

**THE IMPACT OF ECO-TOURISM ON LAND-USE PATTERNS:
THE CASE OF DINOKENG ECO-TOURISM PILOT PROJECT IN
GAUTENG PROVINCE**

by

Motsoka William Moeng

**Submitted in partial fulfillment of the requirements for the degree of
M Inst Agrar (Rural Development Planning)**

in the

Department of Agricultural Economics, Extension and Rural Development

Faculty of Natural and Agricultural Sciences

University of Pretoria

Pretoria

July 2004

TABLE CONTENTS

ACKNOWLEDGEMENTS	v
ABSTRACT	vi
LIST OF ACRONYMS	ix
CHAPTER ONE: INTRODUCTION	1
1.1 GENERAL PROBLEM	1
1.2 SPECIFIC PROBLEM	5
1.3 OBJECTIVES OF THE STUDY	9
1.3.1 Primary Objective	9
1.3.2 Secondary Objectives	9
1.4 METHODS AND PROCEDURES	10
1.4.1 Stakeholder Meetings	10
1.4.2 Property Sales Records	10
1.4.3 Land-Use Change Applications	11
1.4.4 Literature Survey	11
1.5 SIGNIFICANCE OF THE STUDY	12
1.6 STUDY OUTLINE	13
CHAPTER TWO: PROCESSES LEADING TO THE DEVELOPMENT AND IMPLEMENTATION OF DINOKENG PROJECT	14
2.1 BASIS FOR THE PROJECT	14
2.2 THE INITIAL CONCEPT	14
2.3 DEVELOPMENT FRAMEWORK AFFECTING THE PROJECT	15
2.3.1 New National Development Framework	15
2.3.2 Integrated Approach	16
2.3.3 Effective Development Machinery	16

2.4	PROGRESS AFTER INCEPTION OF DINOKENG	19
2.4.1	Gauteng Provincial Government Economic Efforts	19
2.4.2	Dinokeng Project Acceptance Campaign	20
2.4.3	Feasibility Studies	20
2.5	THE FINAL PRODUCT	22
2.5.1	Feasibility Study	22
2.5.2	Framework for Implementation	23
2.5.3	Implementation Process	24
2.5.4	Summary	28
	CHAPTER THREE: STUDY AREA AND PROJECT CONCEPT	29
3.1	LOCATION OF THE PROJECT	29
3.2	CHARACTERISTICS OF THE PROJECT SITE	30
3.3	POSSIBLE ROLE PLAYERS	30
3.3.1	Vastness of the Area	30
3.3.2	Department of Agriculture, Conservation, Environment and Land Affairs (DACEL)	31
3.3.3	Metsweding District Municipality	31
3.3.4	Local Municipalities	32
3.3.5	Landowners	32
3.3.6	Department of Land Affairs	33
3.3.7	The South African National Defence Force	34
3.3.8	Adjacent Communities	34
3.3.9	Farmworkers/dwellers	35
3.3.10	Department of Minerals and Energy	35
3.3.11	Department of Environment Affairs and Tourism	35
3.3.12	NGO's	36
3.4	SUMMARY	36
	CHAPTER FOUR: CHALLENGES FACING DINOKENG PROJECT	37
4.1	IMPLEMENTATION ROUTE	37
4.2	LEGALITY	39

4.3	LAND TENURE SYSTEM	40
4.4	IMPACT ON LAND REFORM AND SECURITY OF TENURE OF FARM WORKERS	41
4.5	ECONOMIC SUSTAINABILITY	43
4.6	COMMUNITY PARTICIPATION	44
4.7	SPATIAL DEVELOPMENT IN THE REGION	44
4.8	SUMMARY	46
	CHAPTER FIVE: LITERATURE REVIEW	47
5.1	CONSERVATION PIONEERS	47
5.1.1	The Cape Colony (South Africa)	47
5.1.2	Zimbabwe	49
5.1.3	Kenya	51
5.1.4	Ethiopia	52
5.1.5	Sierra Leone	52
5.1.6	Nigeria	53
5.1.7	USA	54
5.1.7	Sabi Sand Game Reserve	55
5.2	SUMMARY	57
	CHAPTER SIX: RESULTS OF THE STUDY	59
6.1	SITUATION PRIOR TO DINOKENG PROJECT IMPLEMENTATION	59
6.1.1	Early Farming Activities	59
6.1.2	Earlier Conservancy Developments	61
6.2	PROJECT IMPACT ON LAND USE PATTERNS	61
6.2.1	Recent Conservancy Developments	61
6.2.2	DACEL's Contradictory Implementation Strategy	63
6.3	IMPACT OF STATE LAND PILOT PROJECT ON PRIVATE LAND OWNERS	65

6.4	OWNERSHIP CHANGES BROUGHT ABOUT BY THE PROJECT	66
6.5	ACCEPTANCE OF PROJECT BY LAND OWNERS	67
6.6	EFFECTIVENESS OF THE ADOPTED STRATEGY	68
6.7	SUMMARY	70
	CHAPTER SEVEN: CONCLUSIONS AND RECOMMENDATIONS	71
	REFERENCES	82
	ANNEXURES	85
	A: Old District and Local Council Demarcations	86
	B: New Local Council Demarcations	87
	C: New District and Metro Council Demarcations	88
	D: Gauteng Composite LDO	89
	E: Rural Development beyond the Urban Edge	90
	F: Conceptual Spatial Framework	91
	G: Gauteng Provincial Urban Edge	92
	H: Spatial Intervention	93
	I: Open Space/ Conservation Areas	94
	J: Vegetation Map	95
	K: Tourism Nodes	96
	L: NEGI Area	97
	M: Conservancies	98
	N: Dinokeng Concept Plan	99

ACKNOWLEDGEMENTS

My sincere thanks is directed to the following persons whose contribution has led to the success of this work:

My wife Jemina and kids Nakedi and Sedumedi for encouragement and giving me the peace of mind to apply my energies to the work.

Mr Vincent Maila formerly of Emendo Town and Regional Planning for making available vital information relating to Dinokeng Project.

The Ekurhuleni District municipality for sharing their LDO Review Cycle IV Report.

Mr K Mathivhe of Gauteng Province' Department of Agriculture, Conservation, Environment and Land Affairs for sharing the various stages of the Project and the NEGI reports and newsletter.

Mr Dumisane Hlongwane for helping with the type-setting.

Prof C. Machethe for providing the guidance and mentorship leading to the successful finalization of the thesis.

**THE IMPACT OF ECO-TOURISM ON LAND-USE PATTERNS:THE CASE OF
DINOKENG ECO-TOURISM PILOT PROJECT IN GAUTENG PROVINCE.**

DEGREE: M Inst Agrar (Rural Development Planning)

Department: Agricultural Economics, Extension and Rural
Development

Supervisor: Prof Charles L. Machethe

ABSTRACT

The objective of this study is to look into the changes in land-use patterns on the mostly private land properties brought about by the envisaged Dinokeng Pilot Project on State-owned land properties since it was introduced in 1995. This is a critical parameter for the success or otherwise of the implementation of the broader project on the mostly private properties earmarked for inclusion in the project surrounding the pilot site.

The method employed entailed analyzing several progress indicators to gauge whether adequate progress was made between 1995 and 2001 in implementing the project. Indicators used were the finalization of the project process by DACEL, large scale sales and consolidation of affected properties and applications to the Metsweding District Municipality for change of land use by the present landowners

Several procedures were employed to determine whether there was adequate progress or not. The initial programme of Dinokeng Project Concept was studied and envisaged

progress was compared with the implementation phase the project was in as at December 2001. The records of the Metsweding District Municipality were studied to find out the types and number of land use change applications by private landowners. The deeds records were also sampled to detect any large scale property sales and consolidations that can be ascribed to the envisaged project. The response of DACEL to criticism by affected landowners was also studied. A literature review of similar projects was undertaken to understand the methods employed to achieve desired results.

The study found that there is lack of adequate progress on the finalization of the precise site for the project and agreements with present landowners on the tenure issue and other administrative matters that are a prerequisite for the proclamation of the project. Proclamation is necessary to restrict the land use activities within and around the proposed project site so as to make all affected stakeholders to be committed to the implementation of the project.

The failure by the project to achieve the desired results of being in whole or partially up and running within five years of its inception is ascribed to the initial adopted strategy of depending on complementary changes in land use patterns in the privately owned land properties to consolidate the properties into a contiguous ecological area large enough to accommodate the Big Five. This shows that although the political developmental framework has changed, certain old order strategies and procedures are still as effective as ever.

It is recommended that the project area be subdivided into phases without any regard to land ownership. The core area should consist of land properties ecologically suitable and forming a large enough area to contain the proposed Big Five. The total project area should be proclaimed with provision being made for a phased implementation approach with definite timetables and concrete deliverables. This will separate the totally unwilling landowners from the others who want to be part of the project on condition that their minimal interests and requirements are met.

LIST OF ACRONYMS

- ANC: African National Congress
- CBO: Community Based Organisation (non-governmental organization with broad based membership)
- DACE: Department of Agriculture, Conservation and Environment of Gauteng Province
- DACEL: Department of Agriculture, Conservation, Environment and Land Affairs of Gauteng Province (formally known as DACE)
- DDPLG: Department of Development Planning and Local Government of Gauteng Province
- DLA: Department of Land Affairs
- DFA: Development Facilitation Act (Act 67 of 1995) to facilitate and regulate land developmental matters in South Africa
- DME: Department of Minerals and Energy
- GSDF: Gauteng Spatial Development Framework
- IDP's: Integrated Development Plans that could be the integrated LDO's or outright new initiatives facilitated by Category C (District & Metropolitan) Councils and Category B Local Councils as required by the LGTA
- IUCN: World Conservation Union

- LGTA: Local Government Transition Act (Act of 1993 and Second Amendment Act, 97 of 1996) obliging municipalities in South Africa to develop negotiated IDP's for their areas of jurisdiction
- LDO's: Five year Land Development Objectives that are supposed to be drawn up by all primary local councils as development master-plans of their areas as required by the Development Facilitation Act (Act 67 of 1995).
- MEC: Member of the Executive Council
- NEGI: North Eastern Gauteng Initiative, a Biosphere Reserve project proposed by the Gauteng Provincial Department of Agriculture, Conservation, Environment and Land Affairs for the North Eastern Region of Gauteng for the area north of the R513 and east of the N1 (Pretoria-Piensaarsriver).
- NEG: The North Eastern quadrant of Gauteng Province whose rough boundaries are taken as N1 freeway between Pretoria and Piensaarsriver (West), Northern Province and Gauteng Province boarder (North), Mpumalanga Province and Gauteng Province border (East), the N4 freeway (South) and which is the proposed site for the Dinokeng project.
- NGO: Non Governmental Organisation
- SIA: Social Impact Assessment Report as commissioned by DACEL to find out the feelings of stakeholders about the proposed project
- SDI's: Spatial Development Initiatives that are the integration of various District Municipality Council IDP's/ LDO's into a coherent and integrated

regional or provincial development efforts by provincial governments as regulated by their own planning regulations.

RDP:	Reconstruction Development Programme
SANDF:	South African National Defense Force
SANAF:	South African National Air force
SEIIP:	Strategic Economic Infrastructure Investment Programme
UNESCO:	United Nations' Educational, Scientific and Cultural Council
LAC:	Local Area Council
RC:	Rural Council
TRC:	Transvaal Rural Council
LC:	Local Council
LSCF's:	Large Scale Commercial Farms (Zimbabwe)
CA:	Communal Areas (Zimbabwe)
CONEX:	Department of Conservation and Extension (Zimbabwe)
DEVAG:	Department of Agricultural Development (Zimbabwe)
AGRITEX:	Department of Agricultural Technical and Extension Services (Zimbabwe)
CAMPFIRE:	Communal Area Management Programme For Indigenous Resources (Zimbabwe)

CHAPTER ONE

INTRODUCTION

In this chapter, the general problem leading to the study is identified, the study objectives defined and the study outline presented.

1.1 GENERAL PROBLEM

The inception of an all-inclusive democratic dispensation in South Africa in 1994 ushered in a new developmental framework that included more developmental roles for provinces. The Department of Agriculture, Conservation, Environment and Land Affairs (DACEL) (formerly Department of Agriculture, Conservation and Environment) of the Gauteng Province used those powers to embark on a project to search for some solution for the economical use of the rural farmlands in 1995.

Gauteng Province is the most populous of the nine provinces yet the smallest in terms of land surface. It serves as the net importer of people from different provinces, neighbouring and overseas countries.

Historically the economic activities of Gauteng consisted of mining, manufacturing, service industries, government and building industry and to a lesser extent agriculture and tourism. The recent slump in precious metal prices has led to many mines closing or

scaling down production at marginal and deep branches that proved too uneconomical to run. This resulted in retrenchments of thousands of employees. Retrenched and new migrants then settle in informal settlements around the urban core or in rural areas. The majority of these people then start engaging in informal subsistence agricultural activities mostly along water courses or valleys.

It was during a search for solutions to such problems as the population explosion, urban sprawl, consumption of prime agricultural land by urbanization, and increased food demand that a project named Dinokeng Biosphere Reserve (formerly North Eastern Gauteng Initiative (NEGI)) was conceptualized in the North Eastern Region of Gauteng (NEG). The Gauteng Provincial Department of Agriculture, Conservation, Environment and Land Affairs (DACEL) mixed the agricultural and environmental potential of the NEG area and the already preferred economic activities by landowners to develop an ecological economic plan to generate income, create employment and conserve the rural nature of the area.

The belief in the feasibility of such an idea was strengthened by the observations of tourism patterns of similar reserves such as Pilansberg and Madikwe in the North West Province. The latter conservation park was created by the former homeland government of Bophuthatswana in an area devoid of any fauna, flora, cultural or spectacular natural site worth protecting or marketing to attract tourists. Another observation made by DACEL was the proliferation of conservancy (one or more farms engaged in game farming and small-scale tourism and having an Exemption Certificate issued by DACEL

allowing the farmer to own and look after game) or game farming in the identified area since the early 90's; this has almost totally replaced ranging as a preferred method of land use.

The area is characterized by a large number of small to medium size private holdings with very few state owned holdings. Most of the private landowners are already engaged in the creation of reserves either as stand alone or group ventures. Almost all the reserves are engaged in small-scale tourism enterprises as well other broad traditional conservation activities.

Unlike in the past, the new legal set-up does not allow arbitrary and unilateral decision making by government institutions on developmental issues. Therefore, present government developmental initiatives are constrained by the status quo as obtaining on the ground. It was against this background that perhaps DACEL chose to investigate the possibility of enhancing economic development in the broader NEG area through agricultural or ecological activities that were already being practiced by certain property owners rather than come up with economic plans based on drastically different land-use activities. This would later place certain constraints to the pace and direction of Dinokeng developmental plan. This fact will be outlined in the following chapters.

Several feasibility studies commissioned by DACEL found that the total impact of the project on the region as a whole could not be measured. Limitations were due to the inconclusive information on the possible impact of the project on several categories of

possible beneficiaries, especially landowners not falling within the identified core area of the project as well as surrounding communities who have no property rights within the study area.

The studies indicated the need for further studies to measure the possible impact of the project on all categories of landowner beneficiaries as well as to determine the radial extent of such impact. One other complicating factor is the new approach of leaving the acceptance and implementation of related activities to the project mainly in the hands of current landowners that was adopted by DACEL to implement the project. With such an open-ended approach the timetable for the implementation of the project cannot be precisely determined or set. It is common knowledge that the diffusion of any new idea cannot result in simultaneous adoption by targeted groups or individuals.

The ANC's Reconstruction and Development Programme (RDP), which ultimately became the programme of the new democratic government, proposed two strategies for the role of government in building the economy of the country:

- Increasing the public sector in strategic areas through joint ventures with the private sector amongst other things
- Reducing the public sector in certain in ways that enhance efficiency, advance affirmative action and empower the historically disadvantaged

It is clear that DACEL was trying by all means to adhere to the letter and spirit of this developmental policy framework when it undertook to implement the broader Dinokeng

Project. The RDP did not prescribe any particular policy measure but said that the balance of evidence will guide the decision by a particular government institution when implementing a particular project under specific material conditions.

1.2 SPECIFIC PROBLEM

DACEL has taken concrete steps to establish a tourism based developmental project in the form of a Big Five reserve (Dinokeng) in the North-Eastern Region of Gauteng. The initial idea came from the landowners themselves sometimes in the 1990s. When the project became a government driven project after 1995, there emerged certain implementation demands by the landowners which DACEL either did not agree with or chose a different strategy to deal with them.

Subsequently only a core area consisting of three state farms has been identified and is being developed into a pilot project. The main economic assumption is that the project has the potential for both personal and broader regional economic spin-offs. It is hoped that private landowners would come to appreciate this fact, and act upon it by changing the land-use patterns in their properties to increase the area of the broader project and ultimately reap the fruits of the project.

The critical factor now is to begin to quantify the benefits of such a strategy as perceived by mostly landowners that should manifest in the changes in land-use activities in affected properties within and outside the general core area of the proposed project.

All affected stakeholders are so far agreeing on the need for such a project as envisaged in Dinokeng. Everybody seems to agree on the ecological, economic and spatial merits of the project for themselves, however, it seems there is no clear vision as to who need to do what and to what extent should the project expand to be economically viable and attractive enough as a regional tourism destination to compete with existing destinations such Pilansberg, Madikwe and to some extent the Kruger National Park.

Despite the initial in principle acceptance of the project by all stakeholders, points of disagreement mainly about the implementation strategy have arisen to stall the project's implementation programme. Landowners accuse DACEL of coming up with new detractions such as the general conservancy concept. This they view as seeking to establish voluntary and self-regulatory area management entities for all land-users in a particular locality irrespective of the existence of large-scale conservancy project initiatives such as Dinokeng as initially conceived by individual landowners who sold the idea to other farmers with varying degrees of success.

The majority of landowners who are already part of Dinokeng related conservancies are opposed to the DACEL's idea of bringing in state supported community entities without the matching equity in the form of land and mainly game stock. As a result of lack of resolution over this point, DACEL took a unilateral decision that the project would be kick-started on the identified three contiguous state farms. Secondary development was initiated on the other state farms scattered throughout the region. DACEL's rationale is

that those farms falling in between these state farms would eventually be cajoled to join up and make a large area to meet the envisaged project requirements.

The view of the landowners is that the project area as proposed by DACEL would be unworkable as it is going to curve the formally compact conservancies into bits and pieces that is going to cause both logistical and legal problems to those entities and Dinokeng project. The process of amalgamating individual landowners into conservancy grouping started a long time ago before DACEL came into the picture, it is not possible to suddenly reverse the process on the instigation of DACEL.

The second disagreement is about the apparent reluctance of DACEL to proclaim the identified area as a conservation area outright. This they argue would bring commitment to all affected stakeholders towards the implementation of the project. Such a scenario should make the customary provision of the option to expropriate unwilling participants and give the state the opportunity to empower the previously disadvantaged communities it want to bring on board the project. The argument is that what will be the ramification of a scenario where most of the affected landowners want to participate, but only one or few occupying strategic areas were unwilling to participate to the detriment of the majority and the whole project.

Thirdly, DACEL is accused of deviating from the originally professed initial core area. Most part of the late 2001 was spent on trying to find a new front around the Rust de Winter areas of both Limpopo (formerly Northern Province) and Mpumalanga. By 2002,

most of the DACEL Dinokeng internal management posts were converted from the initial three-year contract posts to permanent positions, indicating that the project is now expected to take a longer time in being implemented than first anticipated.

Landowners are viewing the apparent lack of progress as the result of DACEL's preoccupation with peripheral matters such as the establishment of conservancies. They believe that DACEL should have been rigorously pursuing negotiations with directly affected landowners and Limpopo as well as Mpumalanga provinces in order to finalise all aspects related to the establishment of the long talked about Biosphere reserve.

The study was motivated by the desire to find an amicable resolution of the conflicting perceptions between DACEL and landowners about the best strategy to be employed to implement the desired goal to which all parties agree. In addition, it is necessary to determine the validity of the assumption that land use changes would be effected in adjacent properties to align the agricultural activities with the broad vision of Dinokeng Project. The envisaged changes would entail shifting from purely agricultural activities to conservation related ones and accommodation enterprises such as lodges etc on those properties whose owners identify with the Dinokeng project.

1.3 OBJECTIVES OF THE STUDY

1.3.1 Primary Objective

The main objective of the study is to evaluate the impact on land-use patterns of the strategy adopted by DACEL to implement Dinokeng Biosphere Reserve Initiative through a pilot project on three state farms.

1.3.2 Secondary Objectives

The secondary objectives are to

- assess whether any private landowners have been influenced by the pilot project on state land;
- determine the change in land ownership that has been brought about by Dinokeng project;
- assess the acceptance of the initiative by the landowners in terms of the future sustainability of the entire project; and
- determine whether the adopted strategy of depending on complementary changes in land use practices by willing landowners will achieve the initial stated objective to consolidate the properties into a contiguous ecological area that is large enough to serve as a Big Five anchor project with all the necessary functional zoning for such a project.

1.4 METHODS AND PROCEDURES

The methods and procedures employed in the study are outlined below.

1.4.1 Stakeholder Meetings

Meetings of affected property owners with DACEL consultants could not be attended to gather first hand the opinions expressed especially by landowners about the proposed project. The period of the research coincided with fall-out between DACEL and Landowners. Because of the sensitivity of DACEL about the perceived external instigation of opposition towards the project, no formal questionnaires were prepared and circulated to the affected landowners. Personal interviews would also be undertaken.

1.4.2 Property Sales Records

Intentions of landowners could be identified from mandatory deeds registration of titles as a result of change in property ownerships that are supposed to be lodged with Land Affairs' Deeds Office. Deeds records of a sample of the affected properties were perused to check for any new ownership registrations for land properties that might have been brought about by the advent of Dinokeng project. The number of sales post 1995 as well as property consolidations will indicate the influence of the project on the landowners and hence land-use patterns.

1.4.3 Land Use Change Applications

It would not be possible to visit or interact directly with landowners to get their views on the proposed project as well as their preparedness to embrace it as shown by the limitations of previous SIA processes. Therefore another complimentary method used was to visit one of the significant “watering well” in the form of Metsweding District Municipality. This is where all landowners were supposed to register their desire to change land-use practices in favour of Dinokeng project.

Any contemplated land-use change desired by a landowner must be applied for at the District Municipality. Therefore if there is any intention by any landowner to change his land-use to align with the Dinokeng biosphere project, an application would be found lodged with the Metsweding District Municipality (formerly Eastern Gauteng Services Council). The records of the District Municipalities were perused to check for any applications by affected landowners to change land-uses in favour of Dinokeng project.

1.4.4 Literature Survey

A literature survey of national and international experiences was undertaken to see if there were any comparisons with the Dinokeng scenario. The success rate for such projects were measured against Dinokeng to explain the apparent lack of progress since its inception in 1995.

1.5 SIGNIFICANCE OF THE STUDY

Communities around the area, interested parties as well as the various departments are still grappling with the logistics relating to the possible establishment of the biosphere reserve. Outstanding issues include such items as the political approach; locality for the core area; managerial institutional arrangements; land-use patterns as well as the economic impact on both land owners and surrounding communities.

DACEL has gone to a great deal to adhere to the letter of the new political developmental framework in basing its project on the initiatives of the affected landowners as well as to bring on board the previously disadvantaged communities when the project was initiated in 1995. There was also a major attempt to rope in all the major governmental and non-governmental institutions into the project as it was envisaged that Dinokeng project has the potential to have developmental and spatial ripple effects throughout the province.

Faced with opposition of some of its strategies by landowners, DACEL then decided in 1999 to sidestep the demands of the affected landowners by putting more effort to interact with peripheral property owners within the proposed project site as well as mostly township or village communities surrounding the Dinokeng area, but excluding property owners whose land-use activities might be influenced by the project as well as to influence the project.

The study will shed light on the possible impact that the pilot project initiative on state-owned land properties will have on adjacent landowners and their reaction to it. This will add to the ongoing debate about the ramification of the project on the region and province as a whole and the approach that need to be taken to make the dream a reality as initially envisaged.

1.6 STUDY OUTLINE

Chapter two looks at the process followed since the inception of the project in 1995 as well as the founding principles and implementation assumptions.

Chapter three discusses the study area and its characteristics as well as the possible role-players affecting and being affected by Dinokeng project.

Chapter four sheds light on the challenges facing the project and its implementation.

Chapter five deals with literature review of other near similar situations that may help explain the reasons for the lack or otherwise of progress for this particular project.

Chapter six discusses the results of the study

Chapter seven outlines the conclusion reached from the study and also present recommendations.

CHAPTER TWO

PROCESSES LEADING TO THE DEVELOPMENT AND IMPLEMENTATION OF DINOKENG PROJECT

Dinokeng project was conceptualised under particular economic and political circumstances. The resultant project is thus constrained by those founding circumstances in its effort to meet the generated needs of DACEL and expectations of other role-players especially the present landowners.

2.1 BASIS FOR THE PROJECT

Creating new employment opportunities as well as maintaining the present ones is a priority for the Gauteng Provincial Government. The province is the most populous yet the smallest in terms of land surface. It also serves as the net importer of people from different provinces, neighbouring and overseas countries. All provincial departments are trying their best within their areas of jurisdiction to come up with programmes that would alleviate poverty and create employment.

2.2 THE INITIAL CONCEPT

The Department of Agriculture, Conservation, Environment and Land Affairs (DACEL) conducted a study of the prevailing agricultural land uses compared with the alternative biosphere reserve or conservation based land use alternative in the North Eastern Region

of Gauteng Province. The conclusion was that the latter could yield far more economic returns to individual landowners, the region and the province (Department of Agriculture, Conservation, Environment and Land Affairs, 1999b). DACEL then approached the directly affected stakeholders to sell the idea to them.

Dinokeng, formerly the North Eastern Gauteng Initiative (NEGI) is a project conceptualized to preserve the natural environment, conserve the rural landscape against the urban sprawl as well as to create economic development and jobs. This reserve would be large enough to accommodate the Big Five (elephant, lion, leopard, buffalo and rhino), thereby creating tourist attraction that could be translated into an eco-tourism destination within the borders of Gauteng Province.

2.3 DEVELOPMENT FRAMEWORK AFFECTING THE PROJECT

2.3.1 New National Development Framework

The post-apartheid developmental spirit has been based on consensus seeking solutions to the intricate problems and situations that in the past led to conflicts. In this regard various mechanisms and systems have been developed to deal with potential conflict and to give all participants recognition that they deserve. People are now at the centre of development; therefore the South African government subscribes to the ethos of involvement of people in development. Right from early 1994 with the RDP and many other subsequent policies, the government put people at the forefront of development.

The LDO/IDP processes are meant to make sure that affected communities are consulted and also participate in the actual project implementation.

2.3.2 Integrated Approach

The second strategy adopted was to try and cover as many geographical areas as possible, and especially to target those areas that have both the physical and social attributes to accommodate economic projects that would integrate the divided society by also bringing the previously disadvantaged societies on board. Such strategic projects to inject economic life into previously neglected areas are termed Presidential lead projects and cover the whole spectrum of developmental spheres such land reform, agricultural, industrial, cultural, educational, water provisioning, electrification, roads, etc and are scattered throughout the length and breath of the country.

2.3.3 Effective Developmental Machinery

In line with the newly found spirit of unity, an elaborate strategy has been developed to deal with the disjointed and fragmented social and physical landscape. First an attempt was mounted to de-racialise society and development through bringing previously divided cities into single local government entities before and during the first local government establishment of 1994/5 as provided for by the Local Government Transition Act (Act 209 of 1993).

The process was further perfected in the run-up to the second municipal elections of 2000 through the enactment of the Local Government Municipal Demarcation Act (Act 27 of 1998) as well as the Local Government Transition Act Second Amendment Act (Act 97 of 1996). Through the two acts, the Municipal Demarcation Board in consultation with local structures came up with a delimitation system that to a larger degree achieved a deeper economic integration of various developmental centres, highly and less developed. By establishing uni-cities (metropolitan councils) and similar peri-urban municipalities, all urban cores became the bridgeheads for the development of the rural hinterland.

A new developmental legislation binding the Local Municipalities, District Municipalities, Provincial and National line-function departments and parastatals into an integrated developmental framework came into being during the second local government era of 2000. Whereas initially the aim was to enable local governments to develop master-plans for their areas through Land Development Objectives as required by the Development Facilitation Act (Act 67 of 1995), now municipalities are in terms of the Local Government Transition Act Second Amendment Act (Act 97 of 1996), required to develop Integrated Development Plans (IDP's).

Municipalities are compelled to budget for their IDP implementations and importantly to align their developmental plans with those of district, provincial and national institutions. Based on these IDP's, Spatial Development Initiatives (SDI's) such as Dinokeng can be undertaken as practical interventions to bring about economic development and

integration of society, areas and strategic growth centres (Eastern Gauteng Services Council, 2000).

Therefore, Dinokeng project, which started as an LDO process, is now being developed into an IDP process to integrate the economies and land-use objectives of the entire NEG region. Upon its implementation, Dinokeng is expected to have far reaching impact on land-use activities even outside the Dinokeng area. This will culminate into a spatial configuration of inter-linking zones of activities, which from the provincial point of view is taken as an SDI (Department of Developmental Planning and Local Government, 2000). Such a provincial plan is being presented as the Gauteng Composite LDO (Annexure D). The NEGI Marketing Report and Final Tourism Report (Department of Agriculture, Conservation, Environment and Land Affairs, 1999e) proposes that the final product be marketed as a destination entity linking all the aspects of the region into an ‘All Africa in one Day’ banner.

The above development can prove to be both a blessing and curse for different role-players in the project. The new developmental regulatory environment gives the Local Municipalities, District Municipalities, Provincial Governments and the National Government more developmental regulatory and initiative powers. The drawback for such an arrangement is that total consensus amongst role players is required for the implementation of any project. At times this causes costly delays.

For Dinokeng Project in particular, the new Local Municipalities and District Municipality may choose to review certain processes or aspects of the project. DACEL also may and has already engaged in activities that are perceived by affected landowners as material changing of the original course as well as delaying tactics or living up to the legendary “much-ado-about-nothing” governments are notorious for in the field of developmental leadership and service delivery.

2.4 PROGRESS AFTER INCEPTION OF DINOKENG

2.4.1 Gauteng Provincial Government Economic Efforts

The Gauteng Provincial government has in general taken great strides in conceptualizing developmental projects that are geared at benefiting the entire population as well as to involve them in the actual implementation of such projects. There are major housing, local economic and spatial development projects being undertaken by various provincial departments and local and district municipalities. Dinokeng project is aimed at achieving both economic and social development through the creation of linkages between landowners and local communities (Department of Agriculture, Conservation, Environment and Land Affairs, 1999a).

2.4.2 Dinokeng Project Acceptance Campaign

DACEL has undertaken a rigorous campaign to have the project accepted by the major stake-holders. The Local Councils, Eastern Gauteng Services Council (EGSC) and some landowners accepted the proposal in principle to allow DACEL to initiate further steps towards implementation. The Local Councils and Eastern Gauteng Services Council took steps to formalize their acceptance through the inclusion of such an economic development in their LDO reports as required by the Development Facilitation Act (Act 67 of 1995). The acceptance of the proposal by these institutions also paved the way for the Department of Development Planning and Local Government to include the project into the Gauteng Spatial Development Framework (Department of Development Planning and local Government, 2000) as depicted in Annexures F and H. The project also now forms part of the Gauteng Province's Strategic Economic Infrastructure Investment Programme (SEIIP) (Department of Agriculture, Conservation, Environment and Land Affairs, 2000) (see Annexures I and L).

2.4.3 Feasibility Studies

After all stakeholders have accepted the project, DACEL then undertook a feasibility study for the implementation of the biosphere reserve. A number of consultants were engaged to investigate this matter, and their work resulted into a about twelve reports on specific topics:

- Report 1: Framework Document
- Report 2: Social Impact Assessment
- Report 3: Land Use Management Framework
- Report 4: Status Quo Report on Ecology, Land Use & Infrastructure
- Report 5: Marketing Strategy
- Report 6: Legal Aspects that may affect the implementation and operation of the proposed NEGI
- Report 7: Shareholding and Ownership Study for NEGI
- Report 8: Institutional and Management Study
- Report 9: Big 5 Anchor Project
- Report 10: Proposed Community Based Pilot Projects
- Report 11: Public Participation Guidelines
- Report 12: Identification of Funding Sources

These reports contain specific recommendations about the process and final shape of the envisaged project. Based on these reports, DACEL then took the decision to engage in activities towards gathering further information that would bring the project closer to implementation.

2.5 THE FINAL PRODUCT

The ensuing activities aimed at developing and finally implementing the project was divided by DACEL into three phases (Department of Agriculture, Conservation, Environment and Land Affairs, 2000):

- Phase 1: Feasibility Study
- Phase 2: Developing Framework for Implementation
- Phase 3: Implementation

2.5.1 Feasibility Study

The work in this section was aimed at examining the baseline data or information on which the proposed project could be justified. The twelve reports that were generated pointed to a conducive climate for the implementation of the project with certain modification in some aspects and also depending on further investigation on others.

The overall finding of the feasibility study was that there were many factors militating against the original idea of establishing a biosphere reserve just for conservation and employment creation as originally conceptualised (Department of Agriculture, Conservation, Environment and land Affairs, 1999b; 1999g). But rather, because of the lack of the authentic African bush characteristics of the NEGI area, it is unlikely that the project could gain international status in terms of the IUCN criteria and the Man and Biosphere program under UNESCO.

It was finally accepted that the project be developed as a tourism led economic development to serve as an international tourism destination area for those travelers that are pressed for time, and are thus content in just experiencing a situation close to the famed Kruger National Park or other similar African destinations

(Department of Agriculture, conservation, Environment and Land Affairs, 1999a).

The other major finding was that the proximity of many previously disadvantaged urban and peri-urban communities as well the proliferation of many small farm properties in the envisaged project area would necessitate special strategies to entice the community members and property owners into becoming part of the broader project. Communities which range from township residents, farm-workers and beneficiaries of the Land Reform process would need special pilot projects through which they can be made to benefit from the bigger project. Property owners should likewise be made to feel secure and be given the option to participate or not to participate without the fear of losing their properties.

2.5.2 Framework for Implementation

This part of the work entails developing the master plan, i.e., detailed plans that can be utilized by DACEL management to take crucial decisions to enable the implementation of the project. The main recommendation was that DACEL should take the lead and start the process rolling by establishing a Big Five pilot project on the state land suitable for forming a core area of the bigger project that has the potential to link up with other areas and grow.

Three state farms, Groenfontein 125 JR, Springfontein 213 JR and Klipplaatdrift 239 JR, were identified as forming a suitable contiguous core area for the Big Five anchor project (Department of Agriculture, Conservation, Environment and Land Affairs, 1999i).

2.5.3 Implementation Process

Based on the above-mentioned work, DACEL then took the decision to implement the project starting with the in-house resources that they commanded. By this act DACEL wished to demonstrate to all affected stakeholders that the proposal could become a living reality.

According to the recently released Dinokeng Newsletter (Department of Agriculture, Conservation, Environment and Land Affairs, 2001a), DACEL list several steps that has thus far been taken to prepare and to implement the project since the project was announced in 1997.

A management structure was established within DACEL headed by the Project Manager (Director) and consisting of a complement of specialist staff on contract of a minimum of three years. This team is responsible for the planning and implementation of the nature based Anchor Project and associated development in the NEGI area.

An ambitious programme to eradicate alien species within the NEGI area was undertaken by DACEL through the Working for Water project. A particular invasive species, Queen

of the Night was identified and targeted for eradication during 2000/2001. This project resulted in the creation of 100 jobs with a budget of R1.3 million and an additional equal amount is budgeted for the 2001/2002 financial year.

Two state nature reserves, Leeuwfontein and Roodeplaat have had their operational facilities created, staffed and restocked with game. At Leeuwfontein a collaborative venture with a private game reserve was established, thereby laying the foundations of a day visit facility that can later be upgraded into a full component of the Big Five area. A tender for the purchase of buffalo to the value of R1 million has been approved and it is anticipated that the actual purchase will take place in March 2001. Due to the problem associated with the acceptance of the implementation strategy by landowners, the purchase of the buffalos was deferred to a later date. Capital expenditure (Capex) contract work amounting to R5 million has been awarded for the upgrading of recreational and other facilities at the Roodeplaat Dam.

DACEL has thus far managed to facilitate the formation of at least 8 new conservancies by private groupings, and the establishment of many more were envisaged. It was hoped that these facilities would later join up with the core area to create a bigger and consolidated tourism based reserve.

A total of R150 million has been allocated to the Dinokeng project by the Gauteng Provincial government over an initial period of three years under the “Blue IQ-the plan

for a smart province banner” (Department of Agriculture, Conservation, Environment and Land Affairs, 2001a).

The Gauteng Provincial Government through the Department of Development Planning and Local Government moved very quickly to guide the developmental process as provided for by various provincial legislations. The Gauteng Spatial Development Framework was established and is a channel for the refinement and integration of various LDO’s and IDP’s drawn by primary or district municipality structures (Annexure D). These plans are then developed into binding Spatial Development Initiatives plans that are protected, supported and funded and administered by an identified authority (DACEL in the case of Dinokeng) with the broad support of various stakeholders.

At the inception of the NEGI proposals, the area was divided into a number of local municipalities:- (see Annexure A)

- Hammanskraal LAC
- Roodeplaat LAC
- Pienaarsriver
- Elandsriver TRC

Almost all feasibility reports commissioned by DACEL (Department of Agriculture, Conservation, Environment and Land Affairs, 1999b) pointed out the undesirability of such an arrangement for the NEGI project. As a result of the input by various stakeholders into the Municipality Re-demarcation process, the core NEGI area is now

falling under only one Local Council, Nokeng Tsa Taemane (Cullinan/Rayton, Roodeplaat LAC, Elandsriver RC, Pienaarsriver RC) and the southern peripheral areas under the Kungwini Local Municipality (Bronkhorspruit, Ekangala, Bronberg) . The whole NEG area now fall under one District Council, Metsweding District Municipality. The remainder peripheral parts of the NEG area have been consolidated into one council, the Tshwane Metropolitan Council (Hammanskraal LAC, Pienaars River TRC) (Eastern Gauteng Services Council, 2000). New boundaries are depicted in Annexures B and C.

This new arrangement is a far cry from the five local council structures that were initially operating within Dinokeng. This arrangement goes a long way in addressing the previous fragmented local government structures that were administering the area. Consultation will be much easier, leading to speedy consensus and rapid implementation. Also one set of rules will govern issues such as the criteria for assessment of property sub-divisions and rezoning applications.

Following the recommendation of many NEGI reports about the unsuitability and unattractiveness of the NEGI name for a project of such intended magnitude (Department of Agriculture, Conservation, Environment and Land Affairs, 1999b; 1999m; 1999a), a new name, DINOKENG was ultimate unveiled by the MEC for Agriculture, Conservation, Environment and Land Affairs in 2001 (Department of Agriculture, Conservation, Environment and Land Affairs, 2001a).

This new name is thought to be having a logical and identifiable streak with the area, and also resonate well with the name of the local council, Dinokeng tsa Taemane. It is hoped

that the name will be catchy and appealing enough for the international market, a fact that will take time to establish.

Terms of Reference have been developed for the final Master Plan development that would lead to a start in the actual implementation of the project. The strategy is to subdivide the implementation into phases, starting with the pilot on the three state-owned farms identified in 2.4.2. Towards this end tenders were invited and consultants appointed for the work which was supposed to commence on 1 April 2001.

2.6 SUMMARY

Many activities were undertaken by DACEL towards the implementation of Dinokeng project. The only dispute about them as reflected by the affected landowners is that in most part is a matter of misdirected priorities. The landowners feel they have long accepted the project but were hoping that DACEL would facilitate the finalization of the project site by reaching agreement with all affected landowners including the Limpopo and Mpumalanga provincial government. The end result of this exercise would be proclamation of the area followed by the other implementation processes that DACEL is now engaged with.

CHAPTER THREE

STUDY AREA AND POSSIBLE ROLE PLAYERS

The envisaged area for the implementation of the project is the North-Eastern region of Gauteng which is thought to be possessing particular suitable characteristics. Within the identified area there are various role-players who will influence and/or be influenced by the project in one way or the other.

3.1 LOCATION OF THE PROJECT

The ideal site for this project has been identified as the North Eastern quadrant of Gauteng Province as depicted in Annexure L. The rural nature of the area, its size and its proximity to the metropolitan areas of Gauteng was thought to be ideal for the setting-up of a biosphere reserve. The identified site's general locality is described by DACEL as follows (Department of Agriculture, Conservation, Environment and Land Affairs,b):

- Western boundary: N1 freeway between Pretoria and Pienaarsriver
 - Northern boundary : The Gauteng-Northern Provinces boundary
 - Eastern boundary: The Gauteng-Mpumalanga Provinces boundary
- Southern boundary: North of Cullinan town

3.2 CHARACTERISTICS OF PROJECT SITE

The area is characterized by a large number of small to medium size private holdings with very few state land properties. Most of the private landowners are already engaged in the creation of reserves either as stand alone group ventures or amalgamated huge conservancies. Almost all the reserves are engaged in small-scale tourism enterprises as well other broad traditional conservation activities.

The SIA Report indicate that many landowners were critical about the pace and strategy adopted by DACEL in consulting and choosing areas that would constitute the core project area. The situation appears to have worsened with the recent implementation proposals emanating from the Master Plan Development process and a fresh round of consultations is underway to arrive at a consensus position on the proposals for implementation.

3.3 POSSIBLE ROLE PLAYERS

3.3.1 Vastness of the Area

The vastness of the area as well as the proliferation of small to medium sized land properties has led to the existence of a large number of stakeholders and interested parties that would have to be consulted. The idea will have to be sold to them before the proposed project can become a reality.

3.3.2 Department of Agriculture, Conservation, Environment and Land Affairs (DACEL)

DACEL is, by virtue of the constitutional obligation vested upon it by Section 104 (1) (b) of the Constitution of the Republic of South Africa, the custodian of all nature conservation, environment, tourism, Regional planning and development, urban and rural development as well as the administration of indigenous forests and agricultural functions. DACEL therefore will take the lead on all developmental issues concerning the above matters that have a provincial bearing or influence. Thus DACEL is the leading agent in the development of DINOKENG project.

3.3.3 Metsweding District Municipality

Metsweding District Municipality (formerly Eastern Gauteng Services Council) is a Category C municipality with district planning competency for the area that it covers. As a result the Metsweding is charged with the consolidation of the two municipalities under its jurisdiction into a coherent and integrated Spatial Development Initiative. Metsweding is therefore responsible for the development and regulation of Spatial Development Initiative plans within its area of jurisdiction

Dinokeng project is situated in one Local Municipality, Nokeng Tsa Taemane, but its influence extent over Kungwini Metropolitan Council, the second municipality falling under the Metsweding's ambit. Therefore the rezoning of the present agricultural

properties to a biosphere reserve will have to be approved by the Metsweding District Municipality.

3.3.4 Local Municipalities

Category A and B local municipalities have the primary legislative powers to administer their areas in terms of Section 156(1) of the Constitution of South Africa. The Development Facilitation Act (Act 67 of 1995) (DFA) also states that the primary municipalities are required to formulate Land Development Objectives (LDO's) for their areas which will form the basis of their plans for the physical development of their landscape.

Affected local municipalities should incorporate Dinokeng into their LDO and IDP plans for it to take shape. This therefore makes local municipalities important role players for Dinokeng's development and implementation especially after the new municipal boundaries demarcations.

3.3.5 Landowners

South Africa has adopted the Constitutional Supremacy model of governance and the private property right is recognized and protected by the Constitution. This is very crucial for the proposed site of Dinokeng project as many properties in the area are owned by private individuals who must be consulted on any matter concerning properties. Save in

the case of expropriation and use restriction, no development can take place over any private property without the consent of the owner (Constitution of the Republic of South Africa, 1996).

All property owners therefore on or in the proximity whose properties the proposed reserve is expected to fall should be consulted about the establishment of such a venture.

3.3.6 Department of Land Affairs (DLA)

The Department of Land Affairs is charged with the creation of a just and equitable land tenure system in order to redress the past injustices that resulted in the present skewed land ownership patterns, landless-ness and congestion. This Land Reform Programme essentially operates on three reform legs which are: Restitution, Redistribution and Tenure Reform (Constitution of the Republic Of South Africa, 1996; Department of Land Affairs, 1997).

The North Eastern Gauteng region is another area where DLA is busy with Land Reform projects, and is therefore a very interested party to any land ownership changes as can be brought about by the envisaged Dinokeng project, particularly its impact on restitution cases, redistribution projects and security of tenure of farm workers and dwellers.

3.3.7 The South African National Defence Force (SANDF)

The South African National Defence Force occupy some substantial area of land situated along the N1 and forming the eastern boundary of the proposed biosphere reserve project. Part of the land is used for accommodation and administration, some for training (shooting range) and another part is utilized for game or conservation, activities that may enhance or impede the establishment of Dinokeng.

3.3.8 Adjacent Communities

The area proposed for the project is mostly rural agricultural land devoid of established villages or towns. The well established settlements are located away from the proposed core and buffer areas but their inhabitants can have a huge influence on the activities taking place within the reserve.

Communities can supply the needed human resource, entrepreneurs, support services as well as the bulk of the day visitors to the project. Members of these communities can also be empowered to become partners or outright new owners of land properties within or outside the core area. If these communities are not effectively involved in the project, they have the capacity to disturb its efficient running. Issues such as poaching of game and mugging of both staff and patrons are a common feature in projects where the local communities have not been integrated.

3.3.9 Farm workers/ dwellers

Farm workers and dwellers constitute the only non-owner component of the community residing within the proposed biosphere project site. If it comes to a point that they should be relocated because of the proposed project, some amicable agreement will have to be reached in terms of the accessibility of their new area to their work-stations. This may mean that they are settled in areas not far from the project on land acquired from willing sellers that do not wish to be part of a broader Dinokeng.

3.3.10 Department of Minerals and Energy (DME)

The proposed site for the biosphere reserve is moderately imbued with various mineral deposits. Therefore it is envisaged that holders of minerals within and outside the project may opt to exercise their rights to mine when the time is opportune for them to do so. Therefore their indication early in the project cycle will go a long way in informing the project planners about their imminent or future intentions or resolving possible future disputes and conflicts.

3.3.11 Department of Environment Affairs and Tourism (DEAT)

The overall environmental protection framework and the development of an economically viable tourism infrastructure vests with the national Department of Environment Affairs and Tourism. The department has developed the National

Environment Management Act to which all developmental projects should adhere and ascribe to. Therefore DEAT is expected to be a very interested player in the whole tourism development project.

3.3.12 NGO's

The present development framework emphasizes the involvement of affected communities as well as non-governmental organizations in the planning, implementation and administration of developmental projects. Relevant NGO's and CBO's such as Estate Agents, EJNF, Property Developers, Farmers Unions, Associations of Accommodation providers Tour Operators, National Land Commission, Farm-workers' Unions, Black Empowerment groups could be expected to have an interest in what is going on in the project.

3.4 SUMMARY

North Eastern Gauteng has been identified as a suitable area for the project. It has an unspoiled rural landscape and is sparsely populated making it ideal for a Big Five game reserve establishment. The area is also adjoining suitable areas in the Limpopo and Mpumalanga provinces, a natural expansion area for the envisaged trans province frontier park. Many stakeholders such as landowners, surrounding communities and various governmental department have been identified as they are being affected and also affect the project.

CHAPTER FOUR

CHALLENGES FACING DINOKENG PROJECT

The project is facing many challenges that are critical for its successful and speedy implementation. The chosen implementation strategy will also be the determining factor in the rapidness with which the project can be implemented and the acceptance of the project by affected stakeholders.

4.1 IMPLEMENTATION ROUTE

Customarily, the establishment of conservation areas such as parks and reserves is often accompanied by acrimonious disputes between the government as lead agent (alone or in partnership with local/foreign developers) for the perceived economic venture and landowners who see such a move as interference in their established economic activities that have evolved over decades and at worst as seizure of their properties by government for dubious economic and political agendas with no guarantee for success. The normal route is a feasibility study, followed by proclamation of such an area as a conservation area. Land uses are restricted and unwilling landowners' properties are then expropriated or owners forced to sell to willing participants.

In the spirit of the new post 1994 developmental spirit of government assuming the role of facilitator of development, DACEL tried to avoid the customary top-down approach as outlined above. The strategy chosen was to initiate the tourism based ecological

activity in the form a Big Five reserve to be established mainly on privately owned land but with the initial core project confined to three state-owned properties within the general Dinokeng project area. It is hoped that the success of the pilot project would lead to wide acceptance by surrounding land property owners who would then join up with the pilot project to create a large enough contiguous area for the different operational zones of the project.

The ultimate area would be big enough to contain large herds of the Big Five species to attract enough overseas visitors away from the more established resorts based outside Gauteng Province such as Kruger National Park, Madikwe, etc. Although government would initially finance the project, the project should quickly get off its feet to be self-sufficient within a reasonable period of time (10-20 years) (Department of Agriculture, Conservation, Environment and Land Affairs, 2000). It is therefore imperative that the alignment of the core and peripheral areas should develop as soon as possible after the establishment of the pilot project to provide a competitive authentic African bush experience to attract a high level of patronage by mostly overseas visitors who are pressed for time.

It is also expected that some owners would reject the project and therefore either engage in confrontational activities or sell their properties to new owners who see bright prospects in the establishment of Dinokeng project. The new owners and willing current owners would then consolidate the small and fragmented land properties into bigger conservancy area with a view to join and expand the broader proposed Dinokeng project.

For the project to be a success, all stakeholders need to play their part by availing their properties to the project by those that are in the core area, aligning land-use practices to support the project in the peripheral properties. Unwilling landowners could sell their properties to new Black Empowerment consortium wishing to be part of the project. None of this has happened and various stakeholders and government are blaming each other for lack of progress.

4.2 LEGALITY

The chosen implementation strategy is expected to run into a number of legal hurdles that will need innovative systems to overcome. The most limiting factor about the project is lack of a large area of contiguous state land on which the core project could be based. The second limiting factor is that participation is based on a willingness basis with no intention to buy-out unwilling members who might be standing in the way of the project. Therefore, the landowners are fully protected by the Property clause in Section 25(1-4) of the Constitution of the Republic of South Africa (Act 108 of 1996)(1996) and it will require extra-ordinary conditions to temper with their enshrined rights as provided for in the same document.

Thirdly, the project is going to involve the introduction of potential dangerous game such lions, elephants and rhinos whose containment within premises is never be guaranteed. Game ownership of escaped animals, liability for damages and ownership of game over

multi-owned land portions are burning legal traps that could derail the project at one time or another.

Fourthly the issue of succession and how future owners could be bound to present agreements as well as exit strategy in the case where the original party to the agreement want to withdraw from the project are pertinent questions that should be addressed now. This is to make sure that participants' interests and all foreseeable eventualities could be catered for. Presently the normal practice is an embargo in the title deed to restrict certain activities on the property, bind the property owner to certain conditions or give the owner or other third parties certain rights outside or within specific properties such as servitudes, mineral rights or access to water resources. The restriction or entitlement might be perpetual or for a specific period of time.

Fifthly, almost all participating landowners would go into the project mainly for economic reasons. Therefore the question of how the proceeds disbursement mechanism is going to be structured will be a cardinal factor in getting the venture off the ground.

4.3 LAND TENURE SYSTEM

The unique feature of the project is that it is going to be implemented over land owned by various owners who are not going to lose ownership rights to a central authority through the mere fact of participating in the project. Also game need space to travel and graze,

and as such the removal of internal fences is an operational pre-requisite event in large reserves such as the Kruger National Park.

The thorny issue still to be worked out is an amicable tenure system that would meet almost all operational requirements without compromising the rights of landowners and affected non-owners such as farm-workers, restitution applicants and adjacent communities who might depend on the project for livelihoods.

Various tenure arrangements are possible, but the most important element is the flexibility of the arrangement to allow owners to enjoy ownership rights without compromising the operational and economic sustainability of the project. Previously disadvantaged communities would be looking at the possibility of making inroads into a market from which they were excluded before, and as such an first entry mechanism should be worked out to avoid difficulties such as was experienced in housing and business sectors. In this sectors many up-front payments such registration fees, electricity or water connection fees and some deposits are discouraging many would-be home or business buyers.

4.4 IMPACT ON LAND REFORM AND SECURITY OF TENURE OF FARM WORKERS

It is acknowledged that no land parcel in South Africa is free from the prospect of land claims. Were this situation to continue unchecked, it would have a detrimental effect of

development. However, the government has put down a deadline of 31 December 1998 by which all applications for land restitution were to be lodged with the Commission for Land Restitution to be considered.

A claim for restitution on a particular land portion by itself does not constitute an embargo on necessary development. The claim is mainly legally binding after acceptance and gazetting by the Regional Land Claims Commissioner having jurisdiction of the province under which the claimed property falls. Any major improvements after the gazetting of the claim should be communicated to the Land Claims Commission for comment, and whose usual requirement is that the incumbent landowner should not impede the resolution of the lodged claim through such a development. The landowner should just acknowledge the claim and the intention to abide by the outcome of the case subject to rights of appeal.

The NEG area has many pending restitution land claims which gives rise to a feeling of insecurity of tenure (Department of Agriculture, Conservation, Environment and Land Affairs, 1999b) and the ability of incumbents to confidently conclude or negotiate land developments initiatives. New landowners through restitution might want to use the land for different purposes as many of them would not have the experience to manage game, let alone the Big Five which, are considered quite dangerous by many. Therefore prospective claimants should also be included in the information workshops conducted by DACEL which so far has not been done.

It can be envisaged that most applicants can definitely opt for alternative land or compensation rather than involve themselves in the Dinokeng project. This will have far reaching implications for the project as it aimed both economic development and the introduction of previously disadvantaged communities in the mainstream of the economy as well as to effect land reform. Claims are mostly community based and the withdrawal of a significant number of community members could have a detrimental effect on the continuation of the application itself as has been seen in cases where claims take a long time to be finalized as a result of opposition by present landowners.

4.5 ECONOMIC SUSTAINABILITY

The project is based on participation by a large number of landowners who would demand a lion's share of profits from the project. If this matter is not handled well it may lead to the collapse of the project.

The other most important element is whether the project would be big enough to serve as a regional attraction. For this to be achieved, consensus on a number of issues needs to be achieved. From landowners' viewpoint, nothing less than the outright inclusion of established conservancies in the immediate proximity to the identified state land core area could win their support for the project. For the state the involvement of farm workers, claimants and surrounding communities in the project is seen as lying at the heart of what can be termed project success.

4.6 COMMUNITY PARTICIPATION

The community that is expected to play a meaningful role in the project lie outside the area. This is both a positive and negative factor in the project. It is fortunate that most of the non-owner community is situated outside the project area as otherwise it might have involved massive relocations reminiscent of apartheid era forced removals. The government of the day and communities would not agree to such a scenario.

Because the community is situated outside the project area their claim to a fair share in the envisaged project is weakened and they run the risk of being marginalized and relegated to mere visitors and labour providers. The government and communities would not like to see such an outcome, and the huge investment by government would not be justified. The South African government standing in the eyes of the international world from which must come the bulk of the patrons of the project would be jeopardized, leading to the non-sustainability of the project.

4.7 SPATIAL DEVELOPMENT IN THE REGION

The project is intended to be a lead economic and social development venture capable of transforming the economy of the NEG region and Gauteng Province to higher heights. For the project to succeed and be sustainable it would need to generate and be supported by secondary activities and enterprises outside the project area.

So far development has been confined to the area around the Roodeplaat dam where the government has developed a nature reserve. Numerous supportive resorts have developed on privately owned land around the dam to an extent that the area have been ruled out of the core Big Five area, but proposed to be zoned for the multipurpose intensive use area. The other major development is along the N4 freeway which forms part of the greater Maputo corridor development.

For this reason it is expected that a successful Dinokeng tourism project could have far reaching influence on the spatial development of the area. In anticipation of such a scenario, the Gauteng Provincial government has started a process of ring-fencing the urban edge (see Annexure G) to protect the rural areas from the urban expansion (Department of Development Planning and Local Government, 2000).

The present multi-purpose lodge development east of Mamelodi should be taken as the urban-rural interface that should be protected from further destabilization by further development. The existence of other long established centres such as Cullinan, Rayton and Bronkhorspruit should be utilized as the southern urban-rural frontier (Annexure I). The current proposals to confine all future residential, industrial and commercial activities to Bronkhorspruit should be upheld.

If properly managed, a neat and complementary hierarchy of development can take place right from the Kempton Park-Benoni urban edge up to the N4 freeway. The resultant spatial development as a result of the establishment of Dinokeng project should be

private entrepreneur-led but controlled by the various local municipalities with the help of Metsweding District Municipality, Ekurhuleni Metropolitan Council and the provincial Department of Development Planning and Local Government (Annexures F and H).

The Bapsfontein area which lies south of the N4 and east of the R21 could be utilized for agricultural production (Annexure J) as it is more suitable to intensive production due to the availability of water resources and transportation routes (Department of Development Planning and Local Government, 2000).

4.8 SUMMARY

Several serious challenges are standing in the way of the success of the envisaged project. Factors such as legality, land tenure, economic viability and the participation of local communities still need to be resolved before the project can be implemented. The precise location of the project is still to be finalised and negotiations held with particular affected stakeholders.

CHAPTER FIVE

LITERATURE REVIEW

The ideas and problems associated with the implementation of the Dinokeng Project by Gauteng's Department of Agriculture, Conservation and Land Affairs, as this Chapter will show, are almost similar to problems encountered by earlier attempts by various conservation pioneers in many countries especially USA and colonial governments especially in Africa.

5.1 CONSERVATION PIONEERS

The pioneers for the present conservation movement seems to have been the various British colonial governments spread throughout the African continent. These governments were faced with an alarming rate in the deterioration of the environment brought about by settler activities such as growing permanent settlements, hunting for pleasure or for animal product business, commercial exploitation of the forest as well as irrigated cultivation of cash and subtropical fruit crops.

5.1.1 The Cape Colony (South Africa)

According to Grove in Anderson et al (1987), by the later part of the eighteenth century European colonial expansion and penetration into Northern America, southern

Africa and India had begun to cause major environmental changes and problems, which were accelerated by industrialization in Europe and especially Britain.

In the Cape Colony, large tracts of forests especially along the southern coast and the intensive exploitation of the pastures and scrubland triggered a series of debates about the ownership and management of the various important land parcels of major environmental concerns to the government, settlers and the Cape newspapers. This culminated in the passing of the 1846 Ordinance dedicated to “the better preservation of the Cape Flats and Downs (Grove in Anderson and Richard Grove, 1987).

Ultimately in February 1856, conservancies were set in the forests of the George region, but private property activities were allowed to run in competition with those of government and there were also proposals to compensate private owners for the loss of forest rights, leading to an outcry from several quarters and the appointment of Dr Ludwig Pappé as the first Chief Colonial Botanist of the Cape.

The follow-up environmental regulations and the setting-up of government conservation areas put the government and farmers owning land adjacent to the forest reserves at odds. Poaching continued unabated which was ascribed to the determination of disgruntled private citizens to continue utilizing the resources in the restricted areas. It was only after a series of droughts and especially that of 1862 that the whole settler community and especially white farmers started to listen to the explanation of government of the causes of such regular natural disasters (Anderson et al, 1987). A partnership between the

government and private landowners and public at large was thus borne, with the government taking total control of the situation.

5.1.2 Zimbabwe

Like in all the colonies, the arrival of the first European settlers in Zimbabwe marked the beginning of competition for land and natural resources. Moyo (1991) quotes McKenzie (1987) as saying that the King of Matebeleland, King Lobengula was forced to issue hunting regulations restricting white hunters to particular routes as well as charging license fees in an attempt to protect Ndebele hunting rights and resources. His efforts were however overwhelmed by the development of the Victorian hunting ethos which wanted to restrict African access to game.

For many years after colonization, the white settlers assumed that the fertility of the rich red soils were inexhaustible and implemented resource management systems and policies that would later prove negative to the environment. It was not until the evidence of severe soil erosion had become so great that a conservation unit was formed in the Division of Agriculture and Lands in 1929 (Moyo, 1991) to no avail as subsequent surveys conducted in the 1930's indicated that soil erosion from the commercial farms had continued unabated.

The government then adopted a multi-pronged strategy to deal with resource conservation in the Large Scale Commercial Farms (LSCF's) occupied by white settlers

and Communal Areas (CA's) occupied by Africans. In LSCF areas seventy Conservation Areas were identified where farmers had to take responsibility and appropriate action for conservation of resources, particularly soil. To capacitate the farmers the Department of Conservation and Extension (CONEX) was established to conduct research, teach and implement conservation measures.

In African occupied Communal Areas, conservation measures were implemented through the Land Apportionment Act of 1930 whose main purpose was to alienate tribal lands in favour of LSCF's as well as allocate additional land to the National Parks and Demarcated Forests, urban expansion, mining, dumping of mine wastes and flooding of reservoirs especially Lake Kariba (Moyo, 1991). Further on the Land Husbandry Act of 1951 was enacted to improve conservation and agricultural productivity in CA's but in practice was to attempt to enforce conservation of natural resources through further restriction of land access in the CA's. The enactment of additional acts such as Tribal Trust Lands Act (1967), Land Husbandry Act (1970) and the formation of the Department of Agricultural Development (DEVAG) charged with conservation and extension in tribal areas did not help much as there was already a fully fledged popular armed struggle against the government of the day (Moyo, 1991).

After independence in 1980, DEVAG and CONEX were merged into a single Department of Agricultural Technical and Extension Services (AGRITEX), and the first National Development Plan emphasized agrarian reform, human resource development, extension of social services and increased participation of blacks in the economy. The

government came with resettlement programme to take people next to resources, introduced institutional measures to involve local communities in the planning and management of local resources in the form of village, ward, district and provincial development committees.

The government also came up with the Communal Area Management Programme For Indigenous Resources (CAMPFIRE) exercise that experimented with the devolution to district level of ownership and management of wildlife as well as rural a-forestation programme which together with credit availability through the Agricultural Finance Corporation saw productivity in some CA's approaching that of the LSCF's (Moyo, 1991).

The new government continued where its predecessor left in the control of management and utilization of natural resources by passing many acts, created many institutions and also drafted many programmes and policies (Moyo, 1991).

5.1.3 Kenya

In Kenya the situation was not different from the scenario that obtained in the Cape and Zimbabwe. The colonial government as well as the post independence government maintained control of the management of the natural resources to safeguard them against depletion or deterioration as well as to maintain strategic commercial levels mainly to the benefit of white settlers and their European customers.

Notable amongst such programmes are National Park and Game Reserve policies that affected Kenya Massailand (Central Rift Valley), Amboseli and Lembus. In all these programmes, the colonial and post independence government passed various laws in order to create national parks and reserves (Anderson et al, 1987) with the restrictions or exclusion of usage by communities who have been living in those areas harmoniously with nature from time immemorial.

5.1.4 Ethiopia

In Ethiopia, the Mursi and National Park development in the Lower Omo Valley represent an attempt by both the colonial and post colonial governments in taking the lead in regulating and managing the usage and conservation of natural resources. The common strategy was to exclude indigenous communities from both the planning and implementation of such schemes to varying degrees of failure and success (Anderson et al, 1987).

5.1.5 Sierra Leone

The conservation experience of the Sierra Leone during the colonial era and independence government is discussed by Andrew Millington in Anderson et al (1987). The methodology, policies and strategies do not differ much from the other countries discussed above.

5.1.6 Nigeria

Post independence Nigeria like many countries in the phase of democracy and election driven politics, was according to Andrew Millington (Anderson et al, 1987) more concerned with the urban and social welfare issues. This was reflected in the development plans that concentrated on problems related to water supply, health facilities and town planning issues of housing, sewerage and refuse disposal

The most notable conservation programme that attempted to touch on rural life and resources were the forestry conservation policy aimed mainly at protecting the land, forest and to conserve water.

Many regulations were issued from time to time in an effort to regulate conservation of natural resources; notable amongst them was the Land Use Act. Areola in Anderson et al (1987) quotes Adeyoku (1970) as saying that the objective of these measures was not to keep large areas unutilized, but were meant to use and develop the land and natural resources under reserve in a rational manner to maintain their sustained yield. Thus, the subsequent use of the reserves for wildlife management, lumbering and plantation forestry (Anderson et al, 1987).

5.1.7 USA

It has been admitted by the words of U.S. Senator John H. Chafee (Endicott, 1993) that the imagination of open, undeveloped land and the freedom and the possibilities it represent has always been and important part of the American identity. Therefore when it was realized very early during the western frontier expansion that many resources were being exhausted, the pioneering conservationists recognized the importance of preserving open spaces and natural resources for present and future generations.

This realization led to the establishment of the first National Park, Yellowstone in 1872 as well as the first national wildlife refuge, the Pelican in 1903. Since then the Federal Government has gone on to protect over 89 million acres of national wildlife refuges and 80 million acres of national parks situated throughout the country (Endicott, 1993).

But in America, the government found able partners in national nonprofit organization as well as in public and private land trusts that assisted federal, state and local governments in acquiring land for conservation purposes. Institutions such as The Trust for Public Land, the American Farmland Trust and the Nature Conservancy play a very important role in federal land acquisition efforts. They help by conducting land evaluations, negotiating with private landowners and also using own means in acquiring land properties before federal funds could be available for that purpose.

The proliferation of local and regional land trusts across the country, now estimated at around 1 000 indicate a growing support for the conservation movement in America. These organizations also play a very important role in the education the public about the importance and value of natural resource conservation, including land. Despite all these efforts, the loss of forests and other habitat areas remain a serious problem in North America, as indicated by the loss of about 3,95 million acres of forest in the USA between 1977 and 1987. There is a further loss of 290 000 acres of wetlands annually and over 700 species are listed as endangered or threatened (Endicott, 1993).

5.1.8 Sabi Sand Game Reserve

This reserve is made up of an association of 48 neighbouring landowners and covers about 60 000 ha. It was proclaimed as a reserve in 1965 and is presently managed by an operating company, Sabi Game Lodge (Pty) Ltd as a single unit with no internal fencing. The reserve was initiated more than hundred years ago at the instigation of President Paul Kruger of the Transvaal Boer Republic in 1884 (Sabi Sabi Private Game Reserve, 1990). It initially formed part of the Sabi Game Reserve situated between the Sabi River and the Crocodile River which was established on 26 March 1898 by the Transvaal Boer Republic.

During the second Anglo-Boer War of 1899-1902, more hunting took place in the area. After the war, the victorious British administration decided to continue with what was begun by the Boer Republic. The reserve was formalised and Major (later Lieutenant-

Colonel James Stevenson-Hamilton was appointed as Warden to eradicate hunting in the area stretching from the Crocodile River northwards to the Limpopo River. But when the Kruger National Park was later proclaimed in 1926, it covered only 20 000 square kilometers of the original extent of 30 000 square kilometers. The area exercised consisted amongst others of the present day Sabi Sand Game Reserve which had been surveyed into farms in the 1890's.

The private farms were used by the wealthy of the Witwatersrand goldfields as hunting area, something that they could no longer do in the neighbouring officially proclaimed Kruger National Park. Parts of the farms were used from time to time for winter grazing by cattle and sheep farmers. A number of owners decided in 1928 to take measures to limit hunting and protect their game. This became the first large-scale nature conservation project by private individuals in Southern Africa.

Today the reserve is recognised as offering a wonderful piece of the African Bush experience visited by many local and overseas patrons. James Clarke in Sabi Sabi Private Game Reserve (1990) is of the opinion that Sabi Sand Game Reserve together with the other four major blocks, Timbavati, Klaserie, Umbabat and Manyeleti game reserves, represent the largest concentration of privately owned wildlife reserves in the world. He reckons that together, they are bigger than the renown Yosemite National Park situated in California, United States of America. The reserves form a wide buffer between the State-owned Kruger National Park to the east and the private and state tropical fruit farms to the west.

5.2 SUMMARY

The literature review has elicited the main common pre-requisite for the successful implementation of projects similar to Dinokeng.

First, a need is identified for the establishment of conservation measures in general or for particular endangered species over a defined area. Such an initiative can emanate from the government or private individuals or institutions. Secondly, a pre-project feasibility is undertaken for the practicality and economics of such a venture. Thirdly, affected landowners and communities are consulted about the desirability of such a venture and the benefits for all affected are outlined. Fourthly, affected stakeholders accept or reject proposals pending finalization of the finer points. Fifthly, the area is proclaimed and a definite method of implementation is decided upon by consensus, cohesion or a mixture of the two. Lastly a definite programme is drawn to implement the project.

The Dinokeng process has initially followed the above pattern up to the fourth point, where there was disagreement about the zoning of the project into operational units as well as land tenure matters. Instead of refining the document based on the concerns raised by affected landowners, DACEL decided to try to use state land under her control to try to create the pilot projects. The landowners were left with a feeling that they were being left out and that DACEL was perhaps deviating from the original project proposals.

Another sticky point was the delay in proclaiming the Dinokeng area as a conservation area thereby curtailing all other non compliance activities. Such a measure would signal to all and sundry that bar finalization of the fine points, the project is a reality. Many landowners argue, DACEL possessed all the constitutional and legal framework to achieve under the many laws such as the National Environment Management Act, Development facilitation Act (LDO/IDP) and Constitution. Such a move would get commitment from all affected stakeholders and definite progress would be achieved than it is the case at present.

Unwilling landowner participants could then be dealt with in terms of the Expropriation Act of 1975 (Act 63 of 1975) read together with Section 36(1-3) of the National Environment Management Act (Act 107 of 1998) as well as Section 25(4)(a) & (b) of the Constitution of the Republic of South Africa (Act 108 of 1996). Formerly disadvantaged communities could be dealt with in terms of Section 25 (4)-(7) of the Constitution as well as Section 37 of the National Environment Management Act.

From the above literature study, it is clear that there should be a clear implementation timeframe which must include the element of the use of coercive powers by the government to get commitment from all affected stakeholders. The issue of proclamation of the affected area goes a long way towards reaching finality about the implementation of conservation projects where the results are not immediately tangible to affected stakeholders, but take many years to accrue. Therefore the sooner the commencement of the project is effected, the sooner the results will be realized for all involved.

CHAPTER SIX

RESULTS OF THE STUDY

The results of the study as per the objective identified at the beginning of the study will be outlined in this chapter.

6.1 SITUATION PRIOR TO DINOKENG PROJECT IMPLEMENTATION

6.1.1 Early Farming Activities

The NEGI area is characterized by its rural set-up of approximately 123 medium to small farm units. A multitude of land uses were practiced in the area, but agriculture was the predominant activity followed by public resorts, small-scale mineral extraction, light industrial development and scattered but concentrated residential areas (Department of Agriculture, Conservation, Environment and Land Affairs, 1999d). In addition, there were about 60 farms around the Dinokeng area on which more or less the same land use activities were practiced.

The majority of landowners were previously engaged in agricultural related activities. Some of them especially on smaller plots, using their areas as only residents but earning their living from full-time employment somewhere else. The area is not that well suited to intensive agricultural production, experiencing no better rainfall or imbued with no extraordinary soil resources than other areas.

Most intensive agricultural production occurs under irrigation and is thus mainly confined to areas near reliable water resources. The predominantly produced crops are vegetables on medium to small scale. Some farmers do keep animals and there are even dairy farms within the area. But as the SIA Report indicates, most farmers have found agricultural production less profitable, and have thus diversified into other activities.

It was expected that once Dinokeng became a reality, many forms of land uses or development will have to be limited or curtailed. Therefore many landowners would choose to align their land-use activities with the project rather than spend time and resources in litigation with the proponents of the project. Also the landowners were the first to engage in non agricultural activities that prompted the then DACEL to investigate alternative methods of land-uses that would both conserve the natural resources and bring about economic viability to the area (Department of Agriculture, Conservation, Environment and Land Affairs, 1999a-m).

It was also expected that the demonstrated viability of the project will have an effect on even those individuals that were not already part of conservancies or were not involved in some conservation-cum-small-scale tourism activities. Landowners are still continuing with their normal activities, joining others in establishing conservancies or are just confused.

6.1.2 Earlier Conservancy Developments

At the inception of Dinokeng project, most farmers had already grouped themselves into conservancy formations (Annexure M) whose aim was to discontinue normal agricultural activities such as cultivation or grazing. The ultimate idea was to engage into a uni-activity conservation-cum small-scale tourism development whereby internal fences were to be dropped, domestic animals replaced with game species, and a central management structure established to administer the area. Most of the conservancies went and registered with DACEL for moral support.

According to the Marketing Strategy Report (Department of Agriculture, Conservation, Environment and Land Affairs, 1999e) at the inception of feasibility studies, NEGI related activities consisted of approximately 13 private game and resort lodges, Roodeplaat dam and the Diamond Mine situated at Cullinan, which attracted a substantial number of tourists. Therefore the infrastructure to launch Dinokeng did exist even at the inception of the project. It only needed a will and commitment from DACEL and cooperation from landowners to make the project a reality.

6.2 PROJECT IMPACT ON LAND USE PATTERNS

6.2.1 Recent Conservancy Developments

Feasibility studies about the establishment of Dinokeng Project then led to the establishment of five more new conservancies south of the Moloto road since 1994: Seringveld, Tweede Spruit, Brandbach, Cullinan, Bynespoort (Department of Agriculture, Conservation, Environment and Land Affairs, 1999h), and many more were in the process of being formed (1999a; 1999g).

One of the earliest conservancies established as a result of the first proposals to establish Dinokeng project is Amakulu. It has many members who have discontinued mainstream farming (Department of Agriculture, Conservation, Environment and Land Affairs, 1999g) and has some form of management structure. Presently, the area is not included in the initial central core area (except for the state farm Boekenhoutskloof 129 JR), and the members are not very happy about this development.

A collaborative reserve involving DACEL and two private landowners has been established (Department of Agriculture, Conservation, Environment and Land Affairs, 1999h) and proposals have been put forward to incorporate neighbouring farms Naauwpoort 208 JR (Game farm) and Enkeldoornspoort 207 JR which is part of the Rust de Winter Land Reform Pilot project. The potential exist for this project to develop eastwards and join with Rietfontein 214 JR, Klipfontein 205 JR and Kameelpoort 202 in Mpumalanga (Department of Agriculture, Conservation, Environment and Land Affairs, 1999j).

There are a number of state land portions or parcels not yet allocated to any particular user department that may be later be used to kick-start the project or be added to it. So far nothing has been done to implement the Dinokeng Project on these farms.

The major private enterprise within the Dinokeng project area is the Elandsdrift Game Ranch belonging to Mr Bill Venter on the farms Rhenosterfontein 210 JR, Klipdrift, Leeuwdrift and recently on a portion of Leeuwdraai (Department of Agriculture, Conservation, Environment and Land Affairs, 1999i) where restocking with elephant, rhino and buffalo has already taken place. So far 12 000 ha has been consolidated into this venture. There are different views about Mr Venter's preparedness to participate in the Dinokeng project (Department of Agriculture, Conservation, Environment and Land Affairs, 1999k). What is clear is that his standpoint is that the government should show more commitment by stocking their farms with Big Five and other game before approaching him.

When the project was initiated, there was a marked interest by a number of landowners who immediately submitted their applications for mainly town planning ventures to the Metsweding District Municipality. Most of those applications have not yet been considered by the district municipality, perhaps for lack of direction about Dinokeng project. The District Municipality would rather wait for clarity than to do something detrimental to the project that they have facilitated through the LDO/IDP processes.

6.2.2 DACEL's Contradictory Implementation Strategy

The government as represented by DACEL is keen to involve both the landowners and surrounding communities in the project to maximize social and economic profits from the project. The short-term goal is to establish a viable pilot project on state land and the long-term goal is to establish a large Big 5 reserve situated on both state and private land properties without forceful removals, or buy-out of unwilling property owners (Department of Agriculture, Conservation, Environment and Land Affairs, 1999m). Most of the landowners are reputed to be identifying with the goals of the project even though not with the strategy followed to implement the project (Department of Agriculture, Conservation, Environment and Land Affairs, 1999b).

Despite the above two positive factors, no real impact has been registered by the proposed Dinokeng project on Land-use patterns of the area. Although the project was initiated in 1995 and formally announced in 1997, the follow-up formal Feasibility Studies conducted during September 1998 to February 1999 found that many pertinent issues about the project were still unresolved (Department of Agriculture, Conservation, Environment and Land Affairs, 1999a).

A follow-up work done in 2001 indicated that the project now need a further minimum 12 years (2005 to 2012) to reach medium term operation status and another 10 years (2013 to 2022) to reach long term operation status (Department of Agriculture, Conservation, Environment and Land Affairs, 2001b). This clearly shows that the chosen

strategy is tedious and has not lead to any tangible results for the past eight years after the initiation of the project and has also no prospect to deliver tangible results for the foreseeable future.

The government is still keen to involve both the landowners and surrounding communities in the project to maximize social and economic profits from the project. The short-term goal is to establish a viable pilot project on state land, and the long-term goal is to establish a large Big Five reserve situated on both state and private land properties without forceful removals of unwilling property owners or buy-out (Department of Agriculture, Conservation, Environment and Land Affairs, 1999m).

DACEL has subsequently changed its go-alone strategy and has re-opened negotiations with affected landowners. Negotiations also now include the Mpumalanga and Limpopo Provincial governments with a view to broaden the project from being a Gauteng project to a tri-provincial frontier project. Dinokeng concept plan (Annexure N) has also changed to the positive to re-attract the formerly disillusioned landowners.

6.3 IMPACT OF STATELAND PILOT PROJECT ON PRIVATE LANDOWNERS

So far only one landowner is known to be part of a joint venture with DACEL.

Indications are that many would have liked to be part of this pilot project development, but have been disappointed by their exclusion.

A search of land use change application has found that a sizeable number of landowners (56 out of 99) were positively influenced by the initial news about the establishment of a reserve. This is shown by the numerous applications for the proposed land use changes on their properties to take advantage of the proposed project and to be in line with Dinokeng project.

Of the applications found, 27 were for town planning (lodge establishment), 24 for exemption to own and farm with game, 18 were for unspecified purposes. Many of the applicants already had exemption certificates allowing them to own and farm with game.

The lack of capacity by Metsweding District Municipality (formerly Eastern Gauteng Services Council) to attend to land use change applications and lack of clarity by DACEL on the locality of the core pilot project as well as administrative framework hampered the concretization of landowners' plans. Most of the applications were lodged between 1995 and 1997, indicating a desire by landowners to be part and parcel of the project.

6.4 OWNERSHIP CHANGES BROUGHT ABOUT BY THE PROJECT

Deeds records of about 39 properties were sampled to detect if there were any large scale sales and consolidations that may be ascribed to Dinokeng project. Before 1995, there were 584 recorded sale records. Between 1995 and 2002 the properties recorded 572 sales. There is therefore no major movement in the property market.

The 39 properties had 1932 portions before 1995 but now have a total of 926 portions indicating that there was a steady consolidation of the properties with the post 1995 deeds entries. It is not possible to determine whether it was genuine sale or just the vesting of the properties under joint management structures.

6.5 ACCEPTANCE OF PROJECT BY LANDOWNERS

Most reports have indicated that there is a broad acceptance of the project by the landowners. Even the reluctance of Mr. Bill Venter to join hands with DACEL now is ascribed to the lack of clarity and progress on a number of implementation issues such as the project site and the way the formerly disadvantaged communities will be empowered and catered for in the final business arrangement.

Many landowners only complain about the lack of adequate progress in matters such as proclamation of the project and identification of the pilot project site by merit of advanced conservation work rather than by private or state ownership status. One meeting was attended where the issue of the acceptability of the chosen method of implementation was cropped up. Although the meeting was called by DACEL to discuss the establishment of the general conservancy movement, affected landowners kept on raising the issue of Dinokeng. The consultative meeting was held at Kemptonpark in October 2001 with a broad spectrum of stakeholders including the landowners of properties affected by Dinokeng project. The Dinokeng landowners questioned the wisdom of engaging in parallel near similar activities while the main Dinokeng

conservation project had not been implemented. They ascribed such a strategy to the attempt by DACEL to sideline them and perhaps ultimately to ditch the Dinokeng project.

Other telephonic feedback from some affected landowners indicated that DACEL had restarted the process of consultation with the landowners about their changed implementation strategy as outlined in December 2001. They saw some potential of positive results in the revised strategy that could ultimately regain their confidence and acceptance.

6.6 EFFECTIVENESS OF THE ADOPTED STRATEGY

The initial strategy adopted by DACEL is by all standards not effective. About eight years after the inception of the project there is no tangible positive results on the ground. There is not much progress on state properties and absolutely nothing on private properties towards the implementation of the project.

It could have been expected that at least by now there should have been agreements with all the state land user departments and governments and some few private landowners especially those that belong to conservancies to allow proclamation of the area for a biosphere reserve.

It seems that ultimately the complaints by the mainly private landowners is beginning to be partly attended to by DACEL which came out with new proposals at the end of 2001. According to current proposals, the resultant reserve should be zoned into at least four multi-ownership functional zones, as originally proposed in the feasibility reports (Department of Agriculture, Conservation, Environment and Land Affairs, 1999a), (as depicted in Annexure N) zoned into four areas, namely

- Core Big Five reserve area
- Transitional Day visit area (mostly conservancies)
- Transitional Intensive Multi-utility area
- Urban Support area (Buffer area)

The revived and broadened negotiations also indicate that DACEL has realized the unviability of the initial go-it-alone strategy. Most of the initially three year contract posts of the DACEL facilitative staff have been converted into permanent positions. The unit has been integrated into a Chief Directorate dealing also with the Cradle for Humankind project.

Yet another drawback is that whereas initially all proposals pointed to the need for the urgent establishment of stand alone facilitation entity in the form of Dinokeng Tourism Company; the recent conversion of the post into permanent position indicate that DACEL has accepted the latest proposal for a minimum period of twenty five to thirty years for the establishment of the project to fully fledged commercial levels.

6.7 SUMMARY

The study looked at five parameters that would indicated whether or not there was progress with the implementation of the project as envisaged at the inception of Dinokeng project. It was found that initially even before the advent of the Dinokeng project many landowners gradually moved away from main stream agriculture to conservation practices by joining conservancy groupings.

With the inception of Dinokeng Project, landowners indicated their desire to align with the project by forming yet m ore conservancy groups for those who were not yet part and others applied mostly for town planning permits to establish lodges on their properties by those who already keeping game. Disagreement with DACEL about the implementation strategy resulted in the slag in further such development.

CHAPTER SEVEN

CONCLUSION AND RECOMMENDATIONS

Dinokeng has a potential of enhancing the economic development of the NEG region as well as to introduce tourism in the economic landscape of Gauteng which hitherto has been dominated by mining. Over the last decade the mining sector has shed a lot of employment opportunities through the scaling down of operations and closure of some shafts or whole mining operations to the detriment of the local economy.

Gauteng Province is also the smallest amongst the nine provinces but has the highest population density. The province is also the most mined as well as the most industrialized and urbanized. Therefore there is an acute and sharp competition for the scarce land resource, with much land continually being taken over by residential and mining activities.

The Dinokeng project was embarked upon to try and achieve several objectives, notably economic development and conservation of the rural hinterland from urban invasion. The secondary aim was to enable previously disadvantaged groups to get a foothold in the mainstream economic activity as well as to address the skewed land ownership patterns as obtaining presently in the NEG region.

Landowners themselves planted the first seeds of an eco-tourism project by embarking upon the conservancy based tourism activities instead of the previously practiced

agricultural activities. The initial concept was driven purely by the desire by landowners to make a better living out of their properties with the exclusion of the non-owner component of farm workers, land reform beneficiaries and surrounding communities. This scenario was merely going to perpetuate the status quo, which by the day proves unsustainable through incidences such crime and the eviction of farm workers or dwellers.

The project is earmarking to capitalize on the accessibility of the project area as a result of its proximity to the Johannesburg International Airport, which would cater for the international and national market as well as surrounding urban population that is expected to patronize the reserve. There exist an infrastructure support service that can easily be expanded to service the project area. Therefore, a hierarchy of developmental zones would be established that would culminate into specific SDI configurations.

The greatest challenge to the project has so far been to identify the exact location of the project. A broad area, the North Eastern Region of Gauteng (NEG) was identified as having the potential to can accommodate such a project. Additional suitable area was also found in neighbouring provinces (Mpumalanga and Northern Province). A total of 125 farm properties within the primary study area and 60 outside were targeted for a feasibility study by DACEL appointed consultants who produced about 13 different reports addressing specific themes.

The concept of the project progressed from the initial idea of establishing a biosphere reserve to a tourism lead economic project to address the question of unemployment and diversity of income generation to replace the low producing agriculture and declining mining sectors. For the project to have any appeal and a chance to attract clients in a fair competition with long established an authentic African bush destinations such as Kruger National Park, Madikwe and Pilansberg, it has to offer near authentic bush experience with something extra.

The proximity of the proposed project to the Johannesburg International Airport and to densely populated urban centres is thought to possess that bit extra needed to match the other established game reserves in that it could attract and cater for that portion of the international market pressed for time but who nevertheless wish to enjoy the African bush experience in a day. The project will also rely on the budding patronage from the upcoming local middle class that is starting to flex its recreational muscles as well as low-income entrepreneurs who could provide the much-needed cultural services and more.

There are very few state owned properties within the study area and as such this provide a logistical problem about the establishment of such a venture. The many diverse private property owners have divergent views about the project that if not handled properly could jeopardize the project. Already many plans had to be changed because of lack of agreements with some private property owners who occupy strategic areas within the project plan. Current indications are that the initial concept of establishing a core anchor Big Five reserve on the three contiguous state farms of Groenfontein 125 JR,

Springfontein 213 JR and Klipplaatdrift 239 JR as postulated in the Final Tourism Report and Framework Document and Implementation Plan is not workable.

For the expansion of this core area and its connection with other areas in the future to create an area large enough to contain large numbers of the Big 5 animal species, agreements should be reached with landowners such as Mr Bill Venter. His amalgamated properties occupy a strategic point in the path for such a venture. So far it seems that such an agreement is far from being reached to the extent that new areas in the Northern Province and Mpumalanga were being looked at to host the pilot project.

The lack of finality on the exact location of the core area is causing many problems amongst the various stakeholders. DACEL is eager to see to the implementation of the long-standing proposals within a very short space of time and has committed personnel and financial resources into the venture. An all-encompassing alien vegetation (Queen of the night) clearing project was launched in the properties falling within the project area. A collaborative game reserve with private owners was established to pave the way for future expansion. The existing recreational resorts such as the Roodeplaat dam had their facilities and administrative capacities upgraded to meet the roles that they should play in the greater Dinokeng project area.

Whereas DACEL seems resolute in its strides to launch the project, property owners on the other hand seem to be lost and do not know where they are placed within the unfolding jigsaw puzzle. Most of them argue that they know exactly where they stand, as

they are the ones who initiated the process of game farming, lodge development and small-scale tourism in the early 90's. When DACEL approached them in 1995 about the creation of a bigger reserve they were very happy and co-operative. Existing individual efforts were consolidated into multi member conservancy groupings, internal fences dropped, and management body established and registered with DACEL. In other areas new conservancies were formed and also registered mainly with the intention of being part of the greater Dinokeng.

The third party consists of those members who do not care which way the Big Five reserve go, but who are just interested in doing their own thing. These are the applicants for further subdivisions and establishment of other incompatible businesses much against both DACEL and conservancies who see such developments as a negation of Dinokeng. In contrast, applications by conservancies list such activities as the closure or downgrading of public roads that they see as being incompatible with the greater Dinokeng operations.

The fourth category of role-players consists of property owners around the Roodeplaat dam and the Metsweding District Municipality. This group believes that they are for the project, have accepted their transitional periphery status and hence are placing themselves well by developing a semi-urban lodge township around the Roodeplaat dam resort. The EGSC (now Metsweding) has commissioned a firm of Town Planners to develop a township master plan for the lodge development and believe that it is performing its duty of regulating development processes in favour of Dinokeng. DACEL is against this

development and argue that it further erodes the meagre semblance of African bush set-up existing in the area to the detriment of the whole project.

Because of the apparent lack of consensus on key issues pertaining to the Dinokeng project, many role-players are adopting a “wait and see” attitude. The few that are active are mainly engaged in maintaining the status quo rather than proactively engaging in activities that would make their properties amenable to inclusion in the greater Dinokeng.

Of the about 101 farm properties that are surrounding the proposed initial core area only about 56 have made unspecified town planning related applications which have not been dealt with as yet by the Metsweding District Municipality authorities. More interestingly, the most applications come from areas around the Roodeplaat dam where a lodge township has developed much to the displeasure of DACEL. Because of previous irreversible urban-like developments, the area had been ruled out of inclusion in the core zone but relegated to a transitional intensive use zone. But the mainly lodge development in this zone is out-competing the Big 5 core zone for accommodation provision, and thus putting such a development in the core area at risk.

Under ordinary conditions, land-use practices are very much affected by the new major development project such as the proposed Dinokeng. The creation of a recreational resort around the Roodeplaat dam has undoubtedly contributed to the present urban-like lodge development. The development of a business spine corridor along the Ondekkers road between Krugersdorp and Johannesburg has resulted in the formally residential properties

giving way to business sites without so much expropriation. On the other hand, the planners of Gauteng's supertrain between Pretoria and Johannesburg are leaving nothing to fate: they have reportedly put aside R840 million to buy properties on the route as it is expected that 80% of the route will go through land that still has to be bought; a move that property experts believe may trigger panic selling spree.

Dinokeng on the other hand does not envisage any buying out of property, but rather rely on the willing involvement of affected property owners for gain. This approach has in the short-term met with setbacks as a person like Mr Bill Venter is reportedly steadfastly refusing to be part of the project until he is satisfied that his interests would be secured. This has led to the present apparent impasse with even talk of change of plan that will definitely lead to delays in the prospects of implementation date that many people are eagerly awaiting. It would not be easy to speculate as to the correctness of any approach, but save to say that the adage "...the taste of the pudding is in the eating..." is still appropriate.

Many studies have shown that the pathway or sequence of activities leading to development cannot be definitely charted for each and every situation (Reid, 1995). Many countries follow different paths and also attain different results and pace of development. Also the content and objectives of developmental programmes depend on the strategic objectives of the dominant developmental forces inside and outside the particular community, country, region and continent (Crush, 1995).

But whatever the conditions, strategies and pace of development the unifying factor is generally found to be an attempt to satisfy the basic needs of the people in a sustainable manner (Reid, 1995). However, powerful individuals, dominant local and international forces or agents for change are sometimes found to have ulterior or other reasons for undertaking any development. The reasons may range from genuine desire to meet the basic needs of the people, personal agenda, political desires, cultural, religious and national ambitions to extent hegemony or aesthetic and philanthropic tendencies (Reid, 1995).

But the reality of development, which also applies to Dinokeng, is that it is a multi-faced process and therefore need the coordinated efforts of many role-players. These role-players should have the control of unique resources and developmental forces, especially initiative ness to be able to significantly contribute to the agenda and direction of development. Therefore it is imperative for the movers and shakers of development to accurately recognize as many potential role-players as possible that may sooner or later impact upon the developmental processes (Reid, 1995). Negotiations and trade-offs are sometimes necessary to permit some form of progress through a win-win situation as adopted by South Africa under Mandela's leadership.

There is also a need to adopt a strategy or a number of strategies that may lead to the attainment of the envisaged development over the shortest possible period of time and resources. This will mean that the majority of the affected individuals or members should have at least some of their basic and pressing needs satisfied within reasonable time-

period. If adopted in Dinokeng, this strategy may see the project occupying its rightful in affecting land-use activities in affected properties within and outside but proximate to the project site.

A comparative study of literature about the evolution and implementation of conservation projects for posterity, economic development or and yield increase has indicated that there are many similarities between the Dinokeng effort and earlier attempts by various government in coming to grips with such problems. The example where conservation efforts have been markedly successful has been the USA as the government has found many able partners in the private institutions and organizations.

In many other countries the government often stands alone and is burdened by all the problems related to the identification of the problem, developing strategies to deal with such environmental problems, logistics of implementing such conservation projects as well as literally managing those projects on a daily basis. The Dinokeng project would do well in avoiding such traps that may prove to be non viable in future.

It is important for the private landowners to be given a meaningful role in the development of strategies as well as the implementation of the project. It is true that both landowners and the Gauteng provincial Government have a vested interest in the development of the project to the fullest, but each one has different expectations from the project. Whereas landowners hope that Dinokeng would bring for them personal financial achievement more than the hitherto agricultural activities they were engaged in without

success for many years, the Provincial Government as represented by DACEL hope to see the project playing many roles such as attracting many international visitors and revenue, employment creation as well as integrating the previously disadvantaged black individuals and groups into the main stream of the provincial as well as the national economy.

Both sides have done much good, but it seems each group is blind to the contribution of the other. The government has done much to improve conditions and operations in state farms and private individuals such as Mr Venter have contributed tremendously in the development of their properties for ecotourism. By accommodating Mr Venter in the initial core area, and the acceptance of the overtures of government by Mr Venter would go a long way towards demonstrating to the other landowners that Dinokeng is an operational reality that would soon encompass their properties too.

So far there is no evidence that Dinokeng is off the ground except for the many reports generated by DACEL, and the billboards on the roadsides. It is also worth noting that there was no mention of Dinokeng in the official South African WSSD brochures. Even in the 2001/02 South African Yearbook, Dinokeng is only mentioned as "a Big Five Reserve east of Pretoria, one of the projects to be developed by Gauteng Provincial Government over the next three years through a contribution of more than R300 million" (South African Yearbook, 2001/02). For many landowners Dinokeng remains a distant dream that like many such important issues are often used as electioneering toys by politicians without ever coming to fruition.

It is heartening to see that DACEL has seemingly abandoned the earlier strategy which gave rise to this study of only using the state owned farms to launch Dinokeng project. With the hope that neighbouring landowners would fall in line and change their land-use practices, thereby buying into the project to allow DACEL to justify their incorporation into the project.

In the last conceptual document titled “Summary Dinokeng Integrated Tourism Development Framework” published in December 2001 (Department of Agriculture, Conservation, Environment and Land Affairs, 2001b), DACEL has reviewed its implementation strategy by identifying three phases (areas) of the project, which include both state (Gauteng, Limpopo and Mpumalanga) and private farms to be included in the phased project implementation (Annexure N). Part of the implementation strategy is an upfront agreement with the landowners about land holding and management matters. The demarcation of areas into phases is done only in terms of a scientific delineation for easy implementation and the total area of the project is now well defined.

This strategy has a greater chance of success than the previous one. It borders on the strategy followed in the USA, which was more successful than those adopted in the other countries cited in the comparative study. Another good example is the Sabi Private Nature Reserve where private owners have shown that with the facilitation of the government in the form of a Proclamation, a conservation nature reserve could be implemented even on purely private land parcels.

REFERENCES

- African National Congress. 1994. *The Reconstruction and Development Programme*. Johannesburg: Umanyano Publications.
- Anderson, D. and Grove, R. (Ed). 1987. *Conservation in Africa people, policies and practice*. New York: Cambridge University Press.
- Bacchi, C. L. 1996. *The Politics of Affirmative Action: Women, Equality & Category Politics*. London: Sage Publications.
- Basic Conditions of Employment Act, 1997 (Act 75 of 1997). South Africa
- Constitution of the Republic of South Africa, 1996 (Act 108 of 1996).
- Crush, J. 1995. *Power of Development*. London and New York: Routledge.
- Department of Agriculture, Conservation, Environment and Land Affairs. 1999a. NEGI: Framework Document and Implementation Plan. Johannesburg.
- 1999b. NEGI: Social Impact Assessment Report. Johannesburg.
- 1999c. NEGI: Land Use Management Framework. Johannesburg.
- 1999d. NEGI: Status Quo Report on Ecology, Land Use & Infrastructure. Johannesburg.
- 1999e. NEGI: Marketing Strategy. Johannesburg.
- 1999f. NEGI: Report on Legal Aspects that may affect the implementation and operations of the proposed North Eastern Gauteng Initiative. Johannesburg.
- 1999g. NEGI: Shareholding and Ownership Study for the North East Gauteng Initiative. Johannesburg.
- 1999h. NEGI: Institutional and Management Study. Johannesburg.
- 1999i. NEGI: Report on Big 5 Anchor Project. Johannesburg.
- 1999j. NEGI: Proposed Community Based Pilot Projects. Johannesburg.
- 1999k. NEGI: Public Participation Guidelines. Johannesburg.
- 1999l. NEGI: Identification of Potential Funding Sources. Johannesburg.
- 1999m. NEGI: Final Tourism Report. Johannesburg.
- Department of Agriculture, Conservation, Environment and Land Affairs. 2000. NEGI: Terms of Reference for the Development of Strategies and Systems to Support

- the Implementation of the North Eastern Gauteng Initiative Project.
Johannesburg.
- Department of Agriculture, Conservation, Environment and Land Affairs. 2001a.
Dinokeng: All of Africa in One Day. Newsletter. Johannesburg.
- 2001b. Dinokeng: All of Africa in One Day. Summary Dinokeng Integrated
Tourism Development Framework. Johannesburg.
- Department of Development Planning and Local Government, Gauteng Province.
2000: Gauteng Spatial development Framework: Phase 3: 2000 and
Beyond. Johannesburg.
- Department of Land Affairs. 1997. White Paper on South African Land Policy.
Pretoria.
- Department of Public Service and Administration. 23 April 1998. The White Paper
on Affirmative Action in the Public Service. Government Gazette No
18800. Pretoria.
- Department of Public Service and Administration. 1 October 1997. The White Paper
on Transforming Public Service Delivery (Batho Pele). Government Gazette
No 18340. Pretoria.
- Development Facilitation Act, 1995 (Act 67 of 1995). South Africa
- Eastern Gauteng Services Council. 2000. Eastern Gauteng Regional Integrated
Development Plan (IDP), June 2000.
- Employment Equity Act, 1998 (Act 55 of 1998). South Africa
- Expropriation Act (Act 63 of 1975 as amended). South Africa
- Endicott, E. 1993. *Land Conservation Through Public/Private Partnerships*. Washington
D.C.: Island Press.
- Handley, A. & Mills, G. 1996. *From Isolation to Integration: The South African
Economy in the 1990's*. Johannesburg: The South African Institute of
International Affairs.
- Government Communication and Information System. 2001. South African Yearbook
2001/02. Pretoria.
- Harvey, J. 1981. *Urban Land Economics*. London: MacMillan Press Ltd.

Local Government Transition Act (Act 209 of 1993). South Africa

Local Government Transition Act Second Amendment Act (Act 97 of 1996).

South Africa

Local Government Municipal Demarcation Act (Act 27 of 1998). South Africa

Moyo, S. 1991. *Zimbabwe's Environmental Dilemma: Balancing Resource Inequalities*. Harare: ZERO.

National Environment Management Act, 1998 (Act 107 of 1998). South Africa

Reid, David. 1995. *Sustainable Development: An Introductory Guide*. London: Earthscan Publications Limited.

Snower, D. J. & De la Dehesa, G. (Ed). 1997. *Unemployment Policy: Government Options for the Labour Market*. UK: Cambridge University Press.

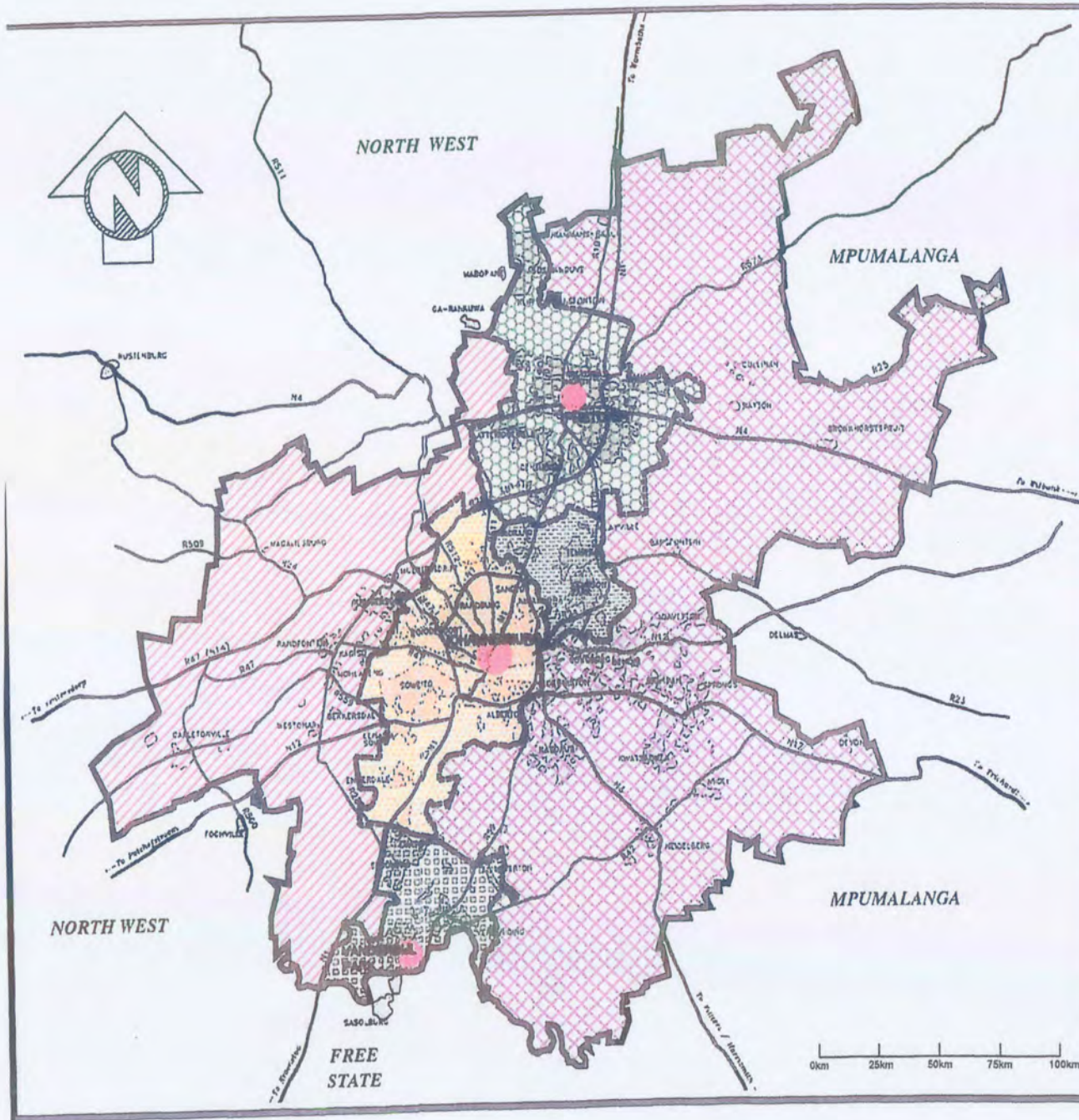
The Sunday Times Metro. September 9 2001. Johannesburg.

University of the Western Cape and Development Services. 1997. Programme for Land & Agrarian Studies, School of Government. Tenure Basics Training commissioned by the Tenure Directorate, Department of Land Affairs. Pretoria.

World Bank. World Development Report 1995. Workers in an integrating World. Oxford University Press.



ANNEXURES



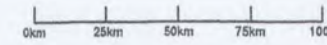
GAUTENG SPATIAL DEVELOPMENT FRAMEWORK PHASE 3

- EXISTING URBAN AREAS
- GJMC - ±1 384sq.km
- KMC - ± 473sq.km
- GPMC - ±1 300sq.km
- EGSC - ±8 500sq.km
- WGSC - ±4 041sq.km
- LVMC - ± 493sq.km
- GAUTENG - ±16 191sq.km**

METRO / SERVICES COUNCIL AREAS

PLAN 1

ISSUED BY: ...
DATE: ...
SCALE: ...
DRAWN BY: ...
CHECKED BY: ...



ROADS MAIN

Old_Six Regions

Municipalities 20010312

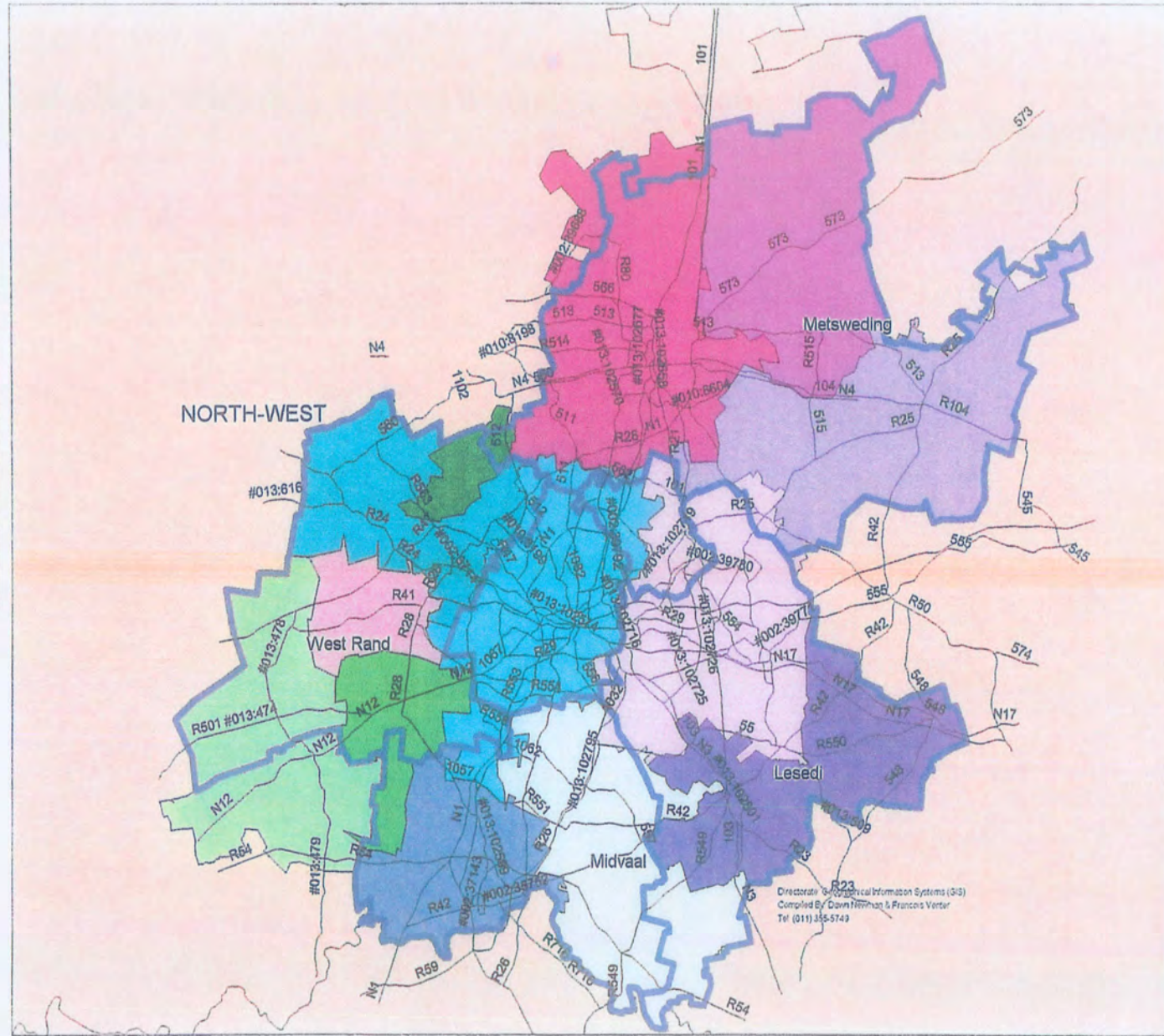
- Emfuleni
- Kungwini
- Lesedi
- Merafong City
- Midvaal
- (World Heritage Site)
- Mogale City
- Nokeng tsa Taemane
- Randfontein
- Westonaria

Metros 20010312

- City of Johannesburg
- Ekurhuleni Metropolitan
- Tshwane Metropolitan

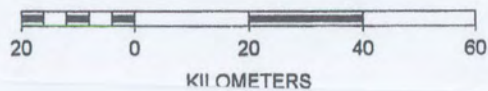
Municipal_Boundary_Area

Provinces



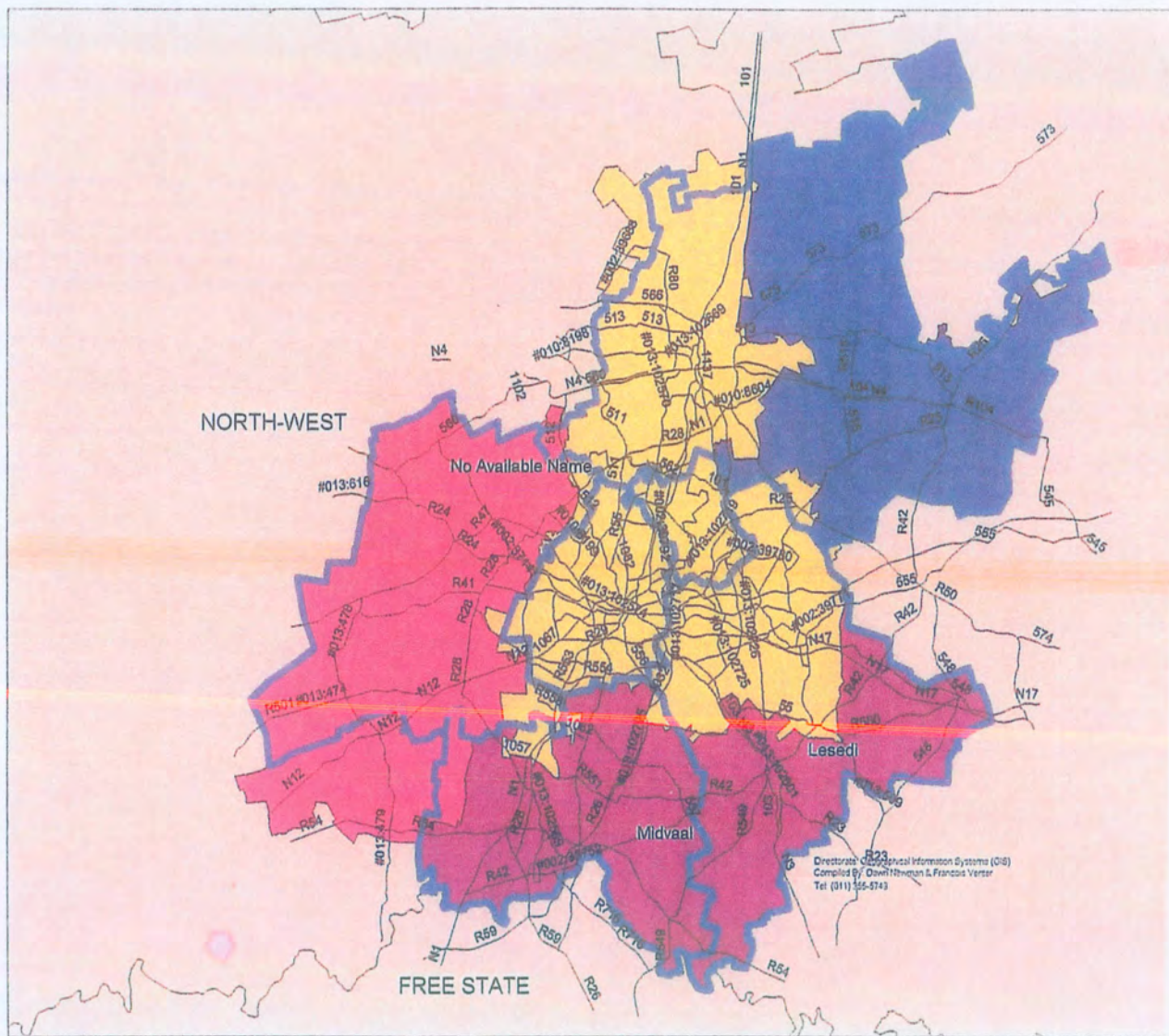
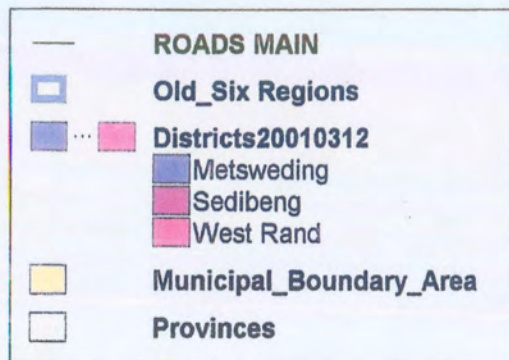
Directorate of Geographical Information Systems (GIS)
Compiled By: Dawn Newman & Francois Venter
Tel: (011) 355-5743

SCALE 1 : 1,277,940

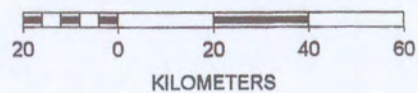


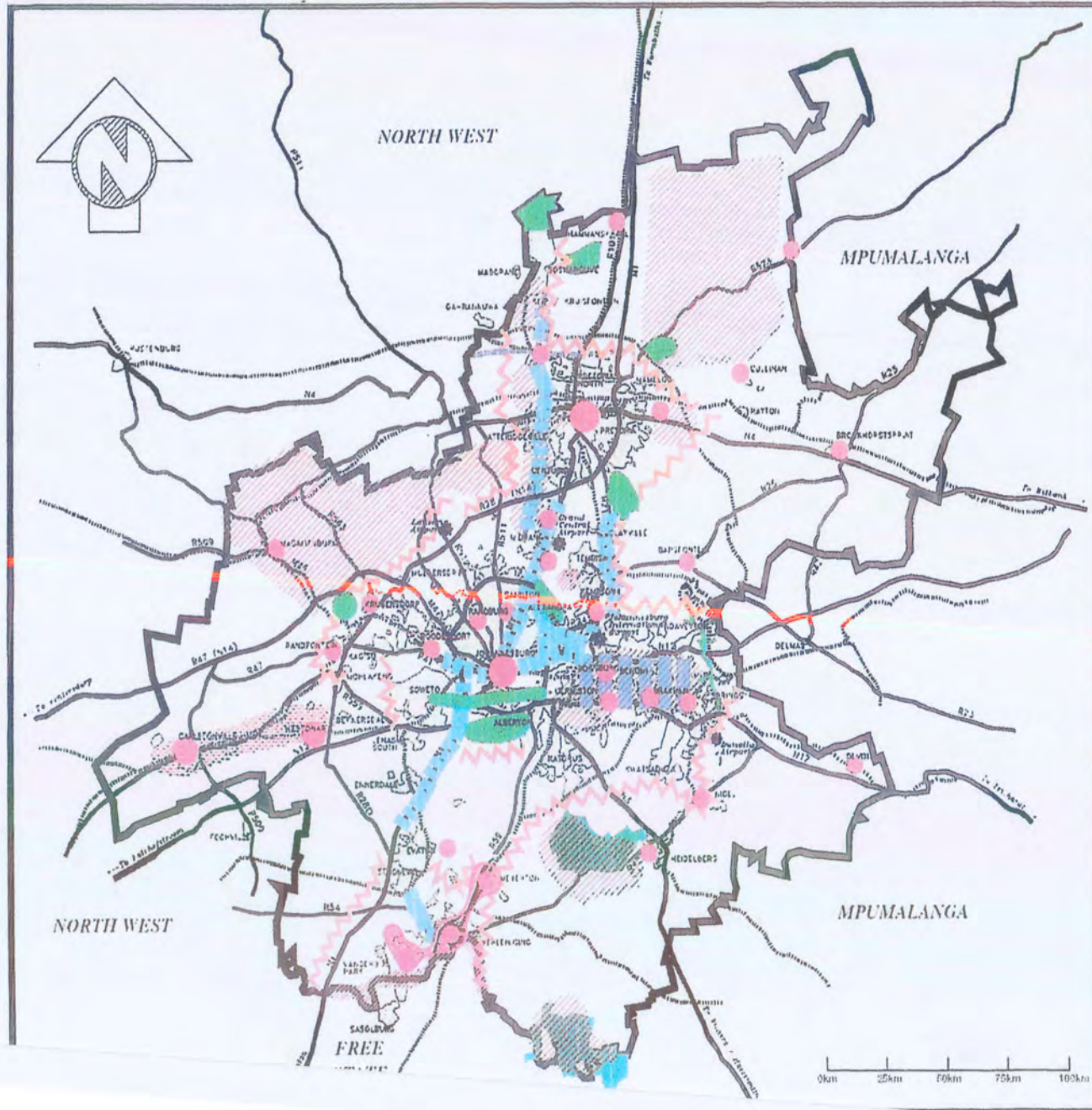


GAUTENG 3 DISTRICTS



SCALE 1 : 1,507,593

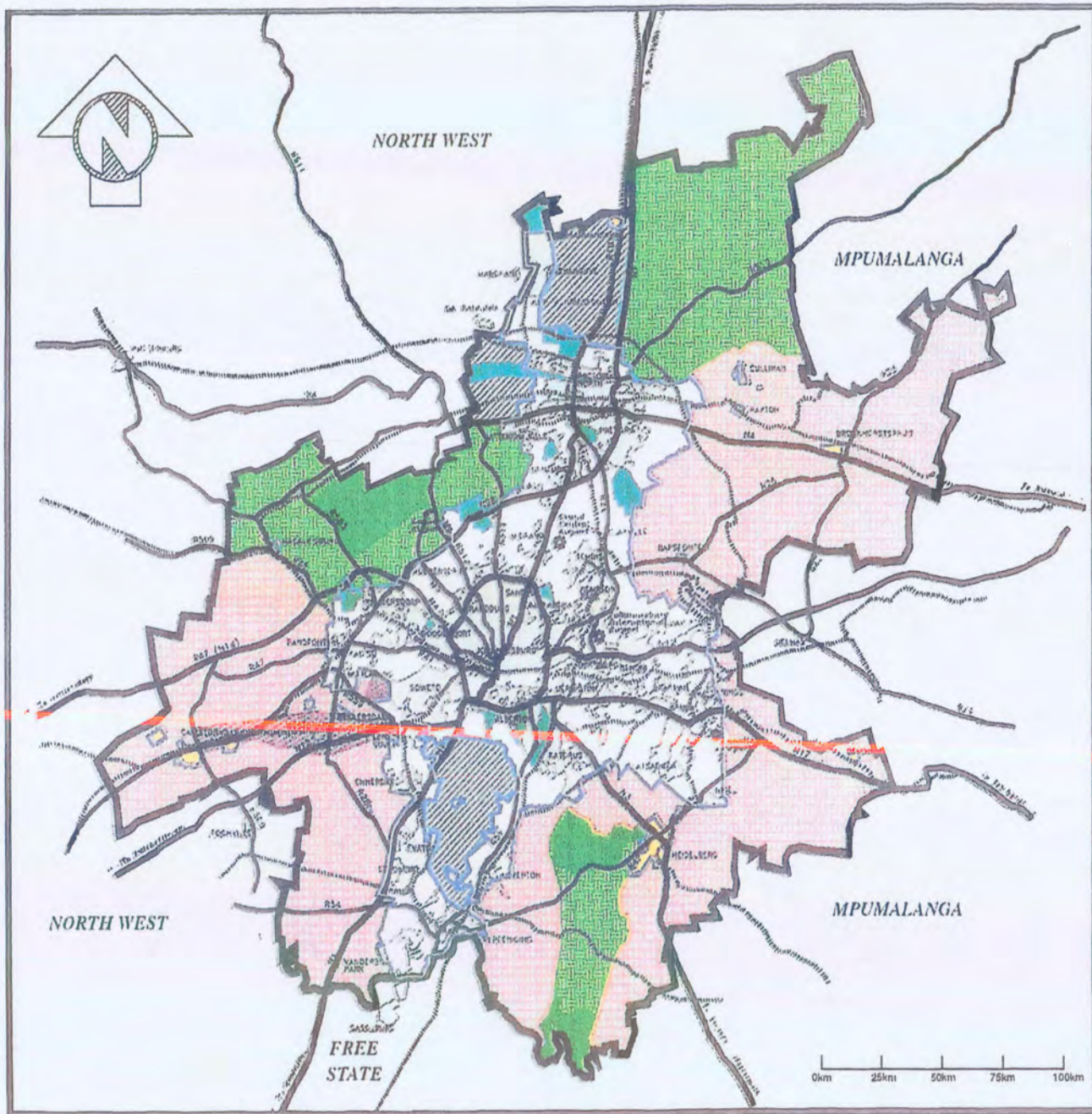




GAUTENG SP/ DEVELOPMI FRAMEWO PHASE 3

- STUDY AREA
 - EXISTING URBAN
 - MAJOR ROADS
 - RAILWAY LINE
 - CORRIDOR DEVI
 - NODES
 - OPEN SPACE / C AREAS
 - URBAN EDGE
 - STRATEGIC DE AREAS
 - MINING BELT
 - ACTIVITY ZONI
 - PROPOSED PV
- GAUTE COMPOSIT

PLAN 11



GAUTENG SPATIAL DEVELOPMENT FRAMEWORK PHASE 3

- STUDY AREA
- EXISTING URBAN AREAS
- MAJOR ROADS
- RAILWAY LINE
- URBAN EDGE
- RURAL TOWNS
- RURAL RESIDENTIAL
- NATURE RESERVES
- INTENSIVE RURAL
- EXTENSIVE RURAL
- MINING IN RURAL AREA

RURAL DEVELOPMENT BEYOND THE EDGE

PLAN 15





Existing Environmental Area
Potential Linkages
Potential Environmental Focus Area
Built-up Areas

Buffer Areas (Infill & Densityfication)
Mining Land (Infill & Densityfication)

Possible Urban Edge
Support Nodes/Settlements
Areas Within the Urban Edge
Accessibility Corridors
Mobility Corridors
Special Corridors
Built-up Areas

Existing Service Node
Existing Settlement Node
Existing Settlement/Service Node
Future Service/Speciality Node

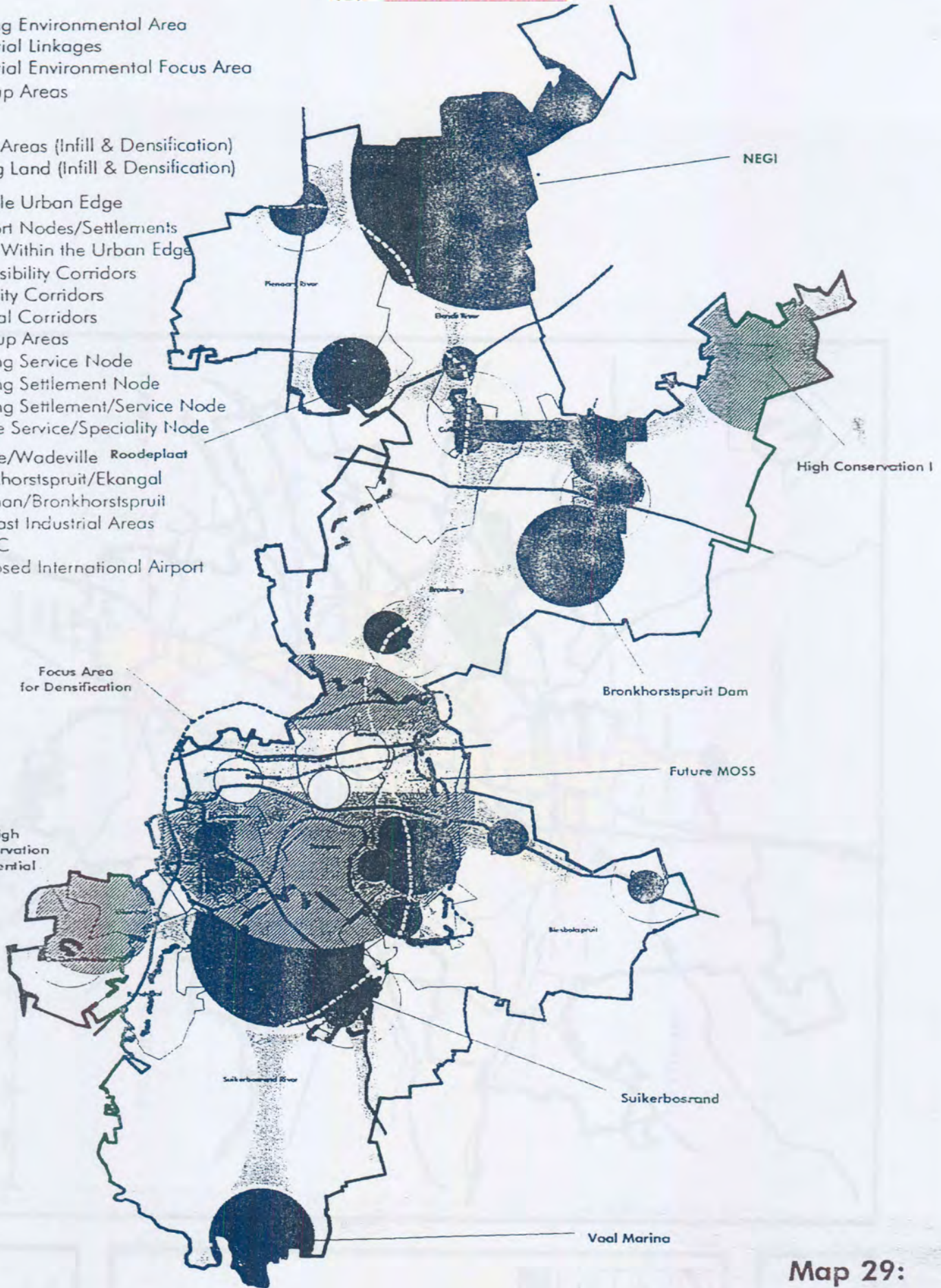
Alrode/Wadeville Roodeplaag

Bronkhorstspuit/Ekangal
Cullinan/Bronkhorstspuit
Far East Industrial Areas
GDAC

Proposed International Airport

Focus Area
for Densityfication

High
Conservation
Potential

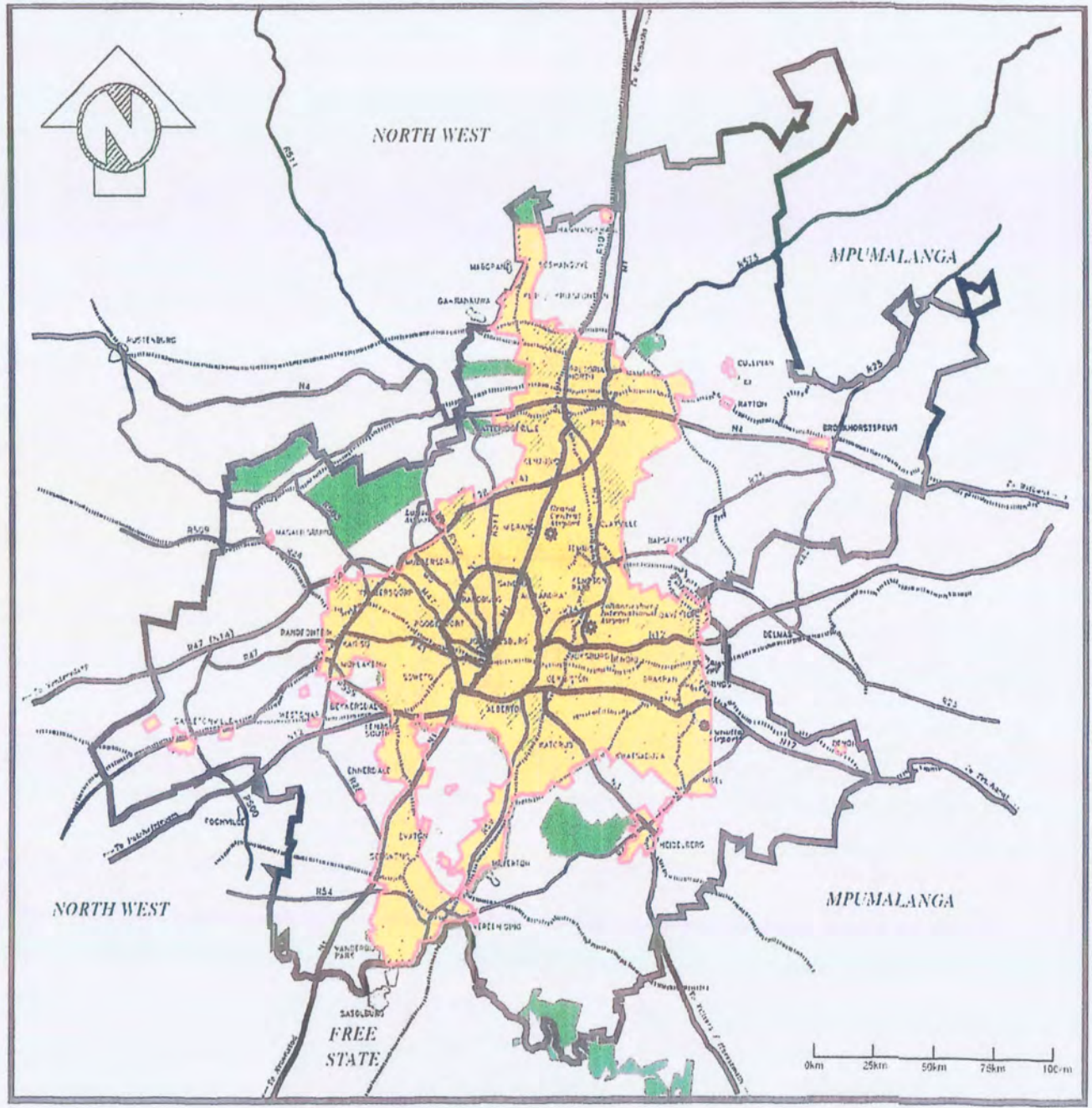


Map 29:
**Conceptual
Spatial Framework**



0 20 40 60 Kilometers





**GAUTENG SPATIA
 DEVELOPMENT
 FRAMEWORK
 PHASE 3**

STUDY AREA

MAJOR ROADS

RAILWAY LINE

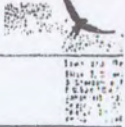
PROPOSED URBAN EDGE

NATURAL AREAS

URBAN AREAS

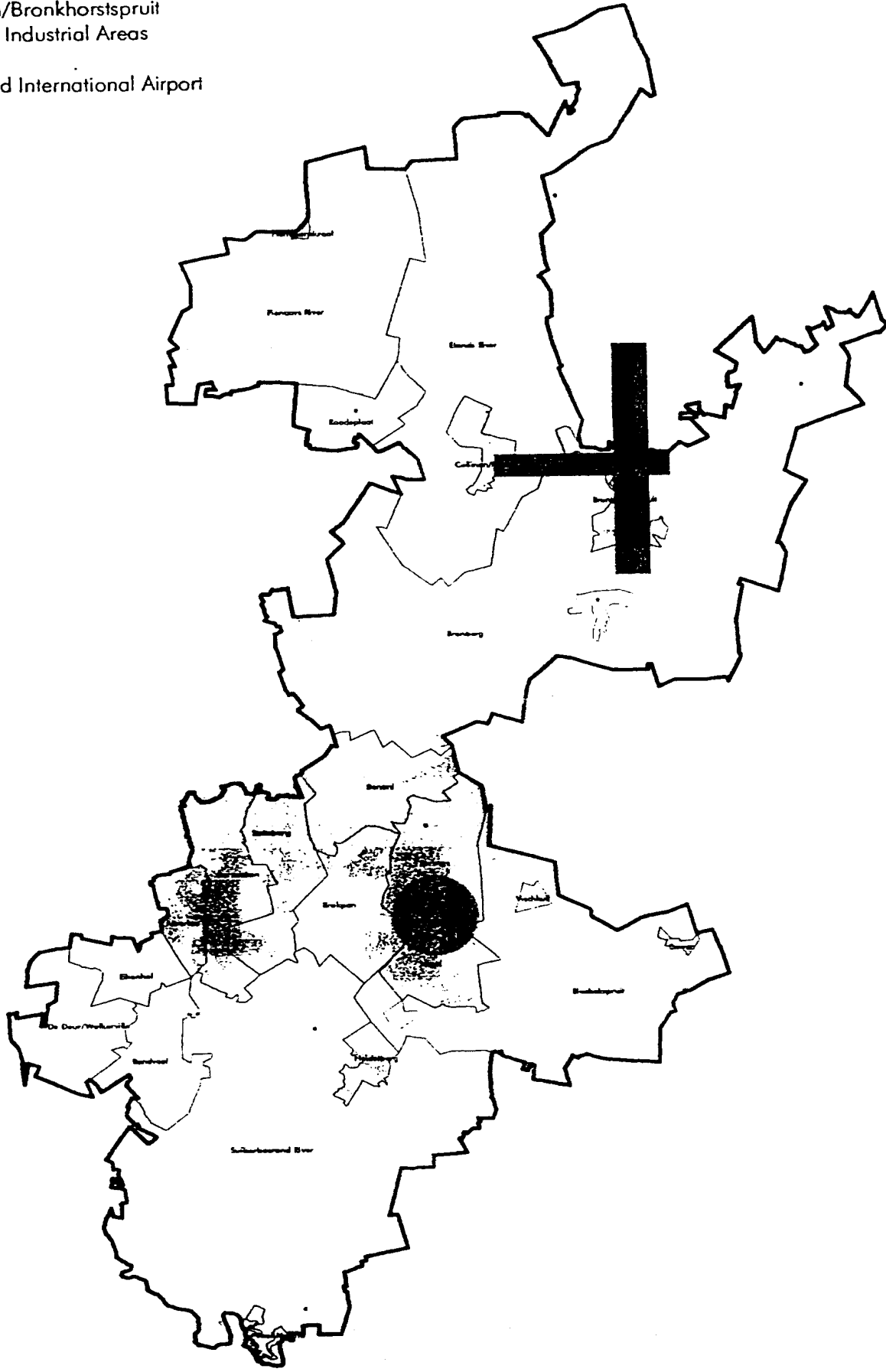
**PROVINCIAL
 URBAN EDGE**

PLAN 13





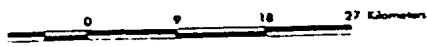
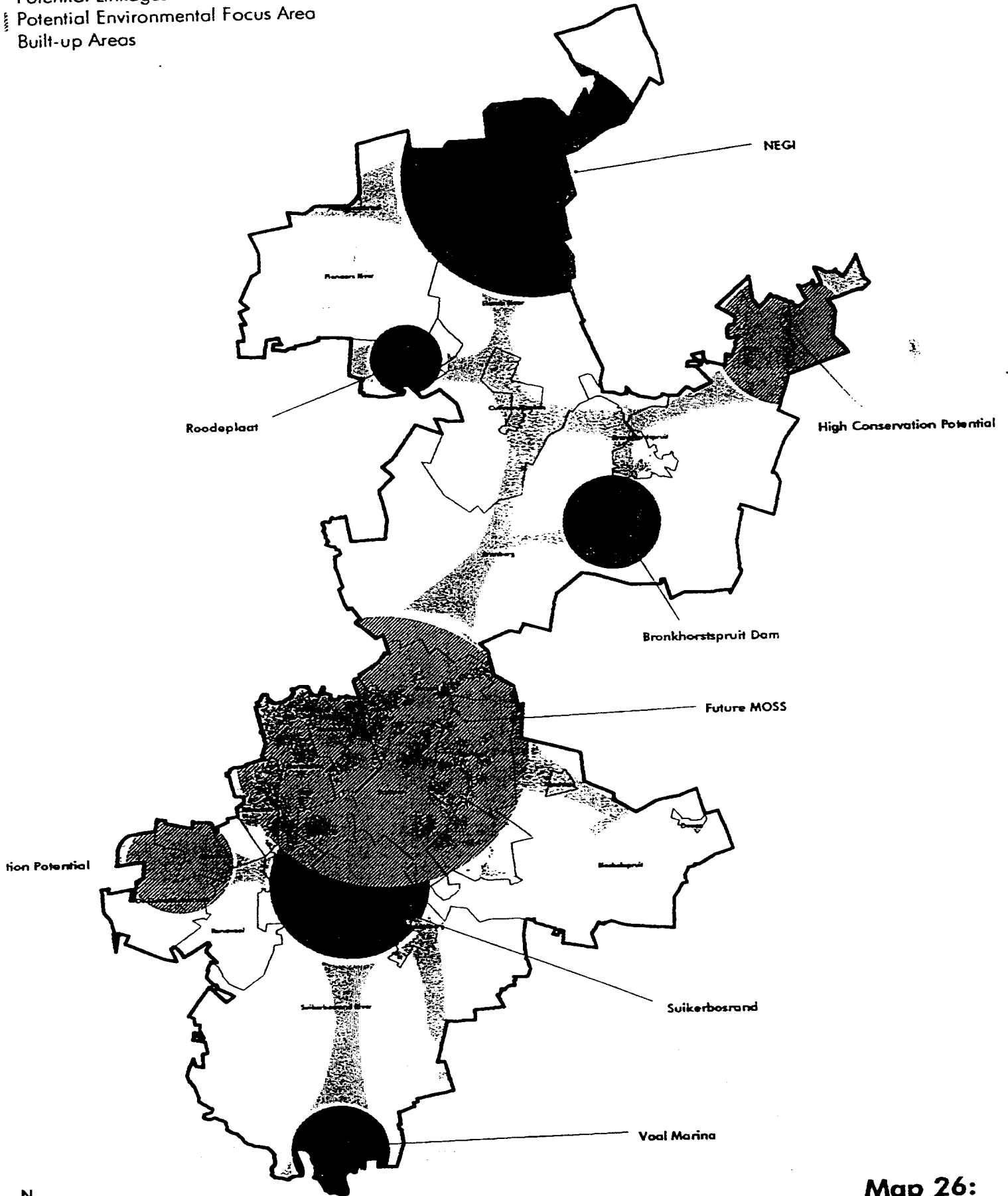
- Alrode/Wadeville
- Bronkhorstspuit/Ekangal
- Cullinan/Bronkhorstspuit
- Far East Industrial Areas
- GDAC
- Proposed International Airport



Map 28:
Spatial Intervention



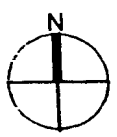
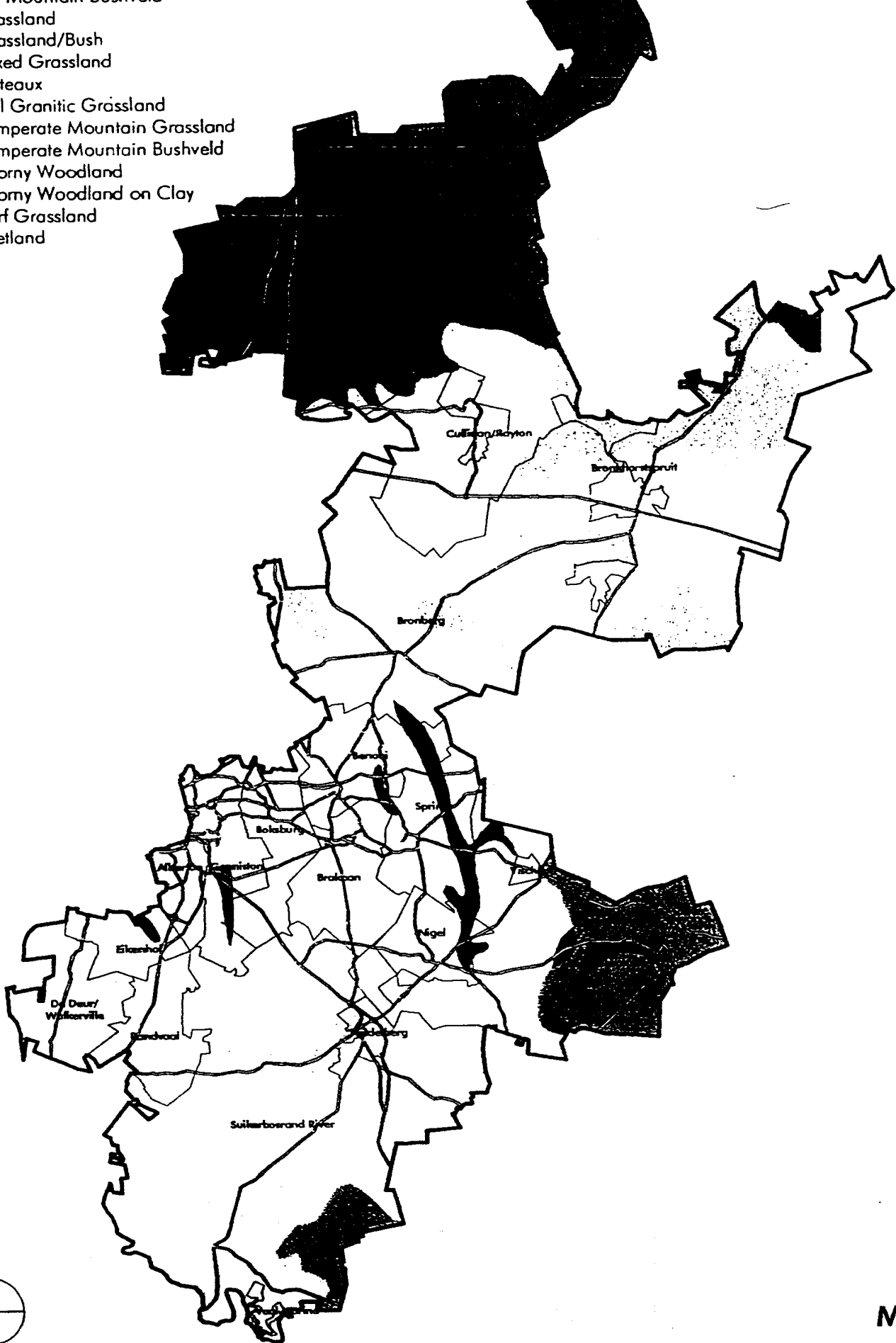
- | Existing Environmental Area
- | Potential Linkages
- |||| Potential Environmental Focus Area
- Built-up Areas



Map 26:
**Open Space/
Conservation**



- Broadleaf Woodland
- Dry Mountain Bushveld
- Grassland
- Grassland/Bush
- Mixed Grassland
- Plateaux
- Tall Granitic Grassland
- Temperate Mountain Grassland
- Temperate Mountain Bushveld
- Thorny Woodland
- Thorny Woodland on Clay
- Turf Grassland
- Wetland

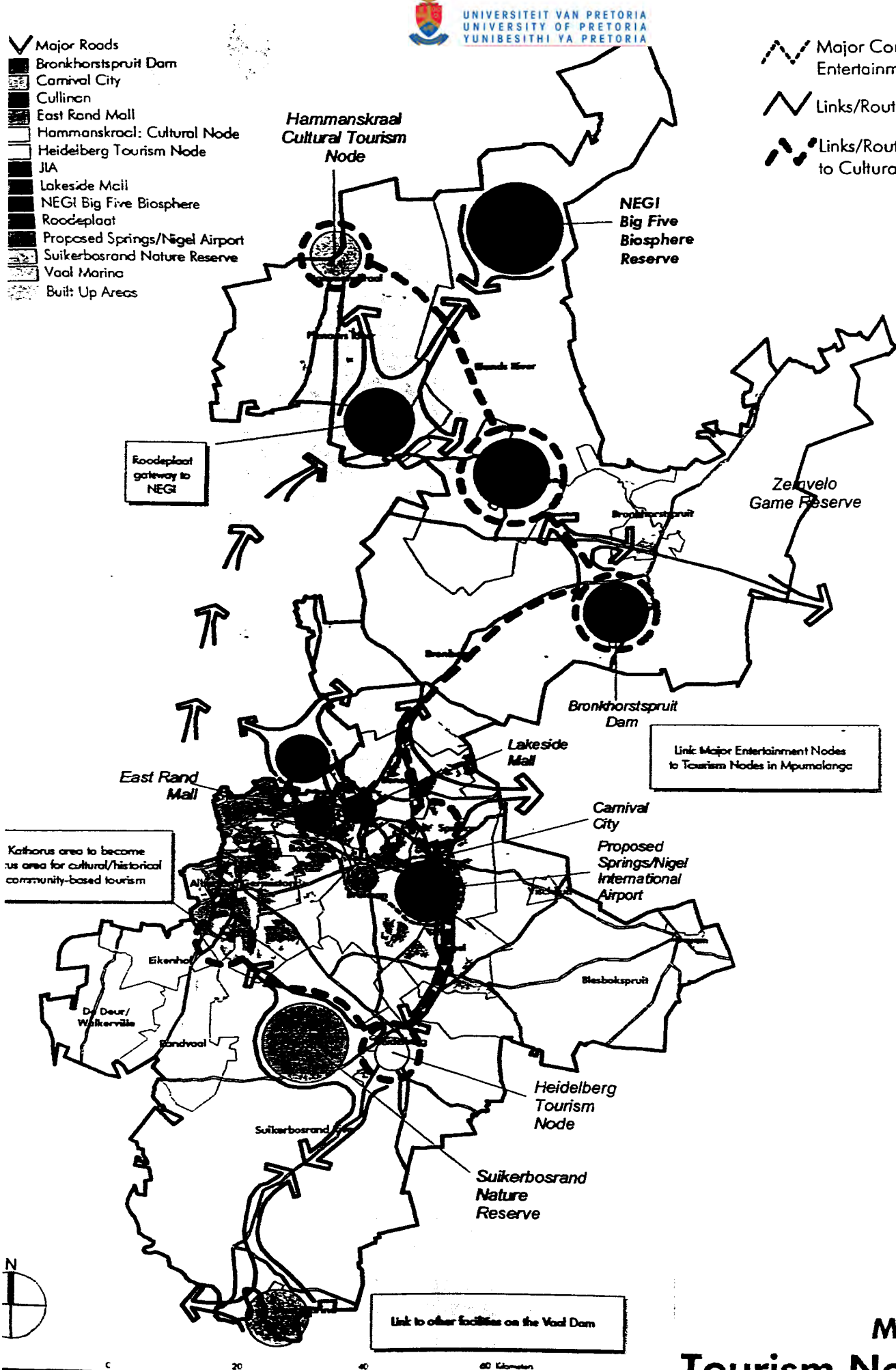


**Map 11:
Vegetation**



- Major Roads
- Bronkhorstspruit Dam
- Carnival City
- Cullinan
- East Rand Mall
- Hammanskraal: Cultural Node
- Heideberg Tourism Node
- JJA
- Lakeside Mall
- NEGI Big Five Biosphere
- Roo-deplaat
- Proposed Springs/Nigel Airport
- Suikerbosrand Nature Reserve
- Vaal Marina
- Built Up Areas

- Major Commercial Entertainment Nodes
- Links/Routes
- Links/Routes to Cultural Nodes



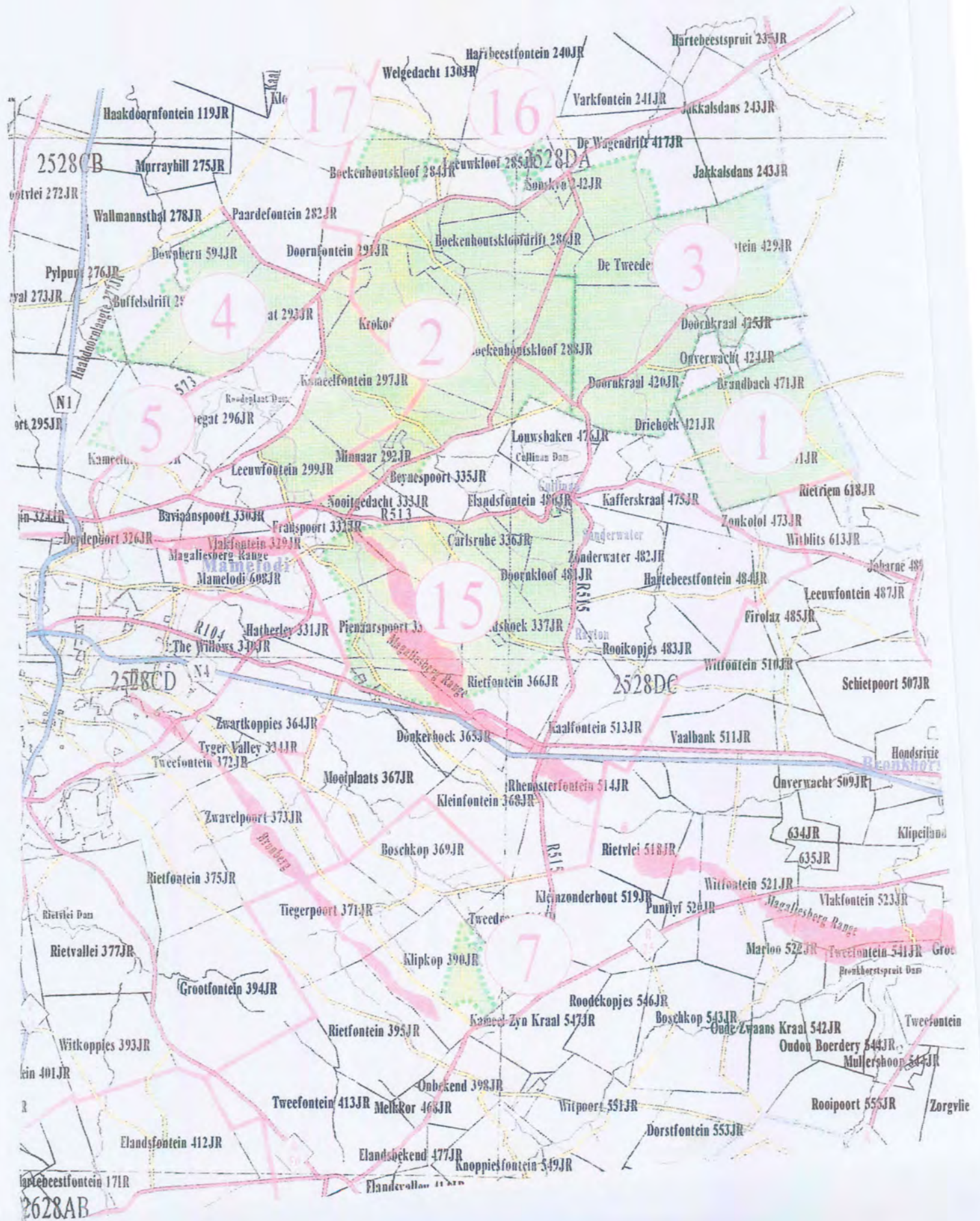
Roo-deplaat gateway to NEGI

Link: Major Entertainment Nodes to Tourism Nodes in Mpumalanga

Katiborus area to become an area for cultural/historical community-based tourism

Link to other facilities on the Vaal Dam

Map 14:
Tourism Nodes





De Tweedespruit

Buffelsdrift

Kameeldrift

Hennopsvallei

Klipkop

Thorntree

Henley on Klip

Smuts Farm (Proposed)

Hartebeestfontein (Proposed)

Alice Glockner (Proposed)

Kromdraai

Rhenosterspruit

Cullinan

Leeukloof Valley

Bobbejaansberg



DINOKENG CONCEPT PLAN

Relocate dirt road through Core Area to Gauteng border; road could be tarred in future to provide better access for communities of Rapotokwane and Vaalbank

Water- and nature- timeshare resort, sunset cruises, canoe trails, chalets on water's edge, houseboats, bird-watching, game-viewing from water; link to Phase B as indicated

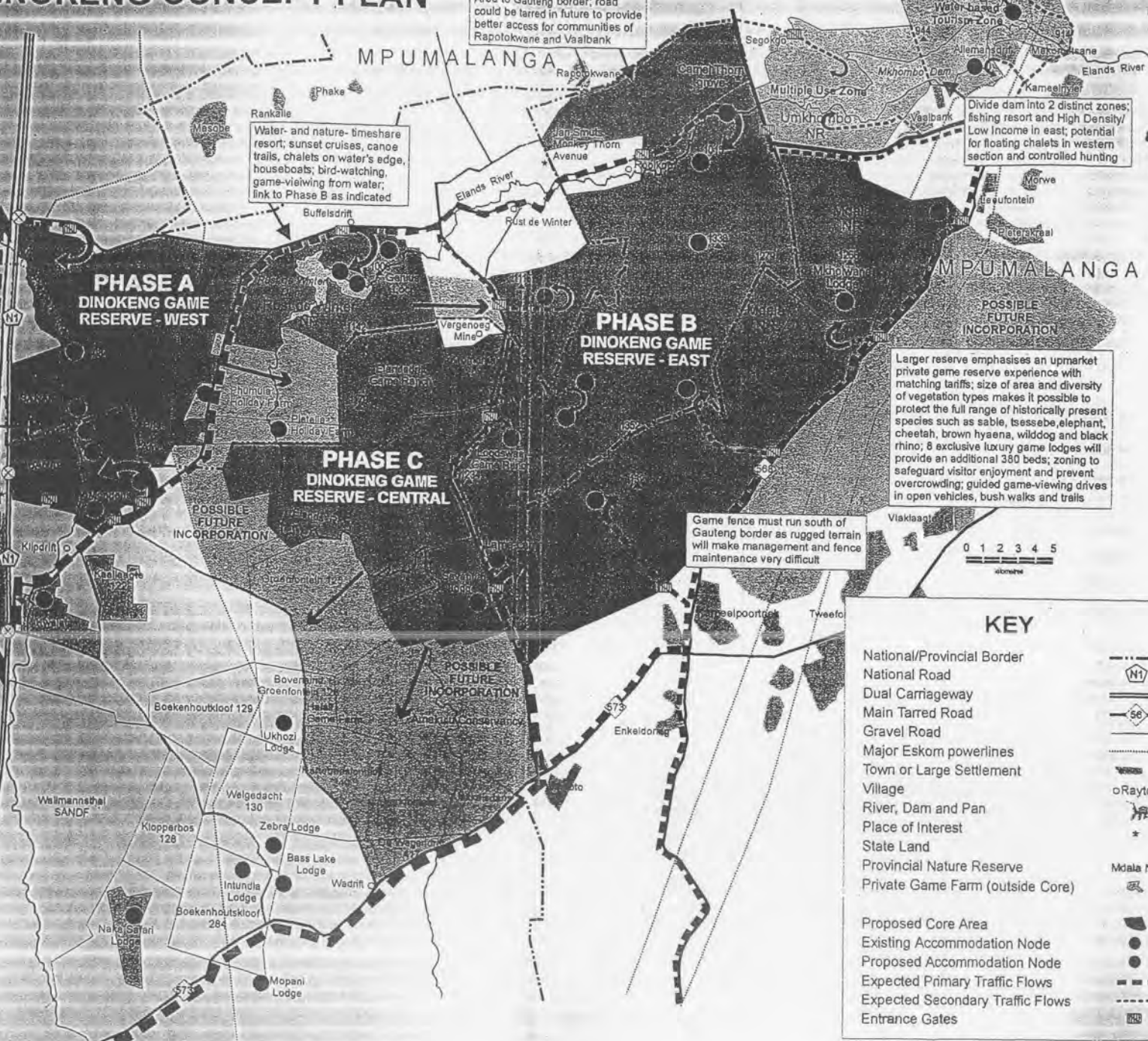
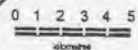
Divide dam into 2 distinct zones; fishing resort and High Density/ Low Income in east; potential for floating chalets in western section and controlled hunting

Reserve emphasizes Big Five with large herds of common species; smaller populations of elephant, buffalo, rhino and lion; 4 game lodges and other accommodation facilities; High Density/Middle Income tourism, guided game-viewing drives, day visits and bush walks

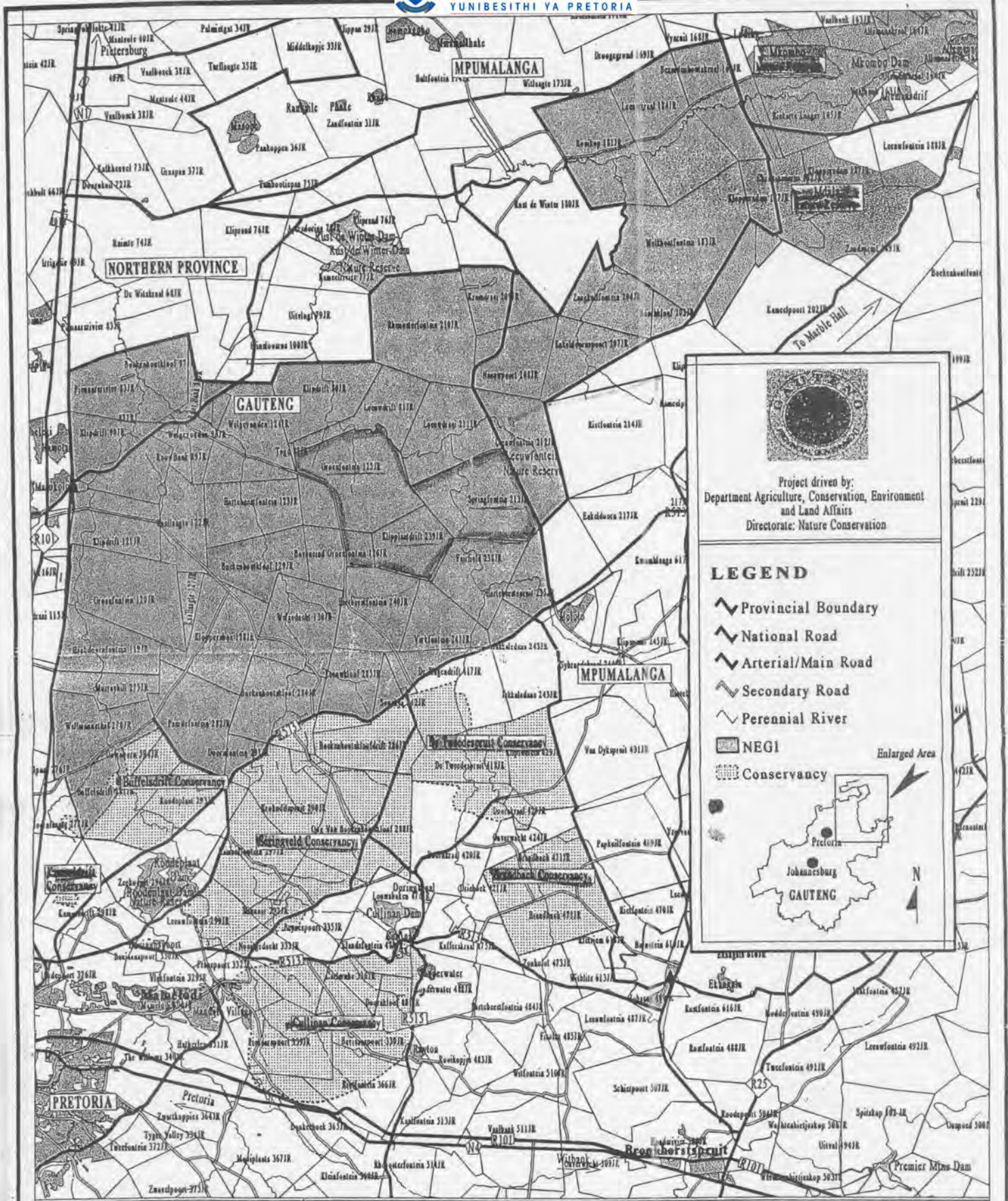
Phase A incorporates 8 game farms, SANAF land, state land and cattle farms option for state to acquire some land; superb lodge sites situated along the Pienaars River floodplain


Larger reserve emphasises an upmarket private game reserve experience with matching tariffs; size of area and diversity of vegetation types makes it possible to protect the full range of historically present species such as sable, tsessebe, elephant, cheetah, brown hyaena, wild dog and black rhino; 8 exclusive luxury game lodges will provide an additional 380 beds; zoning to safeguard visitor enjoyment and prevent overcrowding; guided game-viewing drives in open vehicles, bush walks and trails

Game fence must run south of Gauteng border as rugged terrain will make management and fence maintenance very difficult







KEY	
National/Provincial Border	
National Road	
Dual Carriageway	
Main Tarred Road	
Gravel Road	
Major Eskom powerlines	
Town or Large Settlement	
Village	
River, Dam and Pan	
Place of Interest	
State Land	
Provincial Nature Reserve	
Private Game Farm (outside Core)	
Proposed Core Area	
Existing Accommodation Node	
Proposed Accommodation Node	
Expected Primary Traffic Flows	
Expected Secondary Traffic Flows	
Entrance Gates	






Project driven by:
Department Agriculture, Conservation, Environment
and Land Affairs
Directorate: Nature Conservation

LEGEND

-  Provincial Boundary
-  National Road
-  Arterial/Main Road
-  Secondary Road
-  Perennial River
-  NEGI
-  Conservancy

Enlarged Area



Pretoria
Johannesburg
GAUTENG

N

Project:	negi s4.apf	Projection:	RSA_L027 Cape Datum
Data set:	lm negi s4	Scale:	1:250 000
Prepared by:	PC Compan	Map Number:	negi 7
Date:	23.08.2000		

NORTH EASTERN GAUTENG INITIATIVE (NEGI)