chief operation officer (COO) and with social ecology as the secretariat, working within a mandate from the MTPA's board of directors. Land claims are a crosscutting issue that requires input from many divisions of the MTPA and therefore biodiversity conservation; protected areas; social ecology; financial management; legal and other advice and tourism business

development were all assigned as permanent members of the task team. The others, such as wildlife business development; scientific services; human resources management; regional and reserve managers, were invited on need and request. Internal task team meetings were held regularly, often just before important joint government meetings that were held monthly. The internal task team of the MTPA were responsible for the day-to-day management around the land claims as well as the coordination of the activities around the negotiation workshops and capacity building with the claimant representative structures. The importance of the alignment of pre- and post-settlement, to be able to speed up the process of the disposal of state land, was discussed in the joint government meetings with other government departments (RLCC, DLA and Department of Public Works). These meetings addressed issues around vesting; proclamation; surveying; etc. The Department of Water Affairs and Forestry (DWAF) was also invited on need and request because DWAF is in the process of transferring the management of some of the land to the MTPA and as certain dams are located in the nature reserves. The land claims register, as proposed in 3.2.1.1, was established and updated regularly. The land claims register was used as an information database and reporting format as requested by the EMC and board of directors of the MTPA. The regular updating of the land claims register assisted in informed decisions being made at each stage in the settlement process by the various stakeholders. It meant that stakeholder groups did not talk from a different information base in this very complex process. As the MoA is not a legal document, it proved to be very important to have strong legal support on the subject (see 2.2.1). Land restitution is a politically sensitive issue and there were instances that government representatives contradicted each other as different legislation is involved. Therefore, external legal and co-management advisory services were sourced and included as part of the internal land claims task team. Private investors, interested in developing in Songimvelo and Blyde River Canyon Nature Reserves and other areas, often did not follow the required procedures and/or did not have a clear understanding of the process that needs to be followed. Therefore, it is important for the conservation agency to clearly communicate the procedures to be followed and to know exactly where they stand and what the different options and risks are on certain issues that were identified by the internal task team such as:

- Change in governance structure of the management of the protected areas
- Land rights and land ownership issues, especially with regard to the commercialisation process
- Mandate to be the conservation agency of the protected areas (and the risk of replacement in case of non-performance)

- Financial impact on the conservation agency
- Audit on the rights on properties that will be transferred and ensuring that the right conditions are registered on the title deeds to be transferred.

Land claims are lodged against the state, and various government agencies are involved, each playing a specific role in the process. As stated in the Constitution, state agencies should work hand in hand to achieve the best outcome for all parties. Therefore, the MTPA decided not to question the validity of the claims (see 2.2.2) because this is the mandate of the RLCC. Politically it is not acceptable if one government agency publicly questions the outcomes of the work of another (Heunis 2009). As stated in Section 41(1) of the Constitution, all spheres of government and all organs of state within each sphere must avoid legal procedures against one another (South Africa 2009:27). Through the mechanisms of the internal task team and the regular joint government meetings, the MTPA tried to ensure that the administrative process around the land claims was followed correctly to protect the mandate, budget and impact for the MTPA. It is in the mandate of the conservation agency to ensure that the merit of the claim was investigated properly by the RLCC. This does not mean that the conservation agency took over the work of the RLCC but it means that benchmarking was put in place to ensure that the right process was followed, such as the verification of gazette notices. If needed, the conservation agency requested access to relevant documentation such as the land claims forms via the officers of the RLCC. This information was easily shared because of transparent communication and coordination of activities through the regular joint government meetings. On behalf of the MTPA, this task was managed by the social ecology division. If the administrative process is not followed correctly, this can have great impact on the financial situation of the conservation agency. The size of claimed land in the protected area affects the rights of beneficiation and the sharing of revenues to be negotiated in the different agreements. For example, a case study on Barberton Mountainlands Nature Reserve in Mpumalanga indicated that mistakes had happened in the administrative procedure, when dispossession took place before 1913, or when dispossession had taken place, but was not on racial grounds (Oosthuizen 2008). The claimed land was extended in size because the RLCC lumped some claims together. Legally only the portions indicated on the land claim form are to be considered, and it is illegal to put different claims together if these did not form a community before dispossession (Oosthuizen 2008). During the gazetting phase, the RLCC should have informed the current landowner (DLA and/or Public Works), who should have informed the conservation agency. Unfortunately in the past the landowner was seldom informed at this juncture, and the RLCC often did not give out the research report, but instead gave a presentation to stakeholders (de Koning and Marais 2009c:70–71). As a result,

the exact geographic portions claimed remained unknown for a long time, which could delay the state land disposal process at a later stage. This delay complicates the commercialisation process because investors initiate investments and lease agreements only if the ownership of the land has been confirmed, that is, if the new landowners have the title deeds registered in their names. While Manyeleti Game Reserve was still part of Limpopo Province, investors wanted to do a deal with the claimant community, but in the end the investment had to be stopped because the land claimants did not own the land legally at that point (Rautenbach 2008).

Through the coordinated approach via the internal land claims task team and the regular joint government meetings the land restitution process was followed in the more ideal (logical) sequence. Regular information sharing and capacity building of the MTPA staff members who were involved in the process, but were not directly part of the internal land claims task team and/or the joint government meetings, was of utmost importance for the conservation agency to be able to talk in one voice around this complex topic. Some staff members are claimants themselves, and conflict of interest was identified as a serious issue that needs to be taken into account and managed at all times. This is one of the reasons that it was very important for the internal task team to obtain the delegated authority from the board of directors to deal with these issues and for the internal task team members to declare their interests as there are instances in which individuals tried to derail the process by giving false information. It was observed that many of the MTPA divisions that were not permanent members on the internal land claims task team were not very interested in the topic until the moment they started to feel the impact. A mind shift throughout the whole organisation was needed to implement land restitution in protected areas successfully. This difficult task was allocated to the social ecology division and it therefore needs appropriate allocation of staff and resources. As with many changes, it comes with fear and resistance.

4.2.2 Ranking outcomes of biodiversity and tourism value

The MTPA decided to hire a consultant (Kamoza 2009:3–50) to do the external audit on the biodiversity value and tourism value (and potential) for the concerned protected areas. This biodiversity value assessment was based mainly on ‘irreplaceability’ values in the Mpumalanga Biodiversity Conservation Plan (MBCP) (Mpumalanga Provincial Government 2006). Irreplaceability is a measure of the ‘uniqueness’ of a protected area’s biological resources, with respect to resources found in other protected areas. The existing management plans (MPs) and a study by Karen Vickers in 2006/2007, in which the spatial distribution of 340 key biodiversity features were assessed in relation to the existing protected area network

in Mpumalanga, were also taken into account (Vickers 2007:1). With regard to the latter study, it must be noted that some protected areas with a low biodiversity value are important water catchment areas and therefore have a high conservation value, even though rating low in biodiversity. With regard to the tourism value, the tourism assessment process developed by Conservation International and the George Washington University (Gutierrez et al 2005) was adopted and modified to suit local conditions in Mpumalanga with a multi-stakeholder team doing the assessment. The tourism assessment process helped to determine whether a destination was suitable for sustainable tourism. The tourism assessment process was carried out with reference to larger planning frameworks such as the IDPs, Provincial Growth Development Strategy (PGDS), Mpumalanga Tourism Growth Strategy and MPs. Key MTPA staff from various divisions formed the multi-stakeholder team doing the assessment. Issues with regard to biophysical aspects, safari readiness, market demand, supply and competitiveness, human and institutional capacity, socio-economic, cultural and natural resource use and tourism footprint were taken into account. Only the tourism value was used to determine the economic value of the seven priority areas, because until now this has been the main income-generating activity in protected areas, which was relatively easy to measure. Biological resource use often takes place in the informal sector and is therefore relatively difficult to measure, although its value is often underestimated (see 2.5.2). According to the methodology, in order to recommend tourism the net benefits should be positive (Gutierrez et al 2005:106). However, owing to lack of information this could not be established by the team.

Comparison was made between the ranking outcomes established via the external consultant in the MTPA (Kamoza 2009:6) and the ranking exercise done by MTPA staff in the internal workshops of 3 and 5 June 2008. The results are illustrated in table 7 below.

Table 7: Various biodiversity and tourism value ranking results for the seven priority areas

Conservation value	Low	Low	Low	Med	Med	Med	High	High	High
Tourism value	Low	Med	High	Low	Med	High	Low	Med	High
Blyde									B+T+E
Songimvelo									B+T+E
Mthethomusha					B	T+E			
Manyeleti						E			B+T
Loskop Dam						E			B+T
Mabusa		E		T				B	
Mdala		E		T				B	

B = Biodiversity Conservation staff of the MTPA

T = Tourism staff of the MTPA

E = External consultant

The results indicate that there was consensus among the ranking stakeholders with regard to the first three protected areas, that is, Blyde River Canyon Nature Reserve, Songimvelo Nature Reserve and Mthethomusha Game Reserve. According to the external consultant, the biodiversity values of Manyeleti Game Reserve and Loskop Dam Nature Reserve were overestimated by the MTPA staff. With regard to Mabusa Nature Reserve and Mdala Nature Reserve, the tourism value derived by the biodiversity conservation staff of the MTPA was the same as that of the external consultant, but the tourism staff of the MTPA regarded the tourism value of these two reserves as low. All stakeholder groups had a different rating for the biodiversity values of Mabusa Nature Reserve and Mdala Nature Reserve. According to the external consultant and primary and secondary literature in the MTPA, the biodiversity value of both reserves is low. From this it can be concluded that the biodiversity conservation staff in particular have a tendency to overestimate the value of the protected areas they are managing. The perceptions they project in some cases are slightly different from the facts. Therefore it is difficult to include them in ranking exercises and workshops that influence the choice of the preferred and optimum land claim settlement options and the future management of the protected areas. The same was observed during the ranking exercise executed by the external consultant. Ideally the ranking should have been done at top management level, as recommended, without involving the MTPA staff directly involved in the seven priority areas. Because the MTPA staff knew the objective of the ranking exercise by the external consultant, and the possible influence it could have on the preferred land claim settlement option, some of them had a tendency to overestimate the biodiversity and

tourism values for certain areas. Unfortunately, this was not well managed by the external consultant, and therefore the results of the external audit might have been influenced. A more detailed overview of the exact ranking exercise details and information as suggested in 3.2.1.2 is given in figure 5. Unfortunately, the exact budget, financial feasibility and future projection figures could not be given for all the priority areas because of the lack of information and because the budgets for the protected areas are still combined within the MTPA. It was further established that there are currently established tourism records for Blyde River Canyon, Manyeleti, Mthethomusha and Loskop Dam priority areas. The tourism record for Mabusa, Songimvelo and Mdala priority areas is currently limited, with Songimvelo being the most underdeveloped with its high potential. Both Mdala and Mabusa have existing tourism assets within the reserves, but currently these are limited in usage. For Loskop Dam Nature Reserve and Mthethomusha Game Reserve the exact number of verified claimant households still needs to be confirmed by the Regional Land Claims Commission (RLCC), as indicated by question marks in figure 5. This is because some outstanding land claims have not yet been gazetted and/or there are some disputing claims between various groups.

Seven priority areas MTPA - Ranking

Name (hectares)	% claimed	# of groups (CPA / Trust)	HH	Tourism value	Biodiversity value
Manyeleti (22,750)	100%	1 Trust	253	High	Medium
Blyde (30,000)	90%	1 Trust 3 CPAs	15,000	High	High
Songimvelo (47,519)	100%	1 CPA	2,578	High	High
Mthethomusha (7,200)	100%	1 CPA (?)	100 (?)	High	Medium
Loskop Dam (22,850)	17.4% (?)	2 CPAs (?)	21 and ?	High	Medium
Mabusa (10,300)	79%	1 CPA 1 Trust	52	Medium	Low
Mdala (8,165)	42.9%	1 CPA 1 Trust	586	Medium	Low

(de Koning 2009c:7)

Figure 5: Detailed information on external ranking exercise and literature research
 (?) = still needs to be confirmed because of disputing and/or outstanding land claims

4.2.3 Co-management option

The various co-management options were explained by the senior manager social ecology and the external co-management advisor to the MTPA staff. The outcomes of the beneficiation matrix exercise with MTPA staff in the internal workshops of 3 and 5 June 2008 are visualised in table 8. Table 8 indicates that currently all seven priority areas are still situated on the left scale of the beneficiation matrix according to the MTPA staff. When asked to indicate the optimal co-management option after the claim is settled for a given protected area, most of the staff of the MTPA preferred the co-management options with lower participation by the local communities/landowners. However, when asked which option to choose if they themselves were landowners, they preferred the options with higher participation by the community/landowners. This indicates that most of the MTPA staff would manage the reserves differently if they themselves were the landowners and that currently the MTPA staff do not perceive management to be very efficient and effective. Most of them would rather go for a more privatised and or delegated management approach. However, they question the ability and capacity of the communities/landowners to do so. This indicates that the staff of the conservation agency likes to stay in control over the management of the protected area but they are aware that with the changes in land ownership this situation might change. The chosen optimum land claim settlement options all fall within the current national co-management framework and therefore form the current starting point after settling the land claims. However, reserve management staff need to be prepared for the changes to come, and the shift in land ownership from state land to private land comes with a sense of loss of power for the conservation agency. Over time and if legislation allows, some of the new landowners have the expectation to move more towards the right hand of the scale, depending on the development potential of the reserve and their own management capacity. There are some differences between the biodiversity conservation and tourism staff of the MTPA, especially with regard to the preferred choice if they themselves were claimants. The tourism staff has a tendency to opt more for outsourcing and privatisation rather than keeping the business within government control. Some tourism staff also stated that they did not have enough information to make a clear assessment for all the seven priority areas, especially relatively new areas for the organisation, such as Manyeleti Game Reserve.

Table 8: Choice of optimum co-management option by two groups of MTPA staff for the seven priority areas

	Ad hoc benefit sharing	Consultation benefit sharing	Lease	Part lease, part co-manage	Co-manage	Part co-manage, part delegate	Delegated management	Privately managed
Blyde		① ①		②		②	③	③
Songimvelo		① ①	②	③ ②			③	
Mthethomusha	①	①	②	②		③		③
Manyeleti	① ①			②	② ③			③
Loskop Dam	①	①		② ②	③		③	
Mabusa	① ①		②		② ③			③
Mdala	① ①		②		② ③			③

① = situation now according to biodiversity conservation staff MTPA

② = optimum situation according to biodiversity conservation staff MTPA after the claim has been settled

③ = choice of biodiversity conservation staff MTPA if they themselves were claimants

① = situation now according to tourism staff MTPA

② = optimum situation according to tourism staff MTPA after the claim is settled

③ = choice of tourism staff MTPA if they themselves were claimants

4.3 Agreed consolidated government position and strategy

4.3.1 Determination of most feasible land claim settlement option

Under the initiative of the MTPA, additional options were developed to be able to reach the most feasible land claim settlement option per specific situation. If the claimant community wants land restoration, there are five scenarios, plus combinations of these, as illustrated in figure 6. The first option is the establishment of a co-management agreement between the claimant community and the conservation agency. The second is to establish a lease agreement between the conservation agency and the claimant community. The third is to establish a part lease / part co-manage agreement between the claimant community and the conservation agency. The fourth is to de-proclaim part of the protected area so that more commercial conservation land use can take place and/or land use can be changed. This can only be done if the biodiversity and conservation values of the claimed portion are not important (de Koning and Marais 2009c:74). The fifth option is to de-proclaim the whole area and for the conservation agency to advise on special projects such as buffalo breeding centres and/or to be phased out. Again this can only be done if the biodiversity and conservation values of the area are low. De-proclamation procedures of protected areas are described in NEM:PAA. An outstanding issue is the exact implementation of the lease option because Treasury has not yet agreed to release money for the lease fee, and the calculation of the lease fee is still unclear. To come to the most feasible land claim settlement option within the mandate of the conservation agency it was necessary to look at a combination of the results of the ranking exercise by the external consultant (see table 7), additional information from primary and secondary literature around the current tourism record and, if needed, the results of the socio-economic assessment by the claimant representative structure (see 3.4.11). Areas with a medium to low tourism potential have less opportunity to give sufficient benefits under a co-management model as they attract limited numbers of investors and tourism operations generate only an average turnover. Furthermore, the negotiated contracts risk having fewer pro-poor tourism benefits because operations are more risky and because of the lack of competition by investors (see 2.4). A distinction should be made between whether the tourism value is a potential value or whether the tourism value has established already itself. The combined matrix presented in table 9 was proposed as the overlapping tool to determine the most feasible land claim settlement option/beneficiation model for each given situation. It is still a simplification of a very complex set of factors in which the uniqueness of each specific situation should not be underestimated.

Pre Settlement:
• Lodgement
• Validation
• Gazzetting stage
• Facilitation process
• Settlement
Postsettlement:
• Implementation



Possible options

1. Alternative land
2. Land restitution (based upon settlement principles MoA)
 - Co-management (**only strategy MOA**)
 - Part lease / part co-manage (**proposed strategy national**)
 - Lease agreement (**proposed strategy national**)
 - De-proclaim part of protected area
 - De-proclaim entire protected area
3. Financial compensation (Not preferred)
4. Combination of the above

De-proclaim:

Only possible if scientific assessment confirms that biodiversity and conservation value are low and according to process NEM:PAA

De-proclamation allows for more commercial conservation projects (advice by MTPA) and/or a change in land use

Lease:

Still under discussion on national level and no confirmation if Treasury will release funds for lease fee.

(de Koning 2009c:6)

Figure 6: Overview of land claim settlement options as identified by the MTPA

Owing to lack of information at the time of the provision of the exact results of the ranking exercise by the external consultant and the results of the socio-economic assessment, only a simplified proposal was used for the approval in the internal and consolidated government position. The simplified model was also used because of the reluctance of both the RLCC and the conservation agency to go for de-proclamation because it falls outside the options proposed in the MoA and national co-management framework on national level (see 2.3.3). As mentioned in 4.2.2, there is internal resistance within the MTPA to giving up certain areas, and some of these areas are perceived to be more important for biodiversity conservation than they factually are. However, table 9 was used in the negotiation workshops with the claimant representative structures as it assists in an increased understanding and the management of expectations. The proposed internal MTPA position on the preferred land claim settlement option was discussed in a joint government meeting on 25 June 2009. The preferred land claim settlement options for the various ranking categories were discussed and in principle approved, and are visualised in figure 7.

Joint Government Position

Protected Area ranking using biodiversity and tourism criteria				
Biodiversity value	High Medium	High	Low	Low
Tourism value	High	Low	High Medium	Low
	Co-Manage Blyde Songimvelo Loskop Mthethomusha Manyeleti	Lease as starting point Alternative land Financial compensation	Co-Manage Mabusa Mdala	De-proclaim and swap for high biodiversity areas as part of provincial PA expansion strategy and/or alternative land for high/low areas. Special projects MTPA to advise

(de Koning 2009c:8)

Figure 7: Preferred land claim settlement options for the ranking categories based on biodiversity and tourism value

Co-management in the low-low ranked reserves (low biodiversity value and low tourism development potential) is not considered feasible because it does not provide enough tangible benefits and therefore it is better for the conservation agency to de-proclaim these areas. However, the conservation agency can lobby to obtain high biodiversity areas in line with the provincial protected area expansion strategy and/or to swap the low-low areas for alternative land for the high biodiversity/low tourism development areas. The low-low ranked areas can continue with conservation and tourism after de-proclamation, if wished by the land claimants, with less restrictive conditions for the management of these areas, such as the conservation agency being appointed by the state under NEM:PAA. The land claimants can also opt to change the land use after land restoration. Co-management is not considered feasible in the high biodiversity/low tourism development areas, but these areas must remain under conservation. If the land claimants still opt for land restoration, the lease option is the most feasible option, but agreement must be reached about the payment of the lease fee by Treasury and/or other government departments. Formal agreements must recognise that claimed land with a high biodiversity value within protected area boundaries must remain protected in perpetuity. This means that if portions of valuable conservation land are proposed to be excised for grazing, which is not preferred, they must be managed in a sustainable manner, so that the area does not degrade and can convert back to conservation.

Table 9: Biodiversity and tourism value ranking matrix, taking into account the current tourism record and the socio-economic risk value to determine the most feasible land claim settlement option

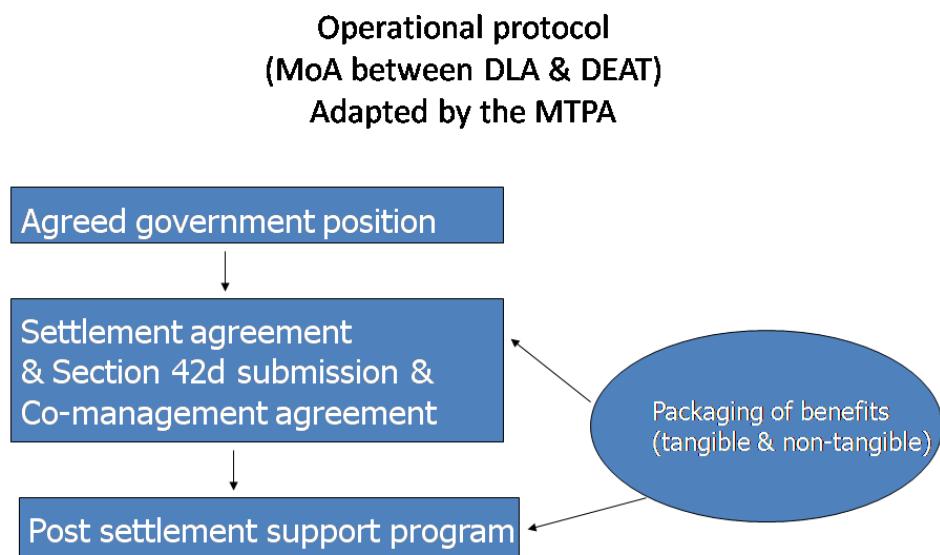
Tourism value →	High	Medium	Low
Biodiversity value ↓	Co-management ↓	Further assessment ↓	No co-management ↓
High	Co-management (use socio-economic risk value and current tourism status to identify risk areas)	Co-management (socio-economic risk ↓ current tourism ↑) Part-lease / part co-manage (socio-economic risk ↑ current tourism ↑) (socio-economic risk ↓ current tourism ↓) Lease/Alternative land/Financial compensation (socio-economic risk ↑ current tourism ↓)	Lease Alternative land Financial compensation
Medium	Co-management (use socio-economic risk value and current tourism status to identify risk areas)	Co-management (socio-economic risk ↓ current tourism ↑) Part-lease/part co-manage (socio-economic risk ↑ current tourism ↑) (socio-economic risk ↓ current tourism ↓) Lease/Alternative land/Financial compensation (socio-economic risk ↑ current tourism ↓)	Lease Alternative land Financial compensation
Low	Co-management (use socio-economic risk value and current tourism status to identify risk areas)	Co-management (socio-economic risk ↓ current tourism ↑) De-proclaim (socio-economic risk ↑ current tourism ↓)	De-proclaim

(Table made by the author)

It was furthermore decided that for protected areas with less than 20 per cent of the surface claimed, it is not preferable to go into co-management as it is too cumbersome for both the land claimants and the conservation agency involved. A back-to-back lease, financial compensation and/or alternative land are the preferred land claim settlement options in these cases. The RLCC stated that land restoration is still the aim of land restitution and the lease option should be the starting point of the negotiations before going into financial compensation and/or alternative land options. Figure 7 indicates that according to government, co-management is the preferred land claim settlement option for the seven priority areas, except for Loskop Dam, as it might be claimed less than 20 per cent.

4.3.2 Signing of agreements

Within the MTPA internal position it was agreed that the co-management agreement must be signed before or at the same time as the land claim settlement agreement as it provides a negotiated advantage for the conservation agency. According to Heunis (2009), the legal bargaining power for the conservation agency becomes much less if the land claimant representative structures sign the settlement agreement first. This principle was approved in the joint government meeting as long as it does not delay the land claim settlement process. The agreed process to be followed is indicated in figure 8.



(de Koning 2009c:4)

Figure 8: Operational protocol MoA (adapted by the MTPA)

However, it is often the priority of the land claimant representative structures to settle the land claims first before wanting to negotiate the co-management agreement. Ba-Phalaborwa leader Steve Ramalepe states: ‘First we want title to the land, then we can talk about development options in collaboration with SANParks and the Land Claims Commission (LCC)’ (Hofstaetter 2008:48–49). It was therefore seen as a huge step forward that the government stakeholders agreed to sign both agreements simultaneously.

4.3.3 Interim arrangements until the agreements are signed

The co-management agreement determines the governance of the management of a protected area, but the management plan (MP) determines what needs to be managed for each protected area individually (see 2.3.2). In NEM:PAA it is stated that the wider community must also benefit from the protected areas (see 2.2.1). The co-management agreement sets the rules for co-management. Until the co-management agreement has been signed, it is not advisable to start with the implementation of co-management. However, at this interim stage it is very important to keep on engaging with the land claimant representative structures and to start to explain the MP, budgets and operations in order to establish trust and to go into a process of joint visioning. It is very important to have comprehensive and inclusive MPs so that all aspects are covered and easy to understand. Issues such as sustainable resource use levels and sustainable game stocking levels should be part of the MP. This sets the framework for the strategic discussions to take place between the conservation agency and the land claimant representatives in future co-management committee (CMC) meetings. The explanation of the MP can help to clarify some of the concerns and misperceptions that the claimants have, for example about the numbers of game to be relocated to other reserves because of overstocking. Often claimants do not understand certain operations on the reserve because of poor communication between reserve staff and the land claimant representative structure.

4.3.4 Use of settlement grants

It was argued by the MTPA that protected areas must strive to be financially self-sufficient in line with government’s strategy to reduce conservation subsidies, and that restitution grants could be invested in new tourism developments for this purpose. It was therefore proposed by the MTPA and in principle agreed in the joint government meeting on 25 June 2009 that at least 60 per cent of the total amount of settlement grants should be used for investment in developments in the protected area, for example the establishment of community-owned lodges and/or equity in tourism businesses. It was also agreed that land claimants should be

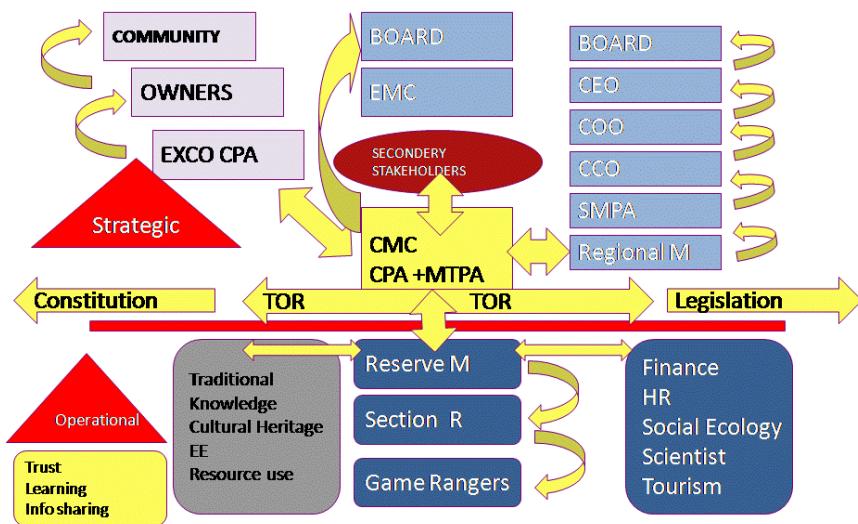
encouraged to obtain equity in tourism businesses from the start to be able to maximise their benefits and therefore the payments of settlement grants should be done in a timely matter within 6 months of signing the agreements. The remaining part of the settlement grants (less than 40 per cent) can be used for the establishment of management and business plans for proposed developments, to cover for reasonable costs for communal property association (CPA)/trust administration and training of CPA/trust members.

4.3.5 Agreed details around co-management option

4.3.5.1 Co-management committee and management of claimed properties

At this stage South African legislation does not allow for true shared responsibilities and accountability in co-management because the conservation agency remains accountable. Therefore the recommendations made by the CMC still need to be ratified by the chief executive officer (CEO) of the conservation agency. To make the CMC as legitimate as possible in the South African context, it was decided to make the CMC an official entity (voluntary association with constitution/ToR) with delegated authority and acting on behalf of its principals. Other legal entities were not preferred (such as Section 21, Close Corporation, Private Company Ltd and Trust) as some are not-for profit companies, have burdensome accounting and administrative procedures, and need approval by the MEC and Treasury because of possible interference with the Public Finance Management Act. Furthermore these other options are legally independent of their principals and therefore might cause conflict of interest, which is not envisaged through the concept of co-management. The CMC serves as a special purpose vehicle for the strategic management of the protected area within the framework of the approved MP. If the CMC cannot reach consensus, there is a right of recall to the board of directors of the conservation agency. The suggestions with regard to the CMC structure were discussed and approved in principle and are presented in figure 9.

Joint Government Position Communication / Reporting / Decision making (CMC)



(de Koning and Marais 2009b)

Figure 9: In-principle agreed CMC structure at the meeting on 25 June 2009

The CMC is responsible for the strategic oversight of the management of the protected area (determine nature of developments, investment mobilisation, destination marketing, and agree on community public-private partnership (cPPP) contracts). This probably results in a more business-minded approach and the MTPA must follow. If not, there is a risk that they will be replaced as the conservation agency at a certain stage. However, in most protected areas it takes time before the operations become profitable and expectations need to be managed carefully. Each party reports separately, so MTPA staff report to MTPA management and land claimants report to the land claimant representative structure. Park management, conservation services, infrastructure maintenance, administration, security management and disciplinary staff issues are all considered operational and are not part of the oversight role of the CMC. Operational management is executed by the conservation agency on an annual agreed performance-based contract with the CMC. A communication protocol and a monitoring strategy need to be developed as part of the ToR of the CMC. The communication to the secondary stakeholders (see 3.4.4), such as the local municipality, private sector and broader community, should be part of the communication protocol. The monitoring strategy is important to pick up disagreements, discontent and misunderstanding at an early stage. The presence of strategic partners as permanent members in the CMC should be considered because the strategic partners can give valuable inputs. The clear

establishment of the ToR of the CMC is critical for its success. Representation of the claimants on the board of directors of the MTPA is not necessarily considered good practice because claimants have a vested interest and this is not in line with sound governance principles, even if the board members declare their interests. The MEC appoints the board of directors and not the MTPA, and the provincial legislation needs to be amended to allow for this. It was therefore agreed in principle that if this happens, it should be clear that the selected land claimant representative represents all the land claimant representative structures in the province, and the selected candidate should adhere to the norms and qualifications to become a board member.

4.3.5.2 Income generation and sharing of revenue

If the protected area is 100 per cent claimed, and the net profit is shared proportionally according to the percentage of land claimed, as proposed by the MTPA, the conservation agency must strategise how net profit benefits accrue to the conservation agency for further investment and maintenance so that activities can be sustained. As long as all actual costs (including maintenance, wages, the costs of game sales and concession management) are included in the net profit calculations it was agreed that this is the most transparent way. The actual expenses are calculated yearly and these are used in the net profit calculation. The overhead costs of the conservation agency head offices need to be sustained by Treasury and it must be investigated whether this is feasible and/or whether a pro-rata cost needs to be included in the net profit calculations. The MTPA has a long-term target to rely for only 60 per cent on government subsidies in 2016/2017 but in 2008/2009 relied for 88 per cent on government subsidies. The short-term strategy is to rely for 82 per cent on government subsidies in 2009/2010 (Ndabeni 2008; Kusimama 2009:1). It was noted that beneficiation through innovative projects (such as renewable energy and payment for ecosystem services) should be promoted. This leads to a diversification of benefits, which is less risky than relying solely on the tourism business. The importance of managing the protected area as one unit to avoid fragmentation and the establishment of simple and transparent solutions that are easy to manage were noted as well. There is a need for decentralised budgets in the future because the net profits must be calculated to be able to address the aspect of beneficiation in a transparent matter. Currently the budgets are not decentralised and cross-subsidies to other nature reserves take place. The MTPA, however, decided to go this route and to transform into a system with decentralised budgets, as agreed upon in the meeting. This change in practice is necessary but has quite some impact and organisations such as SANParks are not willing to go this route. SANParks CEO David Mabunda says that: ‘The Kruger National Park constitutes 80 per cent of the total business of SANParks and cross-subsidises 17 other

developing parks not realising financial surpluses.' SANParks model is heavily dependent on the cross-subsidisation principle and any revenue diversion might precipitate a crisis (Hofstaetter 2008:48–49).

4.3.5.3 Access to claimed properties, use of biological resources and control and management of game

With regard to access to the reserve, it was agreed that special access requests by the claimants must be approved by the conservation agency, and must be submitted in writing well in advance. Claimants and neighbouring communities can get reduced entrance fees, restricted to certain periods according to a protocol and via a community register, as agreed in the CMC. Visits in the reserve must be guided by reserve management staff. This also applies to resource use. Subsistence resource use (eg head loads) is free of charge. Commercial use is charged according to a protocol established in the CMC. The costs of game sales (capture and translocation) and hunting should be offset and be part of the net profit calculations, before any payments are made to any claimant community. The conservation agency remains in control of the management of game.

4.3.5.4 Eco-tourism and other developments

With regard to nature-based tourism concession opportunities it was agreed in principle that:

- CMC is to determine opportunities and to mobilise investors according to a set of criteria spelled out in the ToR of the CMC.
- Concession rights are to be ceded to the CMC. If the proposed development is on state land, Treasury Regulation 16 must be followed as well as Section 76(4)(g) of the Public Finance Management Act No 1 of 1999, which is a lengthy process. If the proposed development is on claimed land then the so-called PPP route does not need to be followed. The conservation agency is allowed to enter into PPP in consultation with the MEC (see 2.4.1).
- cPPP contracts are to be negotiated within the CMC with maximisation of pro-poor development principles and in the best interests of the protected area (see 2.4).
- The concession fees for the developments are part of the net profit calculations and go to the conservation agency to sustain the operational activities in the protected area. The land claimants get a community levy of around R35 per overnight tourist to ensure immediate tangible benefits in case there is no net profit.

- If the MP and zonation plan allows for it, each CPA/trust gets an opportunity to establish one community-owned lodge in the protected area. The concession fee for this lodge accrues directly to the CPA/trust.

4.3.5.5 Local management capacity

Employment opportunities should take land claimants and other neighbouring stakeholders into consideration. Skills development for land claimants and neighbouring communities should be promoted through formal learnerships, depending on the availability of funds. The development of a skills register for land claimants and neighbouring communities is a good starting point. For unskilled positions (immediately below the level of chief field ranger) it is recommended that exclusive employment opportunities should be given to the land claimants (60 per cent) and neighbouring communities (40 per cent). This needs the amendment of current policies that give preference to MTPA staff for internal vacancies. Skilled positions are filled according to qualification and experience. Preference for procurement and small medium micro enterprise (SMME) opportunities are given to the land claimants and neighbouring communities, depending on the minimum skills required. Land claimants and neighbouring communities can go into partnerships to reach the required skills level. In a study tour to Madikwe Game Reserve in North-West Province it was observed by Benghu (2009) that outsourcing fence maintenance to a local SMME contributed to a reduction in poaching. This means that strategic outsourcing of certain SMMEs can contribute to an increased ownership of the protected area by land claimants and neighbouring communities and can promote the mutual beneficial situation that is envisaged through co-management.

4.3.6 Post-settlement support

Important elements were identified for the post-settlement programme such as:

- Development of management plans for the seven priority areas (including capacity building for the new landowners)
- Review of existing concession agreements and, if necessary and possible, re-negotiation (based upon recommendations in 2.4)
- Establishment of CMC and adoption and capacity building on draft ToR
- Establishment of communication and monitoring strategy for the CMC
- Finalisation of ownership vesting and necessary surveying and sub-divisions to ensure the disposal of state land process and handing over of title deeds within six months of signing the agreements

- Continued implementation of community-based natural resource management (CBNRM) strategy (global positioning system (GPS) exercise on resource use; cultural heritage; community, skills and enterprise registers; improved access and benefit sharing via bio-cultural protocol project; sale of renewable energy via hydropower project and payments for ecosystem services via river corridor project)
- Investment mobilisation/commercialisation

All government stakeholders involved in the establishment of the agreed consolidated government position at the meetings on 25 June 2009 and 16 July 2009 expressed appreciation for the joint effort. One of the participants noted that ‘this is the first time that an honest attempt is made to balance land restitution and biodiversity conservation and to come to a feasible solution’. It is crucial to come to a feasible beneficiation model and to include both the land claimants and wider community in the management of the protected area. If not, there is a risk that the communities turn against the conservation agency at a later stage. ‘The danger of excluding people is that they will seize the land and its assets,’ says Lamson Maluleke of the Makuleke community (Hofstaetter 2008:48–49).

4.4 Generic settlement and co-management agreement frameworks

The outcomes of the consolidated government position as described in section 4.3 were translated into comprehensive land claim settlement and co-management agreement frameworks. This was done with the assistance of the legal advisor hired by the conservation agency. The framework agreements referred to the relevant legislation and were circulated to the legal divisions of LCC, DEAT, MTPA, DEDET, RLCC and DLA to ensure that they were legally compliant. Inputs were incorporated as far as possible, including an independent legal opinion by the state attorney, and the finalised versions were approved by the various state departments to form the basis for the negotiations between the government stakeholders and the land claimant representative structures as described in chapter 6. This ensures that the agreement frameworks are legally compliant and stand firm if challenged by outsiders (eg investors) in court one day. The settlement agreement framework was mainly based upon the consolidated government position and the 12 settlement principles derived from the MoA (see 3.4.5). The co-management agreement framework was based mainly on the consolidated government position and aligned with S42 of NEM:PAA as described in 2.3.2. The language used in the agreement frameworks is as simple as possible so that it is easy for the claimant community to understand them. Dispute resolution and termination clauses were added to the

agreement frameworks. The generic settlement and co-management agreements were presented to and approved by the board of directors of the MTPA so that the CEO, as head of the EMC, could negotiate and sign these generic agreements within the approved framework. The settlement and co-management agreement frameworks are attached in appendices A and B for reference.

4.5 Summary and conclusion

As argued in de Koning and Marais (2009c:75) certain land claim settlement options have higher financial implications for the conservation agency than others. If claimants are given alternative land or are financially compensated, this budget comes from other state funds, and is not financed by the conservation agency. According to the RLCC in Mpumalanga, financial compensation is very costly and complex and there are no standard procedures for rural areas. Financial compensation needs a thorough feasibility study and depends on the improvements made on the land. Therefore, normally all developments are on hold when a claim is being gazetted on a property and only maintenance operations can continue. If developments on the land continue, it is more expensive for the RLCC to pay for these improvements. Currently, there is not enough funding for financial compensation and in many cases there is no alternative land available so these options are not feasible. If land restitution is chosen by the claimant community, however, this affects the budget of the conservation agency, especially if a lease agreement and/or co-management agreement are chosen. In the lease scenario the conservation agency leases the land back from the claimants. It must be negotiated with Treasury and/or other stakeholders who provide the additional money for the lease. As Treasury is still not clear and/or committing to the funding of the lease option, it is currently not really a feasible option for the conservation agency to enter into. If the lease option is chosen by the claimant community, they can still participate in many aspects of the protected area, but the power of decision over the protected area remains with the conservation agency. Because there are clear and defined roles, this model probably leads to less tension between the two parties, compared with the co-management model.

The success of co-management depends on whether the protected area can make a net profit. In most cases this is only possible if there is effective and efficient management with a high potential in tourism development and if the right investor can be found. Partnerships with the private sector are crucial to make co-management beneficial to all the parties involved.

Besides the sharing in costs, risks and benefits, the new landowners have to be aware that in many cases they cannot expect monetary benefits for at least the first five years, except for the proposed levy for overnight tourists. Co-management has high financial implications for the conservation agency. This has to be discussed with Treasury and/or other stakeholders who can carry these additional costs, especially in the initial stages when there are unlikely to be immediate additional benefits. To be able to understand the financial impact for both the conservation agency and the land claimants, more detailed studies on the financial feasibility are needed as this information is not ready available. This is partially because many protected area budgets are still centralised.

The co-management option requires a decentralised budget per reserve to be able to calculate the net profit. If the budgets are not decentralised this can lead to lack of clear information for the new land owners and this might lead to conflict and/or non-compliance with the co-management agreement. Cross-funding (between protected areas) is generally not acceptable to claimant communities. For the purpose of this study, 88 per cent of the current staff and operational budget per protected area, as subsidised by the state, is calculated as income in the net profit calculation. The remaining 12 per cent must be generated by the protected area. In the year 2016/2017 only 60 per cent of the staff and operational budget can be calculated as income in the net profit calculations and 40 per cent must be generated by the protected area (see 4.3.5.2). The conservation agency should strategise and prioritise its budget to ensure that if co-management is chosen, it can be implemented successfully. It is not helpful at this stage that Treasury is not committing to any funding for the lease and co-management options as it creates a lot of insecurity for the conservation agency, especially since the RLCC is pushing for the land restoration option. If the conservation agency is not able to secure enough operational budgets to successfully implement these options, it might need to look into other fundraising mechanisms and/or other alternatives such as de-proclamation of the areas with low biodiversity value. It is important that operational budgets should be aligned with the management plans for the nature reserves. This ensures proper management by the conservation agency in a professional manner. If appropriate budget is not allocated, land claimants can legally request for the replacement of the management authority. If the management plan is not properly implemented because of operational budget constraints, no net profit is made, which influences the beneficiation package for the land claimants. If this happens, there is a risk that the land claimants will want to manage the nature reserves privately, which is an option in the long term under NEM:PAA. Some of the priority nature reserves that rank high in tourism value have the potential to make net profit in the future.

However, initial investments in basic infrastructure are needed to attract investors in a competitive way and to ensure pro-poor tourism beneficiation.

From the results presented above it can be concluded that it is beneficial for conservation agencies and RLCC to hold joint meetings in which agreements are reached on the way forward in general and per protected area. These joint meetings should take place frequently, and the right participation of the conservation agency (people oriented) is essential, as well as the presence of senior managers and project officers of the RLCC. To ensure that agreements are reached within the legal framework, there is an urgent need for conservation agencies to establish generic settlement and co-management agreements, based on the principles mentioned in the MoA and Section 42 of NEM:PAA. Ideally the generic settlement and co-management agreements should be established in collaboration with other government departments such as the RLCC and that a firm agreed consolidated government position should be in place. If not, agreements might be signed under political pressure that were not agreed upon by the conservation agency (Heunis 2009). Special attention in these generic agreements should be given to game control and management, the proposed development model (eg PPP, Build Operate Transfer (BOT)), the proposed management model (proposed legal entity and governance structure) and the proposed financing/business model as the different options have high financial and organisational implications for the conservation agency. Most of the intervention areas are well covered in the consolidated government position presented above via the proposed set-up of the CMC. The CMC deals with various actors in cPPP matters and with secondary stakeholders via the communication strategy. Governance and strategic management are arranged via the co-management agreement and marketing, investment promotion and the utilisation of natural resources for local economic development are organised through the CMC. Another opportunity that was created through the consolidated government position is to use settlement grants for infrastructure development on the reserves and to increase the benefits for the land claimants at the same time. It is important that the agreed proposal on the settlement grants should be implemented, enforced and monitored by the RLCC. Collins (2009) observed that settlement grants have rarely been used for infrastructure development on the reserves until now.

Currently there is a kind of a vicious circle in that claimants do not believe in the conservation agency because of poor performance in commercialisation in the past, but the conservation agency cannot commercialise because the claims are not settled and it has limited budget for non-staff-related operational costs and/or infrastructure development.

The settlement and co-management agreements are an absolute priority, since it is experienced that investors cannot be targeted before these issues are settled. In the process of negotiating co-management agreements with claimants, realistic provision should be made for operational expenses (Kusimama 2009:39).

Currently the main income-generating source for the MTPA is related to selling and hunting game, with revenue from entrance fees as the second largest income, and sales of assets as the third income revenue source. Revenue from accommodation and concession fees is currently not a significant source of income. The selling and hunting of game is not a highly sustainable source of income, since the MTPA requires game to populate its own reserves in future. Currently four reserves are playing a major role in terms of revenue generated from reserves, that is, Blyde River Canyon Nature Reserve, Manyeleti Game Reserve, Loskop Dam Nature Reserve and Songimvelo Nature Reserve (Kusimama 2009:4–8).

From the above it can be concluded that currently tourism operations in the MTPA reserves are underdeveloped, as confirmed by the assessment made by the MTPA staff (see 4.2.3). The MTPA has quite small protected areas compared with the other conservation agencies and has more own accommodation for tourism. Other tourism facilities available on MTPA reserves are very limited compared with similar entities, and few activities are available on the reserves, compared with those on similar reserves. There is a big gap between the extent of commercialisation done on other reserves, compared with what has been done on MTPA reserves (Kusimama 2009:30–33). Operational budget constraints really have a negative impact on maintenance of roads, fences and buildings and facilities overall. This factor does not promote effective conservation practices, nor does it complement the natural attraction to promote tourism (Kusimama 2009:16). Best practice in tourist development, in order to provide a higher standard of accommodation, facilities and activities, involves commercialisation in the form of PPP's and cPPPs. The benefits from including the private sector are the following:

- Expansion and upgrading of infrastructure, which finally reverts back to the MTPA or the landowners at that stage
- Marketing of products done by the private sector
- Higher level skills, services and know-how provided by the private sector, resulting in a better tourist experience
- Transfer of significant risks
- Releasing the resources of the MTPA to focus on core mandates

- Fulfilling the social responsibility to the community by including the community of land claimants through cPPPs

Best practice includes a focused strategy, where only two or three protected areas are identified for major commercialisation (Kusimama 2009:43). According to South Africa Tourism, Mpumalanga received 1,200,000 foreign tourist arrivals in 2006 and 1,800,000 domestic trips in the same year. The total amount that tourists spent was R4 billion. Mpumalanga's market share was 6 per cent in 2006, a decrease from previous years. The Mpumalanga Tourism Growth Strategy has identified 'lack of product' as the main reason for the decreasing market share. Mpumalanga's target is to increase total tourist spending from R4 billion in 2006 to R10 billion in 2016. This is an extremely challenging target for growth in the tourism sector, since it requires a 10 per cent annual growth in tourism, while the Gross Domestic Product (GDP) growth target is only 2.5 per cent annually. Major developments that impact the MTPA as part of the 'Mpumalanga vision 2016' are:

- Blyde River Canyon Nature Reserve and other reserves: PPP investment programme
- Development at Barberton (including Songimvelo Nature Reserve)
- Major developments at Loskop Dam area

The very high targets for development need extra funding to enable the MTPA to meet the expectations. The developments in the long run generate increased own revenue, but initial assistance is needed for development (Kusimama 2009:8–10).

This is not really in line with the current approach to go into co-management for all of the identified priority areas. Especially for the priority areas ranking medium in tourism value and that do not have a tourism record at the moment, such as Mabusa and Mdala Nature Reserves, an alternative land claim settlement option would probably have been better for both the conservation agency and the claimants. The decision to go for co-management in all seven priority areas, however, was influenced by a lack of detailed information at the time that the consolidated government position was established and possibly by political pressure. As there is still a push from government to go for land restitution and co-management (the only strategy in MoA), government is hesitant to proceed with the options of de-proclamation and/or partly de-proclamation. Currently, the options of lease, alternative land and financial compensation are unfortunately not realistic as there is not enough funding and therefore they do not form a feasible alternative for now. For the future, however, it is recommended that all the necessary information should be gathered on all remaining protected areas and that realistic alternatives to co-management become available so that a more informed decision can be made in the interest of all stakeholders and that table 9 as presented in 4.3.1 can be

applied. As such table 9 can be seen as a refinement of the general model design as illustrated in figure 4 in section 3.5. As mentioned before figure 4 in section 3.5 is a refinement of the initial model design as illustrated in figure 1 in section 1.8.

The negotiation process between the government and the claimant representative structures is not part of this chapter. The results of this important process, in which the land claimants can voice their opinion and tailor the generic agreement frameworks to their specific situation, are given in chapter 6.

5.1 Introduction

The second objective of this thesis is to explore options and to give recommendations for ‘benefits beyond boundaries’ in addition to possible sources of revenue inside the protected area to make the proposed beneficiation models more feasible over a long period (see 1.3). As stated in 2.5.1 the following sources of potential revenue are seen to have the biggest potential to mobilise finance for protected areas: tourism; resource utilisation, including bio-prospecting; ecological services and existence values such as media rights and international donations. This chapter starts with a description of the selected pilot site, that is, Blyde River Canyon Nature Reserve located in the Kruger to Canyons (K2C) biosphere reserve (5.2). The results of the estimated beneficiation from tourism in the pilot site (as explained in 3.3.2) are given in section 5.3. The tourism industry can be risky and unpredictable and has limited potential to achieve sustainable livelihoods, especially in areas where the market is already satisfied. Therefore it is important to look into the aspect of diversification of socio-economic benefits next to the benefits coming solely from tourism. The feasibility of three proposed projects was conducted according to the explanations given in 3.3.3, 3.3.4 and 3.3.5. The feasibility results of the river corridor project, the hydropower project and the bio-cultural protocol project are presented in 5.4, 5.5 and 5.6 respectively. This chapter finishes with a comprehensive summary and conclusion of the identified results (5.7).

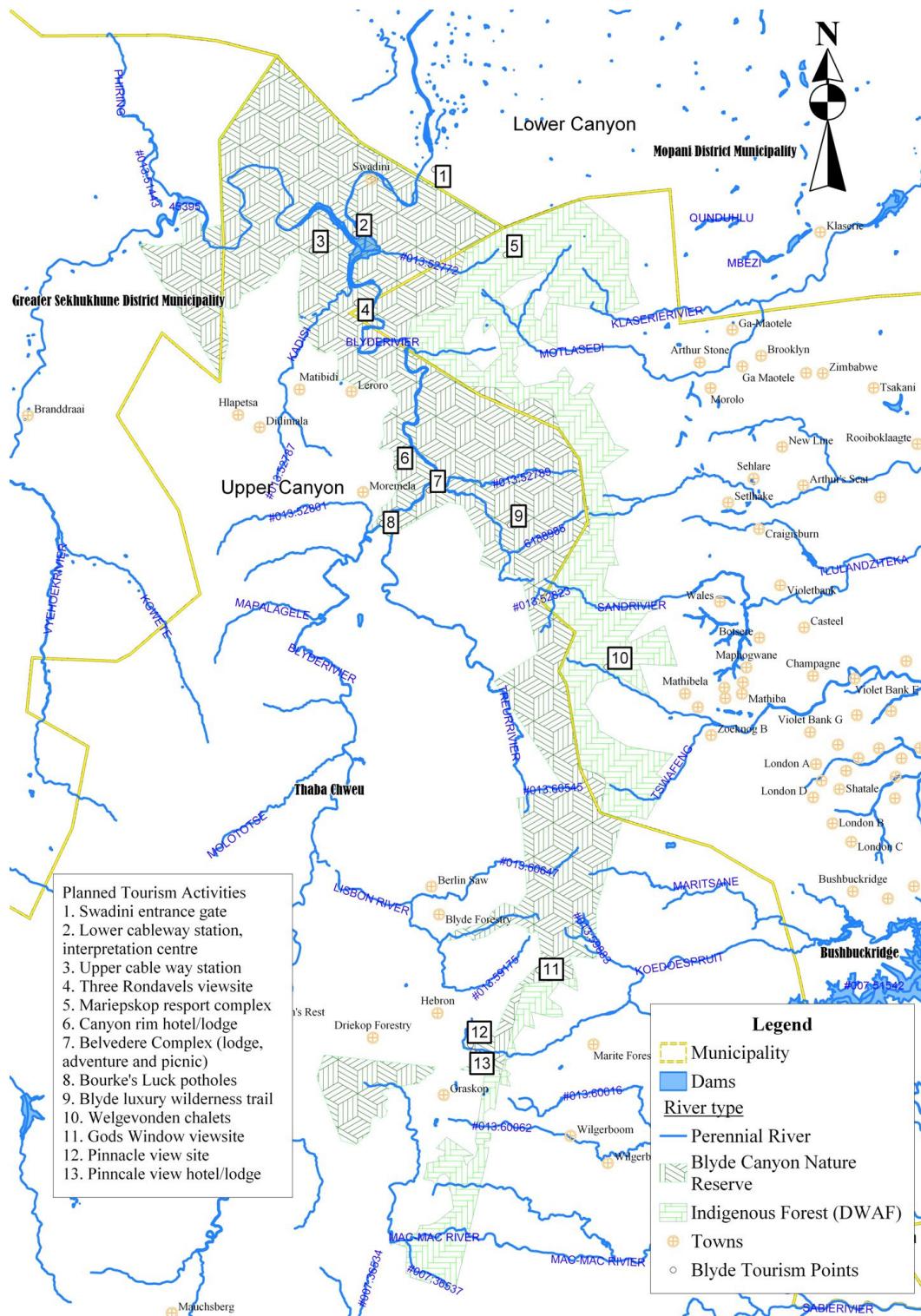
5.2 Blyde River Canyon Nature Reserve as pilot site inside a biosphere reserve

The K2C biosphere region (K2C stakeholders prefer ‘region’ to ‘reserve’) was recognised by the United Nations Educational Scientific and Cultural Organisation (UNESCO) in 2001. It encompasses important South African flagship conservation areas (Kruger National Park to the east and Blyde River Canyon Nature Reserve and Wolkberg Wilderness Area to the west), with widely diverse landscapes containing various habitats and exceptional biodiversity. The K2C has an estimated size of 2.6 million hectares, falling into two provinces of South Africa, that is, Limpopo and Mpumalanga. Besides high biodiversity, the region comprises a diverse human population and a variety of land use practices and economic activities (agriculture, forestry, mining, tourism). The population within the

biosphere is approximately 1.5 million people (~ 97 per cent black), living mainly in the transition zone under rural and poor conditions caused partially by the insecure and uncertain land tenure situation. But besides land tenure, the conservation of the valuable water catchments areas in the biosphere reserve and the equitable allocation of the water resources are crucial for sustainable development in the K2C region. These two key processes on land and water distribution require unity among the stakeholders of K2C such as local communities, farmers, foresters, entrepreneurs, industries, scientists and government agencies. Moreover, it is essential that these stakeholders build up a common ownership of their biosphere through a transparent public participation process. Initial steps in this direction have already been undertaken within the K2C initiative and its stakeholder council, which comprises about 70 people from all relevant groups, including the poor, rural communities (de Koning 2009b:2–3). The mandate for the management of biosphere reserves in South Africa is delegated from the Department of Environmental Affairs and Tourism (DEAT) to the respective provincial authorities. In the case of the K2C biosphere region, this mandate is delegated from the Mpumalanga Department of Economic Development, Environment and Tourism (DEDET) to the Mpumalanga Tourism and Parks Agency (MTPA) with regard to the portion situated in Mpumalanga. For the portion situated in Limpopo Province the Limpopo Department of Economic Development, Environment and Tourism (LEDET) is in charge. For the projects in the transition zone, where there is added value in bringing stakeholders together, and which have a bioregional and advocacy character, the K2C executive committee (EXCO) is in charge of the coordination of activities. Both LEDET and the MTPA remain in charge of the activities in the core zone and the coordination of activities in the buffer zone (private nature reserves). The K2C EXCO is elected by the stakeholder council and comprises five elected members (currently private sector, communities, research organisation and other government departments) and four ex-officio members from the MTPA, LEDET and the two affected District Municipalities (Ehlanzeni DM and Mopani DM).

The existing Blyde River Canyon Nature Reserve is about 30,000 hectares in size. The size will increase in the near future with the proposed inclusion of the indigenous forests on the eastern side of the nature reserve. The nature reserve is part of the Drakensberg Afromontane regional system and has varied plant and animal life. The Mariepskop complex alone has 1,400 floral species and in total there are 1,661 plant taxa. With regard to fauna, there are 100 mammal species (of which 19 are larger game species) and 200 butterfly species. It is the third largest canyon in the world and has two visitor centres and five viewpoints. Other major

attractions are the waterfalls and Bourke's Luck Potholes. The nature reserve also provides passage for three of Mpumalanga's large perennial rivers, namely the Blyde, Treur and Ohrigstad Rivers, which contribute to the Olifants River. The nature reserve is rich in historical and cultural heritage. Current activities are white river rafting, boat trips on Blyderivierpoort dam, and hiking trails. The MTPA owns several facilities such as the 8–10-bed Belvedere Guesthouse, the auditorium at Blyderivierpoort dam, and some hiking huts. There are currently two concessions on the reserve, that is, Forever Resorts Swadini and Forever Resorts Blydepoort. Swadini and Bourke's Luck Potholes can both be accessed by road and the reserve is about 170 km from Kruger Mpumalanga International Airport (Kusimama 2009:51–53). Possible mining from the Dientje mine is a serious threat, and invasive alien species also pose a threat to the biodiversity of the reserve (Kamoza 2009:15). The most important features in Blyde River Canyon Nature Reserve as elaborated on in this chapter are indicated in figure 10 below.



(Map by Ronny Dobbelsteijn)

Figure 10: Features in Blyde River Canyon Nature Reserve as elaborated on in this chapter

5.3 Proposed beneficiation model from tourism

Blyde River Canyon Nature Reserve is often divided into the upper canyon and the lower canyon (see figure 10). The panorama route includes all the tourist attractions on the upper rim area of the escarpment (eg waterfalls, Graskop, Bourke's Luck Potholes, God's Window, Pinnacle and Three Rondawels). Blyde River Canyon Nature Reserve attracts many visitors, of whom 70 per cent are foreigners. The annual visitor numbers to the upper canyon reach 500,000, with Bourke's Luck Potholes attracting 220,000 and God's Window 350,000. Swadini is located in the lower canyon and attracts around 50,000 visitors, and the indigenous forestry areas 3,000 visitors each year (Robford Tourism 2006b:6–14). The Swadini area attracts more domestic tourists, while the higher area around Bourke's Luck Potholes attracts more foreign tourists. Visitor numbers were 216,344 in 2005/2006; 196,535 in 2006/2007; and 218,568 in 2007/2008 (Kusimama 2009:13–14). These numbers reflect only the paying visitors at Bourke's Luck Potholes, which is the only place in the nature reserve that charges entrance fees at the moment (R22 for adults and R11 for children). In 2008/2009 the income received from accommodation, concessions and entrance fees in Blyde River Canyon Nature Reserve was R228,600, R159,720 and R5,345,760. Blyde River Canyon Nature Reserve currently generates 71 per cent of the total MTPA income on accommodation, concession fees and entrance fees received on the reserves (Kusimama 2009:5).

According to Kusimama Consulting (2009:40–41), overall entrance fees compare relatively well with those charged by similar entities. However, a gap was identified between the fees charged by the MTPA at its prime parks and those charged by similar entities. It is therefore proposed that the entrance fee at Bourke's Luck Potholes for South African citizens should be increased from the 2008/9 rate of R22 per adult and R11 per child to R35 per adult, and R20 per child. Further, it is proposed that the rates charged for foreigners should be increased to R50 per adult which is a 127 per cent increase from what was charged in 2008/9. Since 70 per cent of visitors at Bourke's Luck Potholes are probably foreigners, and Blyde River Canyon Nature Reserve contributed 86 per cent of total entrance fees of R6.2 million received in 2008/9, it is estimated that this rate increase for foreigners should generate additional revenue of approximately R4.7 million. The South African citizen rate increase is estimated to be 59 per cent and could generate additional revenue of R950,000. The total additional revenue generation may thus be as high as R5.65 million as a result of this proposed rate amendment. This amount also gives an indication of the extra amount that can be charged for the claimants with regard to the proposed landowners levy per guest visiting

the nature reserve without compromising the competitiveness of the nature reserve. The claimants preferred to have a levy per guest rather than a levy per overnight guest, as proposed in the consolidated government position (see 4.3.5.4 and 6.12). It is also proposed that entrance fees should be charged at the Swadini entrance to Blyde River Canyon Nature Reserve. Thereby, the reserve will receive income from all the tourists visiting the Swadini Forever Resort. The entrance fee may be as low as R10 per adult and R5 per child and could amount to R350,000 per year. This revenue is helpful in maintaining the road to the visitor centre, which is in dire condition, as well as subsidising other maintenance. It is also proposed to charge entrance fees at the viewpoints, such as God's Window, Pinnacle and Three Rondawels. Entrance fees, however, cannot be charged without upgrading the basic amenities, such as parking and ablution facilities (Kusimama 2009:40–41).

The upper and lower canyon areas attract roughly the same amount of overnight visitors, that is, 160,000 in the lower canyon and 190,000 in the upper. Both regions have roughly the same overnight capacity, that is, 1,595 beds in the lower canyon and 1,530 in the upper canyon. The lower canyon area is used as a gateway to Kruger National Park and the private nature reserves, and therefore the average stay is substantially longer than in the upper canyon. Growth calculations show that over the next 10 years an additional 100,000 room-nights will be demanded for the lower canyon and an additional 70,000 for the upper canyon. Most of these establishments are developed outside the nature reserve and have the ability to generate 700 new jobs within the regional economy per annum. It is important to attract more overnight tourists to the region as they spend more than day visitors, and therefore additional activities need to be created, especially in the upper canyon (Robford Tourism 2006b:32–33).

Opportunities for development inside the nature reserve as well as current development projects are the following:

- Funds of R28 million have already been approved for a three-day luxury hiking trail, with three luxury lodges; the upgrade of Welgevonden chalets and hiking trails, and the establishment of the three new entrance gates at God's Window, Pinnacle and Three Rondawels. It is estimated that this will create 34 permanent jobs and a rental of R416,500, with an estimated profit on the new entrance gates of R1.83 million per year (De Beer et al 2007:13–22)
- Cableway project: zoning was specified, development proposals have been received, and feasibility studies must be performed

- Skywalk project on the escarpment overlooking the canyon: investors indicated interest (estimated investment R8 million)
- Re-opening of one-day trail from Potholes to Swadini, with tea garden at visitor centre at Swadini, will require minor facility upgrading
- Adventure activities introduced, such as abseiling, rock climbing and bungee jumping.
- Plans for the incorporation of the Mariepskop complex as part of the expansion of the nature reserve will produce further tourist development opportunities
- Concession agreements with the two Forever resorts need to be reviewed and revised (Kusimama 2009:45)

First of all, the total costs of upgrading the view sites of the upper canyon are estimated to be R61 million. If a 50-bed lodge is developed at Mariepskop, the view sites around that area must be upgraded at an estimated cost of R8 million. Extra costs of infrastructure upgrade for the concession of the proposed cableway are estimated to be R6 million. The proposed skywalk project calculated an additional R7 per adult and R4 per child as entrance fee for the MTPA with an estimated 85,000 people visiting the site in year one. This means additional revenue for the MTPA and the claimants of R414,375 from year one (Scott and Snaith 2009:16). Table 10 below lists some of the proposed developments by the private sector inside Blyde River Canyon Nature Reserve.

Table 10: Proposed developments (including projections) by the private sector inside Blyde River Canyon Nature Reserve (including the indigenous forests)

Facility	No of beds	Capital expenditure	Expected turnover	No of jobs	Rental/concession	Expected year commissioning
Canyon Rim	40	R32 m	R22 m	50	R1.41 m	4
Pinnacle	200	R38 m	R35 m	120	R425,000	5
Belvedere	25	R10 m	R3 m	35	R75,000	4
Cableway	NA	R150 m	R16 m	30	R465,000	3
Mariepskop	50	R25 m	R14 m	50	R850,000	4
Activities	NA	R5 m	?	30		>1
Total	315	R260 m	R90 m	315	R3.23 m	

(Robford Tourism 2006b:105–109 and Busico cc 2005:5)

Table 11 summarises the financial projections of the future entrance fees for Blyde River Canyon Nature Reserve by creating more points that charge entrance fees. These financial projections exclude the proposed price increase for the entrance fees at Bourke's Luck Potholes.

Table 11: Financial projections future entrance fees Blyde River Canyon Nature Reserve compared with the entrance fees of 2008/2009

Entrance fees	2008/2009	2013/2014
Bourke's Luck	R 5,345,760	R 5,345,760
Skywalk	-	R 414,375
Swadini	-	R 350,000
God's Window Three Rondawels Pinnacle	-	R 1,830,000
Total	R 5.3 million	R 8 million

(Summary of financial projections by the author as elaborated in section 5.3)

Table 12 summarises the projections for additional income and permanent job generation through the proposed developments versus the investments that are needed.

Table 12: Additional income and permanent jobs generated through the proposed developments versus the need for public and private sector investments

	Public sector investment	Private sector investment	Annual rental / concession	Permanent jobs
Luxury hiking trail, Welgevonden and entrance gates	R28 million	-	R416,500	34
Skywalk	-	R8 million	-	-
Upgrading viewpoints upper canyon	R61 million	-	-	-
Upgrading viewpoints Mariepskop	R8 million	-	-	-
Infrastructure upgrade around cableway	R6 million	-	-	-
Activities private sector as listed in table 10	-	R260 million	R3.23	315
Total	R103 million	R268 million	R3.65 million	349

(Summary of financial projections as elaborated by the author in section 5.3)

Kloss (2001:15) states that at least US\$200–230 per square km is needed for effective protected area management in the African context. In South Africa the average budget is much higher, with an estimated US\$2,129 per square km in 1998. This is even higher than the average funding per square km in developed countries, with an estimated average of US\$2,058 per square km. For Blyde River Canyon Nature Reserve this amounts to US\$638,700 (300 square km x US\$2,129) which against a currency rate of 1:7.5 results in R4,790,250. According to Mokoena (2009) and Loock (2009) the estimated annual budgets for the bigger reserves such as Blyde River Canyon Nature Reserve and Songimvelo Nature Reserve are somewhere between R3.5 and R4.5 million. This is an estimate as the annual budgets are still centralised within the MTPA, so it is difficult to do the exact calculation per reserve. According to Loock (2009), around 33.3 per cent of the annual budgets for the bigger reserves go to operational costs, such as materials for asset maintenance and fuel, and 66.6 per cent to staff salaries. MTPA currently employs 50 staff for Blyde River Canyon Nature Reserve at an estimated cost of R3 million (Mokoena 2009). The total estimated budget for Blyde River Canyon Nature Reserve in 2008/2009 is therefore R4.5 million (3 million : 66.6% x 100%) which results in US\$2,000 per square km. In 2008/2009 the income from accommodation, concessions and entrance fees resulted in R5,734,000, which means that the nature reserve is breaking even from a business point of view and operating at a profit if it relies only on income generated from tourism, even if the state subsidy for the management of conservation is excluded. As the annual budget for Blyde River Canyon Nature Reserve was subsidised by the state for 88 per cent in 2008/2009, an additional income of R3.96 million (R4.5 million x 0.88) should be added on top of the income generated by the reserve itself when calculating the net profit to be divided by the estimated 15,000 claimant households (see table 2 in 1.9). This amount of R3.96 million is therefore not available anymore for cross-subsidisation to other less viable protected areas. In total, the net profit calculation based on the state subsidy for conservation and the tourism-related income minus the actual management costs for 2008/2009 is R5.2 million (R3.96 + R5.734 – R4.5) which results in R347 per household (HH). If all proposed developments mentioned in table 12 take place, the total rental/concession fees will result in at least R3.65 million in 2014. The review of the concession arrangements for both Forever Resorts is excluded from this calculation. The total entrance fee (collected at six sites) results in R8 million in 2014 (see table 11). The total projected income from tourism for 2014 is R11.65 million and an additional 349 permanent jobs will be created. The annual costs of operating the reserve in 2014 increased by 37.5 per cent because of an estimated increase in costs when going into co-management (see 2.3.3). An additional increase of 70 per cent of the rental/concession fees ($0.70 \times R3.65 = R2.56$ million) is added for concession/rental contract management. The

total estimated management costs for 2014 are R8.75 million ((R4.5 million x 1.375) + R2.56 million). Around that time only 60 per cent (see 4.3.5.2) of the annual budget (excluding the additional costs for concession/rental contract management) is subsidised by the state so R3.71 million (R4.5 million x 1.375 x 0.60) should be added to the income for the net profit calculation. The total projected income in 2014 is R15.36 million (R3.71 million + R11.65) and the reserve could generate a net profit of R6.61 million (R15.36 million – R8.75 million). The complicated calculation above is summarised in table 13.

Table 13: Estimated net profit calculation for Blyde River Canyon Nature Reserve for 2013/2014 compared with 2008/2009

Year	Subsidised budget state (1)	Income out of tourism (2)	Actual costs (3)	Net profit 1+2-3
2008/2009	0.88 x R4.5 = R3.96 million	R5.734 million	R4.5 million	R5.2 million
2013/2014	0.6 x R6.19 = R3.71 million	R11.65	R4.5 x 1.375 = R6.19 million + R2.56 million = R8.75 million	R6.61 million

(Summary of financial projections by the author as elaborated in section 5.3)

In the calculation above, it is assumed that the state will finance 60 per cent of the increase in costs when going into co-management. However, the state will not subsidise additional costs for rental/concession management, and these must be 100 per cent covered by the income from tourism generated by the reserve. The proposed increase in entrance fee at Bourke's Luck Potholes, resulting in an additional R5.65 million, is excluded from this calculation as it is used for the proposed landowners levy per guest. The total tangible benefits going to the claimants are estimated to be at least R12.26 million (R6.61 million + R5.65 million) and in this case the reserve is 100 per cent claimed and this results in R817 per HH per annum. To reach this amount, however, a total investment of R371 million is needed, of which R103 million is provided by the state as grant funding and R268 million as investment by the private sector (see table 12). Around 30 per cent of the private investment could be covered by using 50 per cent (see 6.15) of the settlement grants (R160 million) of the claimants, which can add to the benefits because of a yearly pay out of dividends. Other benefits not included in the calculation are 700 new jobs per year for overnight developments outside the reserve and numerous small micro medium enterprises (SMMEs), training and temporary labour opportunities, especially in the development stages. The above estimates are based on a literature review and the amounts are not corrected for inflation. Possible additional costs

for the proposed extension of Blyde River Canyon Nature Reserve have been excluded from the calculations. The rough estimate of R817 per HH confirms that tourism is not the sole solution to attain sustainable livelihoods. It is probably better to spend the benefits on agreed community projects rather than a per capita payment. The above also indicates that the average budget for protected area management in South Africa is relatively high compared with other African countries. This might explain the call from government for protected areas to become more self-reliant with more effective and efficient management.

5.4 Conservation-related benefits from river corridor project

Biovista Conservation Consultancy was selected and appointed by the steering committee members as the service provider to conduct the feasibility study for the proposed river corridor project. The feasibility study started from five potential corridors in the K2C biosphere region as identified by Newenham (2009:2), namely:

- A. Wolkberg Wilderness Area to Kruger National Park via the Olifants River
- B. Blyde catchment area to Kruger National Park via the Blyde and the Olifants Rivers
- C. Blyde catchment area to Kruger National Park via the Klaserie River and/or private nature reserves.
- D. Blyde catchment area to Sabie Sand private nature reserve via the Sand River
- E. Blyde catchment area to Kruger National Park via Andover and Manyeleti Game Reserve

The study was conducted from July to November 2009. A broad baseline with regard to the value of biodiversity and ecosystem services, as well as the value of creating local economic development (LED) through increased tourism and other nature-based opportunities, was established for these five corridors. An overview of the enabling policy environment and its bottlenecks was given as well. Based on an equal weighing of the combined value to biodiversity conservation and LED, a selection process of the most appropriate corridor took place. The service provider developed 14 selection criteria prior to the screening workshop that took place on 15 July 2009. During the screening workshop, additional criteria were developed by steering committee members and in the end eight ecologically and eight socio-economically related criteria were agreed upon, with additional criteria related to human-wildlife conflicts. The eight ecological-related criteria concern biodiversity; red data and endemic species; ecologically sensitive habitats/ecosystems; ecosystem services; protected area expansion and stewardship programmes; potential and existing physical barriers; aquatic ecosystems; and the ability to mitigate/adapt to climate change. The eight socio-economic-

related criteria concern income generation for communities; landowners, land managers and land users and their internal cohesiveness; impacts of land uses and compatibility with integrated development plan (IDP) and LED plans; land and water management (including private sector development plans and fire management); land claims; community settlements; industries; and land and water management capacity. Based on the selection criteria and the data of the broad baseline study on the five possible corridors, Biovista Conservation Consultancy motivated why corridor E, D, and C should be eliminated for the moment. Proposed corridor E should be eliminated meanwhile as it does not follow a river course all the way through, and because of the high density of communities close to the corridor. Proposed corridor D has a significant aquatic system, but is not directly linked to the escarpment with one river continuum. Also here the high density of the communities in and close to the potential corridor proves to be very challenging. Proposed corridor C also has a fairly significant aquatic system but it is also not directly linked to the escarpment with one river continuum. There are limited communities along the route as it is dominated by private conservation land. Therefore socio-economic benefits as envisaged by the project might be too limited. Based on further discussion about the screening criteria and the baseline data, the multidisciplinary steering committee felt that proposed corridors A and B should be the focus of further study as they contribute most to the conservation of ecosystem services and biodiversity, and good socio-economic opportunities. Since steering committee members represented both Limpopo and Mpumalanga provinces it was too difficult to select either A or B. It was therefore decided that the Blyde River from Pilgrims Rest to its confluence with the Olifants River and the Mohlapitse and Olifants River (from Wolkberg Wilderness Area) to Kruger National Park was the combined corridor to focus on. It was further decided that the design of the combined river corridor should maximise opportunities for biodiversity conservation, while minimising human/wildlife conflict and creating opportunities for LED. The detailed situation analysis, desired state and conceptual model worked out for the combined corridor enabled the development of an implementation plan and fundraising strategy as described below and upon the established terms of reference (ToR).

The situation analysis on the combined corridor provides the status quo/baseline for the ecological component of the river corridor areas, that is, the biodiversity, ecosystem services, sensitive ecosystems and details regarding aquatic ecosystems in particular, as well as the general details regarding the socio-economic profiles of the regions. Details of land claims

and eight identified bottleneck areas¹² were provided, as well as a Strengths Weaknesses Opportunities Threats (SWOT) analysis with special reference to direct and indirect threats to the combined river corridor and to opportunities. The desired state refers the circumstances of the specific environments that the project is focusing on. The scope, vision, conservation targets and goals were defined in a strategic planning workshop by steering committee members using the principles of Open Standards for the Practise of Conservation developed by the Conservation Measures Partnership (CMP) (www.conservationmeasures.org). This methodology can be applied on multiple scales, from small projects to complex programmes, and provides strong guidance for planning. It helps to define an intervention scope/focus, a vision, conservation targets, direct and indirect threats to these targets, and most importantly opportunities. These are then used to identify key strategies, which in turn are prioritised. That the steering committee contained members from various disciplines ensures the balance between biodiversity conservation and LED. This is reflected in the vision that was formulated: within the next five years (2010–2014) it is envisioned that there will be improved sustainable and integrated management and conservation of regional-scale linkages between major ecosystems in the K2C biosphere region for local socio-economic development by multiple key stakeholders. The focus in the K2C biosphere region is on both land and water, and must inculcate a bioregional approach.

The total number of people affected by the combined corridors A and B is estimated at 400,000. Poverty is widespread, with 26 per cent of people surveyed in one of the districts earning no income at all, and 60 per cent unemployed or economically inactive, leading to approximately 70 per cent earning less than R10,000 per annum. The land uses are diverse and the stakeholder base is very large. The main industries/land use types falling within the combined corridor are forestry, agriculture, tourism, conservation, with mining as a fifth. The agricultural sector contributes 40 per cent of employment opportunities in the surveyed area. It also illustrates enormous potential for expansion in tourism job creation as the current number of jobs in the hotels and restaurants category is only 3 per cent. Poverty (unemployment) will continue and worsen unless these communities are assisted to reposition themselves economically instead of relying on external stimulation and opportunities. Communities need to focus on their own needs and learn how to satisfy them from within. In line with the three main functions or principles of UNESCO's Man and the Biosphere (MAB) programme, the overall approach in K2C biosphere region includes strong

¹² Bottleneck areas were identified in the Open Standards for the Practice of Conservation workshop (www.conservationmeasures.org) held on 22–23 September 2009. These areas are most likely to pose the greatest obstacle towards achieving the river corridor goals as discussed in the desired state.

recognition that significant contributions regarding quality of life improvements experienced by impoverished communities living immediately in and around the combined corridor can be partly achieved through the development of nature-based tourism, the production of renewable energy and payment for ecosystem services (PES). These are also beneficial to water and other conservation efforts.

Based on these threats, opportunities and bottleneck areas, two interlinked project proposals were developed to address priority activities for the combined river corridor. In this context the first proposed project aims i) to address a request by the Moletelo community, Limpopo Province, to provide support for diversification of local sustainable livelihood options (based on tourism opportunities); ii) to assess potential for a similar kind of demonstration approach with the Vaalhoek community in Mpumalanga; and iii) to raise awareness and build capacity within these communities. The Moletelo and Vaalhoek communities are also claiming properties on Blyde River Canyon Nature Reserve, and additional income from tourism can be obtained by looking at nature-based tourism opportunities and activities just outside the reserve, such as accommodation, hiking, and rafting. This is in line with the need for additional activities around Blyde River Canyon Nature Reserve as identified in 5.3. The project intends to:

- Support the Moletelo communal property association (CPA)/community with a due diligence assessment regarding their diversification of income generating activities beyond agriculture by the end of 2010, and related sustainable natural resource management. Specific outputs are:
 - Carry out a due diligence assessment regarding the development potential for a tourism product along the lower Blyde River corridor
 - Provide training to Moletelo CPA and community members
 - Initiate steps towards development of the product identified, including identification of private sector partners
- Engage Vaalhoek community representative institutions in discussions on, and development of conservation-sustainable development opportunities, and initiated capacity for pursuing opportunities by the end of 2010. Specific outputs are:
 - Assess perceptions within the Vaalhoek community representative institutions regarding the pending land restitution
 - Increase awareness in the Vaalhoek community representative institutions regarding conservation-sustainable development interlinkages and the opportunities they could represent

- Increase capacity within the Vaalhoek community representative institutions for pursuing potential and sustainable natural resource management

The second proposed five-year project builds on work undertaken thus far by multiple parties in the K2C biosphere region and focuses on two main interventions:

- Establish and develop production of hydropower electricity from Blyderivierpoort dam and Belvedere hydropower station in Blyde River Canyon Nature Reserve (see for more details 5.5)
- Ensure continued or improved water delivery to the Blyde and Olifants Rivers through ‘securing’ two key sites with stewardship agreements under the protected area expansion strategy in their respective watersheds. With regard to this doctoral study only the Vaalhoek area located in Mpumalanga is elaborated on as it forms part of the pilot site as described in 5.2

The Vaalhoek area, located in Thaba Chweu Local Municipality (LM), is listed as a high priority in the national and in the Mpumalanga protected area expansion strategies. It is listed as critically endangered in the Mpumalanga Biodiversity Conservation Plan (MCBP). It incorporates the grassland and sour bushveld areas between Blyde River Canyon Nature Reserve and Morgenzon Nature Reserve. These areas are important for endemic rich dolomite and quartzite grasslands and as critical sub-catchments for the Blyde River that are still in near-pristine condition. The establishment and management of a representative and effectively managed system of protected areas is a key strategic approach in the conservation of South Africa’s biodiversity and in the mitigation of climate change impacts on biodiversity, and in this case on securing the provision of water by not changing the land use (see 2.5.3, 2.5.4 and 2.5.5). The protected area expansion strategies provide for the establishment of biodiversity stewardships to avoid future harmful developments in conjunction with local economic development opportunities. This provides the area with formal status, holds legal obligations, and works only if the communities are provided with incentives for it. Payment for services provided by the site protected, for example regarding the provision of water for hydropower electricity generation, could provide an opportunity. This would open up the provision of government support towards the management of the site. Given the relevance of diversification of income-generating activities, other opportunities – for example tourism development – should be assessed. This is addressed in the first project proposal. This could represent a great demonstration project, given its status as critically endangered, the key role as water catchment for the Blyde River and related

opportunities for community development, and the potential it holds for connecting key protected areas. Although the Sethlare and Mahubahuba a Bokone CPAs are not part of the identified bottleneck areas, they are important components of the claims on the (proposed eastern extension) to Blyde River Canyon Nature Reserve. These areas fall within Bushbuckridge LM in Mpumalanga, have direct influence on the watershed of the Sand River and Klaserie River (tributary of the Olifants River) and therefore are of significant interest and concern in this river corridor initiative. Bushbuckridge LM is a municipality where freshwater is in very limited supply as the water resource is under severe pressure. Therefore, benefits from hydropower electricity generation should not flow only to the owner and user communities outside the nature reserve but also to all claimant groups in the Blyde River Canyon Nature Reserve (see for more details 5.5).

The estimated annual water yield of the Blyde River below the dam is 148 million cubic meters (CSIR estimate). The nature reserve provides at least half of this water to the system, which means that it could provide the essential minimum of 25 litres of water to at least 8,109,560 people a day (Stalmans, Bronkhorst, MacAllister, Boyd, Blair, Dhlamini, Theron and Coetze 1997:11).

By working via the proposed co-management committee and existing CPAs and trust, transaction costs around management and beneficiation arrangements can be reduced considerably.

Other opportunities that could be explored are the elaboration of a PES scheme linked to the combined river corridor. Many of the lodges situated in the Lowveld area of the corridor are five star luxurious retreats, catering for high-paying guests. It is an opportunity worth investigating to establish strategies whereby the guests pay for ecosystem services via a ‘user pays’ levy (see 2.7). The guests of a luxury lodge on the Olifants River for example want to have a clean and healthy river passing by their lodge. Therefore they need to pay upstream landowners and land users to help maintain the ecological integrity of the river.

5.5 Conservation-related benefits from hydropower project

The proposed Blyderivierpoort dam hydropower station is located in Blyde River Canyon Nature Reserve at S $24^{\circ}32'09''$, E $30^{\circ}47'53''$. The Blyde River and the Treur River converge to form the Blyde River, the main contributor to Blyderivierpoort dam. The Ohrigstad River is a tributary of the Blyde River that discharge into Blyderivierpoort dam, but is of less relevance concerning water contributions (van Rensburg 2009). Approximately 31km north

(downstream) of Blyderivierpoort dam, the Blyde River flows into the Olifants River, and is a critical contributor to water flow and health from there onwards, given the poor status of the Olifants River. The Olifants River flows past Phalaborwa (50 km downstream), through Kruger National Park, into Mozambique. In Mozambique, the Olifants River joins the Limpopo, and eventually mouths into the Indian Ocean. Blyderivierpoort dam was constructed in 1974, its primary purpose being to stabilise the run-off of the Blyde River in order to improve water security to the mines downstream at Phalaborwa. The increased water stability also initiated agricultural development in the Hoedspruit area. After the completion of the dam, irrigation downstream of the dam was fed by a series of earth canals that distribute the water discharged from Blyderivierpoort dam to the irrigation areas. In 2003 these canals were replaced by a gravity pipeline network that practically eliminated water losses, while supplying farmers with water under pressure. The relatively expensive capital requirement for constructing hydropower stations, together with the historical lack of incentive to sell the energy at a premium, made most potential hydropower sites commercially unfeasible. According to one of the stakeholders from the Rhön biosphere reserve, working in partnership with the K2C biosphere region, this ‘unfeasibility’ was not applicable to the situation around Blyderivierpoort dam. Within this context a pre-feasibility study was undertaken under the guidance of the established steering committee, and MBB Consulting Services (Nelspruit) (Pty) Ltd were appointed as the service provider. The aim of the pre-feasibility study was to enable decision making on the way forward with regard to the technical, financial and institutional aspects that will lead to the implementation of the project. The study was conducted from April to August 2009.

At the start of the study there was a fortunate policy change in South Africa that made the proposed project even more interesting. In March 2009 the National Energy Regulator of South Africa (NERSA) announced a Renewable Energy Feed In Tariff (REFIT) structure that initiates a system in which green energy initiatives are stimulated through a premium tariff structure for green energy. Furthermore, this initiative facilitates the feed-in of electricity into Eskom’s national grid, practically eliminating the constraint of finding a consumer within an economically viable range from the green energy source. Therefore, the main conclusion of the pre-feasibility report is that the implementation of a hydropower station at the dam wall structure of Blyderivierpoort dam is commercially viable, provided that a successful power purchase agreement can be secured that is based on the REFIT tariff structure as published by NERSA. This is based on conservative estimates and on the generation of electricity only (not the sale of carbon credits or income as a result of tourism). The project implementation period is estimated to be four years. The total project cost of a 3 MW installation is estimated

at R52 million with an expected income generation of R11 million per year. It is proposed that a set of two turbines should be installed. This ensures that the minimum discharge can be utilised for power generation, while excess capacity is available to make use of higher flows during the summer months. This minimises the environmental impact as a result of varying flow regimes (MBB Consulting Services 2009:3–4). It is further proposed that the hydropower station should be developed and owned by a limited company, with shareholding by beneficiaries and equity providers. Subsequently, all licences and other agreements are to be applied for and granted to the new company. In addition, it is recommended that all income and expenses should be channelled through the company. For a limited company, the tax payable on profit is set currently at 28 per cent. The companies structure in South Africa is streamlined and functions well (MBB Consulting Services 2009:26–27). It is also proposed that the hydropower plant should be operated by an entity with specialist expertise to ensure that other interested parties are not negatively affected. To ensure that the entity is responsible for the operation and maintenance of the plant, it is proposed that remuneration should be performance based with a proposal of 8 per cent of the income generated by the plant. The financial feasibility of the proposed project has been calculated on the assumption that the project is financed with 100 per cent foreign capital, repayable over 15 years at an interest rate of 13 per cent per annum. In this case, the financial feasibility shows a net profit in year one of R400,000. In the worst possible outcome of two dry years from the start up of the plant, there is a risk of a cumulative negative cash flow of R3 million.

Because the proposed project is highly feasible, it is of utmost importance to ensure that fair and appropriate ownership is reflected in any agreement regarding the hydropower business. This requires a holistic and integrated approach to the issues, challenges and opportunities, and is the only way to create a direct link between site security by owners and benefits derived from it. There is a risk that ‘outside parties’ will benefit from it merely for financial reasons and interest without incurring any expenses for using the ecological services which provide those benefits. If set up appropriately, this would simultaneously i) generate renewable energy; ii) support local economic development; iii) help to diversify income generating activities for the communities; iv) secure an important water source in the area; and v) help support the government to implement its mandate of integrated management for conservation and development. A legal study is being proposed to be undertaken that focuses on a stakeholder analysis and description (both up- and downstream from the dam), and key legal aspects (rights and interests, ownership of the resources, infrastructure and related governance, and related benefit sharing). It should be preferably agreed upon that some benefits flow back into the conservation function of the water catchment in Blyde River

Canyon Nature Reserve linked to the proposed co-management model. Equity possibilities for the claimants out of their settlement grants should be encouraged so that they can receive a payout of yearly dividends. Possibilities for further pro-poor development benefits for claimants and neighbouring communities out of grant funding (community-based natural resource management (CBNRM) projects; bursaries; etc) should be investigated. Therefore a combination between commercial and grant funding should be considered to maximise the conservation-related and pro-poor development benefits.

‘Measurements of perennial water provision executed during 1996–1997 indicate that on average 10.7 cubic meters/second of water is provided daily by the reserve’ Robford Tourism (2006b:15). According to Stalmans et al (1997:11) the reserve contributes at least half, that is, 74 million cubic metres towards the water yield of Blyderivierpoort dam. This means that at least 22 per cent (74 million : 338 million) of the estimated water provision by the reserve goes to Blyderivierpoort dam. The remaining percentage flows to other sites and/or evaporates. Income generated from the provision of this ecological service should be returned into the management of the nature reserve (for example the ongoing need for removal of invasive species and to link this to job creation, in partnership with the Work for Water programme). A second idea is to establish a general trust fund to support local economic development for primary and secondary stakeholders, whereby the claimant communities as primary beneficiaries have access to a certain percentage of the trust fund. Another key aspect of a holistic approach to be considered is the relevance of securing the proposed extension to Blyde River Canyon Nature Reserve, that is, the escarpment on the east side of the existing boundaries. This helps to secure water provision and sustainability for Bushbuckridge LM, which again requires some form of benefit allocation to secure the site on the escarpment.

In the course of the study a second hydropower opportunity in Blyde River Canyon Nature Reserve was identified at the old Belvedere hydropower station by MBB Consulting Services. This weir was constructed in the 1900s to provide constant electricity to the gold mines around Pilgrims Rest. It is situated just after the confluence of the Blyde and Treur Rivers, upstream from Blyderivierpoort dam. According to van Rensburg (2009) the investment needed at this weir is estimated at R40 million (as the whole installation will be a bit smaller and it will depend on whether the old turbines can still be used), and expected income generation is about R10 million per year. Since the combined weir and hydropower station is a National Heritage Site, implementation is a bit more challenging, but offers opportunities for tourism development. For example, former management housing is being

used as guesthouses, and a small train could bring tourists to visit the site. Given that the dam and weir/hydropower station are situated in Blyde River Canyon Nature Reserve and the area has the same claimants, it makes most sense to develop the two sites at the same time and make a combined financial arrangement. Also, one site as such is too small to explore possibilities to obtain carbon credits, but combined even with the Vaalhoek area (see 5.4) this is a much more likely opportunity. Payment for ecosystem services, that is, the provision of water, should be explored with downstream users. The main differences between the two sites are future land ownership and the water users. The land on which the Blyderivierpoort dam is situated is claimed, but will not be restituted and will remain state-owned land as it is a public asset of national interest. The land on which the weir is situated will be restituted as this is not an asset of national interest and this therefore gives more security for the rights of beneficiation for the claimants. For the location of Blyderivierpoort dam and Belvedere see figure 10 in 5.2. The water from Blyderivierpoort dam is used by a wide range of stakeholders and is therefore more complicated from a stakeholders' point of view. According to Raven (2004:22–29) the newly established water users association (WUA) of the Blyde River can easily become a platform for the already powerful and organised stakeholders. This is confirmed because the WUA represents mainly downstream irrigation farmers and excludes most of the upstream water users. Therefore the need for more integrated water resource management in the Blyde River is highly recognised. It is also worrying that no Catchment Management Agency (CMA) for the Blyde River has been established yet, because the Blyde River is unique in the region for its continuous flow and good water quality, and is an important tributary of the Olifants River. The Olifants River is of poor quality and during droughts there is lack of sufficient flow. The Lower Olifants River basin therefore relies heavily on Blyde River water, from a qualitative perspective, and from a quantity perspective (Raven 2004:3). The purpose of the Water Act (1998) is to ensure that the nation's water resources are managed in ways that take into account the basic human needs of present and future generations, promote equitable access to water, redress past racial and gender discrimination, facilitate social and economic development and protect aquatic and associated systems (Raven 2004:7). Water users that are excluded from the WUA should somehow be included in the proposed project. The CMA is very important and its absence must be redressed. Many areas are under land claim both upstream and downstream. Therefore the proposed legal study must ensure the basis for an informed decision with regard to the ownership and beneficiation structure.

5.6 Conservation-related benefits from bio-cultural protocol project

Bio-cultural protocols can assist the communities to articulate their needs and to negotiate in a multi-stakeholder environment towards the public good. Communities in the biosphere are struggling to secure sustainable access to resources and to derive a fair share of the benefits from the use of these resources by companies, large-scale farmers, private game lodges and tour operators. The quick field and desktop survey was done to give an indication of the best resource to start with for the bio-cultural project and was conducted from 25 March to 28 May 2009. The field survey focused on the five most prominent resources and greatest in demand in the pilot area as experienced by the project steering committee members, that is, thatch grass, broom grass, firewood, medicinal plants and marula. The field and desktop survey confirmed that these are the most important resources in the pilot site. The results of the field survey are indicated in table 14 below.

Table 14: Field survey results in pilot site with regard to most frequently harvested resources

Resource (species)	Zone	Harvesters	Comments
Thatch grass (<i>Hyperthelia</i> and <i>Hyperhenia</i> species, <i>Arastida junciformes</i>)	Core	Women	Mainly for seasonal subsistence use
Broom grass (<i>Festica castata</i> , etc)	Core, buffer	Organised and individual women	For subsistence and local trade by individual women (R5–7 per broom), for regional trade by organised women (R10–25 per broom)
Firewood (Pine, Gum, Black wattle and indigenous species such as <i>Brenadia</i> , stink wood, water berry)	Buffer, transition	Women and men	Head loads by women for subsistence, ‘bakkie’ loads by men (R300–400 per ton)
Medicinal plants (<i>Brenadia</i> , <i>Pterocarpus angolensis</i> , <i>Sclerocaria birea</i> , <i>Ocotea bullata</i> , <i>Celtis Africana</i> , <i>Aloe aristata</i> , <i>Bulbine</i> species, <i>Clivia miniata</i> , Cycad species, etc)	Core (illegal), buffer, transition	Traditional health practitioners (mainly women), herbalists (mainly men)	Local trade by traditional health practitioners and local and regional trade by herbalists (often protected species are targeted in an illegal and unsustainable way)
Marula (<i>Sclerocarya birrea caffra</i>)	Core, buffer, transition (mainly)	Organised and individual women	Subsistence and local trade by individual women (beer, nuts, jam) and regional trade by organised women for the factory (Amarula Cream, juice, oil)

Many of the resources that are harvested are seasonal, such as thatch grass and marula fruits. The collection of firewood in the buffer zone is free for subsistence use (head loads) and is charged for commercial use via a permit system (R18 per ton for softwood, R25 per ton for hardwood and R60 per ton at the saw mill). The harvesting of indigenous species in the buffer zone is illegal, but is taking place. The harvesting of medicinal plants is illegal for the core zone, and the harvesting of broom grass and thatch grass takes place via a permit system. Until now the incentive for harvesters to organise in groups has mainly been improved access to transport and therefore regional markets can be reached. The harvesting of resources in the core zone is limited, especially if the resource is also available in the transition and/or buffer zone. The annual income from permits, game capture and hunting in the core zone is estimated to be R100,000 and is negligible compared with the tourism-related benefits for Blyde River Canyon Nature Reserve, as confirmed by Mokoena (2009). This is mainly because of the inaccessibility of the steep areas in the canyon. Certain areas in the buffer zone are also inaccessible. With regard to medicinal plants, it was observed that there is a great deal of traditional knowledge of this resource, especially among traditional health practitioners. The herbalists do not have a lot of traditional knowledge of medicinal plants and are often involved in illegal and unsustainable practices such as debarking and ring-barking the resource. Many herbalists are from the local community.

According to other studies done in the pilot area, firewood, thatch grass and medicinal plants are in high demand, and broom grass is in medium demand. The greatest commercial activities observed involve firewood, broom grass and medicinal plants (Rhodes University 2004:22). Marula fruits are harvested mainly in the transition zone and are used for seasonal beer production (about 90 per cent). This is an important income-generating activity for the poorest of the poor. The other 10 per cent of the fruit harvest is used for the production of Amarula Cream, marula juice, marula oil, etc. The total value of the commercial trade in marula products to local community suppliers is estimated to be R1.1 million a year in South Africa. This is relatively small in comparison with other natural plant products traded in Mpumalanga region, with the value of the trade in medicinal plants ranging between R62 and R92 million per year (in 1997 prices) (Mander et al 2003:49). According to Rhodes University (2004:18) there are approximately 9,000 households in the 21 villages bordering the forestry areas in the pilot site, translating to 55,800 people who are directly dependent on the resources of the buffer zone. On the western side of Blyde River Canyon Nature Reserve an estimated 6,500 people live in 2,161 households (Newenham and Vermeulen 2009:77). In 1998 Rhodes University (2004:23) estimated that the domestic use of natural resources in the Bushbuckridge area was R2,218, which constitutes 19.3 per cent of the income stream. The

gross annual value of local trade across all households was estimated at R4,412 in 1998. As indicated in 2.5.2, natural resources are valuable sources of income and for some households they constitute the only source of income. Given the high exploitation levels in the communal lands, much of the material for trade in the villages close to the proposed extension of Blyde River Canyon Nature Reserve comes from the forests, wetlands and grasslands in the buffer zone of the pilot site. Thus reduced or denied access to these resources could severely affect cash income of local households. The opportunities for small-scale enterprise development based on natural resources are large and varied, ranging from local sales of raw materials (eg thatch grass and firewood) to those with considerable processing and subsequent export (eg medicinal plants). The first scenario is well represented in the area, with many households selling one or more resources to neighbours. In scaling up from such enterprises to more complex value-added ventures, other issues come into play such as i) assurance of product supply; ii) adequate volumes; and iii) quality standards (Rhodes University 2004:24).

Based on the results of the quick field and desktop survey it was decided to concentrate on medicinal plants in this project because of:

- High demand
- Biodiversity conservation impact (extinction of certain species, unsustainable harvesting and increased pressure on the resource)
- High economic benefits
- Health benefits
- Traditional knowledge

A group of traditional health practitioners linked to the Vukuzenzele medicinal plant nursery in Thulemahashe in Bushbuckridge LM were identified as the starting point for the stakeholder engagement with regard to the bio-cultural protocol project as they have been collaborating with the Department of Water Affairs and Forestry (DWAF) management authority in the buffer zone of the pilot site. In total four preparatory meetings took place (30 May, 18 June, 9 July and 23 July 2009) to bring all stakeholders together, and to explain issues of access and benefit sharing (ABS) and bio-cultural protocols. For example, traditional health practitioners can register via the Interim Traditional Health Practitioners Council of South Africa, as recognised by the Department of Health. Registration can be beneficial, because sick leave is recognised by employers when certificates are issued by a registered traditional health practitioner. It was also explained that bio-prospecting means doing tests on plants and using the communities' knowledge of those plants to lead to

marketable products. At the meeting of 23 July 2009 a committee was elected and, together with some additional geographically based representatives, the bio-cultural protocol was established at a workshop on 27 and 28 July and officially approved by the workshop participants on 27 August 2009. The bio-cultural protocol that was established voices the wishes, concerns, ideas and vision of 80 traditional health practitioners in the transition zone of the pilot site. The bio-cultural protocol provides details of the traditional health practitioners geographically and culturally; their contribution to the health of their local communities; their traditional knowledge; how they link with their local communities via their cultural connection to biodiversity; the threats to their livelihood posed by biodiversity loss; the injustice of taking their traditional knowledge without sharing benefits; how they want to improve conservation and sustainable use of medicinal plants; and information for people who want to access their traditional knowledge and medicinal plants. There are probably 5,000 traditional health practitioners in Bushbuckridge LM. The bio-cultural protocol assists in linking government, business and communities. It also brings together communities and their livelihoods with land, environment and traditional knowledge. The main outcomes from the bio-cultural meetings and workshop are described below. The traditional health practitioners harvest mainly in the communal areas as they have insufficient funds to gain access and/or to buy permits to harvest in the formally protected areas. However, despite paying levies to traditional chiefs, there is still limited access for traditional health practitioners to communal land. The herbalists harvest in the communal areas and they practise illegal harvesting in the protected areas. There is increased pressure on the resources to supply the demand outside the pilot area, such as from Johannesburg, Durban and abroad. Losing the resource would be devastating for the local communities that rely on traditional health provision. Over-harvesting in communal areas and illegal harvesting in protected areas should be better controlled by tribal authorities. According to the traditional health practitioners, the herbalists are harvesting and selling to markets in Johannesburg and Durban. Because the herbalists did not go through initiation, they use unsustainable harvesting practices. The herbalists receive much more benefits from the biological resources than the traditional health practitioners. Bio-piracy of traditional knowledge as well as plants is taking place. Certain exotic species, such as Aloe, are used for medical practices and these species are now becoming extinct because of programmes such as Working for Waters. This is a concern for the traditional health practitioners. Not all the traditional health practitioners have the same speciality and they therefore refer clients to one another. However, it is still beneficial for them to be organised in a group. Some traditional health practitioners are already organised in groups but others not yet. According to the traditional health

practitioners, the belief that medicinal plants harvested in the wild are more effective than the cultivated ones is not true and this belief is not practised by them.

It is important to ensure that communities generate income and livelihoods in the biosphere in a manner that sustains the region's ecology, thereby developing a virtuous circle of conservation, sustainable use and livelihoods. Sustainable use is only possible, however, if the benefits of the biosphere are equally shared by all who live in it, thus incentivising conservation. Systems are required to further incentivise communities in the biosphere to support their role as custodians rather than marginal beneficiaries. Co-management structures in protected areas can play an important role in securing sustainable use and sharing of benefits for the providers of these important biological resources and to formalise and control access, especially in areas that are difficult to reach and unfenced areas such as Blyde River Canyon Nature Reserve and its proposed extension. It is also important to document lessons learnt on sustainable use and benefit sharing via the monitoring strategy of the CMC, as little is known of this subject. Resource use (especially medicinal plants and firewood) is especially relevant to the proposed extension of the Mariepskop area and indigenous forestry areas of around 13,000 hectares (see figure 10), of which management will be transferred from DWAF to the MTPA in the near future. It is estimated that 4,600 hectares that were previously incorporated in the larger proposed extension for the national park remain under plantation and under the management of DWAF, which can provide the local people with some jobs and resources for firewood (see 3.3.2). For the areas where the forest plantations have been phased out, and the forest is being rehabilitated to its natural state, it is important to create an incentive for the communities who have lost their jobs and access to resources because these areas have been set aside mainly to ensure an improved water supply. It will be interesting to see whether the rehabilitated forestry areas (in which plantations have been phased out) can be used for in-situ cultivation of medicinal plants (eg African ginger and African potato). This is important because harvesting in the wild in protected areas will not fulfil the demand. Propagation can possibly also take place in identified communal areas of the transition zone in Bushbuckridge LM. It is also important to avoid additional pressure on places with irreplaceable biodiversity value, such as the Mariepskop area. Another solution to the high demand for firewood is to access it in private nature reserves in the neighbourhood. Other buffer zones in the biosphere often have an excess of wood owing to the thickening of the bush because of years of overgrazing and it would be good if bio-cultural protocols were used to come to arrangements with some of these areas. However, according to the traditional health practitioners, access to private land is a no-go and they rely on access to communal land and wish to formalise access to statutory protected areas in order to access certain

resources. It is important to develop bio-cultural protocols for new landowners. If not, there is a risk that many individuals will start to deal with the private sector direct, which is not in the interest of the claimant and non-claimant community as a whole. Inside protected areas, ABS arrangements can be dealt with via co-management arrangements instead of bio-cultural protocols. Bio-cultural protocols and co-management arrangements at the same time provide certainty and clarity to the private sector, which relies on the biological resources. It is envisaged that such clarity will lead to ABS agreements between communities and businesses with commercial interest generating benefits to communities, which will incentivise them to act as custodians of the ecosystem. The bio-cultural protocol established by the traditional health practitioners can assist when working with the co-management committee of the nature reserve to access certain areas for resource use and to visit graves for cultural purposes, as well as to establish nurseries and in-situ cultivation in the rehabilitated forestry areas of the proposed extension to the nature reserve. In other words, it can assist in formulating the agreements between the primary and secondary stakeholders in the co-management arrangement. As for now, no clear information could be gathered about the exact quantities of species and prices of the medicinal plants that are harvested in the buffer zone. It would be good to do a survey involving claimants, traditional health practitioners and DWAF and MTPA specialists that combined scientific and traditional knowledge, which could assist in the establishment of sustainable harvest levels for certain areas as part of the new management plans. This survey can also assist in establishing a fair permit system for commercial resource use. Another option that is being explored is to utilise the ‘Farm to Pharma’ approach used by the Department of Science and Technology to assist communities to meet the market, to minimise local inefficiencies and to cut down on middlemen. This approach tries to link sustainable livelihoods to sustainable enterprises and to utilise biodiversity for product development in South Africa. Decentralisation of processing is seen as an important measurement to ensure that local people benefit.

5.7 Summary and conclusion

An estimated net profit of R6.61 million per annum could be realised with regard to Blyde River Canyon Nature Reserve by 2014 if investment sources for tourism-related developments can be found. The planned tourism developments will create an additional 349 permanent jobs. Other benefits are 700 new jobs per year for overnight developments outside the reserve and numerous SMME, training and temporary labour opportunities, especially in the development stages. Another big benefit potential for the claimants will come from the

proposed increase in entrance gate fees to be allocated direct to the claimants as a landowners' levy per visiting guest according to the 'user pays' principle (see 2.7). This additional estimated amount of R5.65 million, together with the net profit, gives a total of R12.26 million. Because the reserve is 100 per cent claimed, this will result in R817 per HH. The still relatively low amount per HH is owing to the large number of claimants and it confirms that tourism is not the sole solution to attaining sustainable livelihoods. Therefore, it is probably better to spend the benefits on agreed community projects instead of distributing a per capita payment. The need for additional activities in and around Blyde River Canyon Nature Reserve was identified to be able to attract more overnight tourists. Within the river corridor project, nature-based tourism opportunities for the Moletelle and Vaalhoek communities were identified. Both communities are also claiming properties inside Blyde River Canyon Nature Reserve and additional income from tourism can be obtained by developing opportunities and activities just outside the reserve, such as accommodation, hiking, and rafting. With regard to the Vaalhoek community, this could also contribute to the important expansion of protected areas by securing sites for biodiversity conservation via stewardship programmes.

Further diversification of income for the claimant and neighbouring communities in and around Blyde River Canyon Nature Reserve was identified through the river corridor project. The elaboration of a PES scheme linked to the combined river corridor could be explored. Many of the lodges in the Lowveld area of the corridor are five star and luxurious retreats catering for high-paying guests. It is an opportunity worth investigating to establish strategies whereby the guests and other downstream users pay for ecosystem services via a 'user pays' levy. The establishment of a PES scheme takes a long time. However, by working via the proposed co-management committee and existing CPAs/trust, transaction costs of management and beneficiation arrangements can be reduced considerably (see 2.5.3). A more concrete and quicker opportunity for the payment of ecological services was identified through the hydropower project that is linked to the river corridor project. An estimated investment of R92 million for two identified hydropower projects inside the reserve could generate an annual turnover of R21 million within four years. Both hydropower projects are based on existing constructions and therefore do not have major environmental impact. If the co-management model receives only the concession fees for these two projects at an estimated 10 per cent turnover, an additional R2.1 million on rentals/concessions will be generated by the reserve. Because these rentals/concessions do not need a lot of maintenance and contract management by the MTPA, this results directly in a substantial increase in net profit and therefore an additional R100–140 per HH per annum. However, if a more direct

link between site security and ownership and beneficiation can be developed, there is potential for many more benefits for the claimants. As in the tourism-related developments, a wise use of the settlement grants to obtain equity in the businesses can increase the benefits for the claimants substantially in a yearly pay-out in dividends.

The results of the bio-cultural protocol project illustrate that the importance of natural resources should not be underestimated. This is particularly true of the proposed extension of the nature reserve. The gross annual value of local trade in natural resources across all households on the eastern boundaries of the nature reserve was estimated at R4,412 in 1998. An estimated 55,800 people rely directly on these resources. Compared with the tourism estimated benefits of R817 per claimant HH and the benefits from the hydropower of R100–140, the use of natural resources remains the most substantial in the contribution to sustainable livelihoods. The bio-cultural protocol established by the traditional health practitioners can assist when working with the co-management committee of Blyde River Canyon Nature Reserve to access certain areas for resource use and to visit graves and for in-situ cultivation in the rehabilitated forestry areas of the proposed extension of the reserve. The providers of the natural resource have a legal right to benefit from these resources, especially if they are used commercially. It can assist to formulate agreements between the primary and secondary stakeholders around access and this leads to more equitable access and benefit sharing. If the communities become the owners of these areas, this should help to counteract illegal harvesting, as seen in other co-management case studies (see 2.3.1). The combination of traditional and scientific knowledge can assist in the establishment of sustainable harvesting levels to be determined in the new management plan for the reserve. It can also assist the co-management committee to establish a fair permit system. It is also important to link sustainable livelihoods with sustainable enterprises and to utilise biodiversity for local product development such as decentralising the processing of natural resources and cutting the price charged by middlemen. The principle of the bio-cultural protocol can also be used in the establishment of a PES scheme to agree on certain management and beneficiation practices. The use of a bio-cultural protocol reduces transaction costs and provides clarity for the private sector.

Existence values such as media rights and international donations as potential sources of protected area financing (see 2.5.1) have not been studied in the pilot site. The issue of international donations has been partly captured, because grant funding should be available for financing the hydropower projects because the topics of renewable energy for local economic development and mitigation and adaptation against climate change are popular

with donors at the moment. Because of its spectacular landscape, many advertisements/commercials are made in the Blyde area, and this could be another substantial source of income. A permit system should be established by the co-management committee to deal with media and filming rights. It can be concluded that all suggested areas of protected area financing, that is, nature-based tourism, natural resource use, ecosystem services and existence values are viable options for Blyde River Canyon Nature Reserve. This is confirmed by Stallmans et al (1997:4–5) who estimate the potential employment generation and benefits from livestock grazing and cropping in and around the reserve at less than a third of the current jobs in conservation. The importance of conservation and the splendour of the landscape are directly responsible for the great tourism potential of the area. In terms of the most appropriate land use for the area, conservation, coupled with nature-based tourism, natural resource use and payment for ecological services, is the most viable option for sustainable livelihoods. Diversification of the income sources is important to spread the risks and to reach more people. Another important aspect illustrated by the study in the pilot site is that many of the benefits directly related to the protected area are applicable to and can be increased beyond the boundaries of the protected area. These additional benefits beyond boundaries have been illustrated for nature-based tourism, resource use and processing, and PES opportunities. They make the proposed beneficiation model more feasible over a long period, and contribute to the diversification of socio-economic benefits to sustain livelihoods. Through these interventions, more communities can be reached and this can assist in mitigating against the risk that only the local elite benefit.

In this chapter the estimated tourism-related benefits for Blyde River Canyon Nature Reserve have been compared with the conservation-related benefits from the projects. It can be concluded that the estimated benefits from tourism result in R817 per claimant HH per annum. The estimated conservation-related benefits and potential benefits beyond boundaries can increase this amount substantially. The projected financial benefits for the land claimants are of course an important source of information to be included in the negotiation process between the government and the land claimants. The results of this negotiation process in the seven priority protected area are presented in chapter 6.

Chapter 6: Results of methods to guide the negotiation process between government and land claimant representative structures

6.1 Introduction

The third objective of this thesis is the development of methods to balance the objective of biodiversity conservation with the beneficiation expectations of the land claimants in order to reach a mutually beneficial model for the claimants and the conservation agency. The settlement and co-management agreement frameworks agreed upon by the government departments involved are used as the basis for discussion and negotiation (see 4.4). As stated in section 1.9, the methods used in the negotiation process were developed according to the principle of adaptive learning and were improved upon while implementing. The results of these participatory methods were analysed only in a qualitative way. In general, the negotiation process followed a series of five to six workshops, separate exposure visits and special meetings, if necessary. However, because it was an open process, the same methods and/or sequence of methods were not used in each series of workshops. Each workshop was tailor-made, depending on the protected area, internal land claimant and community dynamics, knowledge base of the participants and the need for additional explanation. Therefore the results are presented as general observations across the seven priority areas and not for each priority area individually. Furthermore, a selection of results with regard to the application of certain methods in specific priority areas is given, based on relevance for this thesis. It must be noted that the process started a long time before the consolidated government position was established. However, the methods as explained from 3.4.8 to 3.4.13 were all implemented after the establishment of the consolidated government position and the settlement and co-management agreement frameworks (see 4.3 and 4.4). Table 15 indicates which method was applied in which priority area. The results of the methodology as described in 3.4.2 to 3.4.13 are presented in the same order in 6.2 to 6.13. Section 6.14 explains the design of the establishment of the management plans (MPs) and the terms of reference (ToR) of the co-management committee (CMC) as described in 3.4.14. This chapter ends with a comprehensive summary and conclusion of the results.

Table 15: Overview of the various methods applied for each priority area from 2007 to 2009

Method	Blyde	Manyeleti	Songimvelo	Mthethomusha	Loskop Dam	Mabusa	Mdala
Land restitution process within legal framework	Y	Y	Y	Y	Y	Y	Y
Participatory mapping	Y	Y	Y	Y	Y	Y	Y
Primary and Secondary stakeholder ranking	Y	Y	Y	Y	Y	Y	Y
12 land claim settlement principles	Y	Y	Y	Y	Y	Y	Y
Types co-management and beneficiation matrix	Y	Y	Y	Y	Y	Y	Y
Exposure visits	½	N	Y	N	½	Y	½
Settlement agreement negotiations	Y	Y	Y	Y	Y	Y	Y
Co-management and beneficiation	N	Y	N	N	Y	Y	Y
Roleplays	N	N	N	N	Y	Y	Y
Socio-economic assessment	N	Y	N	N	N	Y	N
Co-management agreement negotiations	Y	Y	N	Y	Y	Y	Y
Community resolution	20 10	Y 10	20 10	20 10	20 10	20 10	20 10

Y = Yes (implemented)

N = No (Not implemented)

½ = partially implemented

2010 = to be done in 2010

6.2 Following ideal land restitution process within the legal framework

The ideal (logical) land restitution process was presented to all land claimant representative structures of the seven priority areas. For Blyde River Canyon Nature Reserve in particular the importance of the area for clean water provision was explained and emphasised. It was made clear that not only provincial and national policies and legislation are involved, but also international conventions. It was also observed that it is important to be guided by the Regional Land Claims Commission (RLCC) as to who the rightful claimant representatives are. In Blyde River Canyon Nature Reserve in particular, unlawful structures claimed to be the ‘real’ representatives of the land claimants for a certain area. In most cases it was possible to follow the land restitution process in an ideal sequence as far as possible, except for Mdala and Songimvelo Nature Reserves. In these areas, the sequence of the process went differently because the process was already quite advanced before the ideal process was

established and agreed upon. In Mdala Nature Reserve the conservation agency came into contact with the legal entity of the land claimant representative structure only after Section 42d (S42d) had been signed and S42d had been signed without the settlement agreement being finalised (see 2.2.3). After signing S42d, it appeared that another group was claiming areas on the reserve, which was not helpful because the reserve needs to be administered as one unit. This resulted in a situation in which one claimant group had already chosen the land claim settlement option without the second land claimant group and/or the conservation agency being involved. In Mdala Nature Reserve, the sequence of steps has not been logical, and the S42d was signed before the information for the options was available. It was challenging for the conservation agency to bring the process back a couple of steps and to share all relevant information jointly with the two land claimant groups. First attempts via very technical and conservation-oriented people were unsuccessful and led to more miscommunication. The conservation-oriented staff approached the issue from a purely legal point of view, stating that the conservation agency could continue operations on the reserve such as game capture and game selling without consulting the land claimants. Legally, so long as the settlement agreement has not been signed, the claim has not been settled. The land claimants did not agree or understand this position as they thought they would be the official landowners after S42d had been signed. Only after the intervention of social ecology staff, facilitating a session in which the land claimants could express their frustrations, concerns and expectations, could the process continue and the second claimant group were brought on board.

In Blyde River Canyon Nature Reserve, the establishment of a consolidated government position speeded up in the land claim settlement process. In this instance, state partners worked hand in hand. However, in Songimvelo Nature Reserve the negotiation meetings with the land claimants were far more complex, because the RLCC and the conservation agency did not concur on an agreed government position before entering the facilitation process (see 2.2.2). In Songimvelo Nature Reserve certain government departments promised the land claimant representative structure that part of the nature reserve could be excised for grazing, and even provided the funding to put up a cattle fence inside the reserve. This was done without an environmental impact assessment (EIA) and has major effects for the management of the reserve, especially with regard to the management of game. Another worrying factor was that a community resolution had not been obtained from the wider claimant community to implement this project. Because the indicated area for cattle grazing is an area of high biodiversity, it is outside the legal framework to de-proclaim it, and it should remain part of the nature reserve in perpetuity. It is therefore of utmost importance to

ensure that the area is not overgrazed and that no irreversible damage is done to the land. This is particularly important as international agreements between the governments of South Africa and Swaziland have been signed for the establishment of a Trans-Frontier Conservation Area (TFCA) including the area fenced for cattle grazing. Therefore, the conservation agency commissioned a study to investigate the financial feasibility of the cattle-grazing project versus conservation and tourism.

According to Gebhardt (2009), Songimvelo Nature Reserve provides an annual net income of R2.2 million through game sales. This calculation is conservative and based on 60 per cent of the auction price. Songimvelo Nature Reserve has been underdeveloped with regard to tourism for the last twenty years, and there is mistrust by the community that the conservation agency will be able to develop it as a real tourism destination. The reserve has great potential to attract investors to community public-private partnership (cPPP) models, which can generate a lot of jobs and other benefits for the claimants. The fenced cattle-grazing area is the most important area allocated for tourism development, according to the tourism master plan of the integrated MP of the proposed TFCA. If the proposed cattle-grazing area is managed commercially without overgrazing, the maximum carrying capacity is 1,700 head of cattle on 13,000 hectares, generating a maximum net annual income of R514,319. If the 13,000 hectares cannot be used for game anymore, the game must be removed from the reserve immediately for a value of R8 million and the annual net income from game sales will decrease to R1.32 million. This indicates that the proposed cattle-grazing project is less feasible than tourism and conservation. Songimvelo Nature Reserve was declared a reserve because of its limited agriculture potential. However, it is not easy to convince the land claimant community of this while they do not receive tangible benefits from the sale of game. The proposed cattle-grazing project will probably benefit only a few individual cattle owners, instead of the wider claimant and neighbouring community (see 2.4.4). The outcomes of the study commissioned by the conservation agency are summarised in table 16.

Table 16: Summary of the study results comparing the feasibility of the cattle-grazing project versus the feasibility of tourism and conservation for Songimvelo Nature Reserve

	Annual projected profit when cattle grazing project is not implemented	Annual projected profit when cattle grazing project is implemented
Game	R2.2 million	R1.32 million
Cattle grazing project	-	R0.514 million (6 jobs)
Tourism	R0.964 million (110 jobs)	R0.403 million (70 jobs)
Total	R3.164 million (110 jobs)	R2.237 million (76 jobs)

(Gebhardt 2009)

According to Loock (2009) and Gebhardt (2009), the estimated expenditure and income for Songimvelo Nature Reserve in the financial year 2008/09 were R4.5 million (see 5.3) and at least R2.2 million respectively. In the section below what this means for net profit generation and tangible beneficiation opportunities for the claimants is calculated. The size of Songimvelo Nature Reserve is 47,519 hectares and at a currency rate of US\$1: R7.5, this means that in 2008/2009 the management costs were US\$1,263 per square km. In 2008/2009 Songimvelo Nature Reserve should have generated at least 12 per cent of its own income (R0.54 million) to be able to cover the 2008/2009 expenditures, which it did. This means that in 2008/2009 a possible net profit of R1.66 million could have been realised for the claimants. With 2,578 households (HHs) (see table 2 in 1.9), this means R644 per HH. If the budget remains at the same level as 2008/2009, including the 37.5 per cent increase in costs when going into co-management, own income generation in 2016/2017 should increase to R2.475 million and above, which is realistic for such a large reserve with high tourism potential (see table 16).

After discussing the outcomes of the study and the establishment of the consolidated government position, the various government departments are trying to bring the process in Songimvelo Nature Reserve back within the legal framework. This is extremely challenging because of the promises that have been made and compromise is probably the only feasible solution for now. This again emphasises the importance of having a consolidated government position in place before engaging with the land claimant representative structure on land claim settlement options. The financial projections for Songimvelo Nature Reserve are summarised in table 17.

Table 17: Financial projections for Songimvelo Nature Reserve for 2016/2017 compared with 2008/2009

Year	Actual income	Subsidised income	Actual costs	Net profit
2008/2009	R2.2 million	88% of R4.5 = R3.96 million	R4.5 million	R1.66 million
2016/2017 (no cattle grazing project)	R3.164 million	60% of R6.19 = R3.71 million	R4.5 x 1.375 = R6.19 million	R0.684 million
2016/2017 (with cattle grazing project)	R2.237 million	60% of R6.19 = R3.71 million	R4.5 x 1.375 = R6.19 million	R-0.243 million

(Summary of financial projections by the author as elaborated in section 6.2)

Table 17 shows that the proposed cattle-grazing project would jeopardise the feasibility of the co-management model and is therefore not recommendable. Table 17 also shows that the decrease in state subsidies for protected area management makes the co-management model even more challenging for conservation agencies to implement than it already is. In certain cases, the net profit for the claimants might decrease over time because of this policy, depending on the success of the commercialisation process. Land claimants should be made aware of government policy to decrease state subsidies for protected area management over time.

6.3 Participatory mapping

In general, it was observed that the participatory mapping exercises really formed the platform for mutual learning and understanding with active participation by all stakeholders involved, especially by women and elderly. Women and the elderly have the greatest traditional knowledge of natural and cultural resources in the reserves. The methodology was adapted to each unique situation. In Songimvelo Nature Reserve the complexity of the proposed cattle-grazing project (excision of 13,000 hectares) and its negative impact on potential tourism development were visualised. This laid the foundation for more difficult questions about the beneficiaries in the case of the cattle-grazing project and in the case of tourism and conservation. In Mthethomusha Game Reserve it became clear through the participatory mapping exercise that the communal property association (CPA) consists mainly of youngsters and that important information from the elderly is lacking in the CPA.

In Loskop Dam Nature Reserve the CPA contains both youngsters and the elderly and here the participatory mapping exercise revealed that the expectations within the CPA are very different. The elderly want to go back to agriculture while the youngsters want to focus on tourism because they want to be employed in permanent jobs. In Mdala Nature Reserve the participatory mapping exercise was used to unlock the conflict between the claimants and the conservation agency and to create a platform for discussion (see 6.2). For Blyde River Canyon Nature Reserve the participatory mapping methodology was used to bring the expectations of the four claimant groups together and to form a platform to discuss the issue of benefit sharing among the groups and possible outstanding disputes on who is claiming what. More specific results with regard to this method are given for Blyde River Canyon Nature Reserve. In Blyde River Canyon Nature Reserve the participatory mapping exercise was done for each land claimant group individually (12–15 February and 11 December 2008). Although extensive community consultation by national government took place in 2001 to lobby for the proclamation of a national park (see 3.3.2), the importance of the proposed extension of the reserve with regard to water catchment was still not clear for the claimants. The participatory mapping exercise led to an understanding that a holistic management and benefit-sharing approach is needed for the area, and that the claimed land of the various claimant groups cannot be managed in isolation. This was achieved partly through the illustration in the maps that most of the viewpoints are on the claimed land of one group, but interesting features such as the Three Rondawels are situated on the claimed land of another group. All the groups mentioned the importance of visiting sites together, as indicated in the mapping exercise, to increase mutual learning and understanding. This recommendation was included as part of the community-based natural resource management (CBNRM) strategy (see 4.3). The answers by the four claimant groups of Blyde River Canyon Nature Reserve to the guiding questions as indicated in 3.4.3 are presented in table 18. The four participatory maps that were produced are presented in figure 11. The participatory exercise resulted in individual action plans for each land claimant group and a joint action plan for the groups.

Table 18: Participatory mapping results with regard to guiding questions for Blyde River Canyon Nature Reserve

Participatory mapping Blyde guiding questions	Sethlare (12 February 2008)	Mahubahuba a Bokone (14 February 2008)
Which areas are you claiming and to which tribal authorities and municipalities do these areas belong?	Areas go slightly into claimed area PDT and Mahubahuba a Bokone but exclude Belvedere (see map)	Claimed portion are identical with the ones indicated by RLCC. There are some changes in names and three tribal authorities mentioned and one local municipality
What can you offer the protected area?	Dam (coca cola colour), picnic site, special mushrooms, chalets, view up to Mozambique	Natural dam (Madiba a Bakone dam), waterfall. They are happy to be part of protected area
What cultural assets and biological resources are present in your claimed area? What other features are there?	Swazi Napulana, fog/mist, caves, rivers, graves, proteas	Initiation schools Cultural village Cave
What existing tourism takes place in your area?	High season up to 50–100 people per day (mainly day visitors), good tour guide, potential for more but need for development and marketing	Five chalets and office in Welgevonden, chalets in Hebron, picnic site in Onverwacht
What other operations exist in your area?	Two functioning saw mills, forestry plantation, cattle	Two saw mills, forestry (plantation; indigenous), forestry offices, coal mine, cattle, PFM, agriculture
How do you see the relationship with other claimant groups? What about benefit sharing?	Need to work together and create one landowners structure to manage together with MTPA. Sharing of revenue should be done per % in contributions. It can grow overtime. How to calculate water catchment? How to calculate Three Rondawels?	Profit should be shared equally among four groups (25% each) independent of developments. Difficult to separate profits. Happy to go into one landowners' structure for management
What promises have been made regarding the protected area?	Investors are willing to invest and are waiting	Expectation of R600 million but they cannot remember what they have been told
What skills are needed to manage the area and do you have these skills?	Tourism, access, anti-poaching, etc. Skills are insufficient and need for skill development over time	Skills and capacity building needed

Continue ...

Table 18: Participatory mapping results with regard to guiding questions for Blyde River Canyon Nature Reserve

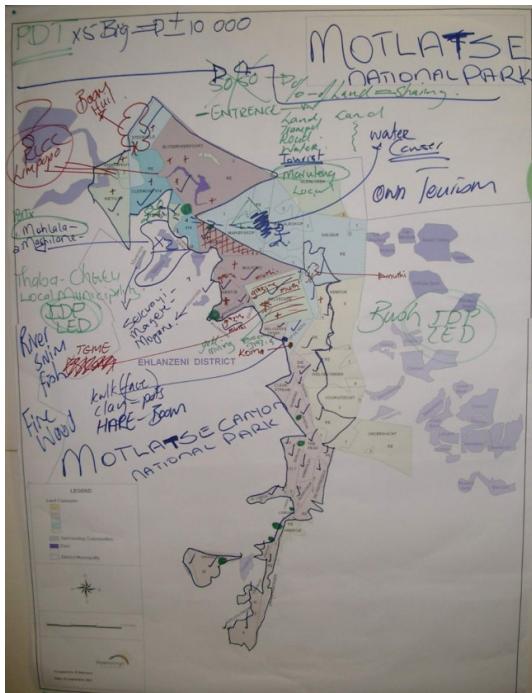
Participatory mapping Blyde guiding questions	PDT (15 February 2008)	Moletele (11 December 2008)
Which areas are you claiming and to which tribal authorities and municipalities do these areas belong?	Some of the claimed portions go in indicated land for PDT and Sethlare. Dispute of 'Belvedere' solved but still dispute on 'Lander'. This will be sorted out in separate meeting between PDT and Sethlare under guidance of RLCC	Claimed portions are the farms of Blyderivierpoort and Glenlyden. They agreed that Steenpoort goes to PDT. They want 'Lander' to be outside PA. Area falls under Moletele tribal authority and Maruleng and Thaba Chweu LM.
What can you offer the protected area?	Viewpoints, potholes, waterfalls, etc	Swadini hotel, cableway, big boat in the dam, cultural village
What cultural assets and biological resources are present in your claimed area? What other features are there?	Graves, initiation schools, medicinal plants, special trees, previous grazing area, hydro-electric station, clay pots	Graves of chiefs in Glenlyden. Moletele to verify with elders if there are other areas that are important
What existing tourism takes place in your area?	Potholes, Three Rondawels, Lowveld View, Gods Window, Lisbon Falls, Berlin Falls, Pinnacle, Swadini, Graskop	Swadini, dam, Blyde botanical garden, tufa falls, visible graves at dam wall, hiking trails, medicinal plants
What other operations exist in your area?	Previous agriculture and grazing areas, previous gold mining, hydro-electric, fishing, firewood, brooms	To be verified with elders
How do you see the relationship with other claimant groups? What about benefit sharing?	They have to work together and see protected area as one and manage in one structure together with MTPA. Sharing depends on certain things and they propose according to surface of land	They are comfortable with other groups and see need to manage in one structure together with MTPA. Profit should go to the exact landowners of the land where the development is. Look at conservation and commercial value land.
What promises have been made regarding the protected area?	No promises were made or all can be cancelled as long as they get their land back	Ideas and expectations around the cableway
What skills are needed to manage the area and do you have these skills?	MTPA has certain skills and will help to transfer skills to PDT	Skills and capacity building needed



Map Sethlare



Map Mahubahuba a Bokone



Map PDT



Map Moletele

(Pictures by author)

Figure 11: Participatory maps established for Blyde River Canyon Nature Reserve

6.4 Ranking of primary and secondary stakeholders

The ranking exercise of the stakeholders, as explained in 3.4.4, was done to increase the understanding of the rights and responsibilities in the management and beneficiation of the protected area. The results of this method are given with Blyde River Canyon Nature Reserve as an example. In the same series of workshops for the participatory mapping exercise for Blyde River Canyon Nature Reserve the ranking exercise of primary and secondary stakeholders was implemented. The results of the ranking exercise for the four claimant groups are indicated in table 19, as well as the ideal agreed ranking after discussion. It was observed that certain claimant groups completely excluded the wider community as a stakeholder.

Table 19: Results of primary and secondary stakeholders ranking exercise for Blyde with the importance of the various stakeholders from top to bottom

Ideal/Agreed	Sethlare	Mahubahuba a Bokone	PDT	Moletelle
(RLCC-DEAT)	Claimants DEAT	Claimants MTPA	PDT – MTPA RLCC (father)	DEAT RLCC
Claimants – MTPA	Investors	RLCC	DEAT (mother)	MTPA
LM/DM	MTPA	DEAT	LM/DM	TA/Claimants
Investors	LM/DM	Investor	Investors	LM/Investors
Wider community	Community	PFM/Community		

The results of the ranking exercise were discussed in each claimant group. In all cases it was agreed and understood that Mpumalanga Tourism and Parks Agency (MTPA) and claimants have to manage the reserve together, being the primary stakeholders in the co-management model. RLCC and the Department of Environmental Affairs and Tourism (DEAT) oversee this cooperation. As soon as development opportunities are identified by the co-management partners (in line with the MP of the nature reserve), the plans can be negotiated with the local and district municipality (LM/DM) and a call for proposals from investors can be made. As soon as an investor comes on board, it is important to work in equal partnership with the investor to make things work. Furthermore the claimants and MTPA have responsibilities to the wider community as well under the National Environmental Management Protected Areas Act (NEM:PAA) (see 2.2.1). The LM/DM, investors and wider community, however, are all secondary stakeholders in the process, and come in only at a later stage when strategic decisions have been made. This was illustrated to the claimants by projecting the co-management partnership as a marriage. The investor can never be more important than and/or

interfere in the marriage without both partners having agreed upon certain issues first. The ‘couple’ contracts the investor and not vice versa.

6.5 Land claim settlement principles

The twelve land claim settlement principles as described in 3.4.5 were presented by the RLCC to all land claimant representative structures of the seven priority areas. Questions were raised around settlement principle 3 and 8 with regard to the appointment of the conservation agency by the member of executive council (MEC) instead of the future landowners. This principle was clarified by explaining the relevant clauses in NEM:PAA and the memorandum of agreement (MoA). Other questions were related to settlement principle 10 because many claimants want to drive the commercialisation process on their own, as in the case of the Makuleke (see 2.6.3.1). It was explained that despite extensive external support, the negotiated contracts between the Makuleke CPA and the private sector are not the best deals the community could have opted for. Full commercialisation rights for only one co-management partner is not the intention of the co-management model because both partners need to benefit and the reserve must be maintained. The need for guidance from government to negotiate the contract with the private sector and the need for maintenance was accepted by all claimant groups. Additional concerns were raised with regard to other settlement principles, but in the end all settlement principles were accepted by the land claimant representatives. It was important that this part of the process was presented by the RLCC and not the conservation agency. Because the twelve principles were derived from the legal framework agreed upon by government, the claimants mentioned that there was no other way than to accept.

6.6 Types of co-management and beneficiation matrix

Currently, only the lease, part lease / part co-manage, and cooperative co-management models are promoted by government (see 2.3.3). After the presentation of the types of co-management to the claimant representative structures, it became clear that most land claimant representatives want to move very quickly towards delegated management and privately managed. However, after presentation and explanation of the beneficiation matrix most land claimant representatives realised that this is currently not realistic, nor is it always the ideal option, especially in cases where there is a low tourism potential. The best option depends on

a complex set of factors and it needs time to develop the capacity to reach the models on the right-hand side of the beneficiation matrix. However, it might well be that in future the co-management option of delegated management will be pursued by both co-management parties. Because protected area management is becoming less subsidised by the state, protected areas must be managed much more as business units, with the role of government being solely to ensure that the legislation for protected areas takes place. This is also the preferred option expressed by the MTPA staff when asked what their choice would be if they were claimants (see table 8 in 4.2.3).

6.7 Exposure visits

Not all the claimant representative structures went on exposure visits. Some preferred to sign the agreements before participating in such a visit. Claimant representatives from Songimvelo Nature Reserve were selected to participate in an exposure visit to Madikwe Game Reserve in North-West Province from 23 to 26 November 2008. Madikwe Game Reserve was originally a cattle-grazing area, but was transformed into a game reserve, as this model was financially more viable for the area (see 2.4.4) Because of the similarity of the situation in Songimvelo Nature Reserve, this site was selected by the conservation agency as a learning site. Five thematic areas were selected by the participants of the study tour, namely cPPP model of community-owned lodge; benefits; relationship between conservation agency, wider community and claimants; relationship between community trust and CPA; and the involvement of the LM for service delivery and financing. The lessons learnt as formulated in the joint report are as follows:

- cPPP model community-owned lodge: 45-year lease is long; there is too much competition from other lodges; financing of lodge via settlement grant preferred instead of community taking a loan; a lot of empowerment is needed to establish successful small medium micro enterprises (SMMEs); interesting programme of graduates as temporary labour with regard to capacity building and skills transfer
- Benefits: main benefits related to jobs, SMMEs and skills transfer and not monetary
- Relationship between conservation agency, wider community and claimants: conservation agency good relationship with community, but still needs to sort out the relationship with the claimants; need for a collaboration platform; lack of consultation with community to understand business concepts and risks of community-owned

- lodge; no relation between community trust and conservation agency for profit making
- Involvement LM for service delivery and financing: no involvement yet; suggestion to include stakeholders such as claimants and LM in quarterly meetings with the concessionaires; LM does not see a strong role in tourism development and financing

The exposure visit opened up discussion about the difficult situation in Songimvelo Nature Reserve and a dialogue about certain contentious issues could be started after the visit. Stakeholders had more realistic ideas of time and resources to be invested into tourism developments under co-management and the extra benefits from that investment. The joint visit allowed for informal time together, which was important for mutual understanding, visioning and trust building between the future co-management partners, that is, members of the CPA and the conservation agency.

The RLCC, together with selected land claimant representatives of Blyde River Canyon Nature Reserve, the conservation agency, and members of the Kruger to Canyons (K2C) biosphere region articulated the need to learn more about:

- How the land restitution process has been applied in other parts of the country, especially conservation areas
- Co-management agreements and their implementation in protected areas and claimants
- Case studies of claimants opting for conservation land use
- How conservation corridors can be created to ensure enabling ecosystem services

After scrutinising possible visit destinations, it was decided to visit the Northern Zululand area, where the Wildland Trust is engaged with communities and conservation. The visit took place from 10 to 14 November 2008. The following visiting elements were identified:

- Public-private partnerships (PPPs)
- TFCA management (from mountain to lower areas)
- Linkages of biodiversity to the private sector and local economic development (LED)
- Management of Small Grants Fund and how projects are linked to the bigger picture of programme and funding
- Structure and lessons learned on stewardship programme work
- Programmes on adaptation to climate change

A detailed joint report was established by the participants. Besides the many lessons that were learned, this exposure visit started the initiative of the river corridor project and the

need to look more into projects beyond protected area boundaries that can create additional benefits (see chapter 3 and 5).

6.8 Settlement agreement negotiations

A clear difference could be observed between land claim settlement negotiations with claimant groups assisted by a strategic partner and those without. In Manyeleti Game Reserve the strategic partner of the claimant representative group negotiated a change in the use of settlement grants, so that these grants can also be used for developments outside the reserve as this might be more profitable. It was further negotiated to allocate a certain percentage of the settlement grants direct to individual claimant households. In Mthethomusha Game Reserve, the strategic partner of the claimant representative group negotiated the possibility of a sale of 10 per cent sale of the land so that residential development can take place. The agreement was amended accordingly, but the sale of land still needs approval by the minister responsible for the Department of Land Affairs (DLA). As learned from the experience in Madikwe Game Reserve (see 2.4.4) one must be aware that supporting non-governmental organisations (NGOs) and strategic partners always have their own objectives. It was observed that the claimant community is often not on the same level of understanding as the strategic partner, and a different opinion is given by the claimant community in the absence of the strategic partner. As stated in 2.3.3 there is political pressure to solve the land claims. However, in many cases solving the land claims is not in the interests of all involved, especially currently operating businesses. Therefore, diversionary and delaying tactics could be observed, especially by confused communities and/or government officials. Having a consolidated government position and with government talking in one voice definitely assisted in keeping the process on track.

In some cases, such as Blyde River Canyon Nature Reserve, it was decided to exclude certain claimed properties meanwhile because these properties are situated on land that is not managed by the conservation agency, that is, the two Forever Resorts in Blyde River Canyon Nature Reserve. Including these properties in the settlement agreement could seriously delay the process and therefore it was decided to include them at a later stage. In many cases there was confusion over other claimed properties of the same claimant groups, but situated outside the reserve. It was explained that this specific settlement agreement deals only with the claimed properties and/or portions of claimed properties located inside the reserve. This is because of the special agreement around land restitution on protected areas and because the

conservation agency can only sign off on properties it is mandated to manage. However, for Blyde River Canyon Nature Reserve it had already been decided to include the proposed extension of the reserve of 13,000 hectares currently being managed by the Department of Water Affairs and Forestry (DWAF) and to include DWAF as a signature to the agreement because responsibility for management of this area is to be transferred to the conservation agency in the near future. In Blyde River Canyon Nature Reserve the land claimant groups requested the government stakeholders for an independent legal advisor to go through the settlement and co-management agreement frameworks with them. Therefore, Blyde River Canyon Nature Reserve followed a slightly different process from other priority areas from this point onwards.

In many cases it was necessary to explain the difference between immovable (eg buildings), fixed (eg fence) and movable (eg cars and pumps) assets. Immovable and fixed assets on claimed properties come under the ownership of the claimants, and the movable assets remain with the conservation agency. Many of the claimant representative structures requested the conservation agency to donate certain movable assets, but this is not in line with the Public Finance Management Act (PFMA) as the assets form part of the asset register of the conservation agency. It was explained that the movable assets remain on the reserve and continue to be used for the management of the reserve. On request by the RLCC, generic changes in the settlement agreement were made to the indicated period for payments of the settlement grants. The time agreed on in the consolidated government position was six months of signing the settlement agreement and this was changed to one year. Furthermore, in some cases the RLCC was unable to give the exact amount of the settlement grants at this stage and the agreements were changed to accommodate this and to ensure that the exact amounts are known by the RLCC within a certain time of signing the agreements.

Other obstacles identified during the settlement agreement negotiations are described below as they influenced the negotiation process. The benchmarking of gazette notices, as described in 4.2.1, revealed that some of the land claimant representative structures consist of lumped claims, as is the case for Blyde River Canyon Nature Reserve. Because the title deeds must be handed over strictly to the group that lodged the claim, the RLCC was requested to clarify the issue. It was also discovered that one of the claimant representative structures has not been officially registered yet and therefore the agreements cannot be signed. The RLCC was requested to attend to the matter as soon as possible. With regard to Loskop Dam Nature Reserve some outstanding claims have not been gazetted yet. This probably pushes the total percentage of claimed land above 20 per cent. Negotiations are put on hold until the other

claimants are brought on board the process. It is however questionable whether co-management is the preferred option for Loskop Dam Nature Reserve as it consists of various claimant groups (at least 3–4) each claiming only a small portion of the reserve. Another complicating factor is that one claimed property is located in Limpopo and the relevant files need to be handed over from the RLCC in Limpopo to the RLCC in Mpumalanga. In Mthethomusha Game Reserve a delay is being caused by the land claimant verification process. Certain claimants (about 5 per cent) are currently not part of the registered CPA and they do not want to be included in the same structure, but would prefer a new structure to be created. So in most cases, outstanding issues were resolved and/or a way forward was formulated and the parties are ready to sign, except for Loskop Dam and Songimvelo Nature Reserves.

6.9 Co-management and proposed beneficiation

The co-management and beneficiation model as described in 4.3.5 was presented to the claimant representative structures, including the detailed ranking results and table 9 of 4.3.1. The presentation on co-management illustrated the difference between what needs to be managed (MP), strategic management decisions (co-management agreement) and operational management by the conservation agency. It also showed that the co-management partners come from different angles and have different objectives, with the conservation agency being mandated to conserve biodiversity within the legal framework of NEM:PAA and the representatives of the claimants being mandated to maximise the benefits for the claimants. It was therefore understood that in co-management it is very important that both partners should see the benefits from cooperation and that a mutual beneficial situation is the targeted outcome, instead of only one party gaining the maximum possible. Table 9 proved to be a comprehensive tool for the land claimant representatives to understand the logic behind the most feasible land claim settlement option for their specific situation. In the two priority areas where the feasibility of co-management is questionable according to table 9, the claimant representatives requested more information to better understand the implications of the options. In Mabusa Nature Reserve the socio-economic assessment as described in 3.4.11 was implemented (see 6.11). In the case of Mdala Nature Reserve the reserve manager was asked to present the financial figures for the reserve. According to Giyani (2009) the expenditure and income for Mdala Nature Reserve in the financial year 2008/2009 were R6,631,806 and R30,531 respectively. In the section below what this means for net profit generation and tangible beneficiation opportunities for the claimants is calculated. The size

of Mdala Nature Reserve is 8,165 hectares and with a currency rate of US\$1: R7.5 this means a management cost of US\$10,830 per square km. This is far above the average funding per square km in developed countries for effective protected area management with an estimated average of US\$2,058 per square km (Kloss 2001:15). So, for Mdala Nature Reserve it is not an issue of being underfunded or of the allocation of budget. Land claimant representatives asked valid questions about the numerous staff members on the reserve and why there are three drivers, but only one functioning vehicle. It was also questioned how much pressure there is on semi-government agencies (parastatals) to use at least 2/3 of budget for staff expenses. This is important in future for the success of the co-management models and the possible move towards privatisation. In 2008/2009 Mdala Nature Reserve should have generated at least 12 per cent of its own income (R796,000) to be able to cover the 2008/2009 expenditures. Actual own income of R30,531 is far below this level, and the reserve runs at a loss instead of a net profit. This means that in 2008/2009 Mdala Nature Reserve received R0.769 million through cross-subsidisation from other reserves which will not be possible anymore in the future with decentralised budgets. If the budget remains on the same level as 2008/2009, including the 37.5 per cent increase in costs when going into co-management, own income generation in 2016/2017 should increase to R3.65 million which is unrealistic for such a small reserve with only medium tourism potential. A direct substantial decrease in staff expenditures is needed for the reserve to ensure that it is not running at a loss. According to the standards of developed countries, the total budget for the reserve should be not more than US\$2,058 per square km, which results in R1.26 million per year. Additional income generation activities need to be identified, such as hunting, to finally come to a net profit situation for the claimants. The financial projections for Mdala Nature Reserve are summarised in table 20.

Table 20: Financial projections for Mdala Nature Reserve for 2016/2017 compared with 2008/2009

Year	Actual income	Subsidised income	Actual costs	Net profit
2008/2009	R0.031 million	88% of R6.63 = R5.83 million	R6.63 million	R-0.769 million (cross-subsidy)
2016/2017	<R3.65 million	60% of R9.12 = R5.47 million	R6.63 x 1.375 = R9.12 million	<0
2016/2017 reduced costs	R0.69 million	60% of R1.73 = R1.04 million	R1.26 x 1.375 = R1.73 million	0

(Summary of financial projections by the author as elaborated in section 6.9)

For the conservation agency, it might have been better to de-proclaim this area because it uses an enormous amount of the budget for a low-biodiversity-ranked reserve. This budget could be better used for the high-ranking reserves that currently have insufficient operational budget. This would lead to higher chances of performance with regard to co-management in the high-ranking reserves, which are priority areas for the conservation agency as per its mandate. According to the claimants, an analysis should be carried out to see whether an alternative land claim settlement option would be better. An exercise in which various land uses are valued and compared could assist in determining possible alternative options. As stated by Carruthers (2007:296–297) ‘South Africa’s protected areas do not comprise quality land, having been originally established in remote parts of the country or in places unsuitable for agriculture’ (see 1.2). It may well be that conservation is still the best option with resource use as an important element towards the contribution to sustainable livelihoods (see 2.5.2). However, it would probably have been better for the claimant community to opt for de-proclamation and to find a suitable strategic partner for a more cost-effective and efficient management of the area under conservation. This is possible for Mdala Nature Reserve under NEM:PAA because of its low biodiversity value. In the end, the land claimant representatives for Mdala Nature Reserve decided that they wanted to go for co-management, together with the MTPA, but that they wish to be able to review and change this option if it does not prove feasible.

6.10 Roleplay

Roleplay was used in particular as a method where lack of understanding was identified. In Loskop Dam Nature Reserve the claimants struggled to understand why co-management is not really feasible if the claimants claim only a small portion of the reserve. A roleplay was performed in which the claimants and the conservation agency worked intensively together to set up a certain income-generating activity. Although inputs were equal, in the end the conservation agency received 80 per cent of the net profit as currently the reserve is only claimed for about 20 per cent. It was illustrated that co-management comes with a lot of costs in time and human resources for the claimants and this is cumbersome if the rights for net profit sharing are limited. Other roleplays were implemented in Mabusa Nature Reserve to illustrate the difference between strategic and operational management. The stakeholders agreed strategically what they wanted, but not who is doing what, and no clear role clarification took place. The roleplay illustrated that this creates confusion on the ground and therefore there is a need for role clarification. Another roleplay addressed the issue of

investors contacting some members of the CMC, but not all. It was illustrated through the roleplay that if an investor approaches one of the members of the CMC, the investor should be invited to give a presentation to the CMC with all involved, instead of dealing only with some individuals. The ‘couple’ contract the investor and not vice versa. The need for transparent communication from the CMC and the land claimant representatives to the wider claimant and neighbouring community was illustrated via two roleplays on access and resource use in the reserve. The protocols on access and resource use as decided on in the CMC should be communicated to a wider audience for people to understand them. The last roleplay in Mabusa Nature Reserve addressed the problem of the conservation agency not communicating well to the claimant community and how this creates confusion if certain strategic decisions have not been made in the CMC, but are implemented at operational level by the conservation agency.

6.11 Socio-economic assessment

The socio-economic assessment as described in 3.4.11 was implemented in Mabusa Nature Reserve and Manyeleti Game Reserve. In Mabusa Nature Reserve claimants were being informed, through sharing the ranking results, that co-management might not be a feasible model in their situation. The socio-economic assessment was implemented to identify further risk areas. These were the high expectations of the wider community; lack of strong community structures in the area; lack of access to infrastructure, services and support organisations; claimants living relatively far from the reserve; and a bad relationship with the LM. The relatively small and coherent claimant community with strong connectivity to the land and relatively equal wealth distribution were identified as positive elements. In Mabusa Nature Reserve the claimants decided to go for co-management because of the existing asset of Zithabiseni Lodge, which can be revived and which they think can generate sufficient benefits for the limited number of claimants. The claimants are aware, however, that they have to lower the expectations of the wider community and that they have to improve their working relations with the LM. The road to Zithabiseni needs upgrading and therefore a good relationship with the LM is important.

In Manyeleti Game Reserve risk areas were identified with regard to the relatively high number of neighbouring communities having expectations for jobs and the lack of access to services. The good relationship between the claimants and the tribal authority; the good relationship with the LM; strong leadership and community structures in the area; cohesive

community; and relatively low expectations of the claimant community were identified as positive elements. For Manyeleti Game Reserve the socio-economic assessment confirms that co-management might be a feasible model as long as the expectations of the wider community are managed. The tool of the socio-economic assessment can be easily used as a monitoring tool for the land claimant representative structures to see whether certain risk areas improve over time. The first socio-economic assessment can serve as a baseline assessment. For the remaining priority areas where the socio-economic assessment has not yet been implemented, this could be done while establishing the CMC.

6.12 Co-management agreement negotiations

Contentious points of discussion in the co-management agreement negotiations concerned the legitimacy of the CMC, the remuneration of claimant members for participation in the CMC, control and management of game, beneficiation by neighbouring communities, and the termination clause. Some of the formulations in the co-management agreement framework were seen by most land claimant representatives as paternalistic with the CMC playing only a ‘rubber stamping’ role. In the co-management agreement framework it was stated that all decisions made by the CMC have to be ratified by the chief executive officer (CEO) of the conservation agency. In the final co-management agreements it was agreed that the CMC can take all strategic decisions as long as they are in line with the approved MP. As soon as decisions are taken outside the MP, the CEO of the conservation agency must ratify them. This provides for a more decentralised governance structure with real legitimacy by the CMC, while protecting the environmental mandate and accountability by the conservation agency. It is in the interests of the conservation agency to appoint quite senior officials to the CMC to ensure that the decisions are made within the approved MP and that proper clarification is given to the other members of the CMC. It was also agreed that the new MPs must be in place within six months of signing the agreements.

After long discussions it was agreed and understood that each party will bear its own costs for the participation of their members in the CMC as proposed in the co-management agreement framework. The importance of an equal partnership in co-management was emphasised with each party having different objectives. It would compromise the mandate of the claimant representatives in the CMC if they are paid for their participation by the conservation agency. The claimant community could easily accuse them of being in the back pocket of the conservation agency and therefore compromising on their mandate to maximise

the benefits for the claimant community. In the end it was also agreed that the conservation agency should remain responsible for the control and management of the game. It was not clear to the claimant representatives that the proceeds generated from the sale and hunting of game are included in the net profit calculations. Strategic decisions on game numbers in the reserve are made in the CMC, and should be in line with game stocking levels as determined in the MP.

It was explained that according to NEM:PAA neighbouring communities should benefit from the reserve (see 2.2.1). It was decided that in particular the communities impacting directly on the reserve should benefit, and neighbouring communities within a radius of 5 km were listed in order to benefit from access, resource use and employment opportunities according to an agreed ratio. It was explained that excluding these people could cause conflict and instability in the area as many of these communities rely on the reserve for their subsistence. The termination clause in the co-management agreement framework was a contentious issue that was discussed in detail. The termination clause states that in the event that the co-management agreement is terminated by the MEC and/or one of the parties, the conservation agency is entitled to lease and/or purchase the properties involved, as agreed by the parties. It also states that in the case of a dispute in the CMC, management reverts to the conservation agency, but the net profit calculations and benefits for the claimants remain intact. The land claimant representatives felt that the termination clause was not fair, as the claimants are the lawful landowners and therefore should have most rights. They stated that they were afraid that they might lose their land again and they have difficulties with the reserve remaining conservation land in perpetuity with the conservation agency appointed by the MEC. Discussions were held as to whether this is also valid if the reserve has not been properly proclaimed yet as a provincial nature reserve. It was explained that if on 27 April 1994 the land was used for conservation and managed by a recognised conservation agency it is considered in status to be proclaimed as a reserve, although not officially proclaimed on paper yet. After providing copies of the relevant legislation (NEM:PAA), the termination clause was accepted by the claimant representatives with specific reference to the relevant clauses.

Some of the clauses concerning the nature-based tourism developments were discussed. The proposal for the claimant community to have the right to establish one community-owned lodge on the reserve (see 4.3.5.4) was rejected by most land claimant representative structures as it is too prescriptive. Therefore it was decided by the government departments involved to remove the proposal from all co-management agreements. Another generic

change that was made was to charge a levy for the landowners on all guests and tourists visiting the reserve instead of charging a levy only on overnight tourists, as suggested in 4.3.5.4. Some reserves do not have many overnight tourists and therefore it was decided to also charge a levy on day tourists. Another generic change was to include a clause in the agreements that all existing agreements should be reviewed and, if legally possible, renegotiated within six months to ensure the overall financial feasibility of the reserve. Currently, most agreements do not provide a lot of benefits for the conservation agency. Certain land claimant representatives had difficulties in understanding the contents of the co-management agreement framework, for example one of the CPAs in Loskop Dam Nature Reserve. In this case, land claimant representatives from neighbouring reserves were asked to explain the settlement agreement in a peer-to-peer session using local language and local examples. This indicates the flexibility in which the various methods were used and adapted according to the specific situations, depending on the level of understanding of the land claimant representatives and their wishes.

6.13 Community resolutions

In general more concerns are related to trusts than to CPAs. Anxiety was expressed by several groups of claimants because they do not have representation on the board of trustees. The board of trustees in the end decides on benefit sharing within the claimant group. The contents of the trust deeds and the CPA constitutions are important to ensure equitable benefit distribution as far as possible. In certain cases, the elected representatives refused to go into new elections although the period of their mandate had lapsed. Through the transparent process of community resolutions this issue can be addressed in the right forum and under guidance of the RLCC as it is not the mandate of the conservation agency. However, if no equitable benefit distribution takes place it ultimately affects the conservation agency.

The community resolution as described in 3.4.13 was established for Manyeleti Game Reserve on 15 December 2009. The verified claimants came in large numbers, and the RLCC used the opportunity to finalise the claimant name verification process. In the end, only five claimant names were added to the list of 253 claimant households. An issue was raised by two opposing groups that the current board of trustees does not represent the claimants in a democratic matter. In the end the community resolution to mandate the current board of trustees to sign the agreements on behalf of the claimants was agreed upon on the condition

that a process must be undertaken to have new elections of the board of trustees within an indicated period and that the trust deed should be amended if necessary. Community resolutions are good methods of addressing issues and conflicts in the claimant community and of ensuring that a majority of claimants agree with the proposed way forward and/or projects. Internal community dynamics often delay the land claim process, but as soon as a dialogue is facilitated it is possible to come to a way forward. It is not within the mandate of the conservation agency to address internal community dynamics, but by insisting on a community resolution under guidance of the RLCC, the conservation agency can be assured that the majority of the claimants agree with the signing of the agreements and that there is a wide buy-in from the claimant community. The final format of the agreements contains the co-management agreement as an annexure to the settlement agreement. Another two annexes of the settlement agreement deal with the issue of verified land claimants and the exact details of the claimed properties inside the nature reserve, such as title deed number and size. The locations of the claimed properties inside the nature reserve are illustrated in a map.

6.14 Design management plan and co-management committee establishment process

Inclusive and detailed MPs are currently only in place for Blyde River Canyon Nature Reserve and Songimvelo Nature Reserve. Therefore, it has not been possible to calculate any financial projections for the next 5–7 years for the remaining priority areas, as has been done for Blyde River Canyon and Songimvelo Nature Reserves (see 5.3 and 6.2). In the case of the MTPA, the proposed method (MTPA 2009b:1–13) for the establishment of the new MPs, according to NEM:PAA, gives three deliverables, that is, tourism master plan, zoning plan, and an integrated management plan including a detailed project implementation plan. The zoning plan is the basis on which the tourism master plan is developed. The tourism master plan and the zoning plan are prerequisites for the integrated management plan. The integrated management plan provides a set of management objectives derived from stakeholder input. The project implementation plan is derived from the integrated management plan and defines a work plan for implementation of the prioritised management objectives including timeframes, responsible agents and budget considerations. The end product is a goal-oriented MP that needs to be revised every five years. The project implementation plan that is going to be established should form the basis for the annual performance based contract on operational issues between the CMC and the conservation agency as proposed in the consolidated government position (see 4.3.5.1). The new MPs should be signed off by the responsible MEC and therefore the process outlined above can be used by the conservation

agency and the land claimants to lobby for appropriate budget for each individual reserve and project. From the cases of Mdala Nature Reserve (see 6.9) and Kusimama Consulting (2009:16) it can be learned that currently the total quantity of budget for individual reserves seems to be sufficient, but there is a lack of operational budget for maintenance and infrastructure development, which affects current and future generation of own income to be able to establish a net profit.

The primary and secondary stakeholder involvement, in line with the legally required public participation process (see 2.3.2), takes place via three workshops. In the first workshop the process and work plan for the establishment of the MP are explained and inputs with regard to the tourism master and zoning plan are gathered. In the second workshop the tourism master and zoning plan are presented to the primary and secondary stakeholders and inputs for the mission, vision and objectives are collected. An official stakeholder forum is constituted if required. Existing and/or proposed stakeholder structures such as existing community forums and the CMC are preferably used to group the stakeholders. In the third workshop the integrated management plan is presented and inputs and comments are collected as well as the ‘go-ahead’ to proceed to project implementation.

The process to establish the MPs should be aligned with the establishment of the CMC and the development of the communication and monitoring strategy for the CMC. As stated in 2.3.1 the essential difference between management and governance is that management (MPs) is about what is done, while governance (co-management agreement) is about who makes decisions and how (Borrini-Feyerabend 2008:1). Proposals for the establishment and functioning of the CMC are outlined in a draft ToR that needs to be discussed and agreed upon during the establishment of the CMC. In the draft ToR it is again clearly stated that the conservation agency is ultimately the institution accountable to the financial and ecological management of the nature reserve and not the CMC. The claimant representative structures on the other hand must ensure maximum beneficiation for the claimant community. It must be clear that the reserve is not a production unit, such as an agricultural business, and maximisation of benefits can only take place within the agreed framework and project implementation plan of the MP. So, the different objectives from both parties, that is, the conservation agency and the claimant representative structures, must be married into one joint ToR without allowing any of the principals to effectively take over the rights, obligations and functions of the other. Therefore, the CMC does not have a legal status separate from that of the principals, but it executes a delegated function on behalf of its principals. The management and beneficiation related to the respective reserve is handled as

holistically as possible in the CMC. Issues of resource use and access are handled in the CMC for the whole reserve, and the beneficiation is calculated based on the net profit made by the reserve as a unit. It is recorded in the draft ToR for the CMC that all concession and development contracts shall be entered into in the name of the conservation agency with the land claimant representative structure as co-signatory if the development is on claimed property. If the developments are on state-owned land all concession and developments contracts shall be entered into in the name of the conservation agency. This is to ensure that the conservation agency can approve developments on state-owned land and that not all developments take place on claimed properties only. All negotiations, finalisation, execution and management of concession and development contracts will remain under the exclusive control of the conservation agency, subject to the strategic decisions made by the CMC with regard to the conclusion of any such contracts. As stated in 1.5, the state has an important role to play in ensuring maximum benefits for communities in the move towards privatisation and market liberalisation in economic development programmes linked to the utilisation of the region's rich natural resource base (Isaacs and Mohammed 2000:19). Especially where communities have firm legal rights over land and where the state controls competitive sites, there is hope for improving rural livelihoods (Wolmer and Ashley 2003:34–39).

6.15 Summary and conclusion

Through the implementation of the methods that were developed to balance the objective of biodiversity conservation with the beneficiation expectations of the land claimants it was learned that the methods can be divided into two groups. The first group contains the more generic methods dealing with legal issues and setting the framework in which the negotiations took place. These methods, such as following the ideal land restitution process, ranking primary and secondary stakeholders, the land claim settlement principles, and various types of co-management in most cases were applied in quite generic and standard sessions with limited room for flexibility as the legal framework stands as it is. The second group of methods contains the more flexible procedures such as participatory mapping, roleplay, exposure visits and socio-economic assessment. These methods were implemented in a much more flexible way and were used on need and adapted to the situation. Though the more generic group of methods were basically implemented in each priority area, the flexible group of methods were used in certain cases only. In particular the tools of participatory mapping and exposure visits proved useful in unlocking the complexity of each situation and forming a basis for negotiations. It was also learned that the tool of the beneficiation matrix

was quite difficult to implement for the land claimant representatives, but it formed a good basis for creating awareness and understanding the uniqueness of each situation. Table 9 of 4.3.1 proved to be a more comprehensive tool for the land claimant representatives to understand the logic behind the most feasible land claim settlement option for their situation. In this case, the socio-economic assessment and the current tourism record took over the function of the beneficiation matrix. In the case of Mdala Nature Reserve, the financial figures were presented in addition to applying table 9 of 4.3.1, which made the implications for the land claimants even more clear. For both Mdala and Mabusa Nature Reserves the preferred land claim settlement option is to de-proclaim the area if table 9 is applied. However, because of reluctance by government stakeholders and the land claimant representatives to go into the process of de-proclaiming the area, it was decided in both cases to go for co-management. This might have negative financial implications for the conservation agency as cross subsidies will not be possible from other claimed areas, and the negative balance can be settled only by using own income generated from non-claimed and/or partly claimed reserves. This would compromise the mandate of the conservation agency to manage areas of high biodiversity effectively. In both priority areas, the implications for the land claimants are negative as no net profit is generated and therefore there are limited tangible benefits. It is questionable whether the conservation agency is able to turn these reserves with limited tourism potential into a profitable business in which at least 40 per cent of the costs are covered by own income generation.

The way in which the negotiations around the land claim settlement and co-management agreements took place was ultimately a combination of generic and flexible methods. As the agreement frameworks were based on a consolidated government position, taking all relevant legislation into account, it started from a generic and standard format. Although certain clauses were not popular with most land claimant representatives, such as the termination clause in the co-management agreement, they were relatively easily accepted when the link to the relevant legislation was made. In most cases generic concerns were expressed by almost all land claimant representative structures. These very valid inputs, such as a guest levy per tourist instead of per overnight tourist, were incorporated in a generic way in the agreement frameworks and therefore form an important addition to the model design as described in chapter 4. Other generic changes were the elimination of the opportunity for one community-owned lodge per land claimant representative structure as it was found to be too prescriptive and the wish to make the CMC as legitimate as possible as long as strategic decisions are made within the MP. Specific wishes and issues expressed by the land claimant representatives were incorporated in a flexible way as far as legally possible. Specific wishes,

such as the request for independent legal advice on the agreement frameworks and the wish to only use 50 per cent of the settlement grants for investment in the case of Blyde River Canyon Nature Reserve, were accommodated by the government stakeholders if possible. In the case of Loskop Dam Nature Reserve, a flexible approach was used to ensure good understanding of the co-management agreement framework by organising and enabling a peer-to-peer session with other land claimant representatives. The community resolution method contains a generic and a flexible part. The process of the community resolution itself is very generic and standard, but the method can be used to address certain concerns that exist within the land claimant community, as was the case in Manyeleti Game Reserve.

It can be concluded that the process of following the various generic and flexible methods per priority area and land claimant representative structure was a lengthy and costly one for the conservation agency. The conservation agency played a very proactive role and ensured that most of the workshop sessions could take place. It is believed that these extensive inputs in human and financial resources by the conservation agency ultimately pay themselves back. Social ecology staff of the conservation agency facilitated the whole process and often had a very difficult role to play by partly taking over the neutral facilitator role that should have been played by the RLCC (see 2.2.3). The implementation of the various methods ensured that the land restitution process in protected areas was kept within the legal framework and that the land claimant representative structures made an informed choice on the best land claim settlement option for their specific situation. Where the feasibility of the co-management model was doubtful, the land claimant representatives were made aware of this and additional risk areas were identified. Apparently, it is difficult not only for the government stakeholders to divert from the policy to go for co-management, as promoted by the MoA, but also for the land claimant representatives. This is also because most alternatives are still unclear (such as lease option) and/or not feasible (financial compensation and alternative land). Flexibility was built into the termination clause with regard to the chosen land claim settlement option, which is important, especially where the feasibility of co-management is doubtful, so that a change in option can be made after a certain time. The whole process ensured improved communication, understanding and trust building between the future co-management partners, that is, the land claimants and the conservation agency, which are important elements for the foundation for its success. It is very important for the conservation agency to select the right people on the CMC and to ensure proper management of the reserves so that tangible benefits for the land claimants are created to make co-management a success.

The analysis results of the testing of the designed model in the seven priority protected areas are presented in this chapter. The results indicate that the methods and guidelines developed as part of the model design may assist conservation agencies and land claimants to come to an agreement on land claim settlement and co-management agreements for each specific situation. Especially in this part of the model design the voice of the people can be expressed. The results of this chapter, including the valuable suggestions by the land claimant representatives, resulted in further refinements of the model design as illustrated in figure 4 in section 3.5. The final general refined model design for land restitution in protected areas is illustrated in figure 12. The summary, conclusion and recommendations of this thesis are presented in chapter 7.

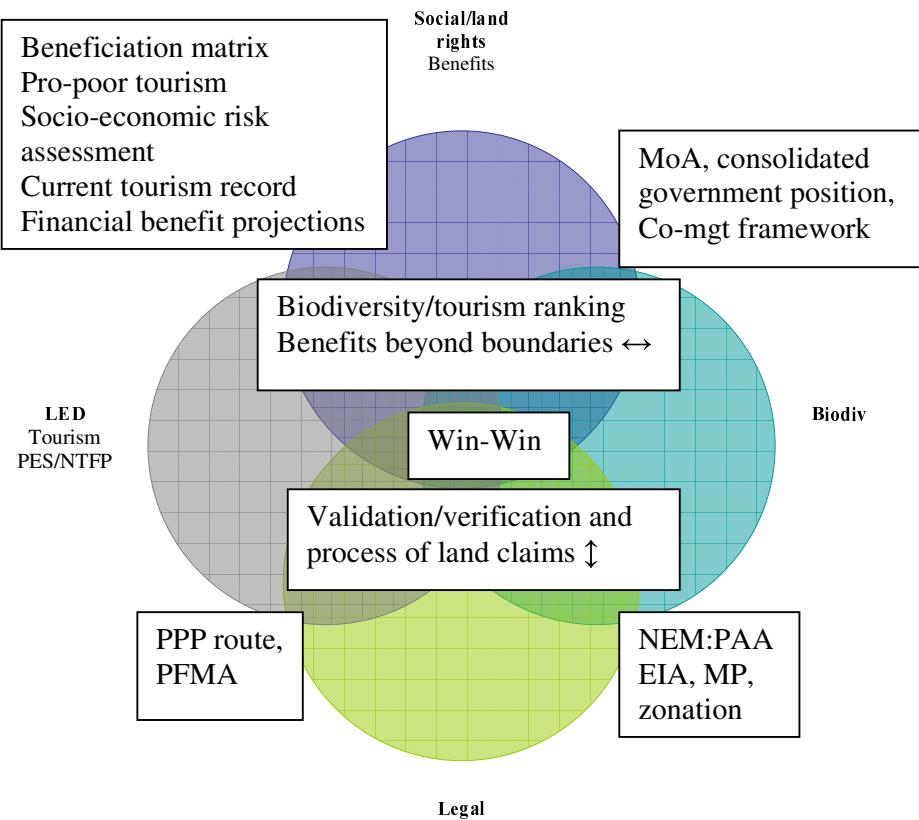


Figure 12: Final general refined model design for land restitution in protected areas

Chapter 7: Summary, conclusion and recommendations

7.1 Introduction

This thesis investigates the design of a model, methods and guidelines that may assist government agencies, especially state-subsidised conservation agencies in South Africa, to find a balance between the objective of biodiversity conservation and increased local economic development in cases of land restitution in protected areas. This topic proved to be very complex because of its interdisciplinary character (social, economic, biodiversity conservation and legal). To devise guidelines to be used by government agencies in South Africa on the possible implementation of the biodiversity conservation and local economic development mandates in cases of land claims within their financial and institutional limitations, it was necessary to subdivide the broad aim of the thesis into three objectives. The first objective addressed in this thesis was the design of a model that conservation agencies can use to facilitate the establishment of a consolidated government position and strategy, leading to an optimum land claim settlement choice and the creation of good generic settlement and co-management agreement frameworks (chapter 4). The second objective was the exploration of options for additional income generation beyond nature-based tourism, and to give recommendations for so-called benefits beyond boundaries to make the proposed beneficiation models more feasible over a long period (chapter 5). The third objective was the development of methods to balance the objective of biodiversity conservation with the beneficiation expectations of the land claimants in order to come to a mutual beneficial model for the claimants as well as the conservation agency (chapter 6).

The data collection that was needed for this study took place from 2007 to 2009, and was limited to seven priority protected areas in Mpumalanga Province, managed by the Mpumalanga Tourism and Parks Agency (MTPA). The seven priority areas were used to study objectives one and three and only one priority area was used to study objective two. The study was limited to the description and analysis of the process of land claim settlement and co-management negotiations and to the design of a model, methods and guidelines towards this goal. The implementation of the various agreements and proposed projects was outside the scope of this study. The study was based on a combination of field and literature research. A detailed literature review was done to provide the background and legal context of the study, including the interlinkages between the various disciplines. The land restitution and co-management process and their options were studied in detail, as well as possible

beneficiation models related to tourism and other conservation and nature-based activities. A summary of the research findings is given in 7.2. The interpretation of the results, including the relation to the findings in terms of the literature and theory, is given in 7.3. This chapter finishes with additional recommendations in 7.4 and a final conclusion in 7.5.

7.2 Summary of results

7.2.1 Results of model design for a consolidated government position and strategy

The first objective in this thesis was the design of a model that conservation agencies can use to facilitate the establishment of a consolidated government position and strategy, leading to the optimum land claim settlement choice and the creation of good generic settlement and co-management agreement frameworks (chapter 4). The model design for a consolidated government position and strategy on land restitution in protected areas was based on three parts. The first part of the model design was the elaboration of an internal position of the conservation agency. A ranking exercise was done by an external consultant on the biodiversity and tourism value to assess the preferred land claim settlement option per priority area. It was identified that additional information is needed to come to the preferred land claim settlement option per protected area such as the actual tourism record; a socio-economic assessment of the environment in which each protected area is embedded; and financial figures to make projections on net profit calculations. The internal position of the conservation agency also gave guidelines for the preferred co-management model and set-up. The second part of the model design was a consolidated government position between relevant government departments with the internal position of the conservation agency as a basis. The third part was the elaboration of generic land claim settlement and co-management agreement frameworks, based on the consolidated government position. The framework agreements referred to the respective legislation involved and it was ensured that they were legally compliant. As recommended in the model design, the finalised versions should be approved by the various state departments to form the basis for the negotiations between the government stakeholders and the land claimant representative structures. The settlement agreement framework was based mainly on the consolidated government position and the 12 settlement principles derived from the memorandum of agreement (MoA) (see 3.4.5). The co-management agreement framework was based mainly on the consolidated government position and aligned with Section 42 of the National Environmental Management Protected Areas Act (NEM:PAA), as described in 2.3.2.

7.2.2 Results of options for additional income generation

The second objective of this thesis was to explore options and to give recommendations for so-called benefits beyond boundaries, in addition to possible sources of revenue inside the protected area to make the proposed beneficiation models more feasible over a long period (chapter 5). An estimated net profit of R6.61 million per annum could be realised from the pilot site, that is, Blyde River Canyon Nature Reserve, by 2014 if the investment sources for the tourism-related developments can be found. The planned tourism developments will create an additional 349 permanent jobs. Other benefits are 700 new jobs per year for overnight developments outside the reserve and numerous small medium micro enterprises (SMMEs), training and temporary labour opportunities, especially in the development stages. The review of existing concession agreements in the pilot site was excluded from the net profit estimate based on tourism-related activities. A substantial increase in tangible benefits for both the conservation agency and the claimants can be generated through the negotiation and establishment of good contracts, including as many pro-poor tourism principles as possible, such as job creation, skills transfer and equity sharing (see 2.4). Another big benefit potential for the claimants comes from the proposed increase in entrance gate fees to be directly allocated to the claimants as a landowners' levy per visiting guest, according to the 'user pays' principle. This additional estimated amount of R5.65 million, together with the net profit estimate from tourism, gives a total of R12.26 million. In this case, the reserve is 100 per cent claimed and this results in R817 per household (HH) per annum. The still relatively low amount per HH is due to the large number of claimants and it confirms that tourism is not the sole solution to sustainable livelihoods.

The feasibility results of the river corridor project indicated that additional income from tourism could be obtained by developing opportunities and activities just outside the reserve, such as accommodation, hiking, and rafting. A further diversification of income for the claimant and neighbouring communities could be explored through the elaboration of a payment for ecosystem services (PES) scheme, linked to the combined river corridor. A more concrete and quicker opportunity for PES was identified through the hydropower project, which is linked to the river corridor project. An estimated investment of R92 million for two identified hydropower projects inside the reserve could generate an annual turnover of R21 million within four years. Both hydropower projects are based on existing constructions and therefore do not have a major environmental impact. If the co-management model receives only the concession fees for these two projects, an additional R100–140 per HH per annum could be generated. However, if a more direct link between site security and ownership and beneficiation can be developed, there is potential for many more benefits for the claimants.

As in the tourism-related developments, wise use of the settlement grants to obtain equity in the businesses could increase the benefits for the claimants substantially by a yearly pay out in dividends.

The results of the bio-cultural protocol project illustrated that the importance of natural resources should not be underestimated, as is particularly true of the proposed extension of the pilot site. The gross annual value of local trade in natural resources across all households on the eastern boundaries of the pilot site was estimated at R4,412 in 1998. An estimated 55,800 people rely directly on these resources. Compared with the tourism estimated benefits of R817 per claimant HH and the benefits from hydropower of R100–140, the use of natural resources remains the most substantial in the contribution to sustainable livelihoods. The bio-cultural protocol established by the traditional health practitioners can assist when working with the co-management committee of Blyde River Canyon Nature Reserve to access certain areas for resource use, visiting of graves and in-situ cultivation in the rehabilitated forestry areas of the proposed extension of the reserve. The providers of the natural resource have a legal right to benefit from these resources, especially if they are used for commercial purposes. It can assist to formulate agreements between the primary and secondary stakeholders around access and this leads to more equitable access and benefit sharing. The principle of the bio-cultural protocol can also be used in the establishment of a PES scheme to agree on certain management and beneficiation practices. The use of a bio-cultural protocol reduces transaction costs and provides clarity for the private sector.

7.2.3 Results of the development of methods to come to a mutual beneficial model

The third objective of this thesis was the development of methods to balance the objective of biodiversity conservation with the beneficiation expectations of the land claimants to come to a mutual beneficial model for the claimants as well as the conservation agency (chapter 6). The group of generic methods that was developed, such as following the ideal land restitution process, ranking primary and secondary stakeholders, adhering to the land claim settlement principles and different types of co-management, were in most cases applied in quite universal and standard sessions with limited room for flexibility, because the legal framework stands as it is and is non-negotiable. The group of flexible methods that was developed such as participatory mapping, roleplays, exposure visits and socio-economic assessment were implemented in a much more accommodating way and were used on need and adapted to the specific situation. The more generic group of methods were basically implemented in each priority area. The flexible group of methods were used in certain cases only. The tool of participatory mapping and exposure visits in particular proved useful in

breaking down the complexity of each situation and forming a basis for negotiations. Table 9 of 4.3.1 proved to be a comprehensive tool for the land claimant representatives to understand the logic behind the most feasible land claim settlement option for their specific situation. In this case, the socio-economic assessment and the current tourism record took over the function of the more difficult tool of the beneficiation matrix. The way in which the negotiations around the land claim settlement and co-management agreements took place was in the end a combination of generic and flexible methods. In most cases, some generic concerns were expressed by almost all land claimant representative structures. These very valid inputs were incorporated in a generic way in the agreement frameworks and therefore form an important addition to the model design addressed in objective one. Specific wishes and issues expressed by the land claimant representatives were incorporated in a flexible way as far as legally possible. It proved that the method of the community resolution contains both a generic and flexible part. The process of the community resolution itself is very generic and standard, but the method can be used to address certain concerns that exist within the land claimant community. It is not within the mandate of the conservation agency to address internal community dynamics, but by insisting on a community resolution under the guidance of the Regional Land Claims Commission (RLCC), the conservation agency can be ensured that the majority of the claimants agree with the signing of the agreements and that there is a wide buy-in from the claimant community. It can be concluded that the process of following the various generic and flexible methods per priority area and land claimant representative structure was a lengthy and costly one for the conservation agency. The conservation agency played a proactive role and ensured that most of the workshop sessions could take place. It is believed, however, that these extensive inputs in human and financial resources by the conservation agency ultimately pay themselves back for the organisation. Social ecology staff of the conservation agency facilitated the whole process and often had a very difficult role to play by partly taking over the neutral facilitator role that should have been played by the RLCC (see 2.2.3). The implementation of the various methods ensured that the land restitution process in protected areas was kept within the legal framework (in most cases) and that the land claimant representative structures made an informed choice on the best land claim settlement option for their specific situation.

7.3 Interpretation of results and conclusion

7.3.1 General model design

The general model design for land restitution in protected areas, as illustrated in figure 4 in 3.5, was established via an extensive literature review and analysis of the legal background in South Africa. The general model design took the various disciplines and their interlinkages into account, and formed the theoretical concept of this thesis and ensured that all options are within the legal framework in South Africa. All elements of the general model design were included to devise the guidelines to be used by government agencies in South Africa on the possible implementation of the biodiversity conservation and local economic development mandates in cases of land restitution in protected areas within their financial and institutional limitations. It was identified that additional information is needed to come to the preferred land claim settlement option per protected area such as the actual tourism record; a socio-economic assessment of the environment in which each protected area is embedded; and financial figures to make projections on current and future net profit calculations. Therefore, improvements on the general model design were elaborated by including table 9 of 4.3.1, as it proved to be a comprehensive tool for the land claimant representatives to understand the logic behind the most feasible land claim settlement option for their specific situation. In this case, the socio-economic assessment and the current tourism record, as indicated in table 9 complemented the results of the biodiversity and tourism value ranking and took over the function of the more difficult tool of the beneficiation matrix. Another addition to the general model design should be the availability of detailed financial figures and projections per protected area to enable an informed decision by government on the most feasible and therefore most preferred land claim settlement option. The final general model design for land restitution in protected areas is illustrated in figure 12 in section 6.15. A financial projection could be made for only three out of the seven priority areas, including Blyde River Canyon and Mdala Nature Reserves. It is reckoned that out of the seven priority areas selected by the MTPA, Blyde River Canyon Nature Reserve has most potential for net profit generation and Mdala Nature Reserve has the least potential for net profit generation. The results on the estimated net profit calculations, derived from section 5.3, 6.2 and 6.9, are summarised in table 21.

Table 21: Estimated net profit calculations of the co-management model in the seven priority areas

Priority protected area	Current management costs in R per sq km	Net profit estimate 2008/2009 in million rand	Net profit estimate within 5–7 years in million rand
Blyde River Canyon	15,000	5.2	6.61
Songimvelo	9,473	1.66	0.684 ¹³
Manyeleti	?	?	?
Mthethomusha	?	?	?
Loskop Dam	?	?	?
Mabusa	?	?	?
Mdala	81,225	-0.769	< 0

The benchmark for effective PA management is US\$2,058 per square km (= R15,435) for developed countries and US\$200–230 (= R1,500–R1,725) per square km for African countries (Kloss 2001:15).

From table 21 it can be concluded that there is a substantial difference in management costs per square km for the various priority areas. Larger reserves such as Blyde River Canyon and Songimvelo Nature Reserve might be relatively cheaper to manage per square km than smaller reserves, but the difference should be limited, and overall the management costs should not exceed the benchmark for effective protected area management in developed countries (R15,435 per square km). Unfortunately, no financial figures were available for Manyeleti and Mthethomusha Game Reserves and Loskop Dam and Mabusa Nature Reserves. Whether a net profit can be generated by these remaining priority areas depends a lot on the review and renegotiation of existing and future concession arrangements on the reserves. The land restitution process provides an opportunity to review and renegotiate existing agreements. Most existing agreements were signed by the conservation agency instead of the landowner of the state-owned land, which makes them legally invalid, according to Heunis (2009). Therefore, a generic change was made to include in the settlement and co-management agreements that all existing agreements should be reviewed and if legally possible be renegotiated within a period of six months to ensure the overall financial feasibility of the reserve. Existing and future community public-private partnership (cPPP) contracts should be negotiated within the co-management committee (CMC) with maximisation of pro-poor development principles and in the best interests of the protected area. As stated in 2.7, socio-economic, strategic, risk transfer, infrastructure upgrade and environmental values should be taken into account, besides the monetary value, when going into commercialisation of tourism enterprises on the reserves. Table 2 of 1.9 shows that the number of claimant households is relatively limited in the four remaining reserves, compared with Blyde River Canyon, Songimvelo and Mdala Nature Reserves. Therefore, a limited net

¹³ The net profit estimate will be R-0.243 million if the cattle grazing project is being implemented.

profit generation (net balance > 0) is sufficient to make the co-management model feasible for the claimants on these reserves. As stated in 2.7, experience shows that the larger the community that holds land, the more challenging it is to manage the land effectively. The number and cohesiveness of people claiming a certain property impact on the success of land restitution and co-management in protected areas.

The financial constraints of the conservation agency must be included in the model design. In this thesis the financial targets set by the government for conservation agencies to generate own income were included in the net profit projections and calculations. Additional costs that come with co-management (see 2.3.3) should not be ignored and in the model design it is assumed that government takes over 60 per cent of the additional costs. The assumption that the state continues to subsidise conservation agencies with 60 per cent of their budget seems to be valid as protected areas cannot be seen as production units with the maximisation of benefits as their ultimate goal. Conservation of natural attraction and sensitive environment is part of the infrastructure that the government of the country is supposed to maintain and enhance. Inherently, conservation is therefore not a revenue-generating activity by nature, and can be very expensive and a technically scientific exercise that requires highly qualified staff (Kusimama 2009:21). The case of Mdala Nature Reserve (see table 21), however, showed that state subsidies are still substantial and that it is important to re-look at the most efficient utilisation of state subsidies with sufficient means for maintenance and infrastructure development. Currently, some of the reserves seem to be managed more as labour generators than according to a sound business approach. This is probably caused through political pressure and pressure from the unions. The claimants can assist the conservation agency to become more business minded by putting pressure on politicians. The question is how long the claimants will have the patience to follow this route with no or limited income and when they will start pushing towards privatisation of the nature reserves to ensure profit generation.

The absence of all relevant information at the required time led to doubtful recommendations in land claim settlement options for two priority areas managed by the MTPA, that is, Mdala and Mabuse Nature Reserves. Government should support all the options as indicated in table 9 of 4.3.1, which is not the case at the moment, and most alternative options, other than co-management, are currently still unclear and/or not feasible. This might have serious negative implications for the conservation agency with the risk of compromising its mandate to manage areas of high biodiversity effectively.

Protected areas are the core unit of biodiversity conservation, but can fulfil their role only when properly managed. The small fraction of our planet that is designed for strict protection is crucial for the future of humankind and hence needs to be protected strictly (Fisher 2008:103).

In both Mdala and Mabusa Nature Reserves the implications for the land claimants are also negative because no net profit is generated, and therefore there are only limited tangible benefits. It is questionable whether the conservation agency will be able to turn these reserves with limited tourism potential into a profitable business in which at least 40 per cent of the costs are covered through own income generation. The lease option appears to be difficult in the currently state-owned protected areas because the state is not bought out in cases of land restitution, as is the case in private nature reserves (see 2.7). Because state subsidies for protected areas are declining rather than increasing, there is a limited chance that government will approve to payment of the lease fee. Unfortunately, it is still difficult for the conservation agency to convince the RLCC that the political drive for land restoration in title deed is not always the most feasible option of land restitution in protected areas, and that in certain cases the options of alternative land and/or financial compensation should be pursued. This is definitely true of areas of irreplaceable biodiversity with limited development potential that are important for the public and cannot be compromised. Another challenge is the internal dynamics within the conservation agency in which there is a tendency to hold on and continue to manage and keep all the protected areas, although they rank low in biodiversity. A way to change this mentality of both the RLCC and conservation agency is to have all the required information and financial projections in the early stages of the process so that an informed decision can be made.

Officials from the RLCC are often unaware of environmental legislation and officials from the conservation agency often do not know the land restitution legislation. Therefore, a consolidated government position is necessary. From the results, it is clear that a consolidated government position, agreed upon by all relevant government stakeholders, would assist in keeping the land restitution process in protected areas within the legal framework. The statement made by Williams (2008) (see 2.2.1) and Kepe et al (2005:10) that in politically sensitive circumstances there is a risk that agreements are reached outside the MoA and that biodiversity conservation is compromised proved to be valid in Songimvelo Nature Reserve. In this case, certain government departments supported the excision of an area of 13,000 hectares of irreplaceable biodiversity for cattle grazing, which goes against the MoA and NEM:PAA. Reversing such promises at a later stage is highly complicated and in the end, compromise is probably the only solution.

7.3.2 Diversification of socio-economic benefits

The results in the pilot site indicate that tourism can generate considerable benefits for regional development in the structurally weak rural periphery. This information should increase the acceptance of protected areas by both local communities and politicians. The concept of socio-economic monitoring needs to be incorporated (Job 2008:134). Putting true economic values on ecological services generated by the protected area (see 2.5.3) also helps to increase acceptance of protected areas. In the end, the conservation agency convinces the claimants and the politicians only if tangible benefits generated by the protected area flow to the land claimants and neighbouring communities. Therefore, it is of utmost importance for the conservation agency to guarantee some tangible benefits for the land claimants in the short term, such as the implementation of the levy per visiting tourist. Besides focusing only on tourism within the protected areas boundaries, it is important to look at tourism possibilities just outside the boundaries. A further diversification of socio-economic benefits is important, and conservation agencies should put much more focus on formalising income from PES schemes and access and benefit-sharing arrangements around the use of natural resources. As stated in 2.5.3, Blignaut et al (2008:13–14) found a high degree of overlap between ecosystem service production, biodiversity importance and poverty rates in various areas in South Africa. These additional benefits make the proposed beneficiation model more feasible over a long period and contribute to the diversification of socio-economic benefits to sustain livelihoods. Through these interventions, more communities can be reached, and this can assist in mitigating against the risk that only the local elite will benefit (see 2.6.2).

It is also important for politicians to understand that protected areas cannot solve all the problems that exist in poor rural communities. As Carruthers states (2007:296–297), ‘South Africa’s protected areas do not comprise quality land, having been originally established in remote parts of the country or in places unsuitable for agriculture’ (see 1.2). It may well be that conservation is in many cases the best land use option, although no net profit can be generated, with natural resource use as an important element towards the contribution to sustainable livelihoods (see 2.5.2). An exercise in which various land uses are valued and compared could help to clarify this, and expectations should be lowered by politicians rather than increased, as is currently often the case, because this can lead to dangerous situations (see 2.7). In this light it can be questioned what government’s exact objective is in land restitution in protected areas. Is the objective of land restitution the rectification of a historical wrong or to generate economic growth, job creation, participation, skills transfer and poverty alleviation? The latter are the objectives shared by community-based natural

resource management (CBNRM) and local economic development (LED) (see 1.6.4 and 2.2.3) and are in most cases the objectives pursued by the claimant community, especially the younger generation.

7.3.3 Balancing biodiversity conservation with beneficiation expectations

The various generic and flexible methods that were developed to workshop the generic agreement frameworks with the land claimant representatives proved to assist in the land claimants making an informed choice within the legal framework and to tailor the land claim settlement option and agreements to their specific situation. Some generic improvements to the agreement frameworks were made by including valid inputs from the land claimant representatives, such as a guest levy per tourist instead of per overnight tourist and the wish to make the CMC as legitimate as possible. Kepe (2008:311) mentioned that in the settlement agreements the power is with the conservation agency, which was the case with the established agreement frameworks. In the end, in the negotiations the land claimants pushed to make the CMC as legitimate as possible by giving it real decision-making power, as long as decisions are being made within the approved management plan (MP). As stated in 2.3.1, the potential of decentralisation to be efficient and equitable depends on the creation of democratic institutions with significant resources and discretionary powers. The socio-economic assessment proved to be a good tool for easily identifying certain risk areas and this tool should be used as a monitoring tool in the future. Other methods and the financial projections definitely assist in lowering expectations by the claimants. Where it is doubtful whether the chosen land claim settlement option is feasible, it is important to create flexible ways of re-looking at the agreements after a certain period and to come up with other more feasible alternatives. Although the whole process was costly and lengthy for the conservation agency, it ensured improved communication, understanding and trust between the future co-management partners, that is, the land claimants and the conservation agency. It is very important for the conservation agency to select the right people on the CMC, with knowledge of the MP, co-management agreement and environmental legislation, and to ensure proper management of the reserves so that tangible benefits for the land claimants are created to make co-management a success. As stated in 2.3.3, co-management is feasible only if at least four conditions are met. These are the presence of appropriate institutions, trust between partners, legal protection of local rights, and economic incentives for local people (Berkes 1997:6). Continued capacity building of the land claimants and the staff of the conservation agency is also crucial to maintain a good basis of trust, understanding and communication. Joint capacity-building sessions are the preferred option and this again requires additional resources, especially in social ecology staff.

The role of the secondary stakeholders should not be underestimated in the co-management model. Local and district Municipalities (LM/DMs) have an important role to play in the whole set-up and it is important to look at the proposed developments from a LED point of view by putting them in a bigger picture and aligning them with regional planning. In the MTPA's business case (MTPA 2009a: annex 3), five business models were proposed for possible LED activities, that is, subcontracting of local labour, creation of business opportunities, extraction of natural resources, payment for ecosystem services, and concessions. All five proposed business models were included in the proposed co-management beneficiation model.

7.4 Additional recommendations and conclusion

7.4.1 Commercialisation

Where commercial agreements currently exist on the protected area, a review of the agreements needs to be done with the claimants. If legally possible and if needed, the agreements must be renegotiated. Amendments to existing public-private partnership (PPP) contracts need Treasury approval, pursuant to Treasury Regulation 16 (see 2.4.1). It is difficult and not recommended to start new contracts and/or investor mobilisation before the negotiations around the settlement agreement have been finalised. The settlement agreement is the key document that is needed for the authorities involved to start the disposal of state land process. Finalisation of new contracts is legally very difficult if the title deeds have not been transferred yet. If it is decided to continue with commercialisation before the finalisation of the settlement agreement, it is necessary to notify the RLCC, who will then make special arrangements. Beneficiation arrangements for the parties involved should be decided upon prior to the planned commercialisation intervention and be formalised in a written agreement. If the commercialisation intervention is not clearly negotiated and the settlement agreement has not been finalised, this might lead to unnecessary conflict and even a delay in the settlement of the claim. It is also imperative that potential investors/partners should be clearly advised of the implications of the pending land restitution claims. Therefore it is recommended to finalise the settlement agreements as soon as possible so that the commercialisation process can start from the right foundation and ideally after the establishment of the new MPs (including zoning, tourism master plan and project implementation plan). Legal advice and capacity building are needed on the best legal entity (see 2.2.3) to implement commercialisation as agreed upon by the co-management partners in

the CMC. Legal advice and capacity building are also needed around the various business plans; feasibility studies; marketing studies; management agreements; shareholder agreements; lease agreements and others as part of the commercialisation process.

7.4.2 Management of the protected area

The land restitution process in protected areas is a long and complicated process. It often goes more slowly than the land claimants had expected, which leads to frustration and misunderstandings. Because of this, there are challenges to managing the reserves, such as the continuation of game capture, and therefore the claims must be settled urgently. The settlement and co-management agreements, together with the MPs, provide the framework for coordinated and proper management. To run the reserves professionally there is a need for adequate skilled staff. The reserves are to be managed in a business-wise approach to be able to generate net profit. The implementation of the post-settlement should start as soon as possible after finalisation of the agreements (see 4.3.6). The establishment of the MPs guides the continuation of game capture, access and resource use on the protected area and it is a good learning and capacity-building process for both partners. The same applies to the implementation of planned CBNRM projects (for example improved access and benefit sharing via bio-cultural protocols; sale of energy via hydropower; and payments for ecosystem services via the river corridor project) as they might give some tangible and intangible benefits in the short term. Other planned interventions (global positioning system (GPS) exercise on resource use, cultural heritage and the establishment of community, skills and enterprise registers) also contribute to improved mutual understanding and trust building. This phase ideally includes some change management interventions so that both partners and other stakeholders can adapt to the changing situation. It should be clear for the land claimants that the work will not be done in isolation, but that the interventions need to be aligned with the LM/DM and benefits must be shared with the wider community.

Other capacity building is needed for the land claimants, and responsibility for the various parts of capacity building should be discussed in the internal task team. Capacity building on co-management, tourism and conservation can be implemented by the conservation agency, but internal support to the land claimants on communication, leadership, record keeping, conflict resolution and beneficiation should preferably be outsourced to a neutral agency under guidance of the RLCC and Department of Land Affairs (DLA). Non-governmental organisations (NGOs) and universities have an important role to play to further empower the land claimant representative structures and to ensure transparent decision making and equitable distribution of benefits to make the co-management model feasible. A lack of these

support structures was identified through the socio-economic assessment and land claimants complain about not having sufficient access to these services. It must be clear that in many instances the conservation agency is an equal co-management partner with the claimants and therefore should not intervene in the internal business of the land claimants. Vice versa, it must be clear to the land claimants that they cannot interfere in the internal business of the conservation agency. The capacity building around the commercialisation process can be a joint responsibility with other partners. Especially where the co-management partners go jointly into a business, it is good that the staff of the conservation agency should be exposed to the same capacity building as the claimants to ensure successful implementation. It should be clear that all other interactions by the conservation agency on the protected area that are linked to the claimants should be aligned in the CMC. If for example game capture is planned on the protected area, it is necessary that the representatives of the land claimants are informed and involved via the CMC. All communication with the land claimants is coordinated via the CMC and this contributes to the necessary trust building process.

7.4.3 Social ecology

It is clear that the social ecology division in the conservation agency plays a key coordinating role in the land restitution process in protected areas. Although not ideal, the social ecologists often need to function as a buffer between the land claimants and the rest of the conservation agency. Normally co-management negotiations should be done by a neutral brokerage, but in practice this does not always work out because of the specialised knowledge involved in land restitution. This role of the social ecologists should be well understood in the organisation, and appropriate staff should be guided and trained to perform this duty. It should also be clear that responsibility for the land restitution process in protected areas lies with the whole organisation and not only with social ecology. Social ecology relies on expert inputs from other divisions of the conservation agency in which social ecology does not have a mandate and/or expertise. This can be achieved through the formation of an internal task team in the conservation agency, as suggested in this study (see 4.2.1). If the land restitution process in protected areas is not handled in this coordinated and joint fashion it might have serious implications for the conservation agency as an organisation after the claims have been settled.

7.5 Conclusion

From the results, it is clear that a consolidated government position, agreed upon by all relevant government stakeholders, helps to keep the land restitution process in protected areas within the legal framework. Through the analysis of the model design in the seven priority protected areas it was identified that additional information is needed to come to the preferred land claim settlement option per protected area. Therefore, improvements on the general model design were elaborated. Government should support all the land claim settlement options as elaborated in the model design, which is not the case at the moment, and most alternative options, other than co-management, are currently still unclear and/or not feasible. This might have serious negative implications for the conservation agency with the risk of compromising its mandate to manage areas of high biodiversity effectively. The various methods that were developed to workshop the generic agreement frameworks with the land claimant representatives proved to assist in the land claimants making an informed choice within the legal framework and to tailor the land claim settlement option and agreements to their specific situation. Where it is doubtful whether the chosen land claim settlement option is feasible, it is important to create flexible ways of re-looking at the agreements after a certain period and to produce other more feasible alternatives.

Bibliography

- Agrawal, A. and C. Gibson 1999. Enchantment and disenchantment: The role of community in natural resource conservation. *World Development* 27(4):629–649.
- Armitage, D., F. Berkes and N. Doubleday 2007. Introduction: Moving beyond co-management, in *Adaptive co-management: Collaboration, learning and multi-level governance*, edited by D. Armitage, F. Berkes and N. Doubleday. Vancouver: UBC Press.
- Aronson, J., SJ. Milton, JN. Blignaut and AF. Clewell. 2006. Nature conservation as if people mattered. *Journal for Nature Conservation* 14:260–263.
- Barahona, C. and S. Levy 2003. *How to generate statistics and influence policy using participatory methods in research: Reflection on work in Malawi 1999–2002*. IDS working paper 212. Brighton, Sussex: Institute of Development Studies.
- Benghu, B. 2009. Personal communication, 21 May 2009. Nelspruit.
- Berkes, F. 1997. New and not-so-new directions in the use of the commons: Co-management. *The Common Property Resource Digest* 42:5–7.
- Berkes, F. and T. Henley 1997. Co-management and traditional knowledge: Threat or opportunity? *Policy Options* 18:29–31.
- Blignaut, J. and C. Moolman 2006. Quantifying the potential of restored natural capital to alleviate poverty and help conserve nature: A case study from South Africa. *Journal for Nature Conservation* 14:237–248.
- Blignaut, J. and J. Aronson 2008. Getting serious about maintaining biodiversity. *Conservation Letters* 1:12–17.
- Blignaut, J., C. Marais, M. Rouget, M. Mander, J. Turpie, G. Preston, K. Philip, L. du Plessis, T. Klassen and N. Tregurtha 2008. Making markets work for people and the environment: Combating poverty and environmental degradation on a single budget while delivering real services to real people. The Second Economy Strategy Project. Presidency. South Africa.

Borrini-Feyerabend, G., MT. Farvar, JC. Nguinguiri and V. Ndangang 2000. *Co-management of natural resources: Organising, negotiating and learning-by-doing*. GTZ and IUCN. Heidelberg: Kasperek Verlag.

Borrini-Feyerabend, G. 2008. *Governance as key for effective and equitable protected area systems*. CBD Briefing Note 8. Tehran: Centre for Sustainable Development (CENESTA).

Botha, J., ETF. Witkowski and CM. Shackleton 2004. Market profiles and trade in medicinal plants in the Lowveld, South Africa. *Environmental Conservation* 31(1):38–46.

Brody, A. 2009. *Gender and governance: Overview report*. Bridge Development – Gender. Brighton, Sussex: Institute of Development Studies.

Brown, S., IR. Swingland, RH. Tenison, GT. France and N. Myers 2002. Changes in the use and management of forests for absorbing carbon emissions: Issues and challenges under the Kyoto Protocol. *Phil. Trans. R. Soc. Lond. A* 360:1593–1605.

Busico cc 2005. Blyde River Canyon National Park: Business and development plan. DEAT and IUCN. South Africa.

Carruthers, J. 2007. ‘South Africa: A world in one country’: Land restitution in national parks and protected areas. *Conservation and Society* 5(3):292–306.

Chambers, R. 2008. *Who counts? The quiet revolution of participation and numbers*. Research Summary of IDS Working Paper 296. Sussex Brighton: Institute of Development Studies.

Chapin, M. 2006. ‘Mapping projects with communities, especially if they are to be genuinely ‘participatory’ (a word with many meanings), are far more complex, and difficult, than many of us would like them to be’, in *Mapping for change: Practice, technologies and communication*. Participatory Learning and Action No 54. Wageningen: CTA.

Collins, S. 2009. Personal communication. 17 November 2009. Pretoria.

Costanza, R., R. d'Arge, R. de Groot, S. Farber, M. Grasso, B. Hannon, K. Limburg, S. Naeem, RV. O'Neill, J. Paruelo, RG. Raskin, P. Sutton and M. van den Belt 1997. The value of the world's ecosystem services and natural capital. *Nature* 387:253–260.

CRLR 2007. Restitution briefing session: Chief Land Claims Commissioner Thozi Gwanya, September 2007, Pretoria.

Davies, R. 1997a. Madikwe Game Reserve a partnership in conservation in *Madikwe Game Reserve: A synopsis*, edited by PA Johnson. Mmabatho: North West Parks and Tourism Board.

Davies, R. 1997b. A description and history of Madikwe Game Reserve in *Madikwe Game Reserve: A synopsis*, edited by PA Johnson. Mmabatho: North West Parks and Tourism Board.

Davies, R., C. Trieloff and P. Leitner 2003. Physical infrastructure in Madikwe Game Reserve, in *A decade of progress*, edited by M. Brett. North-West Province: North-West Parks and Tourism Board.

DEAT 2003. *CBNRM: Guidelines for the implementation of community based natural resource management (CBNRM) in South Africa*. Pretoria: DEAT.

DEAT 2004. People and Parks workshop: Conservation for the people with the people. 25 – 27 October 2004, Swadini Forever Resort, Blyde River Canyon, Mpumalanga.

DEAT 2006. People and Parks conference: Conservation for the people with the people. 29–31 October 2006. Beaufort-West, Western Cape.

DEAT 2007. South Africa's National Biodiversity Framework (final draft). Unpublished report. Pretoria.

DEAT 2008. Third People and Parks conference: Conservation for the people with the people. 31 August – 2 September 2008, Mafikeng, North-West.

DEAT, Mpumalanga Department of Agriculture and Land Affairs and IUCN 2006. Blyde River Canyon National Park: Tourism Development Strategy. South Africa.

DEAT and CRLR 2008. National co-management framework. Third People and Parks Conference: Legal Director Chief Land Claims Commission Thami Mdlalose, 31 August –2 September 2008, Mafikeng.

De Beer, G. 2008. Personal communication, 9 October 2008, Blyde River Canyon Nature Reserve.

De Beer, G., A. d’Oliveiro and F. Jesche 2007. Feasibility study for the social responsibility project ‘Blyde Canyon Park – ‘New’. MTPA, DEAT and GTZ. South Africa.

De Beer, JH. and MJ. McDermott 1996. *The economic value of non-timber forest products in South East Asia*. Amsterdam: Netherlands Committee for IUCN.

De Kock, M. 2007. Personal communication, 10 April 2007, Nelspruit.

De Koning, M. 2009a. Co-management and its options in protected areas of South Africa. *Africanus* 39 (2):5–17.

De Koning, M. 2009b. Lessons learnt of direct exchange programme between biosphere reserves: Case study: Kruger to Canyons, South Africa and Rhön, Germany. Background paper for UNESCO Biosphere Reserves as Learning Sites for Integrating Local and Global Sustainability Issues Workshop as part of the Thematic Cluster II – Building Partnership to Promote ESD, 31 March and 1 April 2009, Bonn.

De Koning, M. 2009c. Joint government position: Overview and update on the process and approach to settle the land claims on the seven priority areas. Progress report to board of directors MTPA. Unpublished document. Nelspruit: MTPA.

De Koning, M.. and M. Marais 2009a. Draft MTPA strategy for the People and Parks programme in Mpumalanga: A discussion document. Unpublished document. Nelspruit: MTPA.

De Koning, M. and M. Marais 2009b. Land restitution and co-management in protected areas toolkit. Unpublished document. Nelspruit: MTPA and DED.

De Koning, M. and M. Marais 2009c. Land restitution and settlement options in protected areas in South Africa. *Africanus* 39 (1):66–79.

De Koning, M. and M. Marais 2009d. Draft strategy for land restitution in the MTPA protected areas in Mpumalanga province. Unpublished document. Nelspruit: MTPA.

De Koning, F., R. Olschewski, E. Veldkamp, P. Benitez, M. Lopez-Ulloa, T. Schlichter and M. De Urquiza 2005. The ecological and economic potential of carbon sequestration in forests: Examples from South America. *Ambio* 34 (3):224–229.

De Villiers, B. 2003. *Land Reform: Issues and challenges. A comparative overview of experiences in Zimbabwe, Namibia, South Africa and Australia*. Occasional Papers. Johannesburg: Konrad Adenauer Stiftung.

De Villiers, B. 2008a. *People and parks – sharing the benefits*. Case study. Johannesburg: Konrad Adenauer Stiftung.

De Villiers, B. 2008b. *Land reform: a commentary*. Policy Paper No 4. Johannesburg: Konrad Adenauer Stiftung.

De Villiers, B. and M. van den Berg 2006. *Land reform: Trailblazers seven successful case studies*. Case Studies. Johanesburg: Konrad Adenauer Stiftung.

DLA 1997. White Paper on South African Land Policy. Pretoria: Government Printer.

Edmunds, D. and E. Wollenberg 2002. *Disadvantaged groups in multistakeholder negotiations*. CIFOR Programme Report. CIFOR.

Emerton, L., J. Bishop and L. Thomas 2006. *Sustainable financing of protected areas: A global review of challenges and options*. Best Practice Protected Areas Guidelines Series No 13. Gland: IUCN.

Ende, S. 2007. *Local economic development*. Reader. Pretoria: DED.

Fischer, F. 2008. The importance of law enforcement for protected areas: Don't step back! Be honest – Protect! *GAIA* 17/S1:101–103.

Gebhardt, C. Personal communication. 3 February 2009, Nelspruit.

Giyani, A. 2009. Personal communication. 5 March 2009, Mdala Environmental Centre.

Goosen, M. Acting park manager Madikwe Game Reserve of North West Parks and Tourism Board 2008. Personal communication, 25 November 2008. Madikwe Game Reserve.

Graham, J., B. Amos and T. Plumptre 2003. *Principles for good governance in the 21st century*. Policy Brief No 15. Ottawa: Institute on Governance.

Grieg-Gran, M. and C. Bann 2003. A closer look at payments and markets for environmental services, in *From good-will to payments for environmental services: A survey of financing alternatives for sustainable natural resource management in developing countries*, edited by P. Gutman. Washington: WWF and DANIDA.

Gutierrez, E., K. Lamoureux, S. Matus and K. Sebunya 2005. *Linking communities, tourism and conservation: A tourism assessment process*. Washington DC: Conservation International and the George Washington University.

Haber, W. 2008. Biological diversity: A concept going astray? *GAIA* 17/SI:91–96.

Hauck, M. and M. Sowman 2005. *Guidelines for implementing coastal and fisheries co-management in South Africa: Subsistence fishing co-management and capacity building programme*. Rondebosch: University of Cape Town.

Heunis, M. 2009. Personal communication, 29 May 2009, Nelspruit

Hofstaetter, S. 2008. Kruger Park in land claims stalemate. *Farmer's Weekly*. 29 August 2008.

Holmes, K. and E. Cooper 2006. *How community-based resource management can benefit the poor*. Earth Trends 2006 World Resource Institute under a Creative Commons License. <http://creativecommons.org/licenses/by-nc-sa/2.5/> (accessed 28 August 2008).

Isaacs, M and N. Mohamed 2000. Co-managing the commons in the ‘new’ South Africa: Room for manoeuvre? *Constituting the Commons*, 31 May–4 June 2000.

Job, H. 2008. Estimating the regional economic impact of tourism to national parks: Two case studies from Germany. *GAIA* 17/S1:134–142.

Kamoza & Associates Eco-Consultants 2009. Ranking protected areas based on their biodiversity & economic importance. Unpublished report. Nelspruit: MTPA.

Kepe, T. 2001. Tourism, protected areas and development in South Africa: Views of visitors to Mkambati Nature Reserve. *South African Journal of Wildlife Research* 31(3 & 4):155–159.

Kepe, T. 2008. Land claims and comanagement of protected areas in South Africa: Exploring the challenges. *Environmental Management* 41:311–321.

Kepe, T., R. Wynberg and W. Ellis 2005. Land reform and biodiversity conservation in South Africa: Complementary or in conflict? *International Journal of Biodiversity Science and Management* 1:3–16.

Kloss, D. 2001. *Guide to sustainable financing of biodiversity and protected areas: a compilation and coarse analysis of financing mechanisms at different levels for project managers, their counterparts and national/international decision makers*. Eschborn: GTZ.

Koch, E. and PJ. Massyn 2003. The Madikwe initiative: A programme designed to optimise local benefits by integrating the conservation of wildlife with local economic development in Madikwe Game Reserve, in *A decade of progress*, edited by M. Brett. North-West Province: North West Parks and Tourism Board.

Kumar, C. 2005. Revisiting ‘community’ in community-based natural resource management. *Community Development Journal* 40 (3):275–285.

Kusimama Consulting 2009. Mpumalanga Tourism and Parks Agency: Revenue generating strategy. Unpublished report. Nelspruit: MTPA.

Lahiff, E. 2002. *Land reform in South Africa: an overview, with particular reference to protected areas*. Programme for Land and Agrarian Studies. Cape Town: University of the Western Cape.

Leach, M., R. Mearns and I. Scoones 1999. Environmental entitlements: Dynamics and institutions in community-based natural resource management. *World Development* 27(2): 225–247.

Loock, L. 2009. Personal communication. 23 November 2009, Nelspruit.

Ludwig, D. 2001. The era of management is over. *Ecosystems* 4:758–764.

Magome, H. and J. Søndergaard 2001. *Capacity building in South African National Parks (June 1998 – June 2001)*. Pretoria: SANParks.

Mahony, K. and J. Van Zyl 2001. *Practical strategies for pro-poor tourism. Case studies of Makuleke and Manyeleti tourism initiatives*. PPT Working Paper No 2, South Africa: Centre for Responsible Tourism of the University of Greenwich, International Institute for Environment and Development and Overseas Development Institute. <http://www.propoortourism.org.uk> (accessed 30 June 2009).

Mander, M., L. Ntuli, N. Dieterichs and K. Mavundla 2008. *Economics of the traditional medicine trade in South Africa* 13. South Africa: Futureworks!.

Mander, M., J. Cribbins, SE. Shackleton and F. Lewis 2003. The commercial marula industry in South Africa: A sub-sector analysis. *Winners and Losers, Financial Technical Report*. Institute of Natural Resources. South Africa.

MBB Consulting Services (Nelspruit) (Pty) Ltd. 2009. Pre-feasibility report on the proposed Blyderivierpoort dam hydro-electric power scheme. Nelspruit: GTZ.

McNeely, JA. 1999. *Achieving financial sustainability in biodiversity conservation programmes*. Gland: IUCN.

McNeely, JA. 2008. Protected areas in a world of eight billion. *GAIA* 17/S1:104–106.

Millennium Ecosystem Assessment. 2003. *Ecosystems and human well-being: A framework for assessment*. Washington: Island Press.

Millennium Ecosystem Assessment. 2005. *Ecosystems and human well-being: Synthesis*. Washington: Island press. Calif: DC and Covelo.

Mitchell, D. 2007. *CBNRM and LED: Lessons learnt from Chad, Ethiopia, Madagascar, South Africa and Tanzania*. Pretoria: GTZ.

Mitchell, D., L. Coelho, J. Baumgart and H. Snel 2008. *Lessons learnt from implementing community based natural resource management projects in South Africa*. Training and Support for Resource Management (TRANSFORM) Programme. Pretoria: GTZ and DEAT.

Mokoena, P. 2009. Personal communication. 9 December 2009. Nelspruit.

Mpumalanga Provincial Government 2006. Mpumalanga Biodiversity Conservation Plan. Nelspruit.

Mpumalanga Provincial Government 2008. Mpumalanga Provincial Growth and Development Strategy (PGDS) 2004–2014: Review of Environmental Sustainability Theme. Nelspruit.

MTPA 2009a. Business case for the Mpumalanga Tourism and Parks Agency (MTPA). Unpublished report. Nelspruit: MTPA.

MTPA 2009b. Development of management plans for the protected areas within Mpumalanga. Strategic Workshop. 11 September 2009. Unpublished report. Nelspruit: MTPA.

Muchapondwa, E., H. Biggs, A. Driver, F. Matose, E. Mungatana and K. Scheepers 2009. *Using economic incentives in bioregions in South Africa*. Bioregional Programme. Rondebosch: University of Cape Town.

Mutter, T. 1994. *Partizipative Methoden in der Entwicklungszusammenarbeit: eine Zusammensetzung*. Berlin: DED.

Ndabeni, C. Chief Executive Officer of Mpumalanga Tourism and Parks Agency. 2008. Personal communication, 7 October 2008, Nelspruit.

Newenham, J. 2009. Preliminary investigation into possible corridors linking the Kruger national park with the escarpment region (within the K2C Biosphere Region). Hoedspruit: K2C.

Newenham, J and J. Vermeulen 2009. Deliverable 3 (part 1): situation analysis report for the feasibility study of the K2C conservation and development river corridor project. Hoedspruit: K2C.

Oosthuizen, N. 2008. Personal communication, 14 August 2008, Nelspruit.

Patterson, C. 2008. *Country report Local Economic Development in South Africa*. Pretoria: GTZ.

Pearce, D. and D. Moran 1994. *The economic value of biodiversity*. London: IUCN and EARTHSCAN.

Plummer, R. and D. Armitage 2007. Charting the new territory of adaptive co-management: a Delphi study. *Ecology and Society* 12(2):10.

Rambaldi, G. R. Chambers, M. McCall and J. Fox 2006. Practical ethics for PGIS practitioners, facilitators, technology intermediaries and researchers, in *Mapping for change: Practice, technologies and communication*. Participatory Learning and Action No 54. Wageningen: CTA.

Rautenbach, G. 2008. Personal communication, 3 December 2008, Manyeleti Nature Reserve.

Raven, BW. 2004. *Water affairs in the Lower Blyde River: The role of DWAF in local water management*. IWMI Working Paper. Wageningen.

Reid, H., D. Fig, H. Magome and N. Leader-Williams 2004. Co-management of contractual national parks in South Africa: Lessons from Australia. *Conservation & Society* 2(2):377–409.

Rhodes University. 2004. *Forest resource use patterns, and local institutional capacity for management and monitoring of resources in the Lowveld state forests: Mpumalanga and Limpopo provinces: Outcomes of rapid appraisal*. Department of Environmental Science. Grahamstown: Rhodes University.

Ribot, JC. 2002. *Democratic decentralisation of natural resources: Institutionalising popular participation*. Washington: World Resources Institute.

Riedel, C. 2007. The land reform process in South Africa: Model options for post-settlement support and agricultural productivity. Background information for the presentation held in the open space session at the Sector Network Rural Development (SNRD), 26 June 2007, Fulda, Germany.

Robford Tourism 2006a. Blyde Canyon National Park Tourism Development Concepts: Concepts for appropriate, sustainable tourism development in Blyde Canyon National Park. DEAT, Mpumalanga Department of Agriculture and Land Affairs and IUCN. Cape Town, South Africa.

Robford Tourism 2006b. Blyde Canyon National Park Tourism Development Manual: Framework for appropriate, sustainable tourism development in Blyde Canyon National Park. DEAT, Mpumalanga Department of Agriculture and Land Affairs and IUCN, Cape Town, South Africa.

Ruecker, A. and G. Trah 2007. *Local and Regional Economic Development: Towards a common framework for GTZ's LRED interventions in South Africa*. Eschborn: GTZ.

Santilli, M., P. Mouthino, S. Schwartzman, D. Nepstad, L. Curran and C. Nobre 2005. Tropical deforestation and the Kyoto protocol: An editorial essay, in *Tropical deforestation and climate change*, edited by P. Mouthino and S. Schwartzman. Washington DC: Environmental Defense.

Scott, C. and Q. Snaith 2009. Proposal for the development of a skywalk on the edge of the Mpumalanga escarpment. Nelspruit.

Shackleton, CM. 2008a. Natural resource values and valuation. CBNRM, a critical review: Towards a new realism. Short course presented by Rhodes University. 25–29 August 2008. Grahamstown.

Shackleton, SE. 2008b. Payments for ecosystem services: The ‘new’ CBNRM? CBNRM, a critical review: Towards a new realism. Short course presented by Rhodes University. 25–29 August 2008. Grahamstown.

Shackleton, CM. and SE. Shackleton 2004. The importance of non-timber forest products in rural livelihood security and as safety-nets: Evidence from South Africa. *South African Journal of Science* 100:658–664.

Smith, J. and SJ. Scherr 2002. *Forest carbon and local livelihoods: Assessment of opportunities and policy recommendations*. CIFOR Occasional Paper No 37. Jakarta: CIFOR.

South Africa. 1994. Restitution of Land Rights Act (No 22 of 1994 as amended). Pretoria: Government Printer.

South Africa. 2003. National Environmental Management: Protected Areas Act no 57 of 2003. Pretoria: Government Printer.

South Africa. 2007. Memorandum of agreement between the Minister of Agriculture and Land Affairs and the Minister of Environmental Affairs and Tourism. Pretoria. http://www.environment.gov.za/AboutUs/StratDoc/StratPlan/DEAT_Strat%20PlanApr2008-2011.pdf (accessed 10 December 2008).

South Africa. 2009. Green paper: National Strategic Planning. Pretoria: Presidency.

South African Biosphere Reserves. 2008. Draft position paper. National Biosphere Reserve workshop. 28–29 May 2008. Unpublished document. Bela Bela, South Africa.

Spenceley, A. and H. Goodwin 2007. Nature-based tourism and poverty alleviation: Impacts of private sector and parastatal enterprises in and around Kruger National Park, South Africa. *Current Issues in Tourism* 10(2&3):255–277.

Stalmans, M. F. Bronkhorst, J. MacAllister, W. Boyd, T. Blair, B. Dhlamini, J. Theron and J. Coetzee 1997. Conservation value and appropriate land use of Blyde Canyon Nature Reserve. Nelspruit.

Stoll-Kleemann, S. and H. Job 2008. The relevance of effective protected areas for biodiversity conservation: an introduction. *GAIA* 17/SI:86–89.

Tapela, B., B. Buescher, L. Maluleke, W. Twine and C. Steenkamp 2009. *Guidelines for negotiating social research in communities living adjacent to transboundary protected areas: Kruger National Park*. Transboundary Protected Area Research Initiative. Johannesburg: University of Johannesburg.

Turner, S., S. Collins and B. Baumgart 2002. *Community-based natural resources management: Experiences and lessons linking communities to sustainable resource use in different social, economic and ecological conditions in South Africa*. Programme for Land and Agrarian Studies Research Report No 11. Cape Town: University of the Western Cape.

Turpie, JK., C. Marais and JN Blignaut 2008. The Working for Water Programme: Evolution of payments for ecosystem services mechanisms that address both poverty and ecosystem service delivery in South Africa. *Ecologic Economics* 65:788–798.

UNESCO MAB 1996. *Biosphere reserves: The Seville strategy and the statutory framework of the world network*. Paris: UNESCO MAB.

UNESCO MAB 2008a. *Madrid Declaration*. Paris: UNESCO MAB Secretariat.
www.unesco.org/mab/madrid/doc/MadridDeclaration.pdf (accessed 1 June 2008).

UNESCO MAB 2008b. *Madrid Action Plan*. Paris: UNESCO MAB Secretariat.
www.unesco.org/mab/madrid/doc/E_MAPfinal.pdf (accessed 1 June 2008).

Van Rensburg, GFJ. 2009. Personal communication, 9 November 2009, Nelspruit.

Venter, A. 2008. Personal communication. 13 November 2008, Tembe Elephant Park.

Vickers, K. 2007. *Assessing the relative contribution of protected areas to the conservation of key biodiversity features in Mpumalanga, South Africa*. Rondebosch: Percy Fitzpatrick Institute of African Ornithology, University of Cape Town.

Williams, C. 2008. Personal communication, 30 September 2008, Nelspruit.

Wolmer, W. and C. Ashley 2003. Part II: Resources and Policies. 3. Wild resources management in southern Africa: Participation, partnerships, ecoregions and redistribution. *IDS Bulletin* 34(3).

WPC (World Park Congress) Outputs. 2003. The Durban Accord. IUCN – The World Conservation Union. www.iucn.org/wpc2003 (accessed 11 February 2009)

Wunder, S. 2005. *Payments for ecosystem services: Some nuts and bolts*. CIFOR Occasional Paper No 42. Jakarta: CIFOR.

Wunder, S. 2006. *Payments for environmental services and the poor: Concepts and preliminary evidence*. Belem: CIFOR.

Wunder, S. 2008. Payments for environmental services and the poor: Concepts and preliminary evidence. *Environment and Development Economics* 13:279–297.

Wunder, S., S. Engel and S. Pagiola 2008. Taking stock: A comparative analysis of payments for environmental services programmes in developed and developing countries. *Ecologic Economics* 65:834–853.

Appendix A

SETTLEMENT AGREEMENT FRAMEWORK IN RESPECT OF A LAND RESTITUTION CLAIM

entered into by and between the

APPLICABLE LAND OWNER

(Herein represented by its _____, Mr / Ms _____)

and the

NATIONAL DEPARTMENT OF RURAL DEVELOPMENT & LAND REFORM

(Herein represented by its _____, Mr / Ms _____)

and the

COMMISSION ON RESTITUTION OF LAND RIGHTS

(Herein represented by its Acting Regional Land Claims Commissioner - Mpumalanga, Ms S I Seboka.)

and the

DEPARTMENT OF ECONOMIC DEVELOPMENT, ENVIRONMENT & TOURISM MPUMALANGA

(Herein represented by its _____, Mr / Ms _____ .)

and the

MPUMALANGA TOURISM & PARKS AGENCY

(Herein represented by its Chief Executive Officer, Mr C V Ndabeni.)

and the

COMMUNAL PROPERTY ASSOCIATION

(Herein represented by its _____, Mr / Ms _____ .)

AGREEMENT

WHEREAS section 25(7) of the Constitution of the Republic of South Africa (Act No 108 of 1996) makes provision for restitution or other equitable redress, to persons and communities who were dispossessed of rights in land after 19 June 1913, as a result of past racially discriminatory laws or practices.

AND WHEREAS those persons listed in the attached Annexure "A" have lodged a land restitution claim on the properties listed in the attached Annexure "B", pursuant to section 10 of the Restitution of Land Rights Act (No 22 of 1994).

AND WHEREAS the Commission on Restitution of Land Rights is satisfied that the land claimants have met the requirements for entitlement to restitution, as set out in section 2 of the Restitution of Land Rights Act (No 22 of 1994).

AND WHEREAS the claimed properties are currently owned by the Republic of South Africa and form part of a protected area, as defined in section 1 of the National Environmental Management: Protected Areas Act (No 57 of 2003).

AND WHEREAS the Parties hereto recognise that the protected area claimed is an asset of national and international significance, which must be managed as such in perpetuity and in accordance with all applicable environmental legislation and international conventions pertaining to the environment.

AND WHEREAS the Parties hereto recognise that the ownership of land claimed by the successful land restitution claimants, without the right to occupation of the land and subject to other restrictions in title, does not necessarily compromise the continued conservation, protection and management of protected areas.

AND WHEREAS the Commission on Restitution of Land Rights is satisfied that no other land restitution claims have been lodged and / or have been Gazetted in respect of the Claimed Properties.

AND WHEREAS this Settlement Agreement has been concluded between the Parties hereto in terms of section 42(D) of the Restitution of Land Rights Act (No 22 of 1994).

AND WHEREAS the Parties hereto have reached an agreement as to the manner in which the land restitution claim shall be finalised and settled, on those terms and conditions set out below.

NOW THEREFORE IT IS AGREED AS FOLLOWS:-

1. PARTIES TO THIS AGREEMENT

The Parties to this Agreement are:-

- 1.1 The _____, being the lawful owner of the claimed properties, pursuant to Section 239 of the Interim Constitution of the Republic of South Africa (Act 200 of 1993); and
- 1.2 The National Department of Rural Development and Land Reform, being truly authorised thereto in terms of Section 42D and other provisions of the Restitution of Land Rights Act (No 22 of 1994).
- 1.3 The Commission on Restitution of Land Rights, duly established in terms of Section 4 of the Restitution of Land Rights Act (No 22 of 1994), being the organ of State responsible for *inter alia* receiving, investigating, validating and facilitating the settlement of land restitution claims; and
- 1.4 The Department of Economic Development, Environment and Tourism, Mpumalanga, responsible for *inter alia* conservation and protected areas within the Mpumalanga Provincial Government; and
- 1.5 The Mpumalanga Tourism & Parks Agency, established in terms of section 2 of the Mpumalanga Tourism and Parks Agency Act (No 5 of 2005), being the management authority in respect of the claimed properties, pursuant to section 38 of the National Environmental Management: Protected Areas Act (No 57 of 2003); and
- 1.6 _____ Communal Property Association, being a juristic person established, in terms of section 5 of the CPA Act, to hold and manage the claimed properties on the claimants' behalf in accordance with its constitution and the relevant provisions of the aforestated Act and duly authorised thereto in terms of Section 12 of the CPA Act.

2. DEFINITIONS

In this Agreement the following words and phrases shall have the meaning assigned to them hereunder and cognate expressions shall have a similar meaning:-

“Agreement” means this agreement, including all its annexures;

“Claim” means the land restitution claim lodged in terms section 10 of the Restitution of Land Rights Act (No 22 of 1994) by those persons listed in the attached Annexure “A” on those properties listed in the attached Annexure “B”, as published in Government Notice No: _____;

“Claimants” means those persons listed in the attached Annexure “A”, who successfully lodged a land restitution claim in terms section 10 of the Restitution of Land Rights Act (No 22 of 1994), as represented by their duly appointed CPA;

“Claimed Properties” means the land successfully claimed by the Claimants, as fully described in the attached Annexure “B”;

“Co-management Agreement” means the agreement regulating the management of the Claimed Properties, which is attached hereto as Annexure “C” and which was concluded substantially on the basis contemplated in section 42 of the National Environmental Management: Protected Areas Act (No 57 of 2003);

“Commission” means the Commission on Restitution of Land Rights, established in terms of section 4 of the Restitution of Land Rights Act (No 22 of 1994);

“Conservation” means the protection, sustainable use and study of flora, fauna and objects of geological, archaeological, historical, ethnological and other interests to ensure the maintenance of the land in its natural state, as far as it is practical, for the benefit and enjoyment of the general public;

“CPA”	means _____, duly established in terms of section 5 of the Communal Property Associations Act (28 of 1996) to hold and manage the Claimed Properties on the Claimants’ behalf subject to the provisions hereof and the Co-Management Agreement, and shall include its lawful successor;
“CPA Act”	means the Communal Property Associations Act (28 of 1996);
“Economic Activities”	Means economic, commercial and related community activities which may be conducted on the Claimed Properties in accordance with the Management Plan as authorised by the Management Authority in terms of section 50 of the National Environmental Management: Protected Areas Act (No 57 of 2003);
“Management Authority”	means the Mpumalanga Tourism and Parks Agency, established in terms of section 2 of the Mpumalanga Tourism and Parks Agency Act (No 5 of 2005); or any other person, organisation or organ of State assigned to manage the Claimed Properties, in terms of section 38 of the National Environmental Management: Protected Areas Act (No 57 of 2003);
“Management Plan”	means the Management Plan pertaining to the Nature Reserve, as compiled and reviewed from time to time by the Management Authority, in terms of sections 39 and 41 of the National Environmental Management: Protected Areas Act (No 57 of 2003);
“Mining and / or Prospecting Activities”	means any of those mining and prospecting activities envisaged in the Mineral & Petroleum Resources Development Act (28 of 2002);
“Nature Reserve”	means the _____ .

“NEMA”	means the National Environmental Management: Protected Areas Act (No 57 of 2003);
“Participation”	means participating in the co-management of the Claimed Properties, as contemplated in the attached Co-Management Agreement (Annexure “C”); provided that such participation does not undermine the financial integrity, sustainability or holistic management of the Nature Reserve and subject;
“Protected Area”	means any of those protected areas referred to in <u>section 9</u> of the National Environmental Management: Protected Areas Act (No 57 of 2003), where the land use is restricted to the preservation of biodiversity, which includes wild animal life and plant life;
“Protected Areas Legislation”	means all South African legislation aimed at protecting the environment, including but not limited to the following Acts (and their Regulations):- <ul style="list-style-type: none"> • National Environmental Management Act (107 of 1998). • National Environmental Management: Protected Areas Act (No 57 of 2003). • all Acts providing for the implementation of relevant international conventions pertaining to nature conservation. • Public Finance Management Act (01 of 1999).
“Restitution Act”	means the Restitution of Land Rights Act (No 22 of 1994);
“Restoration”	means the return of a right in land or a portion of land dispossessed after 19 June 1913, as a result of past racially discriminatory laws or practices;
“State”	means the Republic of South Africa, as represented herein by the Minister of Rural Development and Land Reform;

3. INTERPRETATION

- 3.1. In this Agreement:-
 - 3.1.1. clause headings used are for convenience only and shall not affect the interpretation of this Agreement; and
 - 3.1.2. unless the context clearly indicates a contrary intention, an expression which denotes any gender includes the other gender, a natural person includes a juristic person and vice versa; the singular includes the plural and vice versa.
- 3.2. If any provision in a definition is a substantive provision conferring rights or imposing obligations on any Party, notwithstanding that it is only in the definition clause, effect shall be given to it as if it were a substantive provision in the body of this Agreement.
- 3.3. When any number of days is prescribed in this Agreement, it shall be reckoned exclusively of the first and inclusively of the last day, excluding a Saturday, Sunday or public holiday.
- 3.4. Expressions defined in this Agreement shall bear the same meanings in those Annexures which do not contain their own definitions.
- 3.5. Where figures are referred to in numerals and in words and there is a conflict between the two, the words shall prevail.

4. THE RESTITUTION AWARD

- 4.1. The purpose of this section is to outline the land restitution settlement award made by the Minister of Rural Development and Land Reform to the Claimants, in settlement of the land restitution Claim lodged on the Claimed Properties.
- 4.2. The State hereby awards, and the Claimants duly accept, restoration of ownership of the Claimed Properties to the Claimants, subject however to the following conditions:-
 - 4.2.1. the Claimed Properties will not be physically occupied by the Claimants; and

- 4.2.2. the Claimed Properties shall remain part of the Nature Reserve in perpetuity; and
 - 4.2.3. the Claimed Properties shall be managed by the Management Authority in terms of all applicable Protected Areas Legislation and the Co-Management Agreement referred to in clause 7 below; and
 - 4.2.4. the Claimed Properties shall be used solely for the purpose of conservation and associated economic activities; and
 - 4.2.5. the Claimants shall not be entitled to, sell, exchange, donate, or otherwise dispose of the Claimed Properties or any portion thereof, other than to an organ of State; and
 - 4.2.6. any development of whatsoever nature on the Claimed Properties (including but not limited to Economic Activities and the construction of tourism facilities and infrastructure) shall be subject to the provisions of all applicable Protected Areas Legislation and to the provisions of the Management Plan; and
 - 4.2.7. no part of the Claimed Properties may be used for residential developments or for agricultural / farming purposes, nor for any purposes not specifically provided for in the Management Plan; and
 - 4.2.8. no part of the Claimed Properties may be bonded, mortgaged and / or used for surety purposes or otherwise encumbered in any matter whatsoever; and
 - 4.2.9. the Management Authority's staff and all guests visiting the Nature Reserve shall be entitled, at no additional cost, to traverse over the Claimed Properties; and
 - 4.2.10. the Claimants shall honour and be bound by all those agreements which were concluded in respect of the Claimed Properties, prior to the signature of this Agreement.
- 4.3. It is recorded that, upon signature of this Agreement by all the Parties, the Claim shall be regarded as settled in terms of section 42D of the Restitution Act

and the Claimants shall have no further claim to any other portion of land.

5. GRANTING OF TITLE

- 5.1. To give effect to the award referred to in clause 4 above, the Parties agree that the Claimed Properties shall be restored to the Claimants through the transfer of title of the Claimed Properties to the CPA, to be held on behalf of and for the benefit of the Claimants.
- 5.2. The Parties agree that those conditions set out in clause 4.2 above shall be registered as conditions of title in the Title Deed or be protected and enforced by way of notarial deeds of servitude or such other matter of registration as may be required to give full effect thereto.
- 5.3. It is recorded that the State shall endeavour to finalise the transfer of the Claimed Properties to the CPA within a period of one (1) year, calculated from the date of signature of this Agreement by all Parties.

6. MINING AND / OR PROSPECTING ACTIVITIES

- 6.1. Mining and / or prospecting activities may only take place in or on the Claimed Properties strictly in accordance with section 48 of the National Environmental Management: Protected Areas Act (No 57 of 2003).
- 6.2. Any mining and / or prospecting activities which were lawfully conducted on the Claimed Properties immediately before Section 48 of the National Environmental Management Protected Areas Act (No 57 of 2003) took effect must be reviewed in accordance with sections 48(2) and 48(3) thereof.

7. CO-MANAGEMENT AGREEMENT

- 7.1. The State has agreed to facilitate the restoration of the Claimed Properties to the Claimants, provided that it is assured that the financial viability, as well as Conservation and economic integrity of the Claimed Properties shall be maintained and that those Economic Activities implemented in respect of the Claimed Properties do not degrade the Claimed Properties or impact overtly on the Conservation status in perpetuity of the Claimed Properties.
- 7.2. In order to achieve the objective referred to in clause 7.1 above, the

Management Authority and Claimants have negotiated and concluded a Co-Management Agreement relating to the Claimed Properties (Annexure “B”), on the basis contemplated in section 42 of the National Environmental Management: Protected Areas Act (No 57 of 2003). It is agreed that the Co-Management Agreement shall be a related agreement to this Settlement Agreement and that the provisions of this Settlement Agreement shall only become effective once the Co-Management Agreement has been duly signed by all the relevant Parties.

- 7.3. The Claimed Properties shall be managed in accordance with the provisions of the Co-Management Agreement and applicable Protected Areas Legislation and the Co-Management Agreement may not be varied or amended without the written consent of both the Management Authority and Claimants.
- 7.4. In the event of the termination or cancellation of the Co-Management Agreement, for whatever reason, the management of the Protected Area / Reserve shall revert back to the Management Authority.

8. TRANSFER DUTY

The Minister of Rural Development and Land Reform undertakes, in respect of the transfer of the Claimed Properties contemplated in clause 5 above, to either direct in terms of section 42(1) of the Restitution Act, that:-

- 8.1 any transfer duty or other fee that would otherwise be payable by the Claimants be defrayed in full from money appropriated by Parliament for that purpose; or
- 8.2 in consultation to the Minister of Finance, no transfer duty, stamp duty or other fees shall be paid in respect of the said transfer.

9. INFRASTRUCTURE, FIXED ASSETS, CONCESSION ARRANGEMENTS AND WILDLIFE

- 9.1. The Parties agree that all immovable infrastructure on the Claimed Properties shall become the property of the Claimants, upon transfer of the Claimed Properties to the CPA.
- 9.2. Fixed assets are part of the Claimed Properties and ownership thereof shall

revert to the Claimants, upon transfer of the Claimed Properties to the CPA.

- 9.3. The ownership of all moveable assets on the Claimed Properties shall vest in the Management Authority.
- 9.4. The Management Authority shall continue to control and manage all wildlife (including but not limited to game) in and on the Claimed Properties.
- 9.5. The Claimants hereby agree and undertake to honour and are bound by the terms of all existing concession arrangements and / or leases concluded in respect of the Claimed Properties.
- 9.6. The cost of maintaining the Claimed Properties and any infrastructure / fixed assets thereon (including the erection of any fences) shall be dealt with in the Co-Management Agreement.

10. LEGAL ENTITY

The Claimants warrant that they have established a legal entity in the name of the CPA, to hold and manage the restored Claimed Properties on the Claimants' behalf.

11. COMPENSATION FOR LOSS OF USE AND ENJOYMENT

The Department of Rural Development and Land Reform will make payment to the CPA of an amount to be determined by it as part compensation for loss of rights of use and enjoyment of the Claimed Properties, as the Claimants will not take physical occupation thereof and do not have the right to dispose of or encumber the fixed property.

12. PLANNING AND DEVELOPMENTAL GRANTS

- 12.1. The Minister of Rural Development and Land Reform hereby approves the Restitution Settlement Grants (RSGs) for the Claimant's land restitution Claim in the amount of R _____ per household. These grants will amount to the total sum of R _____. This total amount will be paid to the CPA and shall be used for planning and development purposes.

- 12.2. The Department of Rural Development and Land Reform shall make available from its budget, a total amount R _____, as financial aid to address

subsequent management and sustainable development of the Claimed Properties, in terms of section 42C of the Restitution Act and subject to the provisions of the Co-Management Agreement as approved and consented by the Management Authority.

- 12.3. The Claimants shall ensure that no claimant household which receives the settlement award outlined in this Agreement, may alienate, mortgage or use as collateral security such award for the payment of any personal debts which it owes, or may in the future be owed by the claimant household.
- 12.4. Payment of all grants and / or monies due and owing to the Claimants pursuant to this clause 12 shall be effected by the Department of Rural Development and Land Reform within a period of six (6) months, calculated from the date of signature of this Agreement by all the Parties hereto.
- 12.5. The grants and / or monies due and owing to the Claimants pursuant to this clause 12 shall be utilised as follows:-
 - 12.5.1 A minimum amount equal to sixty percent (60%) of the total grants and monies shall be utilised by the CPA towards acquiring equity in and infrastructure developments of business activities undertaken on the Claimed Properties; and
 - 12.5.2 A maximum amount equal to forty percent (40%) of the total grants and monies shall be utilised by the CPA towards the development of applicable business and management plans in respect of business activities undertaken on the Claimed Properties, in addition to reasonable CPA administrative costs and the provision of training to members of the Claimants, which training shall be facilitated by the Management Authority.

13. FULL AND FINAL SETTLEMENT

The Parties hereto hereby confirm that this Agreement has been concluded in full and final settlement of the Claimants' land restitution Claim and the Claimants shall have no further claim against the State from whatsoever cause arising from their land restitution Claim.

14. INDEMNIFICATION AND WARRANTIES

14.1. The Claimants hereby jointly and severally indemnify the State against any loss, liability, damage, and / or expense which it may incur or suffer pursuant to any claim made in respect of any right in the Claimed Properties by any person who proves to be an heir and / or direct descendant of a claimant or member of the original dispossessed community arising from:-

14.1.1. the allocation or distribution of the restitution award to the Claimants; and / or

14.1.2. the Claimant's failure to disclose any other direct descendant(s) who is (are) entitled to benefit from the Claim.

14.2. The CPA warrants that:-

14.2.1. it is duly authorised to act on behalf of the Claimants; and

14.2.2. there are no other claimants, other than those they represent, who are entitled to claim restitution of the dispossessed property or rights in Claimed Properties.

14.3. The Parties record that they are satisfied that:-

14.3.1. the Regional Land Claims Commissioner has adequately fulfilled all of her statutory duties in order for them to reach a settlement of the Claimants' land restitution Claim;

14.3.2. this Agreement ought not to be referred to the Land Claims Court, to be made an order of that Court.

15. EFFECTIVE DATE

15.1. This Agreement shall come into force and effect on the signature date, which shall be known as the Effective Date.

15.2. Pending transfer of the Claimed Properties in terms of clause 5 above, the terms of this Agreement, to the extent possible, shall come into force and effect in all respects as if such transfer had taken place.

16. AMENDMENT

This Agreement is the sole record of the agreement concluded between the Parties. Any amendment hereto shall not be in force and with effect, unless reduced to writing and signed by all the Parties.

17. CESSION

The Parties may not cede or transfer any of their rights and / or obligations under this Agreement.

18. DISPUTE RESOLUTION

- 18.1. If any dispute arise out or in connection with this Settlement Agreement or related thereto, whether directly or indirectly, the Parties must refer the dispute to resolution first by way of negotiation and in the event of that failing, by way of mediation and in the even to that failing, by way of Arbitration. The reference to negotiation and mediation is a precondition to the Parties having the dispute resolved by arbitration.
- 18.2. A dispute within the meaning of this clause exists once one Party notifies the other in writing of the nature of the dispute and requires the resolution of the dispute in terms of this clause 18.
- 18.3. The Party claiming that a dispute has arisen must, within twenty-one (21) days of the date on which the dispute is said to be arisen, give written notice to the other Parties to the dispute, specifying the nature of the dispute.
- 18.4. The Parties' nominated representatives shall, within a period of ten (10) days of receipt of the notice referred to in clause 18.3 above, meet in good faith in an attempt to settle such dispute or difference through informal negotiations. The representatives shall be authorised to resolve the dispute.
- 18.5. In the event of the negotiation between the designated representatives not resulting in a written agreement resolving the dispute being concluded between the Parties within a period of fifteen (15) days, the Parties must refer the dispute for resolution by way of mediation in accordance with the then current rules of the Arbitration Foundation of Southern Africa ("AFSA").

- 18.6. In the event of the mediation envisaged in 18.5 failing in terms of the rules of AFSA, the matter must, within 15 (fifteen) business days thereafter, be referred to arbitration as envisaged in the clauses below.
- 18.7. The periods for negotiation or mediation may be shortened or lengthened by written agreement between the Parties.
- 18.8. Each Party agrees that the Arbitration will be held as an expedited arbitration in accordance with the then current rules for expedited arbitration of AFSA by one (1) arbitrator appointed by agreement between the Parties, including any appeal against the arbitrator's decision. If the Parties cannot agree on the arbitrator or appeal arbitrators within a period of ten (10) days after the referral of the dispute to arbitration, the arbitrator and appeal arbitrators shall be appointed by the Secretariat of AFSA.
- 18.9. The provisions of this clause 18 shall not preclude any Party from access to an appropriate court of law for interim relief in respect of urgent matters by way of an interdict, or *mandamus* pending finalisation of this dispute resolution process for which purpose the Parties irrevocably submit to the jurisdiction of a division of the High Court of the Republic of South Africa.
- 18.10. The references to AFSA shall include its successor or body nominated in writing by it in its stead.
- 18.11. This clause is a separate, divisible agreement from the rest of this Settlement Agreement and shall remain in effect even if the Settlement Agreement terminates, is nullified or cancelled for whatsoever reason or cause.

19. NOTICES

- 19.1. All notices to be given in terms of this Agreement shall be given in writing and shall be addressed and delivered to the Parties by registered mail or by hand delivery to their postal or street addresses as set out in clause 20 of this Agreement;
- 19.2. Any Party may change its address by giving seven (7) days' written notice to that effect to all the other Parties.

20. DOMICILIUM

The Parties choose the following addresses as their *domicilium citandi et executandi* for all purposes in terms of this Agreement:-

20.1 The _____(landowner):-

20.2 The National Department of Rural Development and Land Reform:-

20.3 The Commission on Restitution of Land Rights:-

20.4 The Department of Economic Development, Environment & Tourism, Mpumalanga:-

20.5 The Mpumalanga Tourism & Parks Agency:-

20.6 The _____CPA:-

21. TERMINATION OF CO-MANAGEMENT ARRANGEMENT

Should the CPA wish to terminate the co-management arrangement referred to in this Settlement Agreement, the full responsibility to manage the Claimed Properties shall vest with the Management Authority and the Management Authority shall either purchase or lease the Claimed Properties on such terms and conditions as may be agreed upon.

22. ATTESTATION

**SIGNED AT _____ ON THIS THE ____ DAY OF _____ 2009
IN THE PRESENCE OF THE UNDERSIGNED WITNESSES.**

AS WITNESSES:-

Applicable Land Owner

National Department of Rural
Development & Land Reform

Commission on Restitution of Land Rights

Department of Economic Development -
Environment & Tourism, Mpumalanga

Mpumalanga Tourism & Parks Agency

Communal Property Association

Appendix B

CO-MANAGEMENT AGREEMENT FRAMEWORK

entered into by and between the

MPUMALANGA TOURISM & PARKS AGENCY

(Herein represented by its Chief Executive Officer, Mr C V Ndabeni.)

and the

DEPARTMENT OF ECONOMIC DEVELOPMENT, ENVIRONMENT & TOURISM, MPUMALANGA

(Herein represented by its _____, Mr / Ms _____ .)

and the

COMMISSION ON RESTITUTION OF LAND RIGHTS

(Herein represented by its Acting Regional Land Claims Commissioner –
Mpumalanga, Ms S I Seboka.)

and the

COMMUNAL PROPERTY ASSOCIATION

(Herein represented by its _____, Mr / Ms _____ , duly
authorised thereto in terms of section 12 of the Communal Property Associations Act 28 of
1996 and it's successors in title.)

WHEREAS the Claimants listed in the attached Annexure "A" have lodged a land
restitution claim on those Claimed Properties listed in the attached Annexure "B", pursuant
to section 10 of the Restitution of Land Rights Act (No 22 of 1994).

AND WHEREAS a Land Restitution Settlement Agreement (hereafter referred to as "the
Settlement Agreement") was concluded on _____ 2009, in terms of which
ownership of the Claimed Properties listed in the attached Annexure "B" would be restored
to the Claimants, subject however to certain conditions which shall be notarially registered
against the Title Deeds of the Claimed Properties, alternatively contained in the Title Deed or
enforced and registered or recorded in such other manner as may be required by Law and as
provided for in the Settlement Agreement.

AND WHEREAS the Claimed Properties form part of the Nature Reserve, as defined in section 1 of the National Environmental Management: Protected Areas Act (No 57 of 2003).

AND WHEREAS clause 7 of the Land Restitution Settlement Agreement makes provision for the Management Authority and the Claimants negotiating and concluding a Co-Management Agreement in regard to the Claimed Properties as a related Agreement, subject to and on the basis contemplated in section 42 of the National Environmental Management: Protected Areas Act (No 57 of 2003), as envisaged and in conformity with the Memorandum of Agreement (MOA) entered into by and between the Minister of Agriculture and Land Affairs and the Minister of Environmental Affairs and Tourism on the 2nd of May 2007, which MOA is hereby incorporated into this Agreement by way of reference.

AND WHEREAS the Parties have agreed that the Co-Management Agreement shall uphold the principles of conservation, ecological integrity, economic viability and financial sustainability.

AND WHEREAS the Parties hereto have reached an agreement as to the manner in which the Claimed Properties shall be managed, on those terms and conditions set out below.

NOW THEREFORE THE PARTIES AGREE AS FOLLOWS:-

1. ACRONYMS & DEFINITIONS

“**Agreement**” shall mean this Co-Management Agreement, including all the annexures and schedules hereto;

“**Beneficiation**” shall mean those direct and indirect benefits derived by the Claimants from various activities to be conducted and operated on the Claimed Properties, including appropriate skills transfer;

“**Claimants**” shall mean those persons listed in the attached Annexure “A”.

“**Claimed Properties**” shall mean the land claimed by the Claimants, which is more fully described in the attached Annexure “B”;

“**Co-Management Committee**” shall mean the committee established in terms of clause 13 of this Agreement, which has the powers, functions and responsibilities as set out therein, as well as those joint directives which may be issued by the Management Authority and CPA from time to time;

“**Commission**” shall mean the Commission on Restitution of Land Rights, established in terms of section 4 of the Restitution of Land Rights Act (No 22 of 1994);

“Conservation” shall mean the protection, sustainable use and study of flora, fauna and objects of geological, archaeological, historical, ethnological and other interests to ensure the maintenance of the land in its natural state, as far as it is practical, for the benefit and enjoyment by the general public;

“CPA” shall mean the _____, duly established in terms of section 5 of the Communal Property Associations Act (28 of 1996) to hold and manage the Claimed Properties on the Claimants’ behalf and duly authorised thereto in terms of Section 12 of the aforementioned Act; and

“CPA Act” shall mean the Communal Property Associations Act 28 of 1996, as may be amended from time to time;

“DEAT” shall mean the former National Department of Environmental Affairs and Tourism,

“DLA” shall mean the National Department of Rural Development & Land Reform,

“Economic Activities” shall mean those economic, commercial and related community activities which may be conducted on the Claimed Properties in accordance with the Management Plan as authorised by the Management Authority, from which activities the beneficiation of the Claimants shall be given effect to;

“Management Authority” shall mean the MTPA, or its legal successor;

“Management Plan” shall mean the Management Plan pertaining to the Nature Reserve, as compiled and reviewed from time to time by the Management Authority in terms of sections 39 and 41 of the National Environmental Management: Protected Areas Act (No 57 of 2003);

“MEC” shall mean the MEC for the Department of Economic Development, Environment & Tourism of the Provincial Government of Mpumalanga;

“Mining and / or Prospecting Activities” shall mean any of those mining and prospecting activities envisaged in the Mineral & Petroleum Resources Development Act (28 of 2002);

“MOA” shall mean the Memorandum of Agreement signed in May 2007 between the DEAT and the DLA;

“MTPA” shall mean the Mpumalanga Tourism and Parks Agency, duly established in terms of section 2 of the MTPA Act;

“MTPA Act” shall mean the Mpumalanga Tourism & Parks Agency Act (05 of 2005), as may be amended from time to time;

“Nature Reserve” shall mean the _____.

“Neighbouring Community / ies” shall mean the following Communities:-

(list Communities).

“Net Profit” shall mean the total revenue generated by and from the Nature Reserve from the economic activities, after the deduction of all costs and expenses determined and incurred by the Management Authority as per it's approved budget, from time to time, in operating, managing, maintaining and developing the Nature Reserve, including but not limited to the following costs:-

- the cost of capture and re-location of game on the Nature Reserve; and
- the salaries and employment benefits of those Nature Reserve personnel, temporary staff and casuals employed by the Management Authority; and
- the pro-rata cost of the salaries and employment benefits of those Head Office and Regional personnel employed by the Management Authority at such pro-rata rate as determined by the Management Authority from time to time; and
- the costs of repairs and maintenance of infrastructure (fixed or movable), plant and equipment on the Nature Reserve; and
- insurance premiums in respect of all insurance comprehensively covering risks related to the Nature Reserve, movable and immovable assets and its operations and all operational risks; and
- all license fees, rates, taxes and other charges payable by or assessed against the Management Authority in respect of the operation of the Nature Reserve; and
- legal costs, audit fees and consultancy fees for services relating to the operation and management of the Nature Reserve, all costs related to the execution of this Agreement, as well as costs and expenses related to training and skills development of members of the CPA and Co-Management Committee; and
- the costs and expenses of all advertising and promotion for the Nature Reserve; and

- provisions for future operational and maintenance costs; and
- sundry expenses approved by the Management Authority from time to time.

“Party” or “Parties” shall mean the Management Authority or the CPA, as the case may be and collectively the Management Authority and the CPA;

“Protected Area” means any of those protected areas referred to in section 9 of the National Environmental Management: Protected Areas Act (No 57 of 2003), where the land use is restricted to the preservation of biodiversity, which includes wild animal life and plant life;

“Protected Areas Legislation” means all South African legislation aimed at protecting the environment, including but not limited to the following Acts (and their Regulations):-

- National Environmental Management Act (107 of 1998); and
- National Environmental Management: Protected Areas Act (No 57 of 2003) ; and
- all Acts providing for the implementation of relevant international conventions pertaining to nature conservation; and
- Public Finance Management Act (01 of 1999).

“Restitution Act” shall mean the Restitution of Land Rights Act (22 of 1994), as amended.

2. INTERPRETATION

2.1 In this Agreement:-

- 2.1.1 clause headings used are for convenience only and shall not affect the interpretation of this Agreement; and
- 2.1.2 unless the context clearly indicates a contrary intention, an expression which denotes any gender includes the other gender, a natural person includes a juristic person and vice versa; the singular includes the plural and vice versa.

2.2 If any provision in a definition is a substantive provision conferring rights or imposing obligations on any Party, notwithstanding that it is only in the

definition clause, effect shall be given to it as if it were a substantive provision in the body of this Agreement.

- 2.3 When any number of days is prescribed in this Agreement, it shall be reckoned exclusively of the first and inclusively of the last day, excluding a Saturday, Sunday or public holiday.
- 2.4 Expressions defined in this Agreement shall bear the same meanings in those Annexures which do not contain their own definitions.
- 2.5 Where figures are referred to in numerals and in words and there is a conflict between the two, the words shall prevail.

3. RECORDAL OF CO-MANAGEMENT ARRANGEMENT

The Parties agree that, with effect from the Effective Date, the Claimed Properties shall continue to be managed and controlled by the Management Authority in accordance with the provisions of all applicable Environmental Legislation, the provisions contained in this Agreement and the Management Plan.

4. COMMENCEMENT AND DURATION

This Agreement shall come into force and effect on the Effective Date and shall continue indefinitely, unless terminated, cancelled and / or amended (in line with all applicable Protected Areas Legislation and the Management Plan) by written agreement between the Parties or otherwise in accordance with the provisions hereof and all related Agreements.

5. RESTRICTIONS ON LAND USE

- 5.1 The Parties hereto have agreed that, notwithstanding the fact that ownership of the Claimed Properties has been or will be restored to the Claimants, the following restrictive conditions shall apply to the Claimed Properties, which shall be registered against the Title Deed/s, by way of Notarial deeds or as otherwise prescribed by Law:-

- 5.1.1 the Claimed Properties will not be physically occupied by the Claimants or their successors in title; and
 - 5.1.2 the Claimed Properties shall remain part of the Nature Reserve / Protected Area in perpetuity, unless decided otherwise by the Management Authority; and

- 5.1.3 the Claimed Properties shall be managed by the Management Authority in terms of all applicable Protected Areas Legislation, the provisions of the Settlement Agreement and this Agreement; and
 - 5.1.4 the Management Authority and all its guests, visitors and employees, contractors and authorised representatives shall have the right to traverse over the Claimed Properties; and
 - 5.1.5 the Claimed Properties shall be used solely for the purpose of Conservation and associated Economic Activities; and
 - 5.1.6 the Claimants shall not be entitled to, sell, exchange, donate, or otherwise dispose of or in any manner encumber the Claimed Properties or any portion thereof, other than to an organ of State; and
 - 5.1.7 any development of whatsoever nature on the Claimed Properties (including but not limited to Economic Activities and the construction of tourism facilities and infrastructure) shall be subject to the provisions of all applicable Protected Areas Legislation and to the provisions of the Management Plan; and
 - 5.1.8 no part of the Claimed Properties may be used for residential developments or for agricultural / farming purposes, nor for any use not approved or authorised in terms of the Management Plan; and
 - 5.1.9 no part of the Claimed Properties may be bonded, mortgaged and / or used for surety purposes or otherwise encumbered in any manner whatsoever; and
 - 5.1.10 the Claimants shall honour and be bound by all those agreements which were concluded in respect of the Claimed Properties prior to the signature of this Agreement.
- 5.2 The Parties hereto agree that all those conditions set out in clause 5.1 above shall be registered against the Title Deeds of the Claimed Properties or by way of notarial deeds or as otherwise required by Law.

6. BENEFICIATION PACKAGE

The Beneficiation package set out in clauses 7 to 11 below is structured in such a way that, as far as possible, the Claimants, through the CPA, receive tangible, realistic and optimal benefits without compromising the ecological and financial sustainability of the Nature Reserve. However, it is noted that the Economic Activities on the Claimed

Properties are restricted by the conservation status, the Management Plan and directives by the Management Authority from time to time.

7. INCOME GENERATION / SHARING OF REVENUE

- 7.1 The Management Authority shall, on an annual basis at the end of its financial year, within sixty (60) days after approval of its financial statements for that financial year, pay to the Claimants through the CPA, an amount equal to a percentage of any net profit generated by the Nature Reserve, based on the percentage of land surface area owned by the Claimants in relation to the total size of the Nature Reserve. For example, if the Claimed Properties make up thirty percent (30%) of the total size of the Nature Reserve, then the Claimant Community shall be entitled to thirty percent (30%) of any net profit generated by the Nature Reserve.
- 7.2 The amount and percentage referred to in clause 7.1 above may be re-negotiated, at any time after a period of twenty-four (24) months has lapsed, calculated from the date of Signature of this Agreement by all Parties concerned. Any agreement reached as a result of re-negotiation, must be reduced to writing, signed by all Parties concerned and shall form an Addendum to this Agreement.
- 7.3 The Management Authority shall charge a landowners' / community levy to all overnight guests visiting the Nature Reserve. The quantum of such levy shall be determined by the Management Authority, in consultation with the Claimants. These amounts shall be collected by the Management Authority and paid over to the Claimants on an annual basis, within a period of three (3) months, calculated from the end of the Management Authority's financial year and after approval of its financial statements for that financial year.
- 7.4 Given that the Management Authority is a public entity, all amounts paid to the Claimants shall be audited by the Auditor General and payments shall be made strictly in accordance with the procedures and directives in terms of the PFMA.
- 7.5 The financial management of all funds of the Management Authority and CPA related to the Nature Reserve and received by any party related to the Settlement Agreement, this Agreement or the Nature Reserve, shall at all times be managed in accordance with and in compliance with all applicable legislation such as the PFMA, the internal and applicable Legislative Provisions of the Management Authority and the CPA respectively.

7.6 The Parties shall at all times strictly comply with all provisions related to reporting and accountability related to financial management of all funds, received and paid out.

8. USE OF BIOLOGICAL RESOURCES

8.1 The sustainable use of biological resources in and on the Claimed Properties by the Claimants shall be subject to the provisions of the Management Plan, as reviewed from time to time, and any other applicable legislation.

8.2 The Management Plan shall define the land or water area within which the use of the biological resources is to be granted to the Claimants, the period for which the resources can be utilised and the limits to the use of the biological resources by the Claimants.

9. ACCESS TO THE CLAIMED PROPERTIES

9.1 The Claimants shall be subject to the same general rights of access to the Claimed Properties as those granted to members of the general public by the Management Authority.

9.2 The Management Authority recognises that certain sacred burial sites of the Claimants are situated in (*define specific area*) of the Claimed Properties. The Management Authority agrees to give the Claimants rights of access to these sacred burial sites, on condition that the Claimants give reasonable prior written notice to the Management Authority. The prior written notice shall specify the date access is required, the number of persons requiring access and the reasons for access. Such visitors shall vacate such burial sites on the same day and shall not be entitled to erect any temporary or permanent structures at such burial sites or to stay over night. The presence and behaviour of any such individuals shall at all times be in strict compliance with the directives of the Management Authority, the Management Plan and rules of the Nature Reserve.

9.3 The Management Authority further recognises that the Claimants are, at no cost, entitled to access the Claimed Properties from time to time, for the purposes of collecting agreed biological resources. These access rights shall be determined in writing by the Co-Management Committee referred to in clause 13 below and shall be subject to such terms and conditions as determined by the Management Authority.

9.4 The rights of access set out in clauses 9.2 and 9.3 above shall not negatively impact on conservation management, commercial and tourism activities and the core ecological purpose of the Nature Reserve and shall be subject to the activity

zonation requirements of the Management Authority, and the Management Authority's final approval.

- 9.5 The Claimants and other neighbouring Local Communities may be charged a reduced gate entrance fee over certain periods, as may be determined by the Management Authority from time to time. This reduced gate entrance fee shall be subject to various controls determined by the Management Authority, including but not limited to Community Registers being compiled, etc. Such reduced fees shall only apply for such periods of time and for the benefit of such members of the CPA or the neighbouring Community as the Management Authority may decide in its absolute discretion from time to time.

10. ECO-TOURISM AND OTHER DEVELOPMENTS

- 10.1 Any eco-tourism developments and related activities undertaken on the Claimed Properties shall be subject to the provisions of all applicable Protected Areas Legislation and the Management Plan.
- 10.2 The Co-management Committee referred to in clause 13 below shall, in accordance with the Management Plan, determine the nature and extent of any eco-tourism developments and related activities to be undertaken on the Claimed Properties, subject to the final approval of the Management Authority being required for all such developments and related activities.
- 10.3 The Management Authority shall be entitled to all lease / concession fees generated from eco-tourism related benefits.
- 10.4 The Claimants shall, subject to the Management Plan, be entitled to develop one (1) Community owned game lodge on the Claimed Properties, at such location and subject to such terms and conditions as determined by the Managing Authority. The net proceeds from the operation of such lodge shall be for the sole benefit of the CPA for the duration of this Agreement, unless agreed otherwise. All expenses of whatever nature related to the erection, maintenance and operation of such lodge shall be for the account of the CPA. The management and operation thereof shall however be done in accordance with the provisions of this Agreement.
- 10.5 No eco-tourism developments and related activities shall be conducted on the Claimed Properties, before an environmental impact assessment has been undertaken and before the approval of the Management Authority and any other relevant Authority has been obtained in respect thereof.

- 10.6 Any benefits arising from non-ecotourism related activities on the Reserve and the distribution thereof shall be negotiated between the Parties at the Co-Management Committee, as and when the need arises.

11. LOCAL MANAGEMENT CAPACITY

- 11.1 The Management Authority shall inform the Claimants of any job vacancies which may arise within the Nature Reserve, in order to afford the Claimants an opportunity to apply (together with other applicants) for appointment into such vacancies. The Claimants and neighbouring Local Community members shall, in a proportion of sixty percent (60%) / forty percent (40%), and as far as is legal and possible, be granted an exclusive opportunity to be employed in vacancies within the Nature Reserve up to a level immediately below the level of Chief Field Ranger (as set out in the Management Authority's Job Evaluation System), subject however to the Claimants / neighbouring Local Community members meeting the necessary job requirements / specifications. The Management Authority's normal Selection and Recruitment Policy shall apply to all vacancies above and including the level of Chief Field Ranger, as set out in the Management Authority's Job Evaluation System.
- 11.2 Both the Claimants and members of the neighbouring Local Communities shall, as far as possible and subject to their skills levels and cost considerations, be granted preferential procurement which may arise within the Nature Reserve. In this regard, the Co-Management Committee referred to in clause 13 below shall compile a formal Procurement Policy & Procedure and the relevant BBBEE Code shall be taken into consideration when determining this Policy & Procedure.
- 11.3 The Management Authority shall request its responsible MEC to take the interests of all claimant communities into consideration, when appointing the Management Authority's board of directors, in accordance with any applicable norms and standards.
- 11.4 The Management Authority shall, as far as possible and subject to its budgetary constraints, attempt to transfer eco-tourism management and biodiversity conservation skills to selected representatives of the Claimants, which may be funded from bursaries or through learnerships.

12. MANAGEMENT OF THE CLAIMED PROPERTIES

- 12.1 The Claimed Properties shall be managed by the Management Authority in terms of all applicable Protected Areas Legislation, this Agreement and the Management Plan.

- 12.2 The Management Authority shall take into cognizance the rights and interests of the Claimants through the mechanism of a Co-management Committee, as detailed in clause 13 below.
- 12.3 The Claimed Properties shall remain part of the Nature Reserve in perpetuity.
- 12.4 The cost of managing and maintaining the Claimed Properties shall, subject to its budgetary constraints, be borne by the Management Authority. However, the Management Authority does not warrant that it will have the necessary funds to do so.

13. CO-MANAGEMENT COMMITTEE

- 13.1 The Management Authority and the Claimants shall establish a Co-Management Committee, which will be known as the _____ Co-Management Committee (hereinafter referred to as the “CMC”).
- 13.2 There shall only be one (1) Co-Management Committee in respect of the Nature Reserve. If there is more than one (1) successful claimant community on the Nature Reserve, they shall jointly participate in the Co-Management Committee.
- 13.3 The Co-Management Committee shall have an overseeing, monitoring and evaluation function in regard to the overall strategic management of the Nature Reserve and shall give effect to this Agreement and the Settlement Agreement strictly in accordance with the instructions of their respective principals. It shall not be involved in the day-to-day operational management of the Nature Reserve. Joint directives, guidelines and rules of governance shall be issued by the Management Authority and the CPA, from time to time, to the CMC, to which the CMC must adhere at all times. The CMC shall at all times fulfil its duties and responsibilities in terms of this Agreement strictly in accordance with the said directives, guidelines and rules of governance
- 13.4 The Co-Management Committee shall be consulted by the Management Authority in its preparation of the Management Plan.
- 13.5 The Co-Management Committee shall accommodate the interests of all other interest groups from Communities living in and / or around the Nature Reserve.

- 13.6 The Co-Management Committee shall, on an annual basis, conclude a performance based management contract with the Management Authority, which takes any budgetary constraints into consideration.
- 13.7 The Co-Management Committee shall comprise of ____ representatives of the Claimants and at least ____ designated officials from the Management Authority. The Parties shall inform each other within thirty (30) days from date of signature of this Agreement of the names and full particulars of their respective representatives and designated officials. The number of Management Authority representatives shall be equal to the number of Claimant representatives. The Management Authority and the Claimants shall appoint and remove their representatives on the Co-Management Committee by written notice delivered to the other Party. The CPA shall ensure that its representatives are duly elected as such from its executive committee, being duly elected and appointed from its members in accordance with its constitution and the CPA Act.
- 13.8 Those members of the Co-Management Committee who represent any claimant community are not and shall not be deemed to be employees of the Management Authority.
- 13.9 Co-Management Committee representatives shall be appointed for a maximum period of five (5) years. The Parties shall ensure that all representatives are not replaced at any one time, in order to retain institutional memory. The Parties shall further replace any representative or designated official within thirty (30) days from the date that such individual resigns or becomes incapacitated to fulfil his / her functions as a member of the CMC.
- 13.10 Management Authority staff that are not nominated onto the Co-Management Committee may be permitted, by agreement of the Co-Management Committee, to attend meetings as non-voting members. The same applies for external advisors if necessary and upon invitation by the Co-Management Committee.
- 13.11 A chairperson and deputy chairperson for the Co-Management Committee shall be appointed from the members of the Co-Management Committee on an annual basis. The chairperson and deputy chairperson shall rotate on an annual basis between a representative of the Claimants and the Management Authority. If the chairperson is a representative of the Claimants, then the deputy chairperson will be a representative of the Management Authority and vice versa.

- 13.12 Should the chairperson not be present at any meeting of the Co-Management Committee, the deputy chairperson shall act as the chairperson for that meeting.
- 13.13 A quorum is present when ____ members of the CMC are present, of which at least ____ members must be from the Management Authority and at least ____ members from the Claimants.
- 13.14 Any decisions taken by the Co-Management Committee must be based on general consensus (i.e.: 50% + 1) of all CMC members and are subject to ratification by the Management Authority's Chief Executive Officer before they are effected by the Management Authority.
- 13.15 The operational staff employed by the Management Authority shall report to their respective line managers and not to the Co-Management Committee.
- 13.16 The Management Authority shall make all relevant information available to the Co-Management Committee in order for it to satisfactorily perform its functions as set out in this Agreement.
- 13.17 Should the Management Authority decide to outsource / sub-contract any of the management functions / activities relating to the Nature Reserve, it shall inform and consult the Co-Management Committee, before implementing such decision.
- 13.18 Any concerns relating to the Management of the Nature Reserve held by either Party and / or the operation of the CPA shall initially be discussed in the Co-Management Committee meetings, in an attempt to address and resolve same.
- 13.19 The Co-Management Committee shall meet at least four (4) times per annum. At least two (2) weeks' written notice of meetings shall be given. Items for the agenda shall be provided by members of the Co-Management Committee to the Management Authority, at least one (1) week before the scheduled meeting.
- 13.20 The Management Authority shall, at its own cost, lend secretarial support to the Co-Management Committee. Minutes will be circulated within two (2) weeks of the meeting to the Management Authority, the CPA and members of the CMC.

- 13.21 Each Party shall bear its own costs in respect of the participation of their members in the Co-Management Committee and no member of the Co-Management Committee shall be entitled to any remuneration from the CMC for holding such office.
- 13.22 Each Party to the Co-Management Committee has an obligation to give appropriate feedback to its own principals. A communication protocol (including communication to other stakeholders) shall be developed by the Co-Management Committee within four (4) months after the signing of this Agreement.
- 13.23 The Co-Management Committee shall determine an applicable Dispute Resolution Procedure, which shall include referral of the dispute to the Management Authority's board of directors for consideration.
- 13.24 The CMC shall have no legal personality, capacity, existence or standing separate from its principals and shall not be entitled to enter into any contracts or engage into any legal activities binding its principals or their credit. All contracts shall be entered into in the name of the Management Authority or the CPA and Management Authority jointly.
- 13.25 It is recorded that the MEC or all parties by mutual consent shall be entitled to suspend the functions of the CMC and to co-manage the Nature Reserve in such other manner and structure as they may agree or as may be determined by the MEC.

14. CONTROL AND MANAGEMENT OF GAME

It is hereby recorded and agreed that the control and management of all game (including all fauna and flora) on the Claimed Properties shall be undertaken by and vest with the Management Authority.

15. MINING AND PROSPECTING

- 15.1 No mining and / or prospecting activities may take place in or on the Claimed Properties, pursuant to section 48 of the National Environmental Management: Protected Areas Act (No 57 of 2003).
- 15.2 Any mining and / or prospecting activities which were lawfully conducted on the Claimed Properties immediately before section 48 of the National

Environmental Management: Protected Areas Act (No 57 of 2003) took effect must be reviewed in accordance with sections 48(2) and 48(3) thereof.

16. AMENDMENT

This Agreement is the sole record of the agreement concluded between the Parties. Any amendment hereto shall not be in force and with effect, unless reduced to writing and signed by both Parties.

17. CESSION

The Parties may not cede or transfer any of their rights and / or obligations under this Agreement.

18. DISPUTE RESOLUTION

- 18.1 If any dispute arises out of or in connection with this Agreement, or related thereto, whether directly or indirectly, the Parties must refer the dispute for resolution firstly by way of negotiation and in the event of that failing, by way of mediation and in the event of that failing, by way of Arbitration. The reference to negotiation and mediation is a precondition to the Parties having the dispute resolved by arbitration.
- 18.2 A dispute within the meaning of this clause exists once one Party notifies the other in writing of the nature of the dispute and requires the resolution of the dispute in terms of this clause 18.
- 18.3 The party claiming that a dispute has arisen must, within twenty-one (21) days of the date on which the dispute is said to have arisen, give written notice to the other Parties to the dispute, specifying the nature of the dispute.
- 18.4 The Parties' nominated representatives shall, within a period of ten (10) days of receipt of the notice referred to in clause 18.3 above, meet in good faith in an attempt to settle such dispute or difference through informal negotiations. The representatives shall be authorised to resolve the dispute.
- 18.5 In the event of the negotiation between the designated representatives not resulting in a written agreement resolving the dispute being concluded between the Parties within a period of fifteen (15) days, the Parties must refer the dispute for resolution by way of mediation in accordance with the then current rules of the Arbitration Foundation of Southern Africa ("AFSA").
- 18.6 In the event of the mediation envisaged in 18.5 failing in terms of the rules of AFSA, the matter must, within 15 (fifteen) business days thereafter, be referred to arbitration as envisaged in the clauses below.
- 18.7 The periods for negotiation or mediation may be shortened or lengthened by written agreement between the parties.
- 18.8 Each Party agrees that the Arbitration will be held as an expedited arbitration in accordance with the then current rules for expedited arbitration of AFSA by one (1) arbitrator appointed by agreement between the Parties, including any appeal against the arbitrator's decision. If the Parties cannot agree on the arbitrator or appeal arbitrators within a period of ten (10) days after the referral of the dispute to arbitration, the arbitrator and appeal arbitrators shall be appointed by the Secretariat of AFSA.

- 18.9 The provisions of this clause 18 shall not preclude any Party from access to an appropriate court of law for interim relief in respect of urgent matters by way of an interdict, or *mandamus* pending finalisation of this dispute resolution process for which purpose the Parties irrevocably submit to the jurisdiction of a division of the High Court of the Republic of South Africa.
- 18.10 The references to AFSA shall include its successor or body nominated in writing by it in its stead.
- 18.11 This clause is a separate, divisible agreement from the rest of this Agreement and shall remain in effect even if this Agreement terminates, is nullified or cancelled for whatsoever reason or cause.

19. NOTICES

- 19.1 All notices to be given in terms of this Agreement shall be given in writing and shall be addressed and delivered to the Parties by registered mail or by hand delivery to their postal or street addresses as set out in clause 20 of this Agreement;
- 19.2 Any Party may change its address by giving seven (7) days' written notice to that effect to all the other Parties.

20. DOMICILIUM

The Parties choose the following addresses as their *domicilium citandi et executandi* for all purposes in terms of this Agreement:-

- 20.1 Mpumalanga Tourism & Parks Agency:-
- 20.2 Department of Economic Development, Environment & Tourism, Mpumalanga:-
- 20.3 _____ Communal Property Association:-
- 20.4 Commission on Restitution of Land Rights:-

21. TERMINATION OF CO-MANAGEMENT ARRANGEMENT

- 21.1 Should the CPA wish to terminate the co-management arrangement envisaged in terms of this Agreement, or in the event that same is terminated in accordance with the provisions of clauses 21.2, 21.3 or 21.4 hereof, the full right and responsibility to manage the Claimed Properties shall vest with the Management Authority and the Management Authority shall be entitled to either purchase or lease the Claimed Properties on such terms and conditions

as may be agreed upon, or if no such agreement can be reached, as determined by the Minister or the MEC. The Minister or MEC may, in such an event, identify a suitable management authority.

- 21.2 It is recorded that the Minister of Water & Environmental Affairs or the MEC of the Department of Economic Development, Environment & Tourism in the Mpumalanga Provincial Government, shall have the right to terminate this Agreement in accordance with the provisions of Section 42 of the Protected Areas Act No 57 of 2003 and all Parties shall be bound by such termination by the Minister or the MEC.
- 21.3 The Management Authority shall be entitled to suspend or cancel this Agreement in the event of any material breach of this Agreement by the CPA through the actions of its representative or its executives, by giving thirty (30) days notice to the CPA to rectify such breach, failing which the Management Authority shall have the right to suspend or cancel this Agreement.
- 21.4 This Agreement shall also be terminated in the event of the dissolution or deregistration of the CPA, in which event the beneficiation of the Claimants shall be in accordance with the directives of the Minister, and / or the MEC.
- 21.5 It is recorded that during the determination of any dispute in accordance with the provisions of clause 18 or a dispute related to the termination, cancellation or any matter related thereto, the Management Authority shall be obliged and entitled to take over all the functions of the CMC related to the Co-Management of the Nature Reserve, subject thereto that the Management Authority shall keep proper records and account to the CPA with regard to all net profits generated for the economic activities.
- 21.6 It is recorded by both Parties that, in the event of termination or cancellation of this Agreement, the objectives of this Agreement will still be achievable and that the Claimants will still be able to receive the benefits of beneficiation without the Co-Management of the Nature Reserve by the CMC or the Parties jointly.

22. ATTESTATION

**SIGNED AT _____ ON THIS THE ____ DAY OF _____ 2009
IN THE PRESENCE OF THE UNDERSIGNED WITNESSES.**

AS WITNESSES:-

1. _____

(for and on behalf of the Mpumalanga
Tourism & Parks Agency, he being
duly authorised thereto)

2. _____

(for and on behalf of the Department of Economic
Development, Environment
& Tourism, Mpumalanga, he / she
Being duly authorised thereto)

(for and on behalf of the Commission on Restitution
of Land Rights, she being
duly authorised thereto in terms of
Section 42D(3) of the Restitution Act)

(for and on behalf of the _____ Communal
Property Association, he /
she being duly authorised thereto)