Department of Agriculture, Conservation, Environment and Land Affairs

Gauteng Province

Strategic plan 2003/04 to 2005/06

Incorporating detailed planning information for the 2003/04 financial year.

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1 Introductory information

1.1Foreword by the MEC - Ms. Mary Metcalfe

The Department of Agriculture, Conservation and Environment has line function responsibilities, which are critical for the survival of present and future generations. The responsibilities of the department are extensive and are primarily focused on natural resource management. In a densely populated, highly urbanised province, such as Gauteng, these functional responsibilities assume even greater importance. The protection and sustainable utilisation of our finite natural resource base is a prerequisite for the creation of a safe and healthy living environment and the meeting of basic needs, inclusive of access to safe and adequate water supplies and nutritious food.

For many people living in Gauteng the business of protection and sustainable use of our natural resource base may seem a distant issue far removed from the reality of the poverty and stress of daily living. Life for the majority is consumed by long transport queues, uncomfortable and lengthy journeys, worrying every day about how to stretch paltry resources in order to feed and clothe families, trudging streets seeking employment, desperately accessing resources in order to make employment, and, for many, maintaining and nurturing family life with minimal shelter and with little access to water or electricity.

However, the business of protection and sustainable use of our natural resource base has everything to do with conditions of poverty and social deprivation. We will not achieve environmental sustainability without eradicating poverty, and we will not eradicate poverty without striving for environmental sustainability. If we are to 'meet the needs of present generations without compromising the ability of future generations to meet their own needs', then we must focus on not only the conservation and management of our natural resources, but also the social and economic dimensions of development.

An understanding of a sustainable approach to the environment will make us understand that we will not change these conditions of poverty if we do not change our relationships with the environment. Indeed, the economic activities that are the basis of the 'better life' that we wish to bequeath to our children can only be sustainable if they are environmentally sustainable. Economic growth is essential in Gauteng, as is the development of infrastructure. Gauteng constitutes only 1.4% of our country's land, but we are home to nearly 20% of our people and we account for 40% of the national economic activity. The housing backlog is about half a million. At present, one in four of our homes are 'shacks', and one in three of our homes consist of only two rooms or less. These needs for development and employment creation, services and infrastructure, housing, roads, schools, clinics and waste collection services place huge demands on the natural resource base – on our soil, water and air.

An understanding of sustainable development will lead to the conclusion that development that seems to meet the needs of the poor in the present but which is not environmentally sustainable can in fact in the long term make our children poorer, and can compromise their very survival. If we allow our factories and our vehicles to pollute air, our children will not be able to breathe. If we build houses so that we lose our wetlands and so lose our natural capacity to manage flooding, and clean our water we compromise the very substance of life. If we build roads in places where the last surviving members of a plant or animal species exist, we lose the richness of our biodiversity and irreplaceable genetic material. If we wastefully consume non-renewable resources of the earth - those that cannot be replenished but can be used until they are completely depleted – what are we leaving to sustain a better life in the future? If we consume energy and water carelessly with no thought for the future, what we do leave for our children? So, environmental concerns are inseparable from social and economic concerns, and must be integrated into sustainable development practices that make a better life for our people, particularly the poor.

If we are together to achieve our constitutional rights to a safe and healthy environment every component of society has responsibilities. It is the responsibility of elected representatives to make environmental sustainability a key component of planning in every sphere of development. It is the responsibility of the people of Gauteng, members of community organisations, trade unions, industry, and NGOs to join government to give effect to our common commitment to the creation of a safe healthy and sustainable living environment, for ourselves and for future generations.

We must remember that we will not achieve the economic goals we have set without attending to the environmental sustainability of our economic and developmental decisions and practices. The benefits of growth and development must be fully shared. True development is guided by equity, justice and social and environmental considerations.

1.2 Foreword by the Head of Department - Dr. Trish Hanekom

The functional responsibilities of the Department of Agriculture, Conservation, Environment and Land Affairs are diverse in scope. The Department as far as possible follows an outputs driven project based approach. Project are combined to achieve greater functionality and prepared with a view to complimentarity in terms of scale and impact. In addition, projects are targeted both spatially and sectorally and all projects are assessed in terms of socioeconomic impacts and gender and youth impacts.

The functional responsibilities are at present carried out on a proportional basis within the existing financial and human resource constraints. Major strategic priorities include:

- Public support and awareness of the critical importance of sustainable development
 - > Development of outcomes based education materials for learners
 - Mass awareness programmes for attitudinal changes on the part of the public

• Agriculture

- > Changing the race and gender patterns of ownership in the agricultural sector
- > Full and sustainable use of agricultural land for primary production
- > Rehabilitation of degraded land
- > Improved levels of food security, particularly at household level
- > Increased contribution of agriculture to GGP
- > Sustainable employment and labour intensive production methodologies in the agricultural sector
- > Agricultural information systems to support agricultural decision making and best practice

Veterinary Services

- > The control and prevention of production animal diseases and enhanced animal production
- > The control and prevention of public health risks of animal origin
- > Management of safety of food of animal origin

Conservation

➤ Management of biodiversity threats – development pressure, pollution, muthi trade, curbing of wildlife smuggling, control of importation of alien species and bioprospecting.

- Management and development of protected areas at nature based tourism destinations, including spatial developments (World Heritage Site, Dinokeng) and provincial nature reserves.
- > Community based natural resource management project at Abe Bailey Nature Reserve.
- ➤ Identification and spatial mapping of sensitive areas to inform decision making on development applications and location of conservancies.
- ➤ Policy development keeping of game, plant export policy, red data plant policy to inform decision making.
- ➤ Conservancy programme to gain support for conservation through partnerships

Environment

- ➤ Measures to reduce air pollution
 - o Industrial sources (power generation and industry)
 - Mining related
 - o Household related (burning coal, wood etc)
 - o Transport related (roads and vehicles)
- ➤ Measure to reduce water pollution
 - o Diffuse pollution (stormwater runoff)
 - o Point source discharges (waste water plants and industry)
 - Mining related
- > Measure to reduce land pollution
 - o Industrial sources
 - Agricultural sources
 - Household related
- Reduction, reutilisation and recycling of waste streams
 - o Hazardous waste
 - o Medical waste
 - o General waste
- ➤ Identification and spatial mapping of sensitive areas to inform decision making on development applications
- Spatial Development Projects
 - ➤ Commencement with implementation of masterplans for the development of the Cradle of Humankind World Heritage Site and the Dinokeng "All of Africa in One Day" nature based tourism destination

These responsibilities of the department are carried out within a context of rectifying the inequities of the past and maximising job creation and income generation opportunities in order to contribute to economic growth.

1.3 Mission and Vision statement

The overall mission of the Department is to contribute towards economic and social development, through public and private partnerships by enhancing the quality of life and sustainable utilization of agricultural and natural resources.

The vision of the department is the successful implementation of departmental programmes:

Programme 1: Management and Administration

To render efficient and effective administration and financial management services;

Programme 2: Agriculture

To optimise the contribution of sustainable agriculture towards the equitable development of all communities and the economy in Gauteng;

Programme 3: Veterinary Services

To promote animal production, animal and public health by facilitating the availability and affordability of safe and healthy food and high quality animal products;

Programme 4: Conservation

To promote the sustainable utilisation and conservation of biological diversity and natural processes for the development of all communities;

Programme 5: Environment

To contribute to sustainable development and quality of life by promoting a safe and healthy living environment;

Programme 6: Special Projects

World Heritage Site

To manage and facilitate the development of the Cradle of Humankind World Heritage Site known as the Fossil Hominid sites of Sterkfontein, Swartkrans, Kromdraai and Environs, in the Gauteng and North West Province, in order to preserve cultural and natural resources and generate appropriate economic growth.

Dinokeng (formally North Eastern Gauteng Initiative)

To establish, manage and facilitate conservation based tourism development in the North Eastern quadrant of Gauteng that will result in the creation of jobs, and increased appropriate economic growth in the area.

1.4Departmental values

In order to fulfil its mission the endeavours of the Department are underpinned by the following values

- The provision of an efficient, effective and quality service to the public and our colleagues
- The promotion of equity in the provision of services
- The promotion of a culture of collective decision making, trust, loyalty and integrity within the department
- The promotion of a culture of public participation
- The promotion and implementation of government policy as determined by the Provincial Executive Council and the Gauteng Legislature

1.5Constitutional mandate

The Department derives its mandate from Section 24 and Section 27 of the constitution.

Section 24 of the Bill of Rights in the Constitution states that

"24. Everyone has the right -

- (a) to an environment that is not harmful to their health or well-being and
- (b) to have the environment protected for the benefit of present and future generations, through reasonable legislative and other measures that -

- (i) prevent pollution and ecological degradation;
- (ii) promote conservation; and
- (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development."

Section 24 of the Bill of Rights in the Constitution states that

- "27. (1) Everyone has the right to have access to -
 - (a) health care services¹, including reproductive health care;
 - (b) sufficient food and water; and
 - (c) social security, including, if they are unable to support themselves and their dependents, appropriate social assistance.
 - (2) The state must take reasonable legislative and other measures within its available resources, to achieve the progressive realisation of each of these rights......"

Schedule 4 of the constitution defines the following areas of concurrent national and provincial legislative competence:

Part A

- Agriculture
- Animal control and diseases
- Environment
- Nature conservation, excluding national parks, national botanical gardens and marine resources
- Pollution control
- Soil conservation

Part B (Local Government matters)

- Air pollution
- Water and sanitation services limited to potable water supply systems and domestic waste-water disposal systems

Schedule 5 of the Constitution defines the following area of exclusive provincial legislative competence:

Part A

- Abattoirs
- Veterinary services, excluding regulation of the profession

Part B (Local Government matters)

- Control of public nuisances
- Fencing and fences
- Markets
- Municipal abattoirs
- Municipal parks and recreation
- Noise pollution
- Pounds

¹ Health care services should be viewed as inclusive of veterinary public health functions

• Refuse removal, refuse dumps and solid waste disposal

1.5 Legislative mandate

The legislative mandate of the department is mainly derived from national legislation which suffices to carry out the functional responsibilities of the Department. The approach of the department is to utilise subordinate legislation in terms of national legislation, and provincial laws to address specific provincial variations only if the national legislative framework does not suffice.

The departments responsibilities are carried out in terms of the following major national laws:

Animal Diseases Act, 1984
Abattoir Hygiene Act, 1992
Livestock Improvement Act, 1977
Plant Improvement Act, 1976
Plant Breeders' Rights Act, 1976
Perishable Product Export Control Act, 1982
Agricultural Products Standards Act, 1990
Fertilisers, Farm feeds, Agricultural remedies and Stock remedies Act, 1947
Conservation of Agricultural Resources Act, 1983
National Environmental Management Act, 1998
Environment Conservation Act, 1989
Atmospheric Pollution Prevention Act, 1965
Hazardous Substances Act, 1973
Water Act, 1998

The department's responsibilities are further carried out in terms of the following provincial laws and subordinate legislation:

Nature Conservation Ordinance, 1983 Environmental Impact Assessment Regulations (Regulations 1182 and 1183), 1997 Noise Control Regulations, 1999

2 Agriculture and Veterinary Services

2.1 Agriculture

2.1.1 Strategic direction

Aim

To optimise the contribution of sustainable agriculture towards the equitable development of all communities and the economy in the Gauteng Province in order to enhance food security, income generation, job creation and the quality of life.

Status quo analysis

The total farmland in Gauteng is 774 265 ha. Of this, 438 623ha are potentially arable, and 390 000ha is grazing land. The amount of potentially arable land that is currently being cultivated is approximately 293 571 ha (67%). The implication of this is that there is spare agricultural potential that can be utilised beneficially in the province. This is of particular importance in the light of the declining mining and industrial activities in some regions of the province.

After gold and other minerals in totality, agriculture in South Africa is the greatest source of foreign exchange earnings.

The following important farming enterprises are found in Gauteng:

- Livestock (including piggery)
- Poultry
- Horticulture
- Crop production (including herbs and medicinal crops to a limited extent)

There are approximately 3 200 commercial farmers in Gauteng employing 39 295 farm workers. The number of commercial farming units in the province is 2 342. The total number of people active in agriculture is 814 000.

Virtually all farm workers in Gauteng are black whilst approximately 90 per cent of farm owners are white. There are now approximately 734 black farmers who have acquired land for primary agricultural production as a result of the democratisation of our country. Most of these farmers (134 in the last financial year) were assisted by government programmes to gain access to land.

The estimated number of smallholdings in the province is 18-21 000 the majority of whom being part time farmers. An audit of the smallholdings in Gauteng is under way and will provide more reliable information on the nature and extent of smallholdings in the province.

The average size of a commercial farm is 2 000ha whilst that of a smallholding is 8ha. The Gauteng Provincial Government is disposing of all agricultural land owned by the Province and not required for government purposes. Provincial agricultural land holdings are approximately 20 000 hectares in extent, with individual holdings ranging from 2,5 to 500ha. Redistribution of the state agricultural land through the Gauteng Farmer Settlement Programme, which provides for a 3-year lease with an option to purchase, positively contributes to changing race and gender land ownership patterns.

Key departmental objectives and target outcomes

Key Departmental Objective	Strategy	Outcome (Goal)	Service delivery Indicator	Service delivery target or milestone
Programme 1: To alleviate household level food insecurity in the province	To contribute to the mitigation of household food insecurity and the generation of income through projects aimed at promoting production of and access to safe, affordable and nutritious food. The strategy involves the progressive establishment of new food production units involving approximately 1200 new households per annum.	Food security; income generation; agricultural training; targeting of women, youth, the disabled and people living with aids; poverty alleviation	Number of food production units established per annum and direct and indirect increase in household income	Approximately 1200 households affected directly per annum i.e. 3600 households for the period 2003/2004 to 2005/2006
	Outsourcing of food production projects in order to monitor outcomes and facilitate standardisation on best practice	Identification of best practice methodologies	Measure of labour absorption, input costs and income over expenditure for different methodologies	Increased production per unit input
	Beneficiary capacity building through the transfer of managerial and production skills	Sustainable household food production through beneficiaries having technical skills and managerial ability.	Time series measure of labour absorption, input costs and income over expenditure	Increased production per unit input and 80% of all food production units profitable.
	Public Awareness Programmes including: a) World food day celebrations b) Female Farmer of the Year	Raised public awareness of provincial stakeholder efforts to improve household food security; Maximisation of impact of poverty eradication initiatives focussed on food security; Profiling the contribution of women to economic growth, food security and job creation	Number of attendees	Approximately 1200 people attending
Programme 2: Change of race and gender ownership patterns of agricultural land and increase in the aggregate primary production per hectare	Provision of training, extension services and agricultural information	High quality training to support agricultural decision making and production practices; Increased contribution of the agricultural sector to economic growth and job creation	Time series measure of labour absorption, input costs and income over expenditure	Increased production per unit input and 80% of all farming enterprises profitable
	Structured interaction with farmers organisations; Formation and support of farmer study groups	Identification of best agricultural practice and skills transfer from the established agricultural sector; improved agricultural production; Increased contribution to GGP from the agricultural sector	Time series measure of labour absorption, input costs and income over expenditure; number of study groups	Study groups formed for all important commodities

	Facilitation and co- ordination of the provision of services by agricultural input providers	Access to agricultural support services for farmers	Time series measure of the net worth of agricultural service providers	Service providers for all required farmer support services
Programme 3: To provide expert advisory and support service to the various	Provision of an effective resource conservation and development service	Sustainable utilization of agricultural resources	Change in land use and change in index of ecological value	Land care projects commensurate with available budget
departmental sub- programmes	Provision of an effective agricultural economics and marketing service	Best practice decision making by farmers; Profitable agricultural enterprises	Time series measure of labour absorption, input costs and income over expenditure.	Agricultural economics and marketing service commensurate with available budget
	Provision of an effective production technology service	Farmers have adequate technical skills for profitable agricultural production.	Time series measure of labour absorption, input costs and income over expenditure.	Production technology service commensurate with available budget
	Provision of an effective agricultural resource information service	Best practice decision making by farmers; Profitable agricultural enterprises	Time series measure of labour absorption, input costs and income over expenditure.	Agricultural resource information service commensurate with available budget

Inter-departmental linkages

Agriculture is a concurrent function and in the spirit of co-operative governance the department works closely with the following national departments in carrying out its functional responsibilities

- Department of Agriculture and Land Affairs
- Department of Water Affairs and Forestry

In order to ensure integration at provincial level the department co-operates with the departments of Social Services and Population Development, Health, Development Planning and Local Government and Transport and Public Works. Integrated planning is necessary to ensure that departmental programmes are targeted spatially and sectorally and that projects are combined to achieve greater functionality and complimentarity in scale and impact.

Finally, a prerequisite for departmental programmes is the involvement of the relevant local authority in planning, implementation and monitoring of department programmes.

2.1.2 Environmental analysis

Assessment of external threats and opportunities

Population influx:

The unemployed in the more rural provinces flock to Gauteng with the hope of finding job opportunities. This results in an influx of an unstable population in the province who might see agriculture as an interim solution to poverty until more lucrative job opportunities becomes available. It also increases the urban pressure on agricultural land.

Comparative and competitive advantage:

South Africa has very limited soils of high and medium potential, the country is water scarce and climatology is not highly favourable for production. Furthermore, primary agricultural production in other Provinces has competitive and comparative advantage relative to Gauteng. The potential for improving production is not disputed but the extent to which this is possible should not be overstated. The international trend in more developed or industrialised economies is that as the manufacturing sector grows the contribution of agriculture to GDP declines as a percentage of GDP. Further economic analysis work is needed to identify the comparative advantages of investment in primary agriculture versus other sectors of the economy.

Natural resources:

The Province has a disproportionate share of high and moderate potential soils. Rainfall is sufficient to sustain rainfed production of crops on the high potential soils. The highly developed infrastructure and lucrative agricultural produce markets in the province further promotes intensified production under artificial conditions e.g. poultry and vegetables. On the other hand, many of the soils in the province are only of marginal potential and if

utilized injudiciously will result in financial losses and the degradation of this finite resource.

Subdivision of agricultural land:

Subdivision of high and medium potential agricultural land is supported in the interests of utilisation of land that is currently unutilised and in order to change the race and gender patterns of ownership and production in the agricultural sector.

However, subdivision also allows the construction of one residential unit per subdivided portion and results in a de facto change from agricultural land use in instances where the end result of the subdivision is the establishment of residential rural estates.

Mining land:

There is an abundance of unutilised mining land in the province, a high proportion of which could be irrigated with excess water from the mines.

Property values:

A high demand for urban and industrial development inflates the value of land. This has a negative impact on gross margins that can be achieved in agriculture.

Pollution:

Industrial and human pollution of the air, water and soil constantly threatens optimal agricultural production in the province.

Infrastructure:

The well-developed communication, commodity supply, transport and markets infrastructure in the province facilitates the flow of information, the availability and transportation of production inputs and the marketing of agricultural produce both locally and internationally.

Irrigation infrastructure:

This only exists in the Rust de Winter area and the availability of water is limited by competing demands for human consumption. Agriculture ventures in the rest of the province rely on the mostly limited water resources from boreholes.

Consumer base:

The high population density of Gauteng offers a stable and lucrative market for agricultural produce.

Innovation:

The highly developed physical infrastructure and markets in the province coupled with the limited access to irrigation water stimulate the development of alternative agricultural practices such as the conversion to high value commodities for niche markets, organic farming and highly intensive agricultural production under artificial conditions e.g. aquaculture, hydroponics, etc.

Assessment of internal strengths and weaknesses

Mode of production:

A well-established commercial agriculture sector exists in the province. This expertise base can be accessed by the emerging farmer sector through the transfer of skills that is supported by a departmental farmer-to-farmer extension programme.

Geography:

The relative compactness of the province promotes cost effective communication and transport (All extreme points are within a 200km radius from the centre of the province).

Institutions:

The presence of all national departments, academic institutions, the Agricultural Research Council and other parastatals and NGO's in the province facilitates easy, speedy and cost effective access to agricultural information. The institutions also play an important role in the provision of advisory services to farmers.

Institutional arrangements:

Inter-departmental communication channels and integrated planning require careful coordination to ensure that there is efficient and effective service provision.

Customers: internal and external

Commercial farmers:

The commercial farming sector is highly organised and receives most of its technical information from the private sector. The role of the department is limited to the provision of strategic information especially with regard to market opportunities with special reference to export market opportunities.

The view of the department is that farmers learn better from other farmers. Commercial farmers play an important role in the capacity building of resource poor farmers through the "Farmer-to-Farmer Extension" programme, a farmer led programme that has been running for the past two years and will be developed further by adding a mentoring component to it in the forthcoming years.

Resource poor farmers:

The department's farmer support services are focussed on this category of farmers with the aim of attaining commercial production as quickly as is possible. The majority of the farmers in this category are beneficiaries of Land Reform Programmes both at national and provincial levels. Approximately 90% of resource poor farmers enter farming without any agricultural experience and need intensive farmer support services.

The services offered include drawing up and implementation of business plans, organisation and running of study groups, facilitation and co-ordination of private sector service providers, mentorship's with commercial farmers etc. Furthermore, farmers are organised into study groups for purposes of semi formal training and exposure to best practice.

Other departments and local government:

The department offers agricultural advise to departments that have agricultural activities such as Correctional Services, Health and Education as well as Local Governments.

• Provincial Departments of Health and Social Services are in the process of transferring certain of their poverty alleviation type projects that have agricultural production units as their major focus to Household Food Security (this as a consequence of a Provincial Cabinet Legothla decision.)

Service providers:

Service providers play an important role in agricultural extension especially with regard to the rendering of training in specialised commodities. The Department utilises the services of service providers where it is not cost effective to retain permanent in house capacity for specialised skills.

Where a government role is warranted, the Department will strive to accomplish that activity in the most cost-effective manner possible. In some instances, activities are performed inhouse, and in other instances, a service provider, best suited to accomplishing the particular function, performs activities. Possible alternative service providers include NGO's, CBO's, consultants, private sector, universities, parastatals, etc.

2.2 Veterinary Services

2.2.1 Strategic direction

Aim

To promote animal production, animal and public health by facilitating the availability and affordability of safe and healthy food and high quality animal products.

Status quo analysis

Epidemiology and Diagnostic Laboratory Services:

The laboratory diagnostic and other laboratory services are outsourced to and operated very successfully by the Onderstepoort Veterinary Institute by means of a contract.

The department has developed the ability to do risk analysis using computer software. Important assessments will be done during the next two years under guidance of an expert to apply the knowledge gained.

Active surveillance by different surveys is completed on a continuous basis by field staff sampling during farm visits and by the Onderstepoort Veterinary Institute laboratory from available samples in the serum bank.

Different computerized data sets are being developed to accommodate disease reporting, geographic information systems and mapping.

Further contingency plans for disease outbreaks will be developed during the next 2-3 years.

Quality control systems will be introduced during the next two years, which will ensure that high quality- and anti-corruption measures are in place. Best process auditing practices will also come into action during the coming year.

Inspections for illegal slaughtering and roadblocks for illegal movement of animals:

The Law Enforcement Unit prosecutes perpetrators who are engaged in illegal activities. The objectives of this unit are: to prevent illegal slaughter; the illegal transport of animals (and animal products); and to ensure that no illegal animal products enter Gauteng. This is of vital importance to protect against the public and animal health risks that arise from these illegal activities.

A combined departmental law enforcement strategy for the most effective and efficient impact will be introduced.

The facilitation of the establishment of an affordable and sustainable veterinary service:

Preventative animal health services are provided to beneficiaries of the Gauteng Farmer settlement Programme and the Department of Correctional Services. In historically disadvantaged communities where services were previously not rendered it is regarded as essential to create an enabling environment for the private sector.

The ethical requirements as determined by the South African Veterinary Council concerning the infrastructure necessary to carry out these services pose challenges for the Department.

Empowering communities with knowledge of animal diseases and primary veterinary health care

The Department runs various projects aimed at empowering the historically disadvantaged with veterinary knowledge so that they can make informed choices. These programmes cover veterinary primary health care, herd health, regulatory information, and general veterinary public health.

These projects or activities involve school visits, video shows, visits to community clinics pamphlet distribution and the development of curriculum material for schools.

Animal Health Regulatory requirements:

$TB \cdot$

The occurrence of Tuberculosis (TB) in livestock in Gauteng is under control with no positive herds. A combined Brucellosis and TB survey will be undertaken based on sound epidemiological principles.

Brucellosis:

There are 65 Brucellosis positive herds and the disease is difficult to control. The Department's approach to Brucellosis has therefore been scrutinised and revised. The risk to untested farms surrounding positive herds is estimated, heifer vaccination is emphasised and more cost effective control measures are being introduced. A new vaccine had been introduced that can be effectively used in adult cattle.

Rabies:

The approach to Rabies control includes outbreak vaccinations in accordance with national policy guidelines as well as buffer zone vaccinations and awareness vaccinations in high-risk areas. Buffer zone vaccinations will continue on our borders with high-risk provinces (especially the Northern and North West Provinces) and in high-risk townships and hostels

Import and export control:

Over the last number of years export of animals and animal products have increased substantially and the tendency for growth in this sector shows no signs of abating. A high level of service excellence is required to facilitate exports that will allow the province to benefit from the increased exchange earnings. Internationally acceptable standards of inspection and certification are an absolute necessity for promoting the continued issue of permits by importing countries and avoidance of non-tariff barriers. The envisaged SANAS accreditation of the Directorate of Veterinary Services as an Inspection and Certification Body will be instrumental in fulfilling these requirements.

Standard operating procedures and manuals are being introduced. A unit is being established which will specialize in ensuring proper service delivery. Cost recovery has been introduced and funds will be used to support the export unit and to improve efficiency of client information services.

Other disease control:

This is an essential regulatory function which entails regulatory inspections of all cloven hoofed animals in and around the foot and mouth laboratory at Onderstepoort; monitoring of stock at road stalls, stock sale pens, auctions, shows, feedlots, quarantine abattoirs, commercial and small scale farms; control and eradication of controlled diseases. A risk assessment of BSE in the country has emphasized the need for South Africa to improve it's control measures in this regard.

Traceability processes, which are important for both animal and public disease control, are in the process of being formulated and introduced. The directorate is in the process of introducing improved control measures in the animal feed industry for disease control purposes.

A strategy to improve on farm bio security is in the process of being introduced.

Veterinary Public Health Regulatory Services:

Inspection of abattoirs – Pro-Active abattoir hygiene based on HAS inspections: The Gauteng Province has 102 abattoirs divided as follows:

GRADE	RED MEAT ABATTOIRS	POULTRY ABATTOIRS	RABBIT	TOTAL
A	9	3	-	12
В	3	7	-	10
С	6	32	-	38
D	9	12	1	22
Е	16	2	2	20
				102

The abattoirs are controlled and supervised through inspections at least once a week to ensure that all the abattoirs conform to the rules of hygiene and meat quality.

Plan evaluation and building inspections:

All future abattoir owners must apply for registration by submitting the following:

- 1. Letter of Consent from Department of Water Affairs and Forestry.
- 2. Letter of Consent from Local Authority.
- 3. Letter of Authorisation from Directorate of Environment.
- 4. Design drawings for the Directorate of Veterinary Services. These drawings should comply with the requirements of the Meat Safety Act. After approval, regular site inspections will be carried out to ensure that the approved design drawings are adhered to.

Inspection of sterilisation rendering/by-products facilities:

Seven Sterilisation facilities are inspected at least once a month. Once a year an evaluation report is sent to the Registrar with recommendations. Rendering facilities are increasing in importance due to possible closure of certain installations and decreasing capacity to handle the waste material produced by abattoirs.

The international requirements for the handling of ruminant by-products (OIE) have placed an extra pressure on the industry, as extensive upgrading is required.

Key departmental objectives

Key departmental objective	Strategy	Outcome (Goal)	Service delivery indicator	Service delivery target or milestones (Goal)
To supply and co-ordinate an epidemiological and risk assessment service to the directorate in order to	Provision of Diagnostic services for Brucellosis, Rabies and other controlled diseases.	Accurate and reliable diagnosis	Number of diagnostic tests	90 000 per annum
minimise the risk of infectious disease spreading in Gauteng and to supply critical information to management to enhance the functions of the directorate in a cost effective and efficient way.	Production of risk assessments and contingency planning to respond to disease outbreaks of high risk economic importance such as CBPP, Rinderpest, African Swine Fever etc.	Correct control and management of risk	Number of risk assessments and contingency plans	3 risk assessments and 3 contingency plans per annum
	Surveillance of diseases of economic importance such as Johne's disease, Brucellosis, African Swine Fever	Correct evaluation of disease status and required control measures in the Province	Number of surveys undertaken	8 surveys per annum
	Maintenance of a disease information management system for monitoring, reporting and planning in response to epidemiological trends	Essential national and international reporting and efficient disease management	Number of diseases/data sets monitored	3 data sets and 10 reports per annum
To empower communities with veterinary knowledge, facilitate clinical and primary health care services, promote animal welfare and to improve animal production, animal and	Provision of preventative animal and herd health extension and in particular provision of services to beneficiaries of the Farmer Settlement Programme	Provision of services in areas not serviced by the private sector thereby supporting resource poor farmers	Quantification of beneficiaries	350 per annum
human health and o facilitate the availability and affordability of safe and healthy animal products of high quality.	Community awareness of veterinary and public health	Communities, in particular the historically disadvantaged are, empowered with knowledge of animal diseases, primary veterinary health care and food hygiene. Improved health of communities and decreased infant mortality	Number of people reached	500 000 per annum
	Production of Curriculum material for schools Law enforcement in order to prevent public health risks emanating from	Skilled and empowered learners High profile law enforcement	Modules produced Number of: Law enforcement	2 per annum
	risks emanating from illegal slaughtering and spread of animal disease as a result of illegal movement of animals	enforcement interventions serving as a disincentive to contraventions	caw enforcement operations Investigations Prosecutions Road blocks Inspections	2 per annum 40 per annum 5 per annum 4 per annum 50 per annum
To promote and protect animal health in order to combat the detrimental consequences of contagious diseases to persons and	TB control and eradication Brucellosis control and vaccination	Promotion of human health through the prevention of animal diseases transmissible to human;	Per Annum: Herd tests Number of cattle tested Number of	Service commensurate with available budget and human resource

regard to animal products and further to the upliftment of life.	Rabies control Import/export control of animals, edible and inedible products Other disease control	Prevention of the introduction of Animal diseases into RSA; Maintenance of veterinary certification credibility and stimulation of economic growth; Improved animal production	vaccinations Number of inspections of premises and consignments Number of certifications Number of inspections	capacity per annum
wholesome and healthy food of animal origin to the consumer in order to encourage household food security with regard to animal products, improved public health and to further upliftment and quality of life.	Inspection of abattoirs – Pro-active abattoir hygiene based on HAS inspections Abattoir plan evaluations Inspection of sterilisation plants	Supply of wholesome and healthy food of animal origin to the consumer. Properly constructed abattoirs, built in areas that will prevent contamination of the product and environment Production of byproducts of animal	Number per annum Routine inspections Abattoirs audited HAS inspections Plans evaluated Site inspections	Service commensurate with available budget and human resource capacity per annum

Interdepartmental linkages

Abattoirs and Veterinary Services, excluding regulation of the profession, are exclusive provincial functions. However, the National Department of Agriculture has important responsibilities with regard to norms and standards and the regulation of international trade. The Provincial Veterinary Services therefore works closely with the National Department of Agriculture in carrying out these functional responsibilities.

At provincial level the department works closely with the Department of Health and the Department of Education. The department also works closely with its sister departments in neighbouring provinces in view of the fact that prevention and control of animal disease require a co-ordinated strategy.

Finally, a prerequisite for departmental programmes is the involvement of the relevant local authority in planning, implementation and monitoring of department programmes.

In addition to co-ordination of the work of the three spheres of government there is cooperation with the SAPS, Customs and Excise and ACSA to fulfil the veterinary regulatory and law enforcement responsibilities, as well as with the Onderstepoort Veterinary Institute for the provision of diagnostic and epidemiological services.

2.2.3 Environmental analysis

Assessment of external threats and opportunities

Regulatory environment:

A challenge faced by the Department is that both the legislative framework and control of the food chain are fragmented. This fragmentation militates against the proper control of the safety of the food chain. Efficient control requires the application of the "Farm to Fork" principle, in order to be truly effective. Animal diseases also know no boundaries and problems of jurisdiction often occur. A strong emphasis is accordingly placed on liaison and

co-governance with other enforcement agencies at National, Provincial and Local Authority Level.

Risk profile:

Gauteng's urbanised nature and highly dynamic animal and human population result in a high-risk veterinary profile. Gauteng has a large number of stockowners that have only a few animals and this means that the outbreak of a major epidemic is more difficult to detect and control before it has become wide spread.

There are also more highly intensified production systems, which have the tendency to amplify disease outbreaks.

A highly developed network of roads, railways and airports exists in Gauteng. There is easy flow of people, animal and animal products in and out of Gauteng, thus increasing the risk of introducing or spreading animal diseases. Many of the large airports are situated in the province, including Johannesburg International airports and Lanseria.

Many speculators converge on Gauteng from all over the country. Large numbers of animals are introduced and are sold at stock sales, road stalls, or to private owners. Slaughter-stock regularly flows from all parts of South Africa to the large abattoirs in the province. The continuous movement of animals and animal products poses a further increased risk of introducing disease into the province.

Hunters from Gauteng who hunt game in neighbouring states or disease controlled areas in other Provinces could possibly introduce diseases like Foot- and Mouth disease, Swine fever, etc., if they do not abide by the rules and introduce infected animal products.

Effective public sector veterinary control-measures have been put in place and are vital to prevent the introduction of disease.

Increasing public awareness of the negative effects of residues in food, combined with the increased use of pharmaceutical products in intensive production systems has necessitated the directorate to carry out increased residue testing. Increasing pollution levels in the environment, which may contaminate the food chain, also necessitates this.

Illegal trade in products of animal origin:

Within the province there is a major informal trade in meat, milk, eggs and other food of animal origin. These products are often obtained from unhygienic, un-inspected slaughtering, diseased herds or flocks or unhygienic uncontrolled processing.

Serious community consequences include infant deaths, as a result of diarrhoea caused by indirect contamination from food of animal origin. Food transmitted diseases, which also include parasite infestation, exacerbate malnutrition cause loss of productivity, increase the poverty spiral and generally cause deterioration in the quality of life. There is also an increasing amount of disease causing organisms with resistance against antibiotics.

Illegal importation of animals and animal products into Gauteng pose a severe risk. This is largely because consumers and exporters are based in Gauteng while the producers are based in other provinces.

International trade:

The increasing occurrence of emerging diseases around the world such as BSE, West Nile, Hanta, Hendra and Nipha viruses put increasing pressure on the department to carry out epidemiological surveys and risk assessments to ensure protection of both the human and animal populations. Surveys are also required to prove freedom from disease in order to facilitate exports from the country under the WTO agreements

The zoo sanitary status of a country and the quality of its veterinary services influence the trade status of the country, not only in animals and animal products but also in other agricultural products. Great importance is attached to zoo-sanitary status in order to ensure that this is not used as a non-tariff trade barrier.

Economic impacts:

Live stock diseases in South Africa cause thousands of millions of Rands in production losses each year. This especially affects the emerging small-scale farmer. The department therefore places emphasis on Animal Health and Community Services programmes. There is an increasing pressure on certification to meet international requirements.

In addition, epidemiological risk assessments are undertaken to determine the areas of highest risk. Inspections are intensified in areas of high risk and decreased where the risk is lower. Surveys are also carried out in order to identify outbreaks as early as possible. Awareness material and communication strategies are used to inform farmers of risks and diseases in order to prevent the outbreak and spread of disease

The possible decrease in the rendering capacity in the Province may place constraints on the meat industry. The upgrading of rendering facilities to meet the international requirements will put a further financial burden on these red meat productions.

Assessment of internal strengths and weaknesses

Scope of work and management systems:

The Department has extended its scope of work from a purely regulatory role to the inclusion of developmental programmes in line with provincial policy objectives.

The knowledge and professionalism of the staff component in the department is outstanding which contributes to the success of departmental programmes. Officials are multi-skilled having formal training in veterinary public health and animal health, good communication skills (services are delivered in all official languages) and understanding and sensitivity of local cultures. There is however a high staff turnover rate as a result of the level of excellence, which results in recruitment of staff to higher level posts in the public sector and positions in the private sector.

A lean personnel structure with an automated project management system and a number of facilitating systems has been created in order to provide an effective and efficient delivery system. These include the creation of efficient communication channels, improving control and management strategies and building the capacity of personnel. Implementation of

strategies for cost recovery for regulatory functions and the rendering of preventative animal health services have been implemented.

Epidemiology and laboratory services:

This work is of a specialist nature and objectives are achieved through a combination of inhouse and outsourced work. An excellent laboratory services is provided by the Onderstepoort Veterinary Institute.

Veterinary Public Health (VPH):

The department has gained the respect and trust of the owners and managers of abattoirs and processing plants who generally comply with the regulatory framework. There are some business operators who are emphasizing productivity of their abattoirs more than the hygiene. The regulatory system furthermore does not allow for competitive advantage for good hygiene practice nor transparency and consumer choice.

The Department is therefore in the process introducing an Abattoir Hygiene Rating Scheme to address these issues and incentivise conversion to best practice.

Animal Health:

The department makes provision and budget for rapid response to emergency outbreaks of controlled diseases. Disease control work is usually carried out on a proportional basis commensurate with available budget and human resource capacity except during outbreaks.

Community services and Law enforcement:

Staff capacity for community services and law enforcement is strategically placed in the areas where these services are required and are provided in collaboration with the Agriculture, Conservation and Environment programmes.

However, community services and law enforcement work is carried out on a proportional basis commensurate with available budget and human resource capacity.

General:

The directorate will be accredited with the South African National Accreditation System (SANAS), which will ensure correct processes, systems and international credibility.

The directorate has commenced and will continue to implement internationally acceptable quality control systems and best process auditing practice.

Customers: internal and external

The veterinary regulatory responsibilities entail national and international reporting requirements.

The quality and success of the animal health and public health work of the department is dependent on the involvement of all relevant stakeholders and the public at large. This includes engagement with organisations in the meat industry including SAMIC, RMPO, SAPO, IMQAS, RMPO, NERPO; interactions with Animal Welfare NGO's and CBO's including SPCA, PDSA, CLAW; engagement of the public at large in animal health and public health programmes.

3. Conservation and Environment

3.1 Conservation

3.1.1 Strategic direction

Aim

To promote the sustainable utilisation and conservation of biological diversity and natural processes for the development of all communities

Status quo analysis

Profile of Gauteng:

Although Gauteng is the smallest province in South Africa, it is characterized by high biodiversity. An estimated 3303 plant species, 125 mammal species, 326 bird species, 25 amphibian and 53 reptile species are known to occur in the province (Low & Rebelo, 1996). The current information available on the biodiversity of the province is outdated, associated with sampling bias, insufficient or has been recorded at too coarse a scale. Gauteng also has the highest urbanization levels in the country. Consequently, the biodiversity in the province is highly threatened by industrialization, mining, agriculture and urbanization. The Department has initiated the Gauteng biodiversity GAP analysis project for the successful conservation of biodiversity within Gauteng. The project will identify and map priority areas where development habitat transformation and fragmentation should be discouraged and conservation efforts should be focused. The Gauteng biodiversity GAP analysis project also offers an opportunity for collaboration with researchers in other institutions on the conservation of biodiversity.

Law reform:

A comprehensive law reform process is underway and a new South African biodiversity strategy and action plan will be given effect through the National Biodiversity Bill currently under consideration. This is be complemented by administrative policies and guidelines put in place by the Department which guide decision-making.

Permitting for the trade and keeping of wildlife:

The Department introduced cost recovery measures on the 1 st of May 2002 relating to permitting functions for the trade and keeping of wildlife. This is underpinned by the outcomes of work currently underway in the intergovernmental South African Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Implementation Project (SACIP). A database for processing general permit applications has been developed and is currently being tested for implementation. Compliance and enforcement is supported by a 24-hour hotline for the public to report illegal wildlife activities and the presence of a Special Investigations Unit at the Johannesburg International Airport to ensure that imports and exports are inspected and regulated.

Conservancies:

The Department is putting in place a conservancy programme to fulfil the government's obligations in the Biodiversity Convention. Designated protected areas alone are insufficient for the conservation and sustainable utilisation of natural systems and species of the province. The programme will consist of a registration and accreditation process in order to promote conversion to best ecological management practices. The package will include a rating system, incentives and a support strategy. These elements are being included in the conservancies' policy, which will be developed into an operational plan over the next year.

CAPEX:

CAPEX programmes on provincial nature reserves are important to ensure that the facilities provided are able to generate a revenue stream to at least partially cover operation costs. The projects are also important for labour absorption.

Key departmental objectives

Key departmental objective	Strategy	Outcome (Goal)	Service delivery indicator	Service delivery target or milestones (Goal)
Resource Management: To ensure sound management of biodiversity, communities, landscape processes and systems	To maintain the infrastructure on the 6 provincial nature reserves.	Well-kept and maintained infrastructure.	% Of buildings, roads and fences repaired and maintained.	Service commensurate with available budget and human resource capacity per annum
through the establishment and maintenance of protected areas; advice to resource users on resource	To implement sound ecologically based veld and game management.	Sustainable utilisation and conservation of protected areas.	Number of hectares in good condition. and endemic diversity of animals	26109 ha
management related issues; provision and expansion of visitor services with an aim of increasing the number of	To implement safe and strategic firebreaks and fire management.	Safe and timely fire breaks. Ecologically correct block burns.	Kilometres burned. Hectares burned.	284 km 8703 ha
visitors to provincial protected natural areas, namely, Suikerbosrand, Alice Glockner, Marievale, Roodeplaat, Leeuwfontein and Abe Bailey.	To remove all alien invasive plants from protected areas.	Protected areas clear of alien invasive plants.	Hectares cleared.	600 ha
	Awareness programs for school groups to reserves.	Essential element of general public awareness	Number of learners participating per annum.	7000
To provide sound ecologically based advice, to resource users on resource management related issues, within the 2 Blue IQ project areas; namely: Cradle of Humankind World Heritage Site and Dinokeng.	To provide advice on fire management and protection, ecologically based veld management, alien invasive plant removal, erosion control and conservancies.	Sustainable utilisation and conservation of project area; ecotourism opportunities; community development programmes; informed resource users, with regard to resource management issues.	Number of requests received for information.	50
Working for Water program	To initiate the clearance of alien invasive vegetation in the riparian zone of strategic river catchments in Gauteng province, in accordance with the objectives of the Working for Water project.	Mapping and eradication of alien invasive vegetation of the selected areas.	Number of hectares cleared. Number of projects run.	20400 ha 17

Key departmental objective	Strategy	Outcome (Goal)	Service delivery indicator	Service delivery target or milestones (Goal)
Technological Services: To deliver decision support to DACEL and the public on conservation biology issues to protect wild species and their ecosystems (ecological processes) through pro- active planning, research, policy compilation, and co- operative action with other stakeholders and development of appropriate utilization	The provision of scientific decision support to support protection and sustainable utilisation of protected and priority natural landscapes (ecosystems which are not transformed).yet i.e. not paved, tarred, ploughed, mined, industrialised or urbanised).	Essential protection and sustainable utilisation of Gauteng's biodiversity; measurable progress with <i>in situ</i> wild species protection programs; environmental best practice land use patterns	The number of representative operational management plan committees (MPC's) established for each priority natural landscape. The number and quality of approved operational ecological management plans (EMP's).	2002/2003: MPC's and EMP's established for 4 out of 6 provincial reserves. 2003/2004: MPC's and EMP's established for all 6 provincial reserves.
strategies.	Facilitate the consolidation of additional natural landscapes under formal ecological protection to meet the IUCN aim of minimum 10% protected surface area of any given veld type /biome/ bioregion.	Essential protection and sustainable utilisation of Gauteng's biodiversity; measurable progress with <i>in situ</i> wild species protection programs; environmental best practice land use patterns	The number of representative operational management plan committees (MPC's) established for each priority natural landscape. The number of approved operational ecological management plans (EMP's).	2004/2005: Expanded formally protected areas of the province commensurate with biodiversity need, available budget and human resources (currently 1.6 %). MPC's and EMP's initiated for additional priority government properties i.e. Tswaing, Hartebeesthoek (WHS)
	Implement scientific investigations and research to contribute to decision support.	Essential protection and sustainable utilisation of Gauteng's biodiversity	The number of completed projects	Publications and reports commensurate with available budget and human resource capacity per annum
	Develop accessible biodiversity and geographical databases and appropriate data management and interpretation expertise.	Essential protection and sustainable utilisation of Gauteng's biodiversity	Customer service delivery indicators for efficient and effective response to information requests	2002/2003: Permit database fully developed and 50% operational. 2003/2004: All databases (biodiversity and GIS) updated, developed and fully operational.
	Develop cost effective monitoring programs for natural resource use and ecosystem health indicators.	Essential protection and sustainable utilisation of Gauteng's biodiversity	The number and affectivity of operational monitoring programs. The reliability of results (data and interpretation for example: River Health program).	Monitoring programmes commensurate with available budget and human resource capacity per annum

Key departmental objective	Strategy	Outcome (Goal)	Service delivery indicator	Service delivery target or milestones (Goal)
Technological Services: To deliver decision support to DACEL and the public on conservation biology issues to protect wild species and their ecosystems (ecological processes) through pro- active planning, research, policy compilation, and co- operative action with	Develop best wildlife utilisation practices through co-operation with all IAP's including NGO's, conservancies, private landowners conservation resource managers and links with other government departments.	Essential protection and sustainable utilisation of Gauteng's biodiversity; development of natural resource use practices (as recommended by models, management plans, procedures and policies) to support ecosystem protection and sustainable use.	Geographic area covered by implementation of best practices.	Resource use policies updated and implemented (game policy, wetland policy, fire policy, buffer zone policy, culling, harvesting, and collecting policies)
other stakeholders and development of appropriate utilization strategies.	Determine biological conservation priorities (conservation status of wild species and Gap analysis).	Essential protection and sustainable utilisation of Gauteng's biodiversity; updated priority list of identified projects; updated lists of unwanted and priority species to support the regulation of the wildlife trade and EIA requirements (CITES and NEMA legislative requirements with regard to biological information).	Customer service delivery indicators for efficient and effective response to information requests	2003/2004: Updated lists of unwanted species and priority species lists (Red Data lists) for urgent conservation action.
Resource Protection: To promote the wise use of natural resources by ensuring enforcement	Develop cost recovery plan for permits issued.	Full cost recovery for Permits Office.	% budget of Permits Office fully recovered.	2002 – Initiate. 2003 – 60% recovery.
and compliance of the Nature Conservation Act and the Convention on Trade in Endangered Species of Wild Fauna	Develop fully computerized permits system for Permits Office.	All permits computerized.	% general permits computerized.	2001 – Initiated. 2002 – 100% complete.
and Flora. R 4 128 000	Develop new Conservation Policy for Gauteng.	Approved Policy for the protection and sustainable utilisation of Gauteng's biodiversity.	% completion of Policy.	2002 – Initiate. 2003 – 100% complete.
	Full implementation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in Gauteng as per the SA CITES implementation Plan.	Prevention of trade detrimental to the survival of CITES species.	% inspection.	2001 – Initiate. 2002 –100% inspection.
	Develop of a new Conservation Act for Gauteng.	Promulgated Act for the protection and sustainable utilisation of Gauteng's biodiversity	% completion of Act.	2002 – Initiate. 2003 – 100% complete. 2004 – Implement promulgated Act.
Project Co-ordination: To co-ordinate, budget for, and plan capital projects on Gauteng provincial nature reserves.	Identify strategic capital projects on provincial nature reserves.	Infrastructure to support administration and reserve visitation; labour absorption	Completion of CAPEX projects; indicators of labour intensivity	CAPEX projects commensurate with available budget

Interdepartmental linkages

Nature Conservation is a concurrent function and the Department carries out its functional responsibilities in close co-operation with the National Department of Environmental Affairs and Tourism.

The Working for Water project is jointly administered and executed by the Directorates of Conservation and Agriculture, the National Department of Agriculture and the National Department of Water Affairs and Forestry. This project that has the dual objective of clearing invasive vegetation with resultant positive water quantity impacts, and poverty alleviation through the creation of income earning opportunities through labour intensive implementation of the clearing programmes.

3.1.2 Environmental analysis

Assessment of external threats and opportunities

Consistency in carrying out regulatory responsibilities:

Interprovincial working groups are responsible for the co-ordination of policy and legislation. The department applies policy as promulgated by the national minister. However, the implementation of policy by Provinces is not always consistent and this leads to "province hopping" i.e. if a permit application is refused in Gauteng, the applicant will attempt to get permits by applying for the permits in a different province. This poses a challenge as the bulk of trade in wildlife takes place via the Johannesburg International Airport. The intergovernmental structures are responsible for consistently addressing this issue.

Conservancies:

The policy and legislative frameworks have historically disincentive best ecological land use practices. The knowledge and expertise for the establishment of conservancies and promotion of conversion to best practice is therefore limited. This is an important matter in view of the fact that the natural resource base is finite and must be protected and sustainably utilised in order to safeguard the interests of current and future generations. The Department is however steadily building its expertise base and draws on the knowledge and expertise of interested and affected parties.

Management of biodiversity threats:

Sound management of ecosystems is essential to sustain plant and animal life. Development pressure, pollution, the muthi trade, smuggling of wildlife and importation of alien species all place pressure on the Provinces ecosystems. The is compounded by the fact that public awareness is limited and biodiversity threats tend to be regarded as insignificant in the face of pressing social and economic needs. However, the biodiversity threats are ignored at our peril and the Department places great importance on raising public awareness and putting in place management strategies for the protection and sustainable utilisation of our natural resource base.

Biodiversity management strategies:

The Department intends to put in place cost recovery measures for services provided, both services in support of business and recreational activity. These measures will include determination of the overhead costs of scientific work required for decision support, for

example decisions on sustainable off take of species. This approach will allow for the affordability of necessary scientific work for the sound management of ecosystems

Assessment of internal strengths and weaknesses

Management challenges:

The wide scope of work of the Department necessitates a multi-disciplinary approach to its functional responsibilities. The poses management challenges and the department is accordingly converting to an outputs based project management system to facilitate best practice in decision-making.

Resource constraints:

The Department plans projects commensurate with the available budget and human resource capacity. The scientific work necessary to support sound decision-making is constrained and therefore the speedy implementation of a cost recovery system for the services provided by the Department is being prioritized. This will enable funds to be used to source expertise on a contract basis.

Knowledge and expertise

The Department has successfully recruited specialist staff with a strong conservation ethic to carry out the functional responsibilities of the Department with excellence.

Compliance and law enforcement:

The international trade in wildlife is an important contribution to the South African economy. Risks are posed by inadequate staff capacity and inappropriate control measures for the checking of consignments against the permit specifications. For this reason procedures are constantly reviewed and improved.

Customers: internal and external

The multidisciplinary nature of the conservation functional responsibilities of the Department require close intra- and inter-departmental co-operation.

Law enforcement, compliance and the issuing of permits are amongst the most important functions of the Department. Clear and transparent operational policies are required for this work and therefore the department consults with interested and affected parties on the compilation of policies from time to time. Associations of interested and affected parties include the Falconry Club, East Rand Herpetological Society, Transvaal Herpetological Association, and Rehabilitation Association for Gauteng and the Gauteng Zoo Owners Association.

Visitors to provincial nature reserves are an important segment of the Department's clientele. Existing infrastructure on the reserves, which has to date serviced only school groups, is currently being refurbished to accommodate family groups and conference groups.

The Permits Office refers permit applications to Technological Services, General Investigations and Special Investigations for recommendations. The general permits database developed jointly between Technological Services and Resource Protection should reduce the processing time by supplying electronic processing for permit applications. Technological

Services also comments on environmental impact assessment reports referred by the Directorate of Environment, and supplies vital information and surveillance data to the rest of the Directorate as requested.

3.2 Environment

3.1.1 Strategic direction

Aim

To promote sustainable development and quality of life by contributing to a safe and healthy living environment.

Status quo analysis:

The Department is currently processing an increasing number of development applications throughout the province. As a result different environmental management tools, support systems and approaches are being developed or implemented to expedite or facilitate technically correct and sound environmental decision-making. These include but are not limited to inputting in and updating of the Gauteng Open Space Plan (GOSP), Integrated Environmental Management (IEM) regulations, guidelines and tailor made policies/strategies.

In terms of strategic land use planning processes, the Department has been actively involved and will continue to participate in projects that seek to integrate land use planning with environmental issues. In this regard input into the Integrated Development Plans (IDPs) of Local Authorities is of critical importance. In addition Strategic Environmental Assessments (SEAs), the development of a policy on the subdivision of agricultural land and participation in the Gauteng Spatial Development Framework all contribute towards integrating environmental issues with strategic spatial planning.

With regard to waste and pollution, the most critical global issues is climate change. South Africa is in the top 20 countries contributing to greenhouse gas emissions. Of greater concern is the fact that South African generates 10 tonnes of carbon dioxide per person per annum compared to the global average of 7 tonnes per person per annum.

The key sources of waste and pollution in Gauteng emanate from:

- Industry
- Mining (tailings and impoundments)
- Transportation (road, rail and air)
- Energy (domestic fuel and power generation from coal in particular)
- Waste treatment and disposal (incineration, landfill operations and waste water treatment facilities)
- Area wide miscellaneous sources (biomass burning, agricultural tilling, wind erosion)

The knock-on effects on the health budget of the direct health impacts resulting from waste and pollution are not measured but can be assumed to be considerable. In the long term these risks and the financial implications of treatment are likely to escalate if no preventative measures are taken.

Public interest in and understanding of the importance of the prevention of waste and pollution and the importance of sustainable development is limited. Degradation of the non-renewable resource base and the long-term consequences of this are a "people problem" and require "people solutions".

The World Summit on Sustainable Development to be held in 2002 provides the opportunity to raise public awareness of the necessity of sustainable development. The Summit provides the opportunity to place environmental best practice at the top of the national agenda and to link the World Summit on Sustainable Development to the Millennium Africa Plan.

Key departmental objectives

Key departmental objective:	Strategy	Outcome (Goal)	Service delivery indicator	Service delivery target or milestones (Goal)
Integrated Environmental Management (IEM) for Rural Development: To promote environmentally sustainable rural development; To promote integration of environmental issues with spatial planning; To promote	Implement Environmental impact assessments (EIA) regulations and IEM objectives in decision-making.	Environmentally sustainable rural environment	% Of high potential agricultural land/sensitive/ecological land lost; % Increase in procedurally & technically correct comment/input into applications.	80% of approved applications accord with the preferred environmental/land use policy; 90% of EIA completed within departmental time frame; 95% success rate in litigations
participative and coordinated environmental management	Monitoring authorised development	Environmentally sustainable rural environment	% Level of monitoring	100% monitoring of all Records of Decision (RODs)
	Protection of sensitive environments	Selective development that promotes and protects sensitive environments	Number of strategies developed for dealing with applications in sensitive environments	One strategy for each identified area
	Input into and ensure that appropriate policies and plans are informed by integrated environmental management principles; Disseminate Environmental spatial information to provincial and municipalities	Spatial plans that are informed by environmental best practice	% Compliance of spatial development plans of provincial and local authorities with environmental spatial information.	100% compliance and access to environmental spatial information that informs provincial and municipal plans
	Coordinated environmental management and decision making	Implementation of the Provincial Environmental Implementation plan;	Number of Memorandum of Understanding (MOU) signed with relevant departments; Level (%) of compliance with NEMA and Environmental Implementation Plan	3 MOU signed with relevant departments; (100%)- all GPG business plans contain explicit statement on NEMA compliance
Spatial Development Projects (WHS and Dinokeng): Ensure environmental best practice in Blue IQ projects	Provide environmental management support to COHWHS and Dinokeng projects	Improved environmental performance and environmentally sustainable development that support the objectives of the projects	Number of development applications reviewed and level (%) of monitoring	100% monitoring of Records of Decisions issued

Key departmental objective:	Strategy	Outcome (Goal)	Service delivery indicator	Service delivery target or milestones (Goal)
Integrated Environmental Management (IEM) for Urban development: To promote environmentally	Continue to develop implement and extend policies, plans and programs as well as legislation aimed at environmentally sound and sustainable urban development in Gauteng	Environmentally sustainable urban environment	Completion of intended policy, plans, programs, strategies, and regulations	Achieve 100% of phases of strategies, policies and plans as indicated in the annual business plan.
sustainable development within the urban environment of Gauteng (Focused at the Metro Councils of Johannesburg, Ekhuruleni and	Development and implementation of provincial legislation aimed at facilitating integrated environmental management	A regulatory framework that would support and enforce development in the urban environment that would be environmentally sound and sustainable	Provincial Integrated Environmental Management (IEM) Regulations promulgated and implemented	Promulgation and implementation of provincial IEM Regulations
Tshwane)	Continue to effectively use and develop IEM tools	Urban edge protected; Promotion of infill & densification; Identify and implement management of strategic sensitive environments; Protection of land that has high cultural, social, ecological or agricultural potential	Sensitive environments identified and demarcated; Decision making on development applications; Number of development applications reviewed:	Achieve 100% of target indicated in the annual business plan
Integrated Environmental Management: Transport & Communication	Develop systems/policies /legislation that promote integrated environment management.	informed decision Making on EIA applications relating to roads and communication structures	Number of EIA authorised in relation to roads and communication structures applications	Authorize 100% of roads and telecommunication structures applications received
	Develop Strategic Environmental Assessment (SEA) on the PWV road network and communication network strategy	Sound decision making for new road planned for construction and communication network structures	Completed SEA for the PWV Road network and communication network	Completed strategies
	Develop and update the Environmental Information Management System (EIMS)	To make informed decisions about EIA applications on various developments	Number of ROD's made through the EIMS	100% utilisation and updating for EIA applications
	Review and update the Gauteng State of Environment Report (SOER)	Reporting on the state of environment in Gauteng	Revised (Updated) version of the SOER placed on the web	Annual revision or update of the SOER
	Develop Provincial Guidelines for the Advertising & Signage Structures i.e. Billboards	Strategy and guideline requirements for Advertising & Signage Structures	Completed strategy and guideline	Completed strategy and guideline
Key departmental objective:	Strategy	Outcome (Goal)	Service delivery indicator	Service delivery target or milestones (Goal)
Industrial Impact Management: To facilitate the development and	Pollution Incident Management	Pollution control	Percentage complaints handled	Appropriate action taken for 75 % of all incidents reported
implementation of pollution control strategies for air and water	Environmental Impact Management of new industrial developments	To ensure new industrial development are environmentally sustainable	Number of EIA's / exemption issued; Percentage compliance monitoring	Achieve 100% of target indicated in the annual business plan

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	Cleaner Technology Capital Fund	To provide technical assistance to companies and municipalities seeking to implement cleaner technology initiatives	Number of applicants who successfully adopt cleaner technology.	The successful conversion of 100% of applicants
	Cleaner Fuel for Government Fleet	To identify and convert GDACEL's GG cars to a chosen technology	Number of GG cars successfully converted to cleaner technology	Achieve 100% of target indicated in projects objectives and business plan
Integrated Waste Management: To ensure Waste	Continue to develop, implement and extend policies, plans and programs	Increased recycling tonnages for the inner city	Multi media bins for the inner city	2003 – 2004: Introduce multi media bins
Management that prioritises waste avoidance. Only waste that cannot be	with respect to waste minimisation	Waste minimisation and roll out of bins as part of WSSD legacy	Multi media bins for selected WSSD venues and other sporting venues	60% of waste fro WSSD venues diverted from land fills
avoided reduced or reused should be disposed of in a		High level of awareness around waste minimisation achieved	Awareness conference	Maximum attendance achieved
manner which is not harmful to public health or the environment		Research into recycling market conditions	Study results	Complete studies to input into strategy and action plans with targets
	Continue to develop, implement and extend policies, plans and programs with respect to general waste	Integrated Waste Management planning being achieve at local government level	Input into the development of 6 Integrated Waste Management plans for local government	6 draft Integrated Waste Management Plans for local government
		Strategic waste management planning being achieved at provincial government	Development of the provincial Integrated Waste Management plan	: Draft Provincial Integrated Waste Management plan developed in 2003 – 2004 and completed in 2004/5
	Continue to develop, implement and extend policies, plans and programs with respect to health care waste management	Improved health care waste management achieved in Gauteng	Final health care waste management strategy developed and implementation	: Completed strategy 2003 – 2004: Implementation strategy available including indicators
	waste management		Registration and Information system developed	Complete Health Care waste information system
	Continue to develop, implement and extend policies, plans and programs with respect to hazardous waste management	Status quo with respect to hazardous waste management known and a plan prepared for intervention	Draft Provincial hazardous waste management plan prepared	Draft plan with indicators completed in 2003 – 2004: Final plan developed in 2004-2005
	Continue to develop, implement and extend policies, plans and programs with respect to mining waste	Reduced impact of mining achieved in Gauteng	Number of mining authorisations reviewed and commented on	100% of mining authorisations reviewed within the departmental timeframe
	Development of provincial legislation aimed at facilitating integrated waste management	Provincial legislation for integrated waste management	Regulations for Reporting as well as municipal integrated waste management plans developed	Regulations published in 2004- 2005
	Impact management	Reduced impact of developments achieved by minimising emissions to all media	Number of Environmental Impact Assessment (EIA)	ROD's issued for 100% of active EIA applications received;

		High level of compliance to ROD conditions achieved	ROD's issued. Number of ROD's monitored for compliance	80% of ROD's monitored for compliance
Key departmental objective:	Strategy	Outcome (Goal)	Service delivery indicator	Service delivery target or milestones (Goal)
Environmental Education & Awareness: Promotion of environmental awareness and public support around environmental issues	Develop links with appropriate structures in Local Government to facilitate programmes in respect of best environmental practises	Proactive strategy to ensure public awareness of the importance of safe and healthy living environments as essential requirements for survival and	Formal institutional arrangements and environmental capacity within local authorities	Institutional arrangements to support environmental education and awareness in all local authorities
	Establish Environmental forums to facilitate networking, communication and co-ordination	development; involvement of the public at large in environmental action	Number of Forums established	Forums established in all local authorities
	Develop and distribute materials for environmental literacy		The formulation of EE framework for schools; Number of schools utilising the developed EE materials	EE material for four grades utilised by 10% of the schools by 2003/4.
	Facilitate wider accessibility and use of DACEL protected areas for educational and recreational purposes		The % increase in the number of people using DACEL reserves	25% increase in the use of DACEL reserves by 2003/4.
	Provide capacity building support that is aimed at environmental action		Number of NGOs and Councillors trained	Scope commensurate with available budget and human resource capacity

Interdepartmental linkages

Environment and pollution are areas of concurrent responsibility and waste matters and noise pollution are areas of provincial competence with waste being a local government matter. The Department accordingly works closely with the responsible local authorities and the National Department of Environmental Affairs and Tourism.

Environment is understood to be the natural and the living environment and therefore a number of projects are multidisciplinary and involve collaboration with other provincial departments and spheres of government. These include:

- A donor funded multi year Health Care Risk Waste Project involving the Department of Health and Transport and Public Works.
- A donor funded Air Quality Management Strategy is jointly administered with the Department of Environmental Affairs and Tourism
- The Greater Alexandra renewal project led by the Department of Housing and the Greater Johannesburg Metropolitan Council.
- The development of learning materials for schools in conjunction with the Gauteng Institute for Curriculum Development
- The responsibility for the development and administration of policy for the subdivision of land, as well as the responsibility for planning and development of rural nodes, which is managed jointly by DACEL and the Department of Development Planning and Local Government

• The authorisation of EIA projects requires the specific inputs of the Department of Water Affairs and Forestry, the Department of Land Affairs, the Department of Agriculture, the Department of Health, the Department of Development Planning and Local Government

The Environmental Implementation Plan for Gauteng, formulated and adopted in terms of the National Environmental Management Act, is binding on all Provincial Departments and Local Authorities and is jointly implemented

3.1.2 Environmental analysis

Assessment of external threats and opportunities

Authorisation of development:

Various departments in all three spheres of government have regulatory responsibilities with respect to authorisation of development. Although there is a high quality work being undertaken in the individual departments, the different departments have different and sometimes contradictory objectives. This requires close co-opera tion of the different responsible departments based on common functional and management principles

Subdivision of land:

Subdivision of high and medium potential agricultural land is supported in the interests of utilisation of land that is currently unutilised and in order to change the race and gender patterns of ownership and production in the agricultural sector.

However, subdivision also allows the construction of one residential unit per subdivided portion and results in a de facto change of land use in instances where the end result of the subdivision is the establishment of residential rural estates.

The Department therefore applies the precautionary principle in authorising subdivision of land.

Township establishment:

Township establishment is supported as it adds to the housing stock and has job multiplier effects during construction. However, township establishment may have undesirable results in some instances:

- Development of sensitive land
- Development of high income residential and golfing estates resulting in surplus stock and pressures on bulk infrastructure and roads elsewhere
- Development of associated new industrial, business, commercial and retail centres resulting in surplus stock and pressures on bulk infrastructure and roads elsewhere.
- Increased urban induced soil erosion as a result of increased storm water run-off.

The Department therefore requires environmental authorisation and measures to mitigate negative environmental consequences arising form township establishment.

Mining and industrial development:

Mining and industrial development is supported as it contributes to economic growth. However, inadequate environmental management and/or mitigation and/or use of clean technology has long term financial implications as a result of pollution and waste that may be unaffordable for future. The Department has therefore established capacity to comment on mining authorisations and Environmental Management Plans (EMPs) and follows a cautions approach in authorisation of new industrial developments

New energy and communications infrastructure:

Development of new energy and communications infrastructure is supported. However, there are public health risks associated with this infrastructure in some instances –

- ✓ Contamination of water sources with persistent organic pollutants
- ✓ Telecommunications disturbance emanating from oversupply
- ✓ Radiation risks

The Department follows a cautious approach and requires mitigatory measures for negative environmental consequences arising from the development of new communications and

Waste and pollution:

The urbanised and industrialised character of Gauteng gives rise to particular challenges with respect to waste and pollution.

The strategy of the department with respect to waste generation and pollution of air, water and soil is firstly to minimise generation of waste and pollution, secondly to rehabilitate degraded areas and thirdly to utilise legal instruments to act against transgressors.

Assessment of internal strengths and weaknesses

Management challenges:

The wide scope of work of the Department necessitates a multi-disciplinary approach to its functional responsibilities. Furthermore there has been a major increase in the volume of regulatory work on an annual basis. This poses management challenges as a result of constant growth in the staff capacity and budget for the functional responsibilities of the Department for Environment.

Knowledge and expertise

The Department has successfully recruited knowledgeable and competent staff with a high level of commitment to public service. They carry out the functional responsibilities of the Department with excellence, notwithstanding the constant expansion of the scope of work. However, this also results in a high staff turnover rate as officials are recruited to higher-level posts elsewhere in the public sector and in the private sector.

Compliance and law enforcement:

The department plans its work annually based on the available budget and human resource capacity. At this stage the ability to undertake compliance and law enforcement work is limited. The Department plans to implement cost recovery measures for the authorization of EIAs and it is envisaged that the revenue stream generated will enable expansion of the scope of work in the area of compliance and law enforcement.

Customers: internal and external

The multidisciplinary nature of the conservation functional responsibilities of the Department require close intra- and inter-departmental co-operation.

The client base includes a wide range of interested and affected parties including industry, NGOs, CBOs, and the general public. The Department seek to ensure that all sectors of society have a full and profound understanding of the importance of the environment to the current and future social, economic and physical developments and activities in Gauteng. The onus of taking full responsibility for environment is a shared responsibility of the public at large, since it is human activity, which determines the positive and negative environmental consequences of development.

4 Spatial Development Initiatives

4.1 Dinokeng nature based tourism destination in North Eastern Gauteng

4.1.1 Strategic direction

Aim

To establish, manage and facilitate conservation based tourism development in the North Eastern quadrant of Gauteng that will result in the creation of jobs and increased appropriate economic growth in the area.

Status quo analysis

The area north east of Gauteng, where the Dinokeng project is located, is one of the most economically depressed areas of Gauteng, characterised by a lack of formal infrastructure and high rate of joblessness. In response to this challenge of underdevelopment, the Gauteng Provincial Government has identified Dinokeng as one of its ten Spatial Development Initiatives, or special projects – also known as Strategic Economic Infrastructure Investment Projects (SEIIP), which seek to place the province on a new trajectory of economic development through investment in infrastructure and private-public partnerships. DACEL is the agent responsible for planning and implementing the project.

The management team responsible for planning and implementing Dinokeng was appointed in September 2000 and immediately set out to plan and develop the area as a world-class ecotourism destination targeting business tourists, in close proximity to the cities of Tshwane and the Johannesburg International Airport.

Feasibility studies for the project were completed in 1999, and showed that the area was suitable for development as a conservation-based tourism initiatie. Consultants to undertake master planning were appointed in March 2001 and are currently at an advanced stage of developing detailed and implementable business plans that will guide implementation from 2002 onwards.

Progress has also been made in terms of bringing a variety of stakeholders on board, including the various tiers of government and other state agencies. The project is working closely with the Nokeng Tsa Taemane Local Authority and the Metsweding District Council in a process that will see Dinokeng's land use plans contributing significantly to the local IDP process. DACEL is also collaborating with various government departments and role players such as DLA, DoH, DPLG, GTA and others to ensure proper coordination between the various role-players.

Key departmental objectives

Key departmental objective	Strategy	Outcome	Service delivery indicator	Service delivery target or milestone
Physical Infrastructure	Strategic land purchase Construction of tourism	Safe and efficient travel of tourists and other persons	% Of labour vs. capital utilised	40% of labour
To establish and ensure	facilities (gateways)	through the area	% Of SMMe involvement	50% SMMEs`
implementation of a framework for infrastructure	Infrastructure for the anchor project	Environmentally sound practices in construction	Environmental indicators	
development in Dinokeng in terms of project objectives	Roodeplaat and Leeuwfontein infrastructure	Increased job creation	- Sewerage - Waste disposal	
(41 012 000)	Implementation of a tenure security and housing scheme	opportunities through labour intensive methods		
		Investment and growth opportunities for SMMEs		
Tourism and marketing	Design and develop an integrated tourism development plan for	Capacity building of SMMEs	No of plans	1
To develop and market Dinokeng as a premier eco- tourism destination	Dinokeng Design and develop an integrated tourism	Poverty alleviation through jobs created and incomes generated	No of plans	1
(2 909 000)	marketing strategy	Contribution to	N. Clai	
	Compilation of tourism database	local economic growth and job creation	No of databases regularly updated	1
	Development of communication, media and marketing strategy	Increased profile of Dinokeng locally and overseas	No of strategies/plans	3
	Media relations strategy	Increased	No of press releases, interviews	12
	Develop community based tourism businesses and institutions	participation of PDIs in tourism as visitors and owners	Number of business or institutions	6
	Develop and maintain a functioning website		Website in place	1
	Tourism skills training		Number of people trained	60
Integrated conservation and environment management	Promotion of best development practice in the development of EIA of all major developments	Environmental impact of developments reduced	Dinokeng development indicators (whole monitoring system)	Various
To promote sustainable development in all aspects of Dinokeng development	Promotion of conservation related land use	Improved	Area of land under conservation related land use (%)	30%
(10 209 000)	Incorporation of sustainable	environmental quality	Inclusion of SD issues in IDPs	80%

development in planning by local authorities Establishment of a Big % game reserve project	Increased land under conservation related use	Appropriate institutional model established (no.) No of jobs created % Of shareholding by PDIs	100 20%
	IDPs that promote sustainable development Promotion of local economic development with participation by		
	PDIs		

Public Participation	D : 6 66 6	Public buy-in,		
1 done i diticipation	Design of an effective	support of and		
To ensure full and	public participation	collective		
meaningful	strategy that ensures	ownership of the		
participation of all sectors of the	meaningful and	project Effective model of		
community in the	equitable participation	co-operative		
development of	for all stakeholders,	governance		
Dinokeng	particularly	achieved		
(2.550.000)	marginalised			
(2 558 000)	communities through		IDP compliant master	60% input into
	- Joint work		planning process and	IDP for local
	with IECM		output	authority
	manager on			
	 IDP process 		0/ 4 1 1	400/ 1
			% Agreement reached with landowners in	40% signed agreements
	The nature-based		proposed core area	agreements
	anchor project:		r >p	
	anonor project.		Development of tourism	50% financing
	 Design negotiating 		nodes	for development
	process to reach			of tourism nodes secured
	agreement with landowners			nodes secured
	 Community 			
	finance/incentive			
	schemes designed		0/ 4 1 1	400/ 1
	 Develop 		% Agreement reached with landowners in	40% signed agreements
	community public private		proposed core area	agreements
	partnerships		r	
	developed			
	 Establish 		% Identified	60 % identified
	management		stakeholder groups that support location of	stakeholder groups that
	authority • Joint work with		gateways	support location
	Infrastructure		,	of gateways
	 PP around 			
	gateways in terms			
	of location,			
	structure and function, signage)			
	and		% Tourism authorities	
	❖ Joint work with		established	
	Tourism and		% SMME developed	
	marketing manager Tourism			
	 Tourism development 			
	framework			
	particularly with			
	regard to			80 % identified
	communication strategies and		% Identified	stakeholder
	overlaps in		stakeholder groups	groups that
	community benefit		support	support
	schemes work			
	❖ Design of an			
	effective communication			
	strategy			

	Community benefit schemes Phase 1 — Conceptualisation, baseline research and networking. Phase 2 - Runs two processes in parallel. The first is confirming the plans developed in phase 1 have no fatal flaws and the development of detailed business plans for pilot implementation. The second is a recruitment process for these pilots. Phase 3 - Also runs two processes in parallel. Firstly, the implementation of these pilots. And secondly capacity building of individuals who will be recruited into large-scale implementation. Phase 4 — Although elements of monitoring and evaluation are ongoing - this is a formal evaluation and possible redesign phase Phase 5 - Large-scale implementation.	Community benefit schemes that provide substantive benefits for the poor designed Public-private partnerships in place	Number of programmes run	2 pilots
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Interdepartmental linkages

Dinokeng is an integrated project requiring the cooperation of various government departments at all tiers. The project works closely with the Nokeng Tsa Taemane Local Authority and Metsweding District Council. It also has relationships with national departments of Land Affairs, Land Claims Commission, and DEAT.

At provincial level, linkages exist between Dinokeng and DPLG, Housing, Labour, and Provincial Land Reform Office.

Relationships with other relevant departments are being cultivated.

4.1.2 Environmental analysis

Assessment of external threats and opportunities

Political environment

The Dinokeng project is meant to be an integrated project, which will contribute to changing the trajectory of economic development in the province. Its nature is such that the cooperation of various departments and tiers of government require working together if the long-term objectives of economic growth, job creation and poverty alleviation are to be realised.

Political instability and infighting within the local council (Nokeng Tsa Taemane) has affected the project negatively, resulting in faulty reporting mechanisms and lack of substantive input by the council. Council's co-operation is critical, as the sustainability of the plans to be developed - particularly those related to Integrated Development Plans – will depend on the capacity and willingness of the local tier of government to implement.

On the other hand, good co-operation between DACEL and the departments of Housing, Planning and Local Government, Labour and others present real opportunities for effective co-operative governance.

Social environment

Although accurate statistics are not readily available, the Dinokeng area is know to contain some of the worst forms of poverty and underdevelopment in Gauteng. These exhibit a racial character, with concentration high among black people.

Land ownership is also heavily skewed in favour of whites, and there are frequent reports of farmer killings and the abuse of farm workers and land occupiers, including illegal evictions.

Crime remains a major threat to the development of the area as a tourism destination.

Lack of housing and access to infrastructure such as roads, water and sanitation, schools, and telecommunications is also a major problem.

Dinokeng must try and address these issues in a manner that does not exacerbate racial tensions on the ground.

The project – as a socio-economic intervention by government – will address some (though not all) of these issues, presenting a clear opportunity for improving the lives of the poor. Also, continuing discussions are being held with all stakeholders to garner support for the project and indications are that this is resulting in improvement in relations between blacks and whites in the project area.

Economic environment

The economic environment appears favourable to the development of Dinokeng.

Tourism is a growing sector of the economy and indications are that the environment is favourable for the development of Dinokeng as tourist destination, targeting both domestic and foreign visitors.

With the identification of Metsweding by the Department of Development Planning and Local Government as one of three areas in Gauteng targeted for support in terms of local economic development, the possibility of Dinokeng and the LED initiative complementing each other are huge, and the economic spin-offs for the region in terms of growth and employment will be enhanced.

While some are sceptical of the potential of Dinokeng, there are many locals in the area who continue to invest in the expectation of the market that to be generated by Dinokeng will provide opportunities for profitable business enterprise. A growing number of potential

investors are also making inquiries of the sort that make public-private partnerships a distinct possibility.

Cultural environment

Cultural diversity is a characteristic of the area. Rich aspects of the cultures of the various people who live in the area or have historical roots therein (the Ndebeles, Afrikaners, Pedi's, etc.) are being developed as a positive attribute that will attract tourists to Dinokeng.

However, decades of apartheid have also ensured that deep racial divisions and suspicion remain.

This poses a great challenge for Dinokeng, and the approach so far has been to promote culture as a reconciler rather than a divider of people.

Regulatory environment

The passing of the Biodiversity Bill and Planning Bill planned for the next financial year will support the development of Dinokeng. The Planning Bill provides a national framework dealing with land use issue. The land use plans for Dinokeng will be key in determining what land use patterns will be allowed or disallowed in Dinokeng. The Biodiversity Bill will support the management of environmental matters.

Tendering procedures, though essential to counter corruption, pose problems for a project such as Dinokeng, which has tight timeframes to deliver as quickly as possible. These tend to delay the procurement of goods and services excessively. There is a need for more simplified procedures, which while curbing corruption do not unnecessarily hold up delivery or implementation.

Assessment of internal strengths and weaknesses

Strengths

A highly skilled and dedicated team, supported by the entire department, is driving the planning and implementation of the project. This team enjoys high levels of support from the senior management and political leadership of the department, as well as Blue IQ team.

The project as a whole also enjoys huge political support within the province, and has access to vast expertise through the Blue IQ skills consortium.

The master planning currently under way is being undertaken by a consortium of highly skilled people with vast knowledge and experience, and DACEL receives technical support in evaluating reports from the Development Bank of South Africa. Indications from interim reports are that the development and business plans, which are a deliverable of the master planning process, will be of very high quality.

The master planning process has taken place with the involvement and participation of all relevant stakeholders. This places the development in a position of enjoying future ownership by the beneficiaries, thus enhancing its sustainability.

Weaknesses

Lack of internal capacity is a threat to achievements so far

Lengthy procurement procedures

Conflict between being 3-year project and based in government

Customers: internal and external

Internal:

As conservation based projects, Dinokeng relies on the support and input of the Directorates of Conservation, Environment, Agriculture and Veterinary Services.

External:

National government

Dinokeng is not a line function project but an integrated development project, which requires close collaboration with other government departments. The national departments of Trade and Industry, Land Affairs, Water Affairs, Labour and DEAT play an important role as sources of various kinds of funding as well as implementation.

Other state agencies such as the Land Bank, Khula, Ntsika and SATOUR play critical roles.

Provincial

As part of the Blue IQ initiative, Dinokeng receives funding and other support through Blue IQ. The project also works hand in hand with the Department of Housing in the implementation of its tenure security scheme, with GTA on tourism and marketing aspects, and with DPLG on LED.

Local

The long-term sustainability of the project requires cooperation with Metsweding District Council, Nokeng Tsa Taemane Local Municipality, landowners and residents of the project area, and local business and tourism structures.

4.2 Cradle of Humankind World Heritage Site in North Western Gauteng

4.2.1 Strategic direction

Aim

To achieve an acceptable balance in the World Heritage Site between conservation of cultural and natural resources, access, education and scientific research, the interests of those living and working in the area and its use for the economic and social benefit of the population at large, within the framework of the World Heritage Convention

Status quo analysis

The major undertakings thus far in the Cradle of Humankind World Heritage Site Project are the appointment of permanent staff capacity, the completion of detailed master planning for the development of the 47 000 hectare area and the management of stakeholder participation and communication.

The master plan entails the establishment of a network of five facilities, which will serve as gateways to the Cradle of Humankind Site. These sites will have differing primary purposes, with one site serving as the primary facility, a world-class interpretation centre and associated fossil preparation and research facilities. The primary site will be located on a 100-hectare site at Mohale's Gate donated to government by the Standard Bank. The architectural rationale for the primary site has been developed and the process of tendering for the design construction and operation of the facilities has commended.

The master plan also refines the zonation of the area and establishes limits of acceptable change in each area and provides for a specific management plan for each paleantological site. The requirements for upgrading of roads and the development of bulk infrastructure and telecommunications is also set out in the master plan.

The growth of tourism plant in the area is well underway and already 83-day visitor and overnight destinations are marketed collaboratively as part of the Crocodile Ramble collaborative venture.

In addition a scheme for on site housing development in the area has been developed and will be operationalised.

Public works based ecological management programmes have been initiated, including the burning of the road reserve to prevent accidental fires and the clearing of invasive vegetation. These initiatives will be expanded in future.

Key departmental objectives

Key departmental objective	Strategy	Outcome (Goal)	Service delivery indicator	Service delivery target or milestones (Goal)
Land Use and Physical Infrastructure: To establish and ensure implementation of a framework for infrastructure development	To manage land use planning and Physical Infrastructure development in the WHS	Design, construction and operation of a world class Interpretation Centre; EIA for road construction; Change of land use, servitudes and subdivisions; Road construction and rehabilitation in identified areas; Signage throughout the site; Appointment of technical team for tenure security work; Subsidy administration in place; EIA's for housing; Subdivisions done; Conveyencing; Deed registration; 750 houses built	Jobs per unit spend during construction; Permanent operational jobs created; Indicators of economic growth	Approximately 750 households will benefit from tenure security scheme per annum Approximately 700 direct jobs and 1 450 indirect jobs created due directly to infrastructure development.
Integrated Environment and Conservation management: To promote sustainable development in all aspects of the development of the WHS	Cultural resource management	Integrated governmental approach to the COH WHS; Forward plan for heritage resources audit information; Appropriate fossil site development	Number of joint projects. Document on heritage resources; Individual fossil site plans; 13 Agreements; Revised 3 year research plans; Funding proposal; SAHRA permits in place; Basic infrastructure implementation.	Documented agreements. Documented visits and possible agreements Heritage Audit; Initial monitoring system.
	Promotion of best environmental practise.	COH developed according to Best Environmental practise	Approved policy Records of agreement; Revised Kwena plan; Final model for ecological work funding; Infrastructure, Tenure security plans reflecting best environmental practise; EMPs adhered to; Temporary WSSD structure in place; GIS plan; Pilot training scheme; Access to natural resources by community; Draft regulations for World Heritage Act; Definition of IECM role for management authority;	Benefit defined in terms of sustainable use of resources within WHS

Key departmental objective	Strategy	Outcome (Goal)	Service delivery indicator	Service delivery target or milestones (Goal)
Tourism: To develop and market the WHS as a premier eco-tourism destination	Implementation of an integrated tourism development plan; Implementation of an integrated tourism marketing strategy; Compilation of tourism database; Development of community based tourism businesses and institutions; Develop and maintain a functioning website; Tourism skills training	Contribution to local economic growth and job creation; Increased profile of WHS locally and overseas; Change in race and gender patterns in tourism as visitors and owners	No of new tourism businesses; No of jobs created; Indicators of economic growth	Output commensurate with available budget and human resource capacity
Public Participation: To ensure full and meaningful participation of all sectors of the community in the development of the	Promote Educational and learning opportunities; Ongoing stakeholder participation;	Increased understanding of the WHS and access to related job opportunities. Ongoing input from stakeholders on	Number of educational events held; Number of people attending.	All residents.
WHS WHS	Skills training and capacity building;	developments. Skills audit of the area showing areas of training need; Training undertaken for skills enhancement and job opportunities	Skills needs according to area; Number of people trained; Number of jobs created.	All people in target group
	Establishment of a management authority.	Compliance with the World Heritage Act; Democratic governance	Management authority institutional arrangements in place	
Programme Management	Donor Fundraising in support of Public Benefit Organisation	International profiling of COH; Sequenced development of the site;	% Donor funding of the project; PPP agreements in place	US\$20 million in donor funding for capital developments
	Preparation for ceremonial launch of WSSD and building of a legacy thereafter	Contribution to government commitment to host WSSD and showcase best practice	Temporary exhibition	

Interdepartmental linkages

The Cradle of Humankind World Heritage Site is demarcated as a District Management Authority. The amendment of the boundaries of the District Management Authority is receiving consideration by the Municipal Demarcations Board with a view to the District Management Authority falling under a single local authority.

The Cradle of Humankind World Heritage Site Project is an integrated project involving different departments in all three spheres of government. The project works closely with the responsible local authorities in both Gauteng and the North West Province, namely, West Rand District Municipality, Mogale City Council, Madibeng, Tshwane Metropolitan Council and the Greater Johannesburg Metropolitan Council.

At Provincial level the Gauteng Department of Sport, Recreations Arts and Culture, the Department of Development Planning and Local Government, the Department of Finance and

Economic Affairs, and the counterpart Provincial Departments in the North West Province are involved in the project.

The responsible departments as national level are the Department of Environmental Affairs and Tourism and the Department of Arts, Culture, Science and Technology. In addition the Departments of Water Affairs and Forestry, Land Affairs, Labour and Trade and Industry are important role players in this project.

4.2.2 Environmental analysis

Assessment of external threats and opportunities

The African Renaissance and Millennium Africa Recovery Plan provide the programme with ideal opportunities to profile and position itself on the world stage. This could well be done in conjunction with other recognisable and well-known palaeo sites, such as those to be found in Kenya.

The worldwide recognition of Sterkfontein and environs as a pre-eminent site facilitates the branding of the Cradle of Humankind World Heritage Site. There appears to be a worldwide interest in Palaeo-anthropology, which can be harnessed. However, the science does not have general appeal and therefore poses a special challenge to capture wider interest and involvement.

As a result of the worldwide interest in the site, the opportunities for the mobilisation of individual and corporate sponsorship for purposes of social good and necessary education, scientific and research endeavour is immense. It is envisaged that a donor funded world class Interpretation Centre will be established and fully operational within the next three years.

The Cradle of Humankind Site is the most prolific site to date yielding early evidence of the origins of humanity. The discovery of older hominid fossils elsewhere presents a challenge for the development of linkages that enhance the knowledge base of the origins of humanity rather than detracting form the uniqueness of the Cradle of Humankind or any other site. Increased crime in South Africa and the consequences of negative perceptions in the international tourist market pose particular challenges for the Cradle of Humankind as a destination. The project will take this into account in the planning and management of the development of the area.

Assessment of internal strengths and weaknesses

A highly skilled and dedicated team, supported by the entire department, is driving the planning and implementation of the project. This team enjoys high levels of support from the senior management and political leadership of the department, as well as Blue IQ team. The project as a whole also enjoys huge political support within the province, and has access to vast expertise through the Blue IQ skills consortium.

The management of the project requires interaction with a range of research and scientific interests. The relationship with the academic community with the professional knowledge that is not retained in-house be the department is therefore essential and the Department therefore regards these working relationships as extremely important for advise and involvement in the development of the project. The involvement and collaboration with the University of Witwatersrand is central to this working relationship.

The role and involvement of individual stakeholders with business interests in the development of the site is likewise essential as the area is almost wholly privately owned and the development of the area requires collaboration with respect to the scope and sequencing of development.

The generation of community benefits through diverse revenue streams is a prerequisite for the successful development of the area. The Department therefore places particular emphasis on ensuring that the plans for the development of the area will result in social change and tangible benefits for the poor.

Customers: internal and external

The Cradle of Humankind World Heritage Site project relies on the support and input of the Conservation, Environment, Agriculture and Veterinary Services components.

The project is an integrated development project, which requires close collaboration with other government departments and the collaboration of the Gauteng Tourism Authority and SATOUR will become increasingly important as the destination is developed.

Furthermore, the fact that the project area is privately owned with diverse land utilisation practices interspersed with the world's most important sites yielding paleantological findings of the origins of humanity, requires interaction with the very diverse interested and affected parties. These stakeholders are the partners for the development of the area for the benefit of all.

5. Capital investment strategy

The Department budgets on an annual basis for requirements for the procurement, operation and maintenance, replacement and disposal of existing assets. New assets are acquired commensurate with the available budget and needs of the Department.

In addition the Department receives a conditional grant for CAPEX projects on the Provincial Nature Reserves on an annual basis.

The details of this are provided in Budget Statement 3 on an annual basis

6. Service Delivery Improvement Programme

The goals of the department are pursued according to the following guidelines and principles:

Role of government

The Department confines its activities to facilitation, regulation, and temporary and/ or short-term developmental interventions. The Department designs its developmental interventions with limited time-frames and well-understood exit strategies, so as not to create dependency, and to allow the fullest scope for contributions from alternative service providers. The Department seeks to promote self-reliance and sustainability, in part through stimulating activities of other service providers.

Links with other government structures

The Department recognises that it cannot accomplish some of its social aims without considerable co-operation with other government structures, whether local, provincial or national. Strong communication links are therefore established with these other structures to share information and devise complementary strategies on, for example, problems of employment conditions, nutrition problems etc.

Cost - Efficiency

Where a government role is warranted, the Department strives to accomplish its objectives in the most cost-effective manner possible. In some instances, activities are performed in-house, and in other instances, where permanent in house capacity in not warranted or if the functions could be more cost effectively and efficiently carried out be alternative service providers, functions are contracted out to service providers better suited to accomplishing a particular function. Alternative service providers include NGO's, CBO's, consultants. private sector, universities, parastatals, etc.

Affordability

The Department endeavours to establish reasonable targets and time -frame for its interventions, in keeping with its budgetary and other resources. Where possible and appropriate, the Directorate relies on its role as facilitator to ensure the pursuit of important activities by others, or it will establish these activities on a cost-recovery basis.

Appropriate Standards

The Department's developmental and service activities - or those funded by government but performed by other service providers – are required to meet minimum necessary/acceptable standards, with a concerted effort to focus on interventions which result in the largest welfare improvements for the disadvantaged.

Correct Incentives and Conservation

In view of the responsibilities of the Department with regard to the sustainable use of our finite natural resource base, the Department seeks to ensure compliance with standards of resource conservation that place appropriate responsibility on resource users. The Department seeks to identify legislative means by which resource users are penalised for poor land stewardship; not withstanding the importance of private rights in property, land is recognised as an aspect of national heritage that should not be misused.

7. Organisational management

7.1 Organisational establishment

The organisational establishment charts are contained in the Annexures as follows:

- A1: Organogram for supporting functions
- A2: Organogram for directorates

7.2 Human resource strategy

The Human Resource strategy in the Department is to facilitate and enhance service delivery by supporting the line function directorates in the Department to meet their objectives and constitutional obligations through commitment to the principles of People, Service, Value.

It has become almost axiomatic that the most important Resource of any enterprise (public or private) is committed and skilled people or teams. This is especially so for a human resource management component of the department, given that Human Resources is both the entry and exit point for members of the department. What happens between these two points in so far as the main tenets of the employment relationship is concerned, is largely impacted upon by an efficient and effective human resource management function, or lack thereof.

The over-aching values for good human resources practice are embodied in the bill of rights contained in the constitution as well as the legislative framework² that underpins Human Resources Development and Management. Human dignity, professionalism and equity form the basis of the hierarchy of values that inform human resource provisioning.

The Department has succeeded in recruiting skilled, versatile and motivated staff which provides a strong foundation for the work of the Department. The Department further constantly endeavours to ensure that the structure of the organisation and the work systems supporting it are informed by the Human Resource strategy.

As the cliché' goes, the biggest room in the world is the room for improvement. For this reason the Department endeavours to ensure constant learning and development of all individuals in the Department.

Key Human Resource Strategy objectives include:

- Strategic resourcing and retention of a highly skilled human resource capability through competency based assessment and selection tools.
- Systematic reskilling and development of both existing and new personnel to meet the
 demands of a responsive and developmental government, through an Education, Training
 and Development Programme that is underpinned by a Skills Development and
 Employment Equity Plan.
- A pro-active labour relations programme that facilitates harmonious working relationships and legislative compliance through workplace justice.
- A comprehensive performance management system culture and implementation tools to ensure service delivery, accountability and improvement of performance.
- A good human resources information management system that will facilitate and enhance decision making by management.
- Effective management of employee benefits and conditions of service
- Effective management of establishment matters.

In order to constantly evaluate and respond to changing circumstances in the Department the planning cycle of the Department provides for regular monitoring and evaluation of the management of human and financial resources and programme implementation. The tools for this include:

- Quarterly strategic review sessions for each component of the department
- The Budget Process
- The Personnel Performance Management System
- Public Participation

-

² The legislative framework that governs Human Resource Development and Management is made up of (1) the Labour Relations Act; (2) the Basic Conditions of Employment Act; (3) The Employment Equity Act; (4) the Skills Development and (5) Skills Levies Acts. These pieces of legislation should not be seen as entities on their own but as a package designed to facilitate Human Resources Development and Management in South Africa

7.3 Affirmative action programme

The Department has functional responsibilities that require the recruitment of scarce skills. This poses particular challenges for the department to compete for these skills in the workplace. This challenge is exacerbated by the fact that certain of these skills are in professional competencies which historically excluded the admission of black students. This applies in particular to Veterinary Services, with at present not more than 200 black veterinarians in South Africa.

Nonetheless, the Department has been on a path of continuous improvement in recruiting a diversity of staff at all levels of the establishment. In particular the race and gender composition of staff at all levels of the establishment progressively improves to reflect the demographics of the country.

The key elements of the affirmative action strategy of the Department include:

- Measures designed to further diversity and equitable representation in terms of race, gender and disability in all categories and levels of the establishment
- Identification and elimination of barriers which adversely impact on designated groups
- Measures to retain and develop individual employees through appropriate training and development
- Preferential measures for recruitment based on numerical goals subject to compliance with the requirements for particular work responsibilities
- Job classification and grading through job evaluation

7.4 Information on consultants

The approach of the department is that where the planned outputs of the Department warrant permanent in house capacity suitable staff are recruited to the permanent organisational establishment of the department. In instances where planned outputs are required for a limited duration, and / or if particular professional competencies are required on a less than full time basis, the services of consultants are procured through competitive bidding. This approach has proved to be cost effective and has facilitated the constant growth of the output targets of the Department.

7.5 Information technology resource strategy

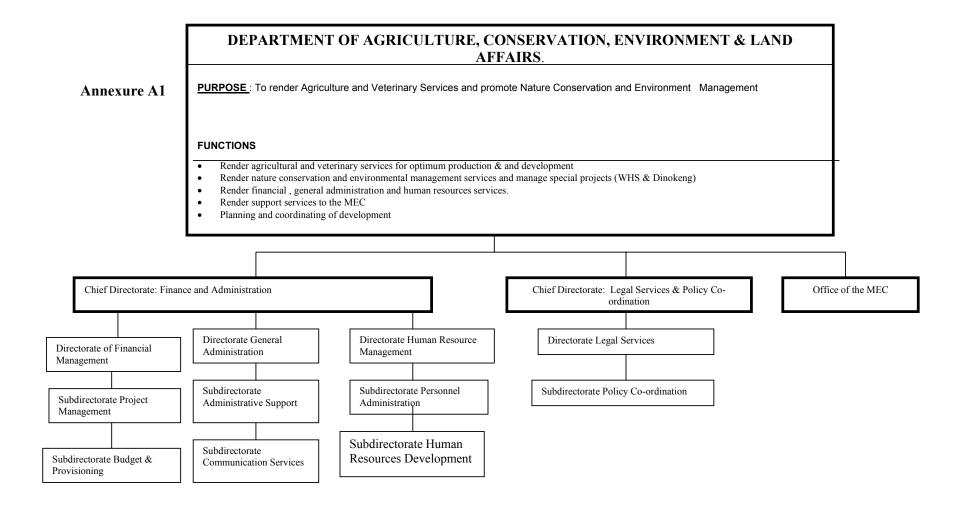
The Department endeavours to have a stable information technology infrastructure, automated systems to support users in carrying out their work responsibilities, access for users and knowlegeability for the use of automated systems.

The key elements of the information technology resource strategy of the Department include:

- Maintaining a network, which is logical and efficient.
- Deploying large numbers of machines which can be easily upgraded later.
- Constant review and decision on what services are needed.
- Planning and implementing adequate security.
- Providing a comfortable environment for users.
- Developing ways of fixing errors and problems which occur.
- Keeping track of and understanding how to use the enormous amount of knowledge which increases every year.

8.	Resource Red	uirements and	planning i	ıformation 1	for 2002/03 (Year 1	information)

The details of this are provided in Budget Statement 2 on an annual basis



DEPARTMENT OF AGRICULTURE, CONSERVATION, ENVIRONMENT & LAND AFFAIRS.

PURPOSE: To render Agriculture and Veterinary Services and promote Nature Conservation and Environment Management

Annexure A2

FUNCTIONS

- Render agricultural and veterinary services for optimum production & and development
- Render nature conservation and environmental management services and manage special projects (WHS & Dinokeng)
- Render financial, general administration and human resources services.

