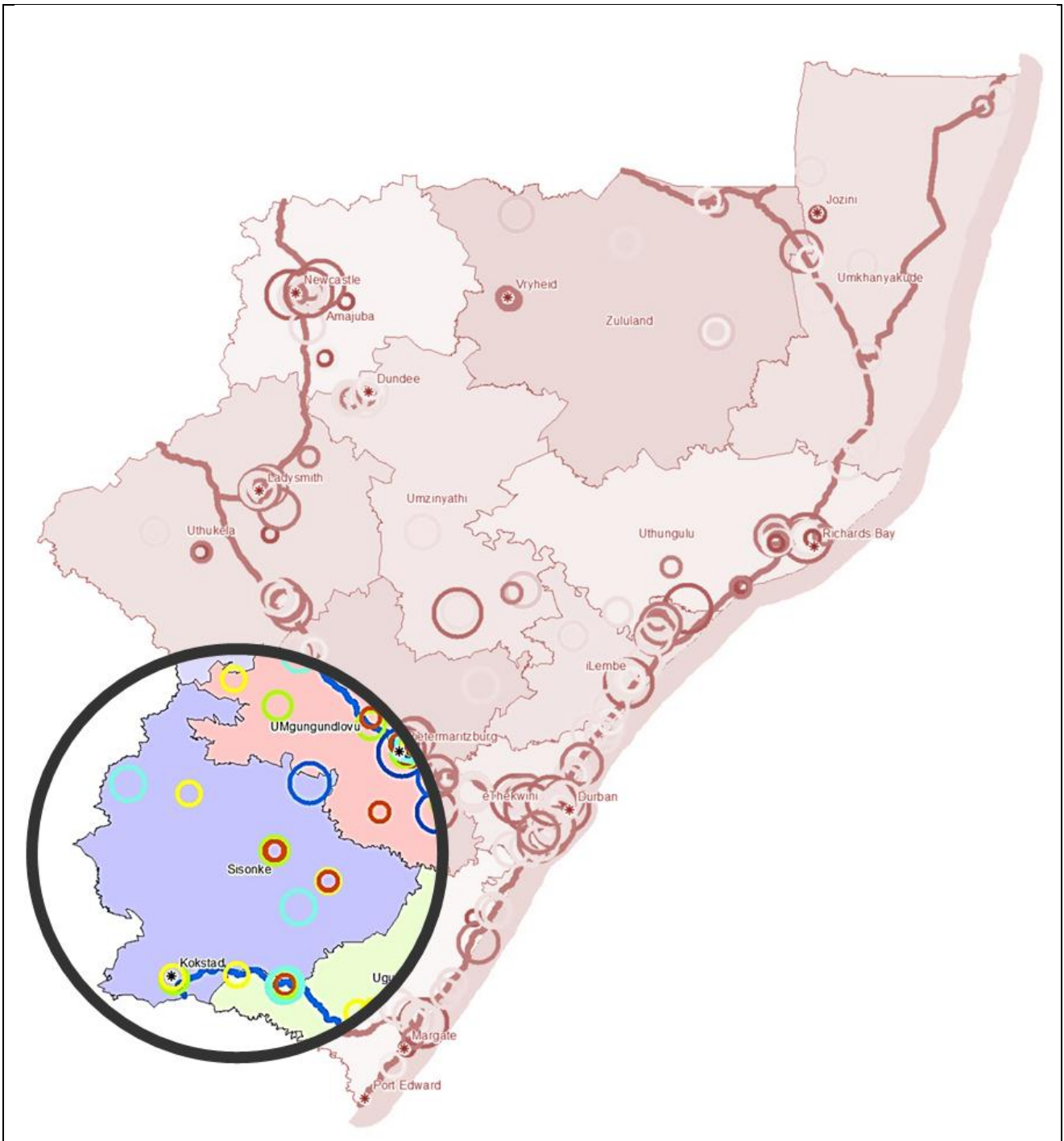


**KZN PSEDS
PROFILING DISTRICT ECONOMIC DRIVERS**



**SISONKE DISTRICT MUNICIPALITY
A SPATIAL ECONOMIC OVERVIEW**

MARCH 2012

**KZN DEPARTMENT OF ECONOMIC DEVELOPMENT & TOURISM
PROFILING DISTRICT ECONOMIC DRIVERS**

**PHASE 5 – SPATIAL ECONOMIC OVERVIEW
SISONKE DISTRICT MUNICIPALITY**

MARCH 2012

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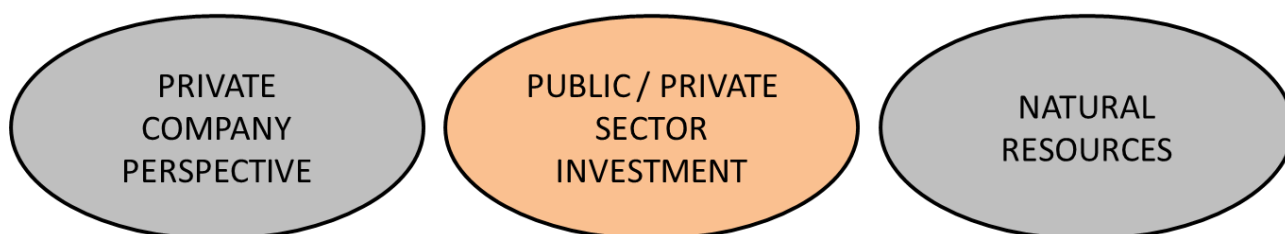
1. BACKGROUND AND APPROACH

1.1. OBJECTIVES FOR REPORT

The overall vision for this initiative, and therefore ultimately this report, is to provide reliable data at district municipal level to inform and update the provincial PSEDS as the basis for planning future economic development and growth in the province. There is a strong acknowledgement that the linkages between economic development, spatial development frameworks and natural resource availability are fundamental to future sustainable development.

The overarching objective of this project, as contained in the terms of reference for this brief, is “...to extensively profile the economic drivers and resource endowments (natural capital) of the ten KwaZulu-Natal Districts plus the eThekweni Metro”. As noted above this will be undertaken with the view to updating the PSEDS and informing planning and decision making in government.

Economic drivers are considered from three perspectives:



1.2. APPROACHES TO COMPILING THE REPORT

The information in this report was compiled using different approaches:

For the Private Company perspective:

- The identification of companies viewed as drivers or potential drivers by stakeholders;
- The refinement of the list of major companies in the province;
- A survey that included a total of 510 firms identified; and
- The analysis of information from the survey (and location of companies on GIS).

For the Public / Private Sector Investment perspective:

- An assessment of the strategic planning of municipalities;
- A survey of municipalities to identify economic development challenges and significant historic, current and future initiatives; and
- A series of workshops with municipalities to share findings and obtain spatial planning inputs.

For the Natural Resources perspective:

- Using land cover as a base an expert panel was requested to consider the potential of each land cover type to produce and/or deliver different categories of ecoservices and score this; and
- The assessment outcomes were considered using the recommendations emanating from other components of the assessment.



2. DISTRICT ECONOMIC OVERVIEW

2.1. INTRODUCTION

An initial overview of the district economy is provided in this section of the report. The aim is to provide a contrast within which the sample survey of companies was undertaken. The District economy is considered in terms of the following:

- Spatial Economic Features;
- District Economic Contribution; and
- District Economic Structure.

2.2. SPATIAL ECONOMIC FEATURES

Key spatial features of the Sisonke District impacting on economic development include:

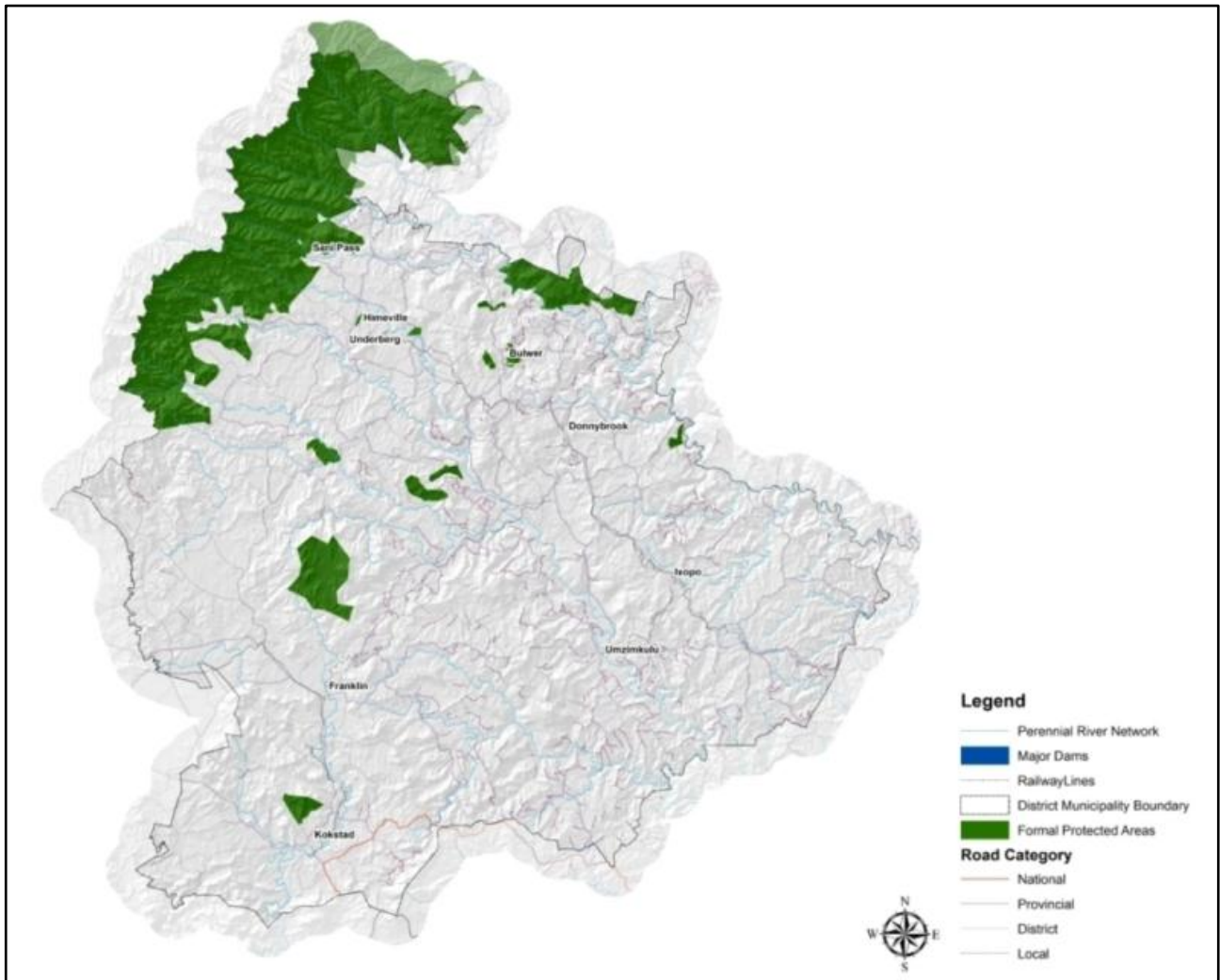
- Msunduzi and eThekweni, located to the north and north east of the district, are the key provincial economic development nodes in the province.
- Ixopo, Underberg-Himeville, Creighton, Umzimkulu and Kokstad are the key economic development nodes in the district.
- Historically the rail system from Pietermaritzburg to Donnybrook via Creighton to Riverside and Eastern Cape was the major transportation link through the central part of the District. From Donnybrook the line split and linked up Kokstad via Franklin. A further rail line ran from Donnybrook to Umzimkulu via Ixopo. It is the only line through to Kokstad and the Eastern Cape that is functional mainly for timber haulage. The line from Ixopo and Umzimkulu has been reconstructed for tourism purposes. The Eastern Cape line is also used for limited steam train tourism.
- Transportation routes include the main road (R56) through from Msunduzi to the Eastern Cape via Ixopo and Kokstad. The other main road traversing the district is the (R617) which links Msunduzi to Bulwer, Underberg and Kokstad. There is a linkage route from the coast at Park Rynie to Ixopo and Bulwer.
- The district is characterised by limited formal urban development the majority of which is located in the centres listed above. However, rural traditional areas of the district are characterised by large rural residential populations scattered throughout the district.
- The main focal areas for tourism in Sisonke is the Drakensberg from Bushmans Neck through to Sani Pass. Limited adventure tourism is taking place along the major river systems (Umkomaas and Umzimkulu) and gravel roads (Berg to sea mountain like challenge).
- Commercial agriculture is extensive throughout the district excepting for Umzimkulu. Similarly subsistence agriculture is extensive with the exception of the Greater Kokstad municipality.
- The predominant crops produced in the municipalities closest to the Drakensberg include: livestock, dairy, maize, potatoes, deciduous fruit. In the lower lying areas of the district crops produced are similar to the above in addition to commercial timber and sugar cane.
- As noted above the majority of the population is located in rural settlements in traditional areas of the province.



- There are a number of nodes identified in the Spatial Development Frameworks for each of the local municipalities which are predominantly located in the traditional areas. Owing to limitations on economic activity and formal services provision in these areas these centres remain largely undeveloped.

The map below reflects the location of major roads and transport infrastructure, as well as topographic and key natural features.

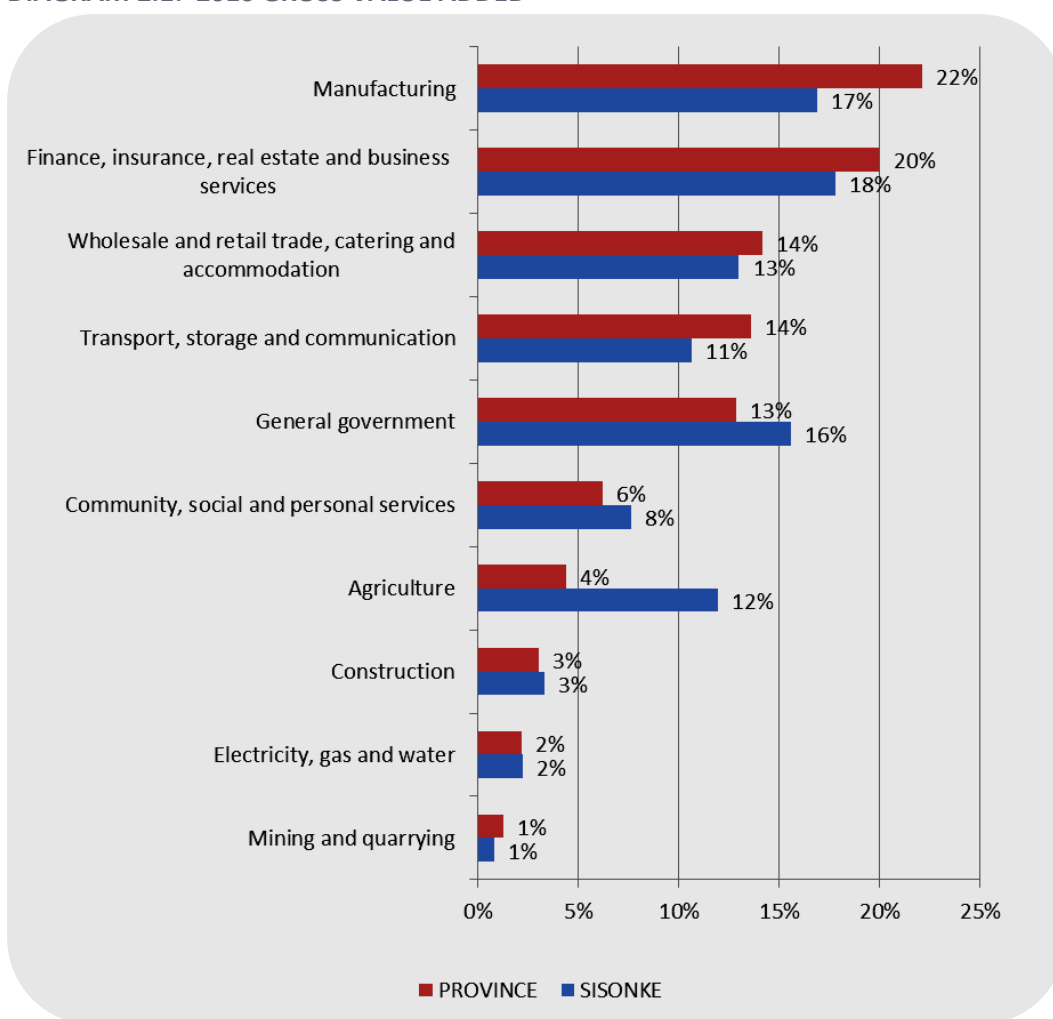
MAP 2.1: SPATIAL ECONOMIC FEATURES



2.3. DISTRICT ECONOMIC CONTRIBUTION

- In overall terms the Sisonke District makes a limited contribution to the economy of KwaZulu-Natal, i.e. R6,014 billion of a total of R260 billion or 2.3% of the provincial economy.
- A comparison of contribution of sectors in Sisonke to the district GVA indicates that services, manufacturing, government, retail, agriculture, transport and social services form as the basis of the local economy.
- The diagram illustrates the differences between the two economies with government, agriculture and services playing a greater role in the district. In contrast manufacturing, services, retail and transport play a more important role at provincial level.

DIAGRAM 2.1: 2010 GROSS VALUE ADDED



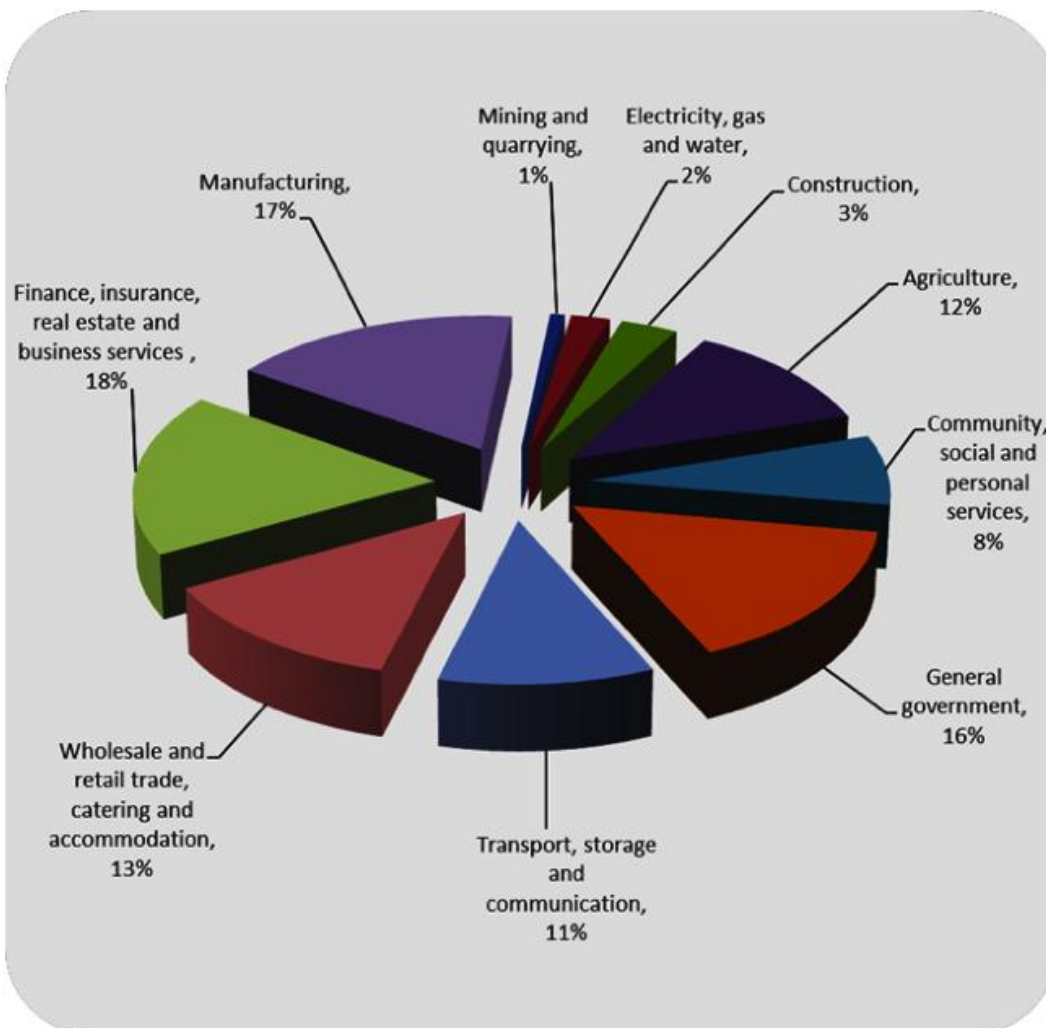
Source: Quantec 2010



2.4. DISTRICT ECONOMIC STRUCTURE

- The diagram reflects the economic structure of the Sisonke District based on 2010 GVA figures where the following key findings are noted:
 - Services, manufacturing and government sector each account for between 15-20% of the district GVA.
 - Trade, agriculture and transport account for between 10 - 15% each of the district GVA.
 - The smaller contributors to the district economy include construction, utilities and mining (each sector is <5%)
- These findings would seem to indicate diversification in the district economy despite Sisonke being in a relatively remote rural area of the province.

DIAGRAM 2.2: 2010 GROSS VALUE ADDED TOTAL GVA OF R6 016M



Source: Quantec 2010

It should be noted that the GVA data (above) does not necessarily have a bearing on companies in the sample which were identified as drivers. The criteria used to identify drivers was different to the method used to formulate the GVA. This must be born in mind when analysing key sectors and companies that drive the economy. For example, agriculture, and tourism companies dominate the “top companies” of the sample whilst manufacturing and services dominate the GVA sectors.



3. A MAJOR COMPANY OVERVIEW

3.1. INTRODUCTION

The basis of the major company interviews was a comprehensive questionnaire that extracted a range of information from companies deemed to be drivers, or companies belonging to sectors driving the economy. It must be noted that a number of companies perceived to be potential drivers chose not to participate in the survey. This District report reflects on the following information relating to major companies in order to provide a basis for future spatial economic development planning in the District:

- A General Perspective of the Economic Sectors
- Companies Interviewed
- Sectors and Products
- Spatial Distribution of Companies
- Key Characteristics of Companies
- Major Companies
- Companies Exporting
- Infrastructure and Other Challenges
- Interviewee Comments

Based on the above information a “major company perspective” of economic drivers is provided.

3.2. SECTORS AND PRODUCTS – A GENERAL PERSPECTIVE

3.2.1. MANUFACTURING SECTOR

- The manufacturing sector is limited (despite its major contribution to GVA) in Sisonke with factories based at Kokstad, Ixopo and in rural areas associated with timber and saw mills.
- Manufacturing is mainly linked to agricultural products in the form of timber, dairy processing and foodstuffs.
- There are limited opportunities in manufacturing related to construction such as brick making and roofing timbers.

3.2.2. AGRICULTURAL SECTOR

- Whilst not the highest contributor to the GVA, commercial and subsistence agriculture is one of the key sectors in Sisonke in terms of up and downstream value add. Commercial mainly involves livestock (beef, sheep, goats), dairy, potatoes, pastures, vegetables (cabbage, spinach, carrot, dry bean, green bean, tomatoes), timber, limited sugar cane, maize, pecan and macadamia nuts. Types of production are area dependent with higher colder areas limited to livestock, dairy, pastures and potatoes. The warmer lower lying areas include a wider range of agricultural products. Game farming is a growing agricultural opportunity in the higher and lower lying areas of the district.
- Subsistence production involves: traditional livestock and limited commercial livestock production, maize, sorghum and vegetables for household consumption and limited trade. As in the case of commercial, the types of subsistence agriculture practised vary according to high, moderate and low lying areas.



3.2.3. TOURISM SECTOR

- The tourism sector in Sisonke primarily focuses on the Drakensberg with a number of resorts in strategic locations at Lotheni, Sani Pass, Cobham, Garden Castle and Bushman's Neck. In addition a number of events are held in the district including the Berg to Sea cycle race and a number of white water events mainly on the Umkomaas River.
- There are a wide range of opportunities and experiences associated with environment in Sisonke ranging from the mountains and alpine experiences in the west through to the grasslands and indigenous forests (and associated parrots) in the midlands areas to deep valleys and bushveld in the east.
- Cultural experiences include the 4 catholic missions dating back to the 1860s, historic steam train rides at Creighton and Ixopo and local indigenous knowledge experiences in traditional areas (yet to be developed).
- Hospitality as a sector exists in the above mentioned resorts. In addition there are a large number of Bed and Breakfast farm based experiences in the district.

3.2.4. COMMERCIAL SECTOR

Note: The commercial sector in this context is used as a generic term for most businesses included the following sectors (as defined by the Standard Industrial Classification): (1) financial intermediation, insurance, real estate, and business services, (2) wholesale and retail trade (excl. Hotels and restaurants), (3) community, social and personal services.

- Wholesale and retail outlets are mainly located in the urban centres in Sisonke particularly Kokstad, Ixopo, and Underberg.
- Smaller retail outlets in rural areas depend upon the wholesalers in the district centres. These rural trading centres are located in traditional areas in the district as well as in the Eastern Cape.
- The majority of goods provided by wholesalers are imported from manufacturing hubs in KwaZulu-Natal and South Africa.
- An important component of the commercial sector relates to agriculture in the provision of equipment, spares, inputs (seed, fertilizer, chemicals, fuels) and transportation.

3.2.5. SERVICES SECTOR

- The services sector has evolved from the provision of a range of services to farmers (vet, financial, farm planning) to now include commercial banking services, medical services in government and private hospitals, legal and accounting services and educational support services. These are all based in the main centres in the district.

3.2.6. GOVERNMENT SECTOR

- The government sector has extensive networks throughout the district in the form of health services (hospitals (Kokstad, Underberg and Ixopo) and clinics), educational facilities (schools), welfare services (pension pay points, welfare and social service facilities), agricultural extension services, SAPS, justice, foreign affairs, housing and CoGTA Traditional houses.
- Government plays a key role in supporting the economy of the traditional areas with a variety of state grants and welfare services.



3.3. COMPANIES INTERVIEWED

A total of 20 companies were interviewed in the Sisonke District in order to obtain a better understanding of the types of major firms, their characteristics and challenges faced by them. A number of the corporate agricultural company offices were contacted in Sisonke, but their head offices are located outside of the district and hence these could not be included in the sample. The list below reflects the name of the company interviewed, the annual turnover, employment, product/service delivered and the sector to which it relates (in terms of the Standard Industrial Classification [SIC]). This list should serve as a basis for the District to develop and maintain a major company database. The following categorisations were used:

- Company Turnover categorised in terms of: Small (less than R5m), Medium (R5m to R100m) and Large (R100m+);
- Company Employment categorised in terms of: Small (less than 20 people), Medium (21 to 100 people) and Large (100+ people).

TABLE 3.1: COMPANIES INTERVIEWED (SEE ANNEXURE A FOR DETAIL ON DISTRIBUTION OF SAMPLE IN LOCAL MUNICIPALITIES)

COMPANY NAME	2010 ANNUAL T/O (REVENUE OR SALES)	EMPLOYEES RANGE	PRODUCT CATEGORY
Agriculture, hunting, forestry and fishing			
Woodburn Estates	Medium	Large	Agricultural Commodities
Herdstorm Farm	Medium	Medium	Agricultural Commodities
Sutherland Seeds	Medium	Medium	Seed
Singisi Forest Products	Medium	Not confirmed	Sawn logs
Community, social and personal services			
Riverview Manor Hospital	Medium	Medium	Medical Services
Manufacturing			
Clover SA Kokstad	Small	Medium	Dairy Products / Logistics
Creighton Dairies	Medium	Medium	Milk Products
Creighton Cheese	Medium	Medium	Cheese Products



COMPANY NAME	2010 ANNUAL T/O (REVENUE OR SALES)	EMPLOYEES RANGE	PRODUCT CATEGORY
Wholesale and retail trade; repair of motor vehicles, motor cycles and personal and household goods; hotels and restaurants			
Rhino Cash and Carry	Not provided	Not confirmed	Retail
Ashtonvale Guest Farm	Small	Small	Tourism Accommodation +
Creighton Hotel	Small	Small	Tourism Accommodation +
SuperSparUmzumkhulu	Medium	Large	Retail
Sutton Mechanical Services	Medium	Medium	Equipment Sales
Lewis Stores	Medium	Small	Furniture Retail
East Griqualand Tractors	Medium	Medium	Equipment Sales
Drakensberg Gardens (Gooderson Leisure)	Not provided	Large	Tourism Accommodation +
Kings Grant Country Retreat	Small	Small	Tourism Accommodation +
Mountain Park Hotel	Medium	Medium	Tourism Accommodation +
Newlands Spar	Medium	Medium	Retail
Sani Pass Hotel & Leisure	Medium	Medium	Tourism Accommodation +



3.4. SECTORS AND PRODUCTS – A SURVEYED COMPANY PERSPECTIVE

Considering the approach adopted in identifying major companies, i.e. through consultation with local level stakeholders, there is a high level of certainty that the majority of the larger companies in the District have been identified and interviewed. The following table indicates the number of companies identified per sector and sub-sector and then provides an indication of the extent of “clustering” that occurs in sub-sectors of the economy.

From the following table, and the more detailed information obtained included in the sample through the questionnaire, it is suggested that based on an assessment of the companies the key sub-sectors in the sample driving the economy of the District are (highlighted in grey in the table below):

- Manufacturing mainly involving agricultural products (food and timber)
- Trade in wholesale, retail, tourism and hospitality
- Agriculture in livestock, timber, potatoes, cabbage etc
- Government in the provision of services

TABLE 3.2: STRUCTURE OF SAMPLE PER SECTOR AND SUB-SECTOR

SECTOR AND SUB-SECTOR	NO. OF COMPANIES
Agriculture, hunting, forestry and fishing	4
Agriculture, hunting and related services	3
Forestry, logging and related services	1
Community, social and personal services	1
Health and social work	1
Manufacturing	3
Manufacture of food products, beverages and tobacco products	3
Wholesale and retail trade; repair of motor vehicles, motor cycles and personal and household goods; hotels and restaurants	12
Hotels and restaurants	6
Retail trade, except of motor vehicles and motor cycles; repair of personal household goods	5
Sale, maintenance and repair of motor vehicles and motor cycles; retail trade in automotive fuel	1
TOTAL	20

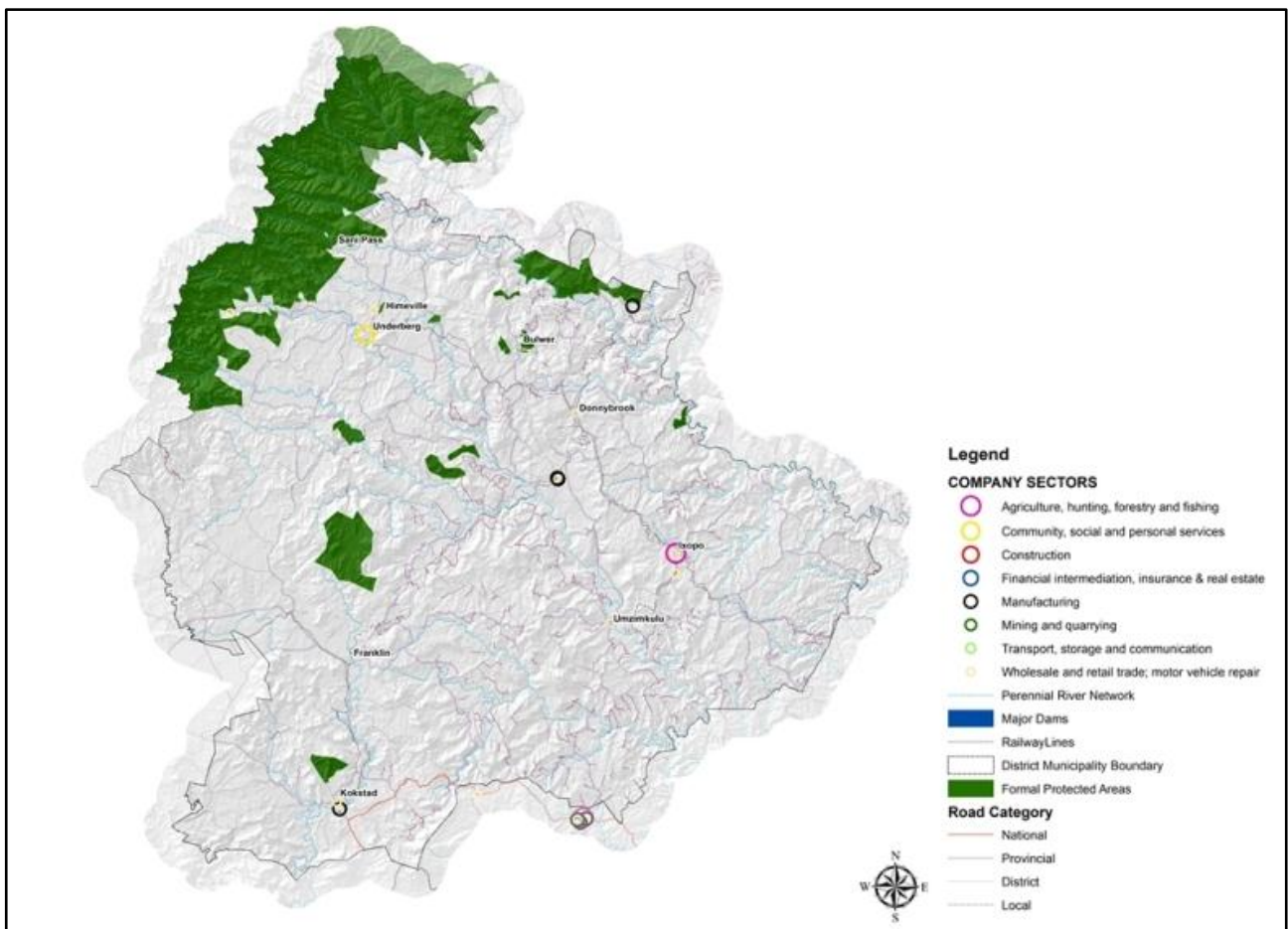


3.5. SPATIAL DISTRIBUTION OF SURVEYED COMPANIES

SECTORS

- The companies sampled in Sisonke are predominantly located in or nearby the main centres within the district.
- Manufacturing companies are located at Kokstad, Creighton, Ixopo and to a limited extent Underberg.
- Commercial agriculture is widespread throughout the district, while social services facilities included in the sample provided by government were located at Underberg.
- Wholesale and retail outlets are located in all major centres of the district and certain of the rural settlement nodes.

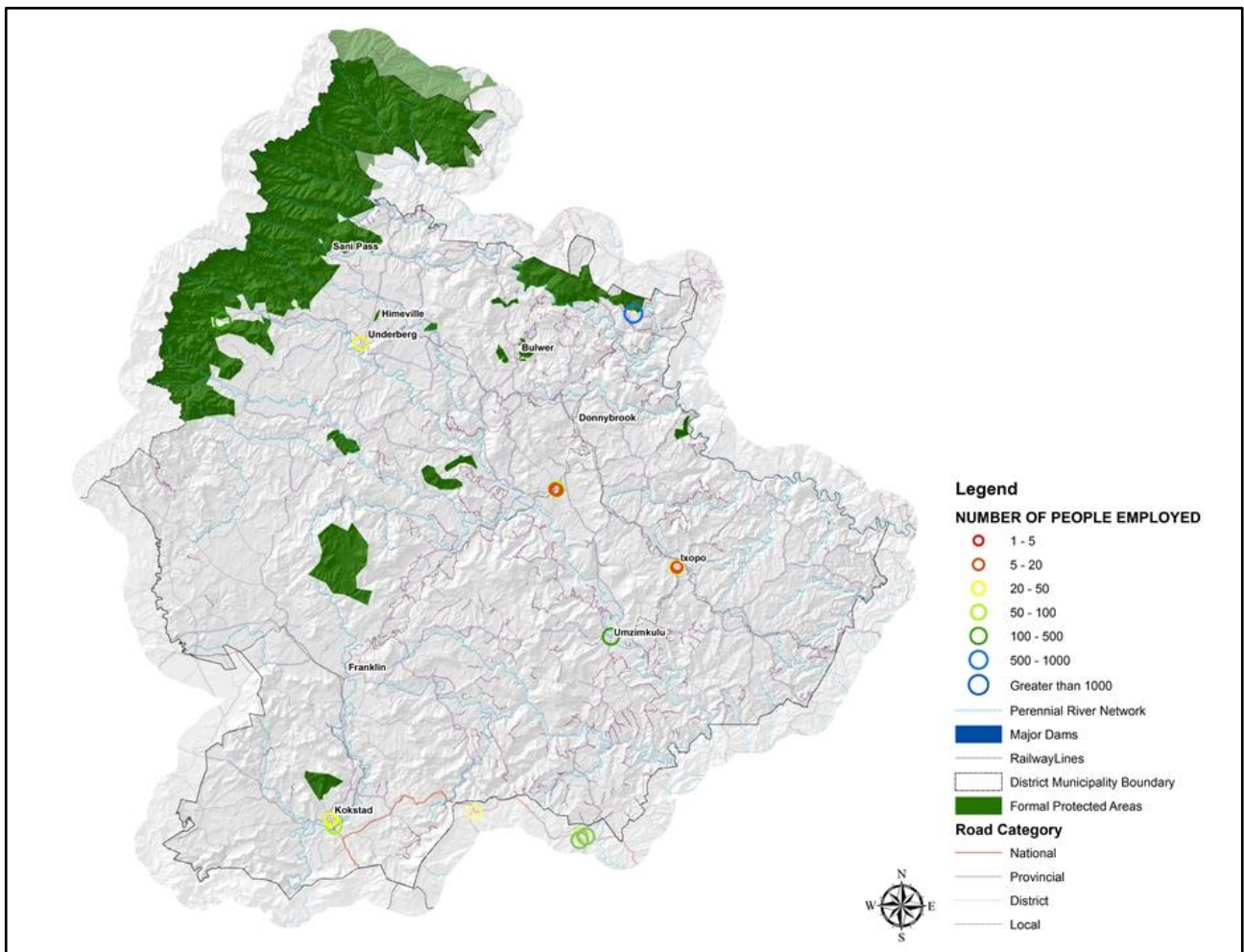
MAP 3.1: SPATIAL DISTRIBUTION OF SURVEYED COMPANIES BY ECONOMIC SECTORS



EMPLOYMENT

- The numbers of employees in companies interviewed ranged from 20-100 workers with manufacturing and agriculture employing the most staff.
- As a consequence of the agricultural and manufacturing sectors employing the highest number of staff in the district these people are either resident in rural areas on farms or in traditional areas or in towns.

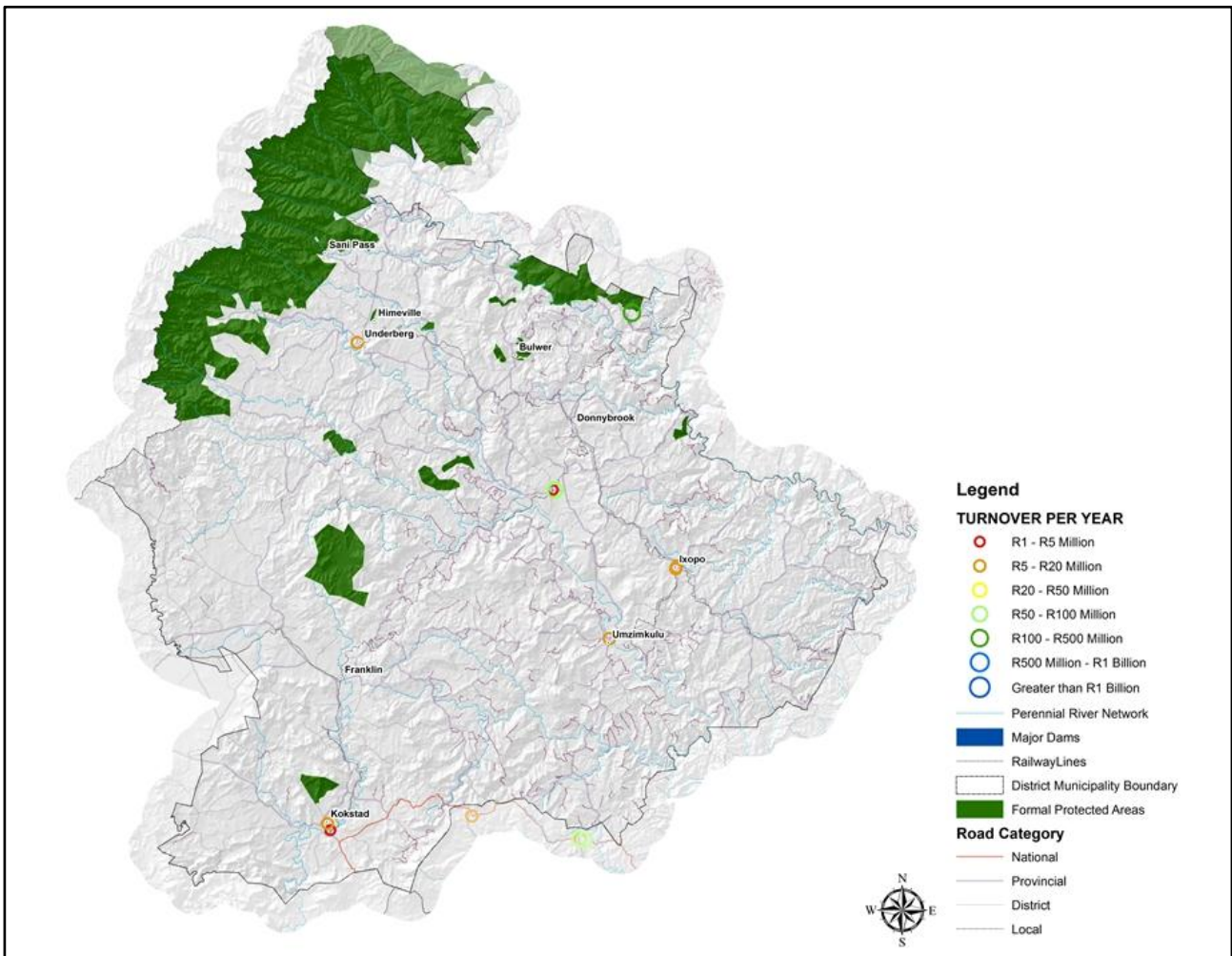
MAP 3.2: SPATIAL DISTRIBUTION OF SURVEYED COMPANIES BY NUMBER OF PEOPLE EMPLOYED



TURNOVER

- Company turnover for those included in the sample indicated that the majority are in the R 20 mil category with a smaller number on the R 5 mil category.
- As noted, commercial agricultural enterprises are located on a widespread basis throughout the district. In contrast manufacturing, wholesale and retail are located in the main centres of the district with access to all the supporting services and transportation networks.

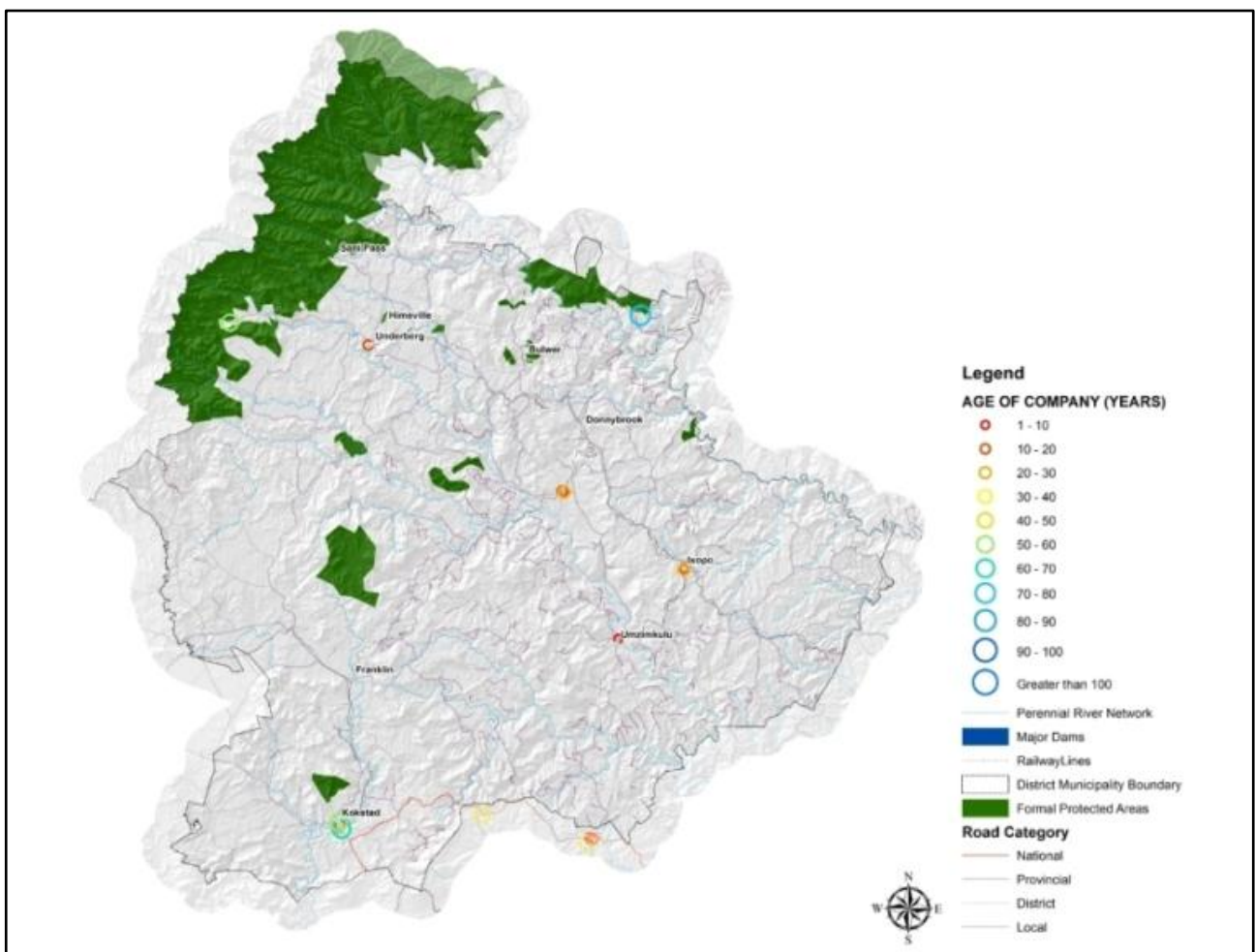
MAP 3.3: SPATIAL DISTRIBUTION OF SURVEYED COMPANIES BY TURNOVER PER YEAR



COMPANY AGE

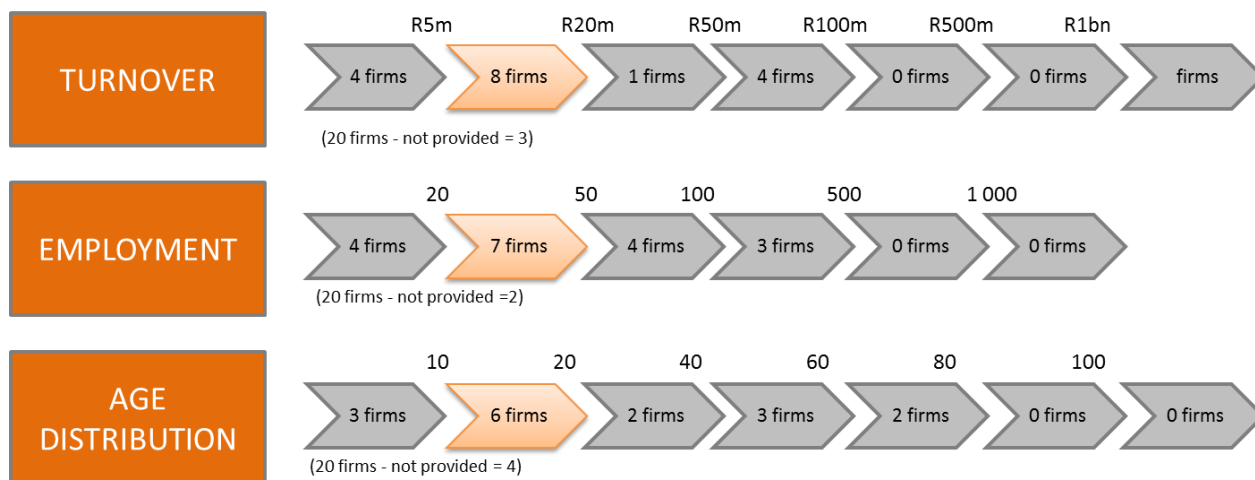
- In the diagram below it may be noted that 9 of the companies in the sample were up to 20 years of age while a further 7 were up to 80 years of age. The survey findings further indicated that the older more established companies were located in the agricultural, manufacturing and wholesale sectors while the younger companies were mainly located in the retail and services sectors. This is consistent with provincial trends.
- The indications are that the older companies are involved in agriculture and manufacturing while the younger operations are involved in trade and services sector activities in the main district centres.

MAP 3.4: SPATIAL DISTRIBUTION OF SURVEYED COMPANIES BY AGE OF COMPANY (YEAR)



3.6. KEY CHARACTERISTICS OF INTERVIEWED COMPANIES

DIAGRAM 3.1: KEY CHARACTERISTICS OF INTERVIEWED COMPANIES



OBSERVATIONS:

It was noted that of the companies that responded to the above components of the survey:

- 70% generated up to R 20million annual turnover, a further 30% generated between R 20 and a R 100million turnover annually.
- In terms of employment 61% of the companies in the sample employed up to 50 staff, a further 39% employed up to 500 staff.
- 56% of the companies were under 20 years of age while the remaining 44% were up to 80 years of age.

3.7. MAJOR COMPANIES SURVEYED

The table below lists the major companies in Sisonke based primarily on number of people employed.

TABLE 3.3: MAJOR COMPANIES SURVEYED BASED ON NUMBER OF PEOPLE EMPLOYED

COMPANIES LISTED EMPLOY BETWEEN 150 AND 30 PEOPLE		
1	Singisi Forest Products	Identifying major companies in Sisonke presented a challenge. Despite limited information on the company owing to its head office being located outside of Sisonke, it is known that Merensky, and Singisi Forest Products, is a major firm in the Sisonke economy with plantations, a saw mill and production plants in the District. Agriculture and agri-industry remains the economic base for the area and is represented on this list by commercial farming concerns, milk processors (Clover and Creighton Cheese) and Sutherland Seeds. The important role of the tourism industry, is evident from the presence of Drakensberg Gardens and the Sani Pass Hotel on this list.
2	Woodburn Estates	
3	Drakensberg Gardens (Gooderson Leisure)	
4	SuperSparUmzumkhulu	
5	Sutherland Seeds	
6	Sani Pass Hotel & Leisure	
7	Newlands Spar	
8	Clover SA Kokstad	
9	Herdstorm Farm	
10	Creighton Cheese	



3.8. SISONKE COMPANIES EXPORTING

PRODUCTS EXPORTED:

Only one company indicated that it is exporting products. The products exported include:

- Sawn logs.

The percentage of production exported by the firms in Table 3.4 is generally below ten percent of the total volume of product sold. Consequently none of the sample companies in Sisonke can be classified as an exporting company (i.e. more than 50% of production is exported). Despite this ruling one of the companies is listed as exporting despite this being at a very low level.

TABLE 3.4: SISONKE EXPORTING

DISTRICT	EXPORTERS	COMPANIES	% EXPORTERS
uMgungundlovu	21	63	33%
uMzinyathi	6	18	33%
uThukela	14	42	33%
Zululand	7	23	30%
uThungulu	11	38	29%
iLembe	13	45	20%
Amajuba	11	41	27%
eThekwini	29	119	24%
Ugu	4	48	8%
uMkhanyakude	1	17	6%
Sisonke	1	20	5%
KZN Province	118	474	25%

3.9. INFRASTRUCTURE CHALLENGES

UTILITY CHALLENGES

Including water, electricity, sanitation.

- Access to and costs of water supply and water quality featured as a challenge for 43% of the companies included in the survey.
- A further 31% noted that they had some difficulty associated with the supply of and/or costs electricity to the businesses. Concerns related to the quality and costs of supply.
- Remaining issues raised related to communications challenges.



TABLE 3.5: UTILITY CHALLENGES

UTILITY CHALLENGE	MENTIONS	%
Water supply	7	30%
Electricity	2	9%
Telecommunications	2	9%
Electricity erratic	2	9%
Solid waste removal	2	9%
Water quality	2	9%
Electricity limitations	2	9%
Electricity costs	1	4%
Water costs	1	4%
Cell phone reception	1	4%
Internet Access	1	4%
TOTAL	23	100%

TRANSPORT CHALLENGES

Only 6 out of 20 companies mentioned transport challenges. The implications are that 60% of the companies are either not experiencing transportation problems or are not heavily dependent on transport for their operations. Amongst those experiencing challenges the following was noted from the survey data:

- Problems associated with road maintenance involving delays in transportation and damage to vehicles translating into additional costs which in turn compromises businesses competitive advantage.
- Costs of fuel was also mentioned as a further limitation.

TABLE 3.6: TRANSPORT CHALLENGES

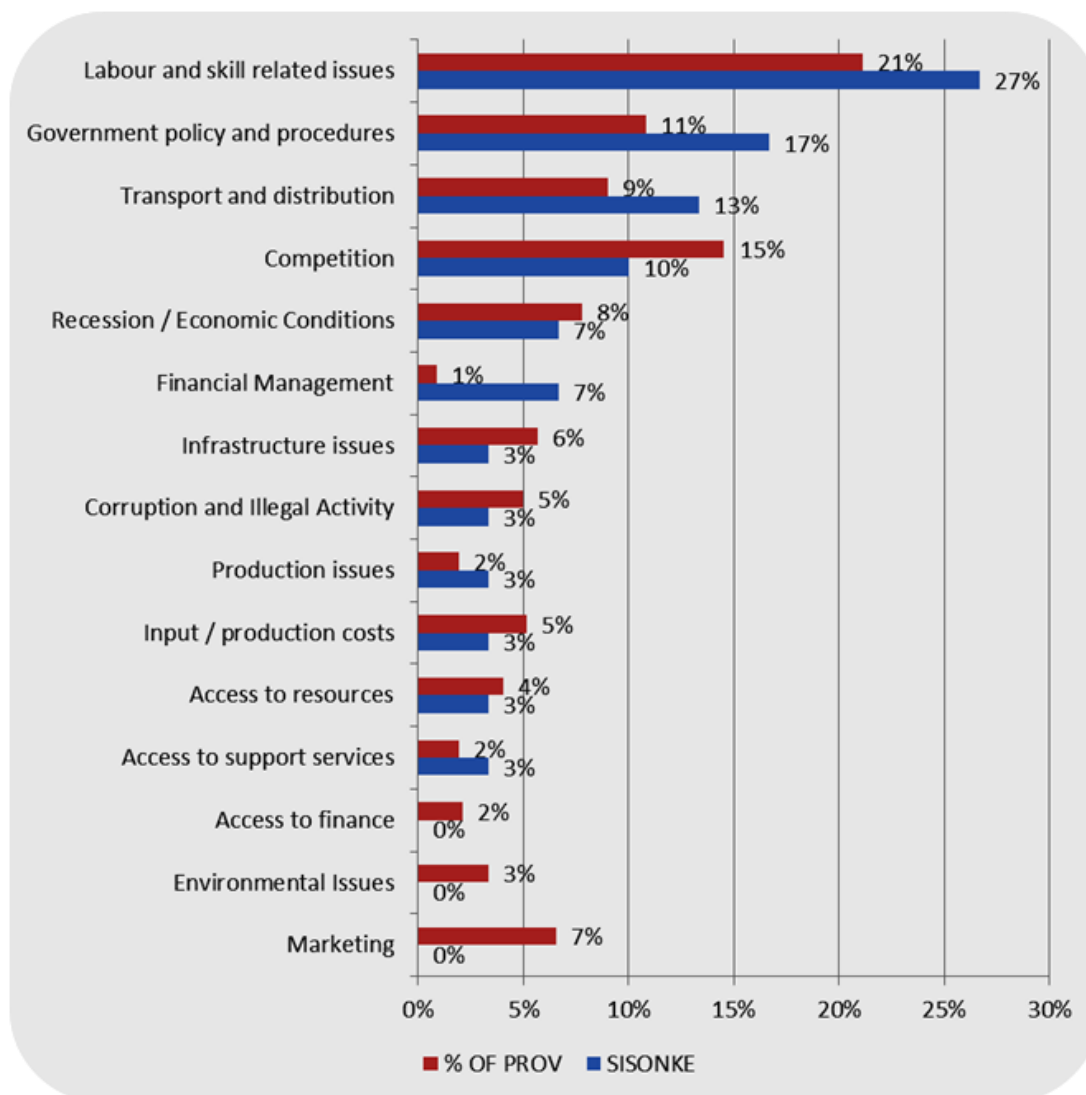
TRANSPORT CHALLENGE	MENTIONS	%
Road maintenance	5	83%
Fuel / transport costs	1	17%
TOTAL	6	100%



3.10. OTHER CHALLENGES

A number of other challenges were identified by respondents as indicated in Diagram 3.2. A comparison is made between aggregated results of the survey at provincial level and those from the Sisonke district survey. The district survey findings revealed that labour and skills issues, government procedures, transportation, financial management, production and access to support services included a greater proportion of the challenges identified by business in Sisonke than at provincial level. In addition to these issues, competition, recession, infrastructure, corruption and input costs were also identified as challenges but at a lower level than the provincial findings.

DIAGRAM 3.2: OTHER CHALLENGES



3.11. INTERVIEWEE COMMENTS

Some of the general observations made by respondents regarding the District economy included:

Types of companies

- A large number of companies interviewed were involved in agriculture or providing services to the agricultural sector.
- Due to the rural nature of the district and its close proximity to the uKhahlamba World Heritage site there are a number of hospitality companies including hotels and bed and breakfast facilities.
- Social services and social welfare also played an important role in the district.
- Manufacturing was limited to the processing of agricultural products in the form of dairy, red meat and timber.

Spatial location and relationships

- Kokstad, Underberg-Himeville, Creighton-Bulwer, Ixopo and Umzimkhulu are the main centres in the district. This is where the majority of high order goods and services and businesses tend to be located.
- Agriculture dominates the remainder of the municipality with small service centres offering basic lower order goods and services.
- The centres in Sisonke are roughly equidistant and thus most of the rural areas and communities have access to goods and services in these centres. The major challenge is poor access due to difficulties associated with the condition of transportation routes and the costs of public transport in an area where the topography is challenging.

Infrastructure

- Poor road maintenance was identified as a major cause for concern in the area.
- A lack of access to utilities including: electricity, water, and communication was identified as a major challenge. It was noted in the interviews that this was often as a result of poor infrastructure maintenance.
- The removal of telephone cables in rural areas is negatively impacting on rural business: it was argued that you cannot operate a business without a reliable communications service.

Industry potential

- It was noted in the survey that poor quality infrastructure is likely to inhibit economic growth and development.
- The Sisonke district is relatively isolated from the rest of the province and hence is not a priority area for investment by business other than for possibly Kokstad, Ixopo and Umzimkhulu due to their strategic location on the N2 and as gateway to the northern part of the Eastern Cape.
- However, the strategic location of these centres is likely to change in future accompanying the construction of the new coastal access route through the Eastern Cape.



Natural resources

- There was wide recognition of the importance of natural resources (in agriculture) to the future of the economic growth and development of the district.
- One of the key limitations to this recognition is that a need was expressed for the area under agriculture to be extended to increase the output: there was no clear recognition of the impact that this would have on biodiversity and sustainability in the delivery of goods and services to the wider region and the province.
- Since relative large areas of the district are still in an un-transformed state (compared to other districts in the province), consideration should be given in the economic development strategy to the notion of carbon trading as a mechanism to incentivise the protection and maintenance of biodiversity in this area of the province.

Social Responsibility

- Most companies in the district reported some form of community involvement/social responsibility:
- Support for local schools (financial, food, provision of facilities).
- Assist in skills development in the local communities.
- Provide agricultural advice to the local community.
- Source inputs from local businesses.

Local Views on the District Economy

- Opinions vary. Some companies reported that the economy was weak, others that it appeared to be stable. No one noted growth.
- Noted that the districts economy is heavily reliant on agriculture, forestry and dairy in particular.
- The agricultural sector seems to be stable but other sectors are in decline.
- There is a need at local level to add value to agricultural goods prior to them being exported to other areas. This value add would serve to boost the local economy.

Government Support

- Access to services was identified as an issue prohibiting development in the area. This was particularly the case with access to communication services, i.e. lack of internet access due to cable theft and Telkom not replacing the cables in the rural areas.
- Need to look into value adding to goods in the area.
- Need to investigate the upgrading of a road between Creighton and Franklin.

3.12. A PERSPECTIVE OF ECONOMIC DRIVERS BASED ON COMPANY SURVEY

Based on the Quantec figures, and through the identification of major companies in the Sisonke District, it is evident that the major sectors driving the district economy are agriculture, trade, manufacturing and government. Timber and timber products allied to livestock and dairy sub-sectors in agriculture fulfils an important role in the local agricultural and manufacturing economy. In addition trade plays an important role in the provision of goods into the Eastern Cape in addition to supplying local populations. Government services is also a major contributor in the form of employment as well as distribution of social and welfare services throughout the district. Tourism does play a role in the local economy, but on a limited basis owing to the limited number of facilities in the area and its relative inaccessibility to the region's major centres.



4. A MUNICIPAL CAPITAL INVESTMENT PERSPECTIVE

4.1. INTRODUCTION

In order to consider District drivers from the perspective of municipalities a questionnaire was issued to each municipality. The information gathered through these interviews and presented in this section includes:

- A Project Based Perspective
- Historic and Current Projects
- Future Projects
- Municipality Identified Challenges
- Addressing the Challenges
- A Public Sector Investment Perspective

4.2. CAPITAL INVESTMENT IN THE DISTRICT

For this initiative the focus was on identifying major (focus on R20m plus) capital investment projects in the District falling in the following categories:

- New nodes / developments: including tourism, commercial and industrial nodes;
- Bulk infrastructure supporting economic development: including bulk infrastructure (excluding reticulation) for water and electricity and other infrastructure related to solid waste
- Link and major access infrastructure supporting economic development including roads, airports and taxi ranks amongst others
- Facilities supporting economic development including sport stadiums, markets, trading centres and the like.
- A summary of Table 4.1 below indicates investment in bulk water and electrical infrastructure to main centres and settlements in the district. In addition a number of projects have been identified for the upgrading of road infrastructure again in an around main centres and settlements in rural areas. The development of a number of nodes in rural areas were also identified for capital investment.

TABLE 4.1: HISTORIC, CURRENT AND FUTURE CAPITAL INVESTMENTS IN DISTRICT ECONOMIC DEVELOPMENT

LOCAL MUNICIPALITY	SECTOR	PROJECT NAME	PROJECT STATUS	FUNDING SOURCE(S)	BUDGET
Ingwe	Bulk infrastructure	Mbululweni Water Supply	no info	0	no info
KwaSani	Bulk infrastructure	Underberg Bulk Water Supply Upgrade Phase 2	no info	0	R19,200,000
Ubuhlebezwe	Bulk infrastructure	Kenterton Umzali 132kVline	no info	DOE	R45,500,000
Ubuhlebezwe	Facilities supporting econ. dev.	Sisonke Farmers Market	no info	0	no info
Ingwe	Other	Allan Paton Express (Ingwe Rail Initiatives)	Historic	DEDT	no info
Greater Kokstad	Bulk infrastructure	National Electrification Program	Historic	0	R18,000,000
Greater Kokstad	Bulk infrastructure	Kokstad Bulk Water and Sewer Upgrade	Historic	Basic Service Delivery	R8,000,000
Greater Kokstad	Facilities supporting econ. dev.	Pick n Pay Shopping Centre	Historic	0	no info
Ubuhlebezwe	Facilities supporting econ. dev.	Ixopo Call Centre	Historic	DEDT	no info
Ingwe	Bulk infrastructure	Skhesneni/Masanini Bulk Water Consolidation	Current	0	R7,200,000
Umzimkhulu	Bulk infrastructure	Rietvlei 132kV Line	Current	ESKOM	R18,000,000
Ingwe	Establish new nodes	Centecow Mission and Related Projects	Current		no info
KwaSani	Establish new nodes	Reichenau Mission Upgrading	Current	COGTA Corridor	R4,000,000
Umzimkhulu	Facilities supporting econ. dev.	New 20 000m2 Retail Centre (Checkers)	Current	Private Sector	no info
Ingwe	Link / access infrastructure	Re-gravelling of P27/2	Current	DoT	R2,500,000
KwaSani	Link / access infrastructure	Sani Pass Road Surfacing	Current	DoT	no info
Ingwe	Other	Ingwe Biofuel	Current	CoGTA	R15,000,000
KwaSani	Other	Underberg Small Town Revitalisation	Current	COGTA Small Town	R5,000,000
Ingwe	Agric production	The Hefer Rearing Project	Future	0	R1,000,000
Ingwe	Agric production	Ingwe Forest Sector Strategy	Future	0	R5,000,000
Ingwe	Agric production	New Afforestation	Future	0	no info
Ingwe	Establish new nodes	Donnybrook Town	Future	0	no info



4.3. MUNICIPALITY IDENTIFIED CHALLENGES

ECONOMIC DEVELOPMENT CHALLENGES IDENTIFIED BY MUNICIPAL SECTOR

- The major challenges to economic development in Sisonke include:
 - The need for utility infrastructure in the main centres (water and electricity)
 - Skills migration was among the major challenges for economic development in this District.
 - Challenges relating to health issues was also viewed as significant by half of the respondents.

TABLE 4.2: MUNICIPALITY CHALLENGES

CATEGORIES OF CHALLENGES	SISONKE		KWAZULU-NATAL	
	NO OF RESPONSE	% OF SISONKE RESPONSES	NO OF RESPONSE	% OF KZN RESPONSES
Infrastructure	4	27%	35	22%
Skills Migration	2	13%	15	10%
Health	2	13%	2	1%
Other	2	13%	11	7%
Land Issues	1	7%	17	11%
Education	1	7%	8	5%
Unemployment	1	7%	16	10%
Planning	1	7%	5	3%
Implementation Of Led Strategy/ Plans	1	7%	22	14%
Recession		0%	5	3%
Rates And Services Availability And Cost		0%	9	6%
Institutional/ Communication		0%	11	7%
Legislation		0%	1	1%
TOTAL	15	100%	157	100%



4.4. ADDRESSING THE CHALLENGES

MUNICIPAL REQUIREMENTS FOR ADDRESSING THE CHALLENGES

In the responses as to how the challenges can be addressed the majority of respondents suggested that the establishment of relevant infrastructure accompanied by the pro-active implementation of local economic development (including funding support), are required to overcome the current challenges to economic development in Sisonke.

TABLE 4.3: ADDRESSING THE CHALLENGES

REQUIREMENTS FOR ADDRESSING THE CHALLENGES	SISONKE		KWAZULU-NATAL	
	NO OF RESPONSE	% OF SISONKE RESPONSES	NO OF RESPONSE	% OF KZN RESPONSES
LED and LED Funding	4	44%	33	24%
Infrastructure/Utilities Required and Funding	2	22%	33	24%
Institutional	1	11%	15	11%
Land Issues	1	11%	10	7%
Policy Support	1	11%	11	8%
Capacity Building & Skills Development		0%	9	7%
Planning		0%	8	6%
Economic Opportunities		0%	7	5%
Communications, Coordination & Consultation		0%	6	4%
Cost Of Services: Municipal Incentives		0%	5	4%
Total	9	100%	137	100%



4.5. A PUBLIC SECTOR INVESTMENT PERSPECTIVE

Sisonke district has been characterised by major low cost housing initiatives and the construction of the C-Max prison over the last 15-20 years with private sector investment in the manufacturing and commercial sectors in the main centres over the same period. In addition district and local governments have established themselves in the main centres resulting in employment and in most cases delivery of services to communities. These investments have served to transform each of these small agricultural towns into centres providing a wide range of social and commercial services and limited employment for local people. One of the limitations to future growth and development of Kokstad and Ixopo is water supply alternative sources have been identified, but capital is required to resolve this challenge.

The district's commercial agricultural sector has been negatively impacted by the manner in which land reform has been handled leading to loss of productive resources and skills particularly in Ubuhlebezwe. In addition a number of land reform projects have resulted in the establishment of large low cost housing and settlement projects in areas which municipalities are unable to service on a sustainable basis.

In future the re-alignment of the N2 along the coastline through the Eastern Cape will have a major impact on the economy of Sisonke since it will result in the loss of the majority of the through traffic to the Cape and the opportunities associated therewith. Furthermore work has been undertaken on the major catchments by Department of Water Affairs to establish the feasibility of additional areas for forestry in the catchment. The proposal is that this should be accompanied by the construction of a number impoundments in the different quarternary catchments which comprise the Umkomaas as a mechanism for balancing and offsetting losses such that downstream flow is not compromised.

It is against this background that the following interventions could be considered by the public sector:

- Municipalities should recognise the limited opportunities for development of Sisonke owing to its rural location and attempt to capitalise on its natural capital through negotiating carbon trading with the provinces industrial municipalities which will increasingly come to rely on the natural capital of Sisonke for goods and services such as water (see inter-basin proposed projects, phase 4 Provincial report), air and food production.
- Owing to limitations on water supply the introductions of a water conservation demand strategy in all towns (involving water infrastructure upgrades) would go a long way to resolving this challenge.
- Providing opportunities and incentives for the manufacturing sector to locate in the main centres of the district with the view to introducing a greater focus on adding value to locally produced agricultural produce. This would serve to attract investment to the district, provide opportunities for employment and skills development without a major and negative impact on the environment.
- A major intervention by the public sector as part of a development planning and environmental initiative in the district would be to develop an Environmental Management Framework allied to a Spatial Development Framework closely linked to a plan and strategy for the implementation of urban edges in both rural and urban areas to limit urban sprawl is essential for this district and its potential for carbon storage.
- EMF initiative should be accompanied by government adopting a greening approach to development of the district economy. This in turn would result in the extension of the tourism sector into the district accompanying the relocation of the N2 along the coast. The existing linkages between the district and the Eastern Cape could potentially be strengthened into an additional berg to sea experience.



5. A NATURAL RESOURCES OVERVIEW

5.1. INTRODUCTION

There exists a strategic link between the state of the District's natural capital, its ability to deliver ecoservices and the extent to which this provides resilience to the economy and/or makes it vulnerable. The interviews with major companies in the district confirmed that most major companies (economic drivers) are ignorant of this strategic link and that they are operating under the assumption that the natural resources upon which they depend, either directly or indirectly, are infinitely available. Also, it needs to be highlighted that many economic drivers are ignorant of the societal costs caused by the generation of environmental externalities for which they are not taking responsibility.

With the above as background this section:

- Considers the quality of ecosystem goods and services in the District;
- Provides an overview of ecosystem resources (including allocating a value to the ecosystem resources);
- Illustrates the ecosystem resource linkages between this District and other Districts in KwaZulu-Natal; and
- Highlights the range of economic opportunities and constraints emanating from the future utilisation of ecosystem resources.

5.2. CONDITION OF NATURAL CAPITAL AND THE QUALITY OF ECOSYSTEM SERVICES

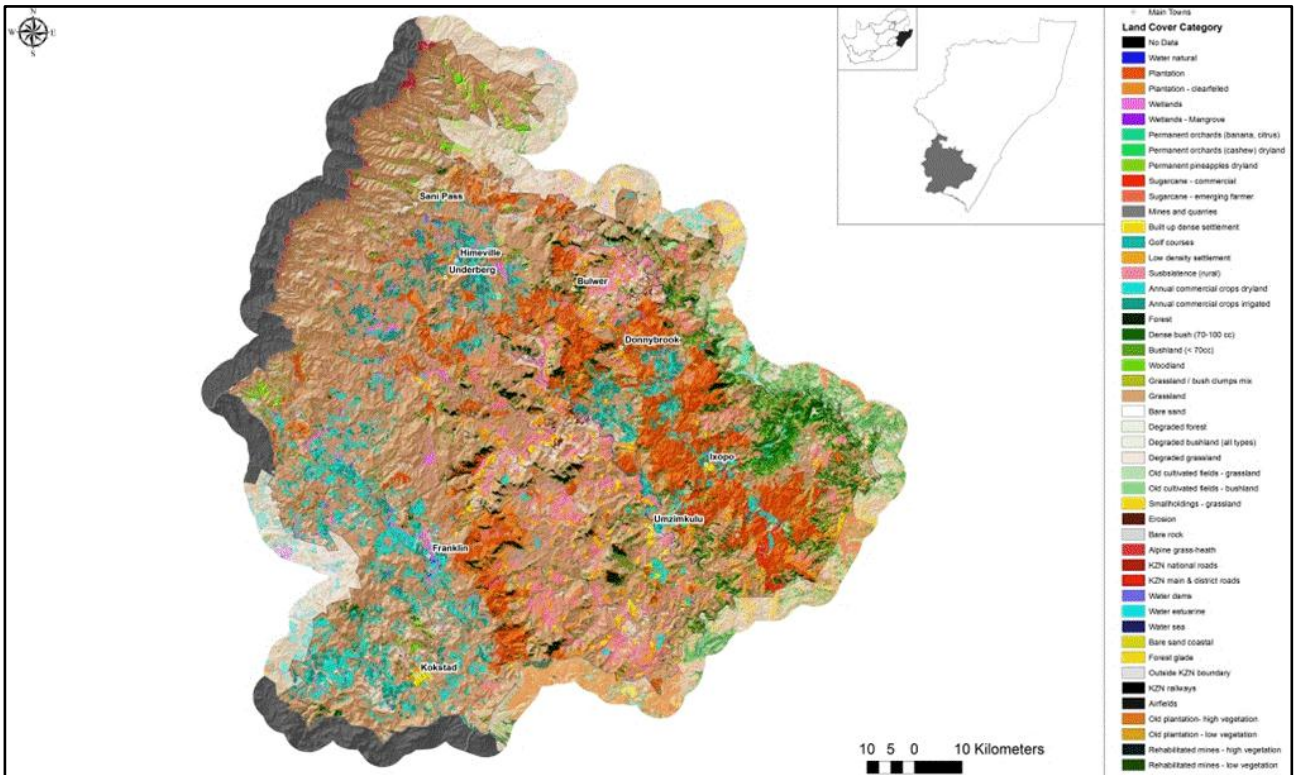
The condition of natural capital and the quality of ecoservices in the District are presented through the discussions provided below, in conjunction with the land cover and ecoservice maps and summary tables also provided below. For background and explanatory information on the concept of natural capital and ecoservices, as well as the process followed to derive these findings, the reader must refer to the economic strategy report for the Province.

Just more than 77% of the surface area of the District maintains the ability to produce and deliver ecoservices. Of all the Districts this has the second highest proportion of natural capital in prime condition, although this is still very low, i.e. 0.34% of the Province. The bulk of the area is considered to have an ecoservice potential of 2 and that is just less than 63%, with the area scoring less than 2 being a total of just more than 14%. Just less than 23% of the District's surface area scores on the negative side of the ecoservice scale.

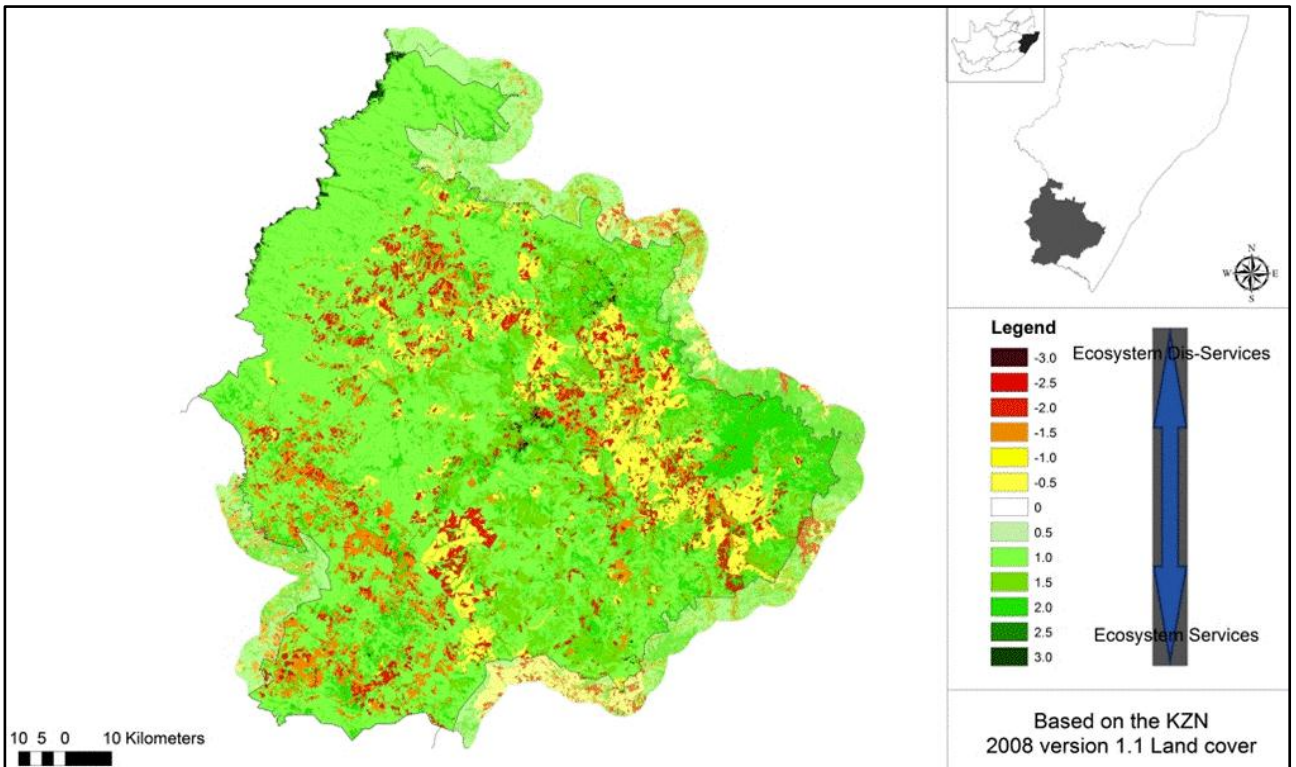
The District has in its favour a large portion of the uKhahlamba Drakensberg Park World Heritage Site, as well as a significant portion of land that is under extensive commercial livestock farming. Both of these land use types have a strongly positive potential to deliver ecoservices and are located in the upper portions of important catchments where a positive water balance enhances their strategic significance in terms of the contribution they make to producing and delivering ecoservices that are related to water provision. However, these relatively high altitude land cover types are not very resilient to mismanagement and consequently the impacts of such are already evident with the resultant loss of ecoservice potential.



MAP 5.1: SISONKE DISTRICT LAND COVER



MAP 5.2: SISONKE POTENTIAL TO DELIVER ECOSYSTEM GOODS AND SERVICES



5.3. SUMMARY OF ECOSYSTEM RESOURCE

Ezemvelo KZN Wildlife completed an exercise, reported on in detail in the Provincial report, which used the values derived for the ecoservices produced and delivered from a variety of natural habitat types in the Province (EKZNW, 2011). The outputs of this exercise were then used to extract the value for each of the Districts and these are presented in table format below. For Sisonke consideration has been made of the fact that the dispute against the provincial boundary has not yet been decided and therefore figures have been presented in respect of the disputed area in order to provide the full picture and yet allow for a distinction to be made if necessary. This value for Sisonke, including the Eastern Cape portion, equates to 10.55% of the total value for the Province which must be considered in the context of the District making up 11.69% of the Provinces surface area. It must be noted that these figures provide an indicative value for the District having been derived from figures at a Provincial scale. Any assumptions and related errors made at the Provincial scale are therefore somewhat greater at the District level. A more refined exercise would need to be done for each District in order to provide a more accurate picture.

TABLE 5.1: NATURAL HABITAT TYPES

HABITAT TYPE	ECOSERVICE VALUE	
	KZN PORTION	EC PORTION
Forests	R 287 828 629	R 268 059
Grasslands	R 2 521 492 481	R 396 491 391
Riparian and floodplain veg and swamp forests	R 3 916 822 922	R 255 500 619
Savannas	R 309 158 978	
Wetlands	R 2 903 855 218	R 2 583 341 396
Rivers	R 2 599 587 268	R 16 168 708
TOTAL	R 12 538 745 498	R 3 251 770 175

In addition to the information provided above this discussion is supported by the two tables provided below and which illustrate the quantitative distribution of ecoservice score categories and land cover types respectively. Maps 5.1 and 5.2 in the previous page **Error! Reference source not found.** provide a spatial illustration of these values and features. These rand values for ecoservices are illustrative of the value that is being contributed to the district economy and more importantly what it would cost the economy of this and downstream municipalities if the natural capital of this area were to be further transformed

TABLE 5.2: ECOSERVICE CATEGORY SCORES

Extent of cover	ECOSERVICE CATEGORY SCORES									
	-3	-2	-1.5	-1	-0.5	0	1	1.5	2	3
Hectares	2511	86196	57319	261	105578	116	64092	92841	690878	3728
%	0.23%	7.81%	5.19%	0.02%	9.57%	0.01%	5.81%	8.41%	62.61%	0.34%



TABLE 5.3: THE EXTENT OF BROAD LAND COVER CATEGORIES AS A PERCENTAGE OF THE SISONKE DISTRICT

LAND COVER CATEGORY	% COVER
Natural - freshwater	1.21%
Natural - marine	0.00%
Natural terrestrial	62.05%
Natural terrestrial degraded	5.48%
Agriculture - active including commercial and subsistence	25.77%
Agriculture - fallow including commercial and subsistence	0.25%
Mining	0.00%
Settlement (including recreation and infrastructure)	5.23%

The southern portion of the uKhahlamba Drakensberg Park World Heritage Site occurs within this District and explains why it has the greatest portion of coverage with a '+3' ecoservice score, which is also a critically important water factory for the Province. To the south of this internationally important protected area is the portion of the Drakensberg that hosts commercial agriculture as well as a portion that falls into what used to be the Transkei. This area has been subjected to unsustainable subsistence land use practices which appear as orange to light yellow patches on the map ecoservices map above. This District has the largest portion of cover under active agriculture of the three Drakensberg Districts and much of this is afforestation.

Considering that the water stresses currently being experienced in uMgungundlovu and eThekweni are due to be addressed by an inter-basin transfer from the Umkomazi River catchment, and that this area falls within this catchment, there are significant opportunities to secure the integrity of the natural capital responsible for delivering watershed services.

5.4. ECOSYSTEM RESOURCE LINKAGES

An extract from the 2008 Land Cover map as provided by Ezemvelo KZN Wildlife has been inserted into the text below in order to illustrate the linkages between the Sisonke District and the Districts of uMgungundlovu, eThekweni and Ugu.

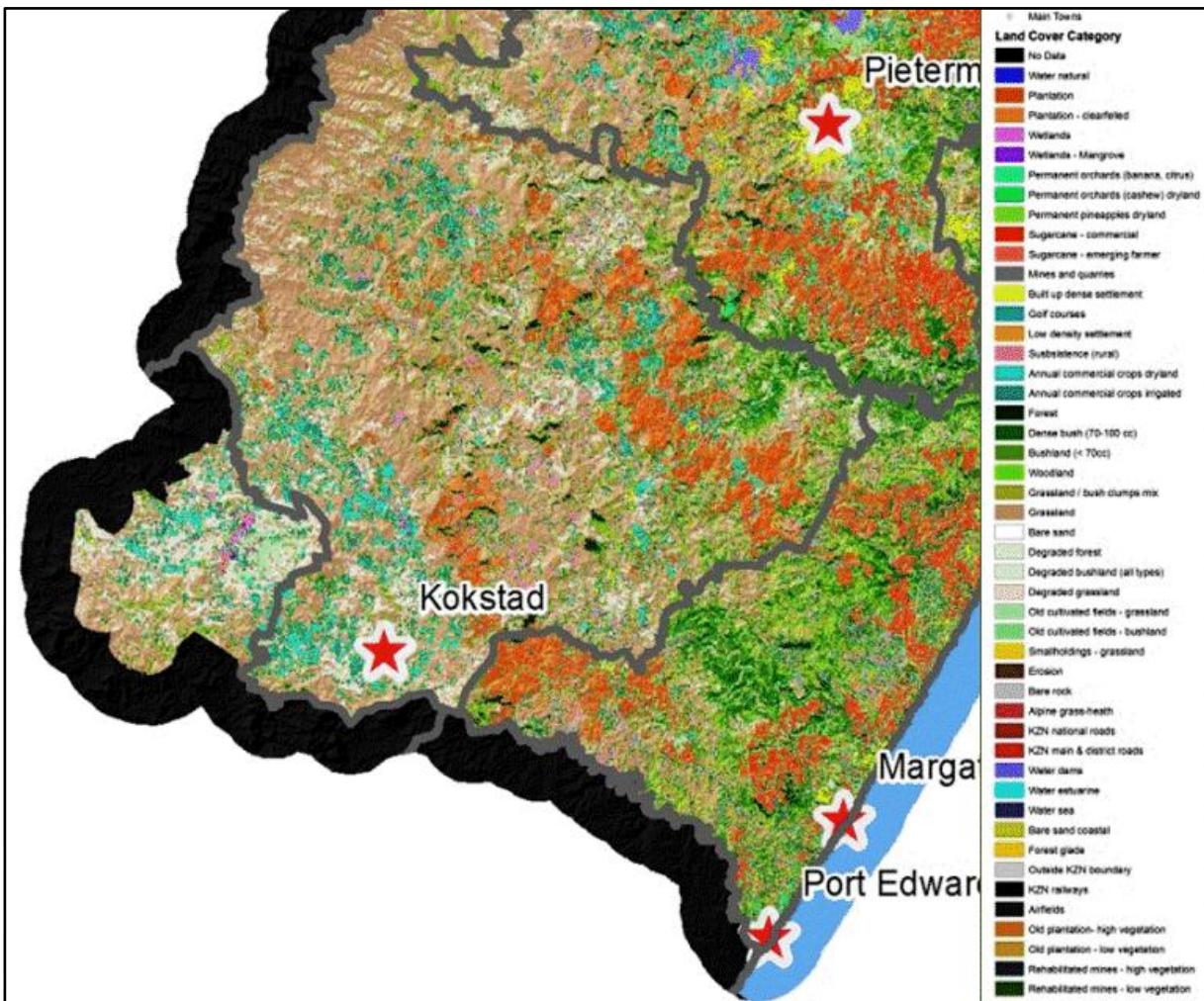
Land use management in the Sisonke District has the potential to impact either positively or negatively on more than 50% of the KZN coastal areas, and in particular the economic hubs of Pietermaritzburg and Durban. With the supply capacity of the uMngeni River system to these hubs being exceeded a long time ago, and the limited potential for the Mooi River system to augment supply through the Spring Grove Dam, the emphasis will be on the planned Smithfield and Impendle Dams on the Umkomazi River to meet demand. Although the potential for the terrestrial component of the Sisonke District to deliver ecoservices, and particularly those associated with watershed/catchment services, is of the best in the Province, the extent of transformation and degradation has led to the loss of catchment integrity as is evident in the sediment loads carried by the Umkomazi River during the rainy season.



Noted earlier there is also evidence of the Mzintlava River system being stressed particularly in low flow periods due mainly to irrigation. This already has serious implications for water supply to Kokstad and downstream implications for agriculture.

Linked to the degradation of the catchments and river systems that flow from the Drakensberg to the coast is the spread of alien invasive plants, especially those associated with timber plantations. Although altitude limits the spread of certain species such as wattles and pines, others such as gums are more widely spread and have a significant impact on catchment hydrology reducing stream flow and taking over indigenous riparian vegetation. Other species of alien invasive plants such as bramble and bugweed are spread by animals that consume the fruit and spread the seed through their faeces. According to information obtained from the Natural Resource Management (NRM) component of the national Department of Environmental Affairs the status of alien invasive plants in the Umvoti to Umzimkulu Water Management Area, which includes the District Municipalities listed above, there is more than a million hectares under uncondensed infestation and almost 140 000 hectares under condensed infestation by a wide variety of alien invasive plants. In addition to the impact on catchment integrity, this situation reflects a loss of access to natural capital such as grazing and medicinal plants, while it also impacts on the aesthetic value of the landscapes which will reduce attractiveness for tourism. An extract from the map provided by NRM is included below.

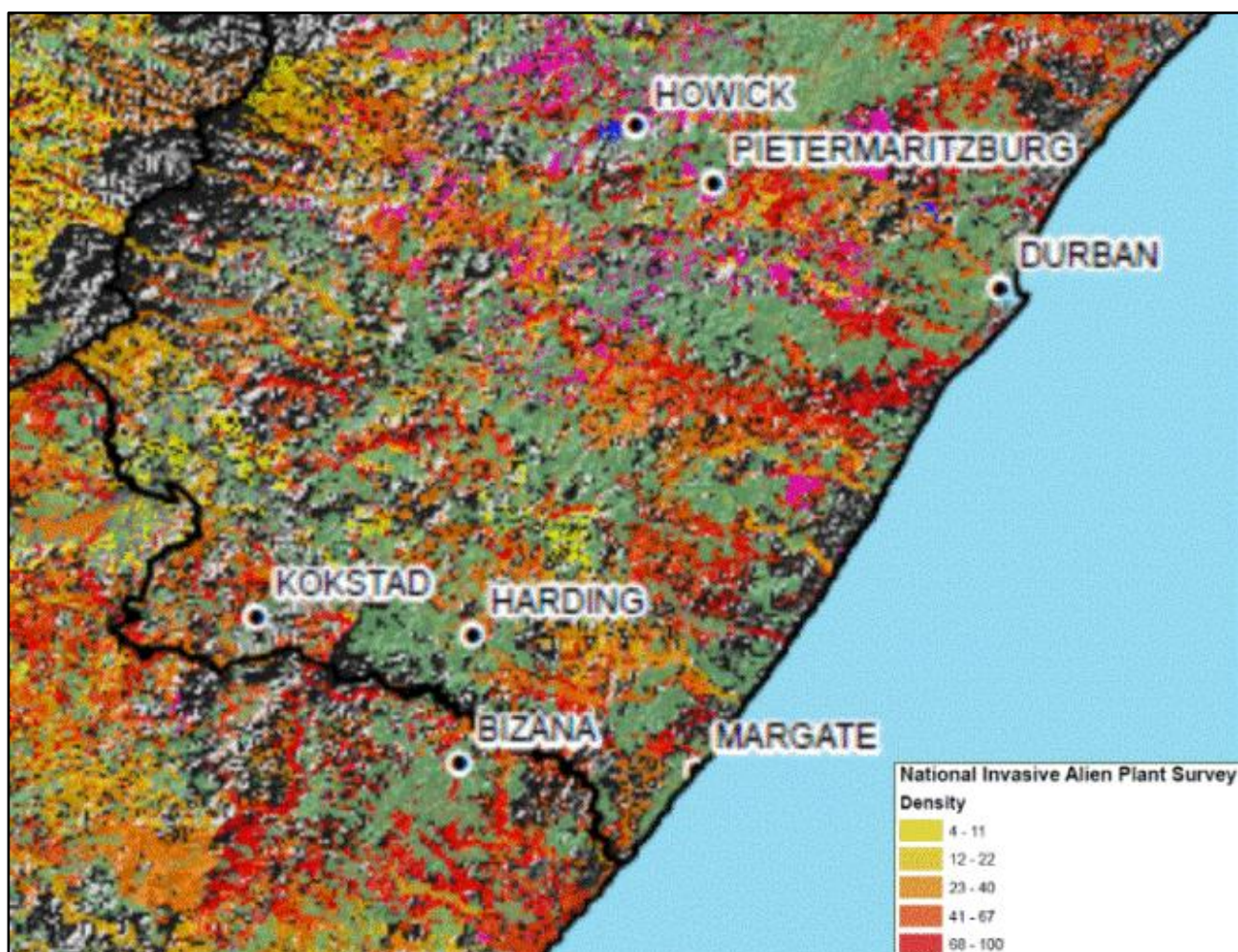
MAP 5.3: THE 2008 LAND COVER FOR SISONKE AND ADJACENT DISTRICTS ILLUSTRATING THE NATURAL CAPITAL LINKAGES



Source: Ezemvelo KZN Wildlife



MAP 5.4: AN EXTRACT FROM THE NATIONAL MAP OF ALIEN INVASIVE PLANTS ILLUSTRATING THE EXTENT OF THIS PROBLEM WITHIN SISONKE AND ADJACENT DISTRICTS



Source: Dept. Environmental Affairs NRM

5.5. THE RESILIENCE OR VULNERABILITY OF ECONOMIC DRIVERS AND THE OPPORTUNITIES AND CONSTRAINTS TO GROWTH

According to the outcome of the surveys undertaken for the broader economic strategy it was identified that the following sectors are the key economic drivers for Sisonke:

- Agriculture (timber, livestock and dairy);
- Trade (supply of goods to the Eastern Cape and locally, as well as to eastern Lesotho);
- Manufacturing (associated with the processing of agricultural produce); and
- Government (employment and social and welfare services).

In addition to the above, tourism is listed as a driver with limited contribution due to the lack of facilities and relative inaccessibility.

The discussion on opportunities and constraints focuses on the above drivers and provides an indication of what the opportunities and constraints are with regard to each of them. It must be noted that this perspective is based on an understanding of the condition of natural capital as pertains to each sector, but that a more detailed assessment is possible if resources are provided to support a corporate ecosystem review. The latter is a recognised assessment tool which requires direct engagement with the various players within the various sectors and could provide a valuable extension to this study.

For more detail see Annexure B.



6. FINDINGS AND RECOMMENDATIONS

6.1. CORE FINDINGS

- From the interviews with major businesses and LED practitioners limited structural changes in the economy of the Sisonke District have taken place over the past two decades (a structural change is defined as a “long-term widespread change of the fundamental structure (of an economy), rather than micro-scale or short-term output and employment”).
- The health of the economy of the District is mainly dependent on commercial agriculture manufacturing and the government sector. An encouraging sign is the emergence of smaller companies engaging in secondary and tertiary sector activities over the past 20 years as the basis for the limited structural change in the district economy.
- The natural capital of the District has been mismanaged, despite this there are still areas where the natural capital is intact and could be recovered with careful management and regulation. Financial incentives for managing to higher levels of bio-diversity could be promoted through introduction of carbon trading at provincial levels between resource rich and resource poor municipalities.

6.2. KEY SPATIAL ECONOMIC FEATURES

A number of key spatial economic features of the Sisonke District must be acknowledged before recommendations are considered:

- The major regional role of core urban centres, most notably Kokstad, Umzimkulu and to a degree Ixopo, in serving a much larger Eastern Cape catchment must be considered. Furthermore Underberg – Himeville is also playing an important service to the population located in Impendle , part of Ingwe and cross border into Lesotho.
- The potential negative impact of the relocation of the Durban International Airport on future tourism and business investment in the Sisonke District.
- The dislocation of rural settlement from urban job opportunities and the underdeveloped nature of the vast rural municipalities of the District.
- The concentration of major businesses along the main transport routes and associated centres (N2, R612, R617, R56) and the barriers to expanding economic opportunities to municipalities in the rural hinterland (including land availability, landownership, absence of planning frameworks, distance from markets and transport networks).



6.3. A CHANGING SPATIAL ECONOMIC DEVELOPMENT STRUCTURE

On a regional level four major initiatives have the potential to influence the spatial economic structuring of the Sisonke District and potentially bring about structural changes, viz.

- The development of the Wild Coast N2 route and loss of a substantial loss of through traffic into the Eastern Cape.
- The establishment of a Dig-Out Port on the old Durban International Airport site located in eThekweni which could provide new opportunities for the production and local processing of agricultural product for export purposes.
- The establishment of a number of impoundments on the Umkomaas river and the expansion of commercial timber production into the Umzimkhulu Municipality on state and traditional lands
- The extension of the tourism sector into this relatively undeveloped sub-region of the province to take advantage of the biodiversity of the area and extend the berg to sea experience which will 'open up' in the Eastern Cape with the relocated of the N2.

Each of the above will require specific spatial planning responses.

6.4. RECOMMENDATIONS ON GOVERNMENT INTERVENTIONS

6.4.1. SUPPORT CATALYTIC PROJECTS

Support, it is recommended that there should be the implementation of "catalytic" projects (or as a first step confirming the feasibility thereof). The currently identified catalytic projects are:

- Relocation of the N2.
- Establishment of retail outlets in the main centres of the district.
- Impoundments on the Umkomaas River and expansion of commercial timber and areas under irrigation (Polela).
- Municipalities providing opportunities for the establishment of industries which could become involved in the processing of natural resources prior to export via the proposed 'dug-out' port in Ethekewini.
- Establishment of and EMF at district level for regulation of development and protection of the natural capital of the area.
- Greening the Sisonke district economy and encouraging the establishing linkages with the Eastern Cape for tourism development in future.



DIAGRAM 6.1: SISONKE ECONOMIC DRIVERS

ECONOMIC DRIVERS		CERTAIN DRIVER	POSSIBLE DRIVER	UNCERTAIN
COMPANIES / SECTOR	Company		Singisi Forest Products	
	Sector/Sub-sector/Cluster	Agriculture Tourism	Wholesale and Retail	
DEVELOPMENTS	Strategic Developments	Allan Paton Express (Rail) Underberg Revitalisation Kokstad Prison Ingwe Forest Sector Strategy	Ixopo Call Centre Centocow Mission and related Reichenau Mission Upgrading Ingwe Biofuel Umzimkhulu Checkers Centre	Kokstad P 'n P Centre
	Supporting Facility	Sisonke Farmers Market		
INFRASTRUCTURE	Special Economic Zones	Donnybrook Town		
	Link Infrastructure	Sani Pass Road Surfacing		
	Other Infrastructure		Various bulk + res water	

Key to text colours: Green = established / Orange = partially established / Red = Concept



6.4.2. PLAN FOR LONG TERM GROWTH

Government should support planning for the long term growth of the economy of the area. This long term planning should include:

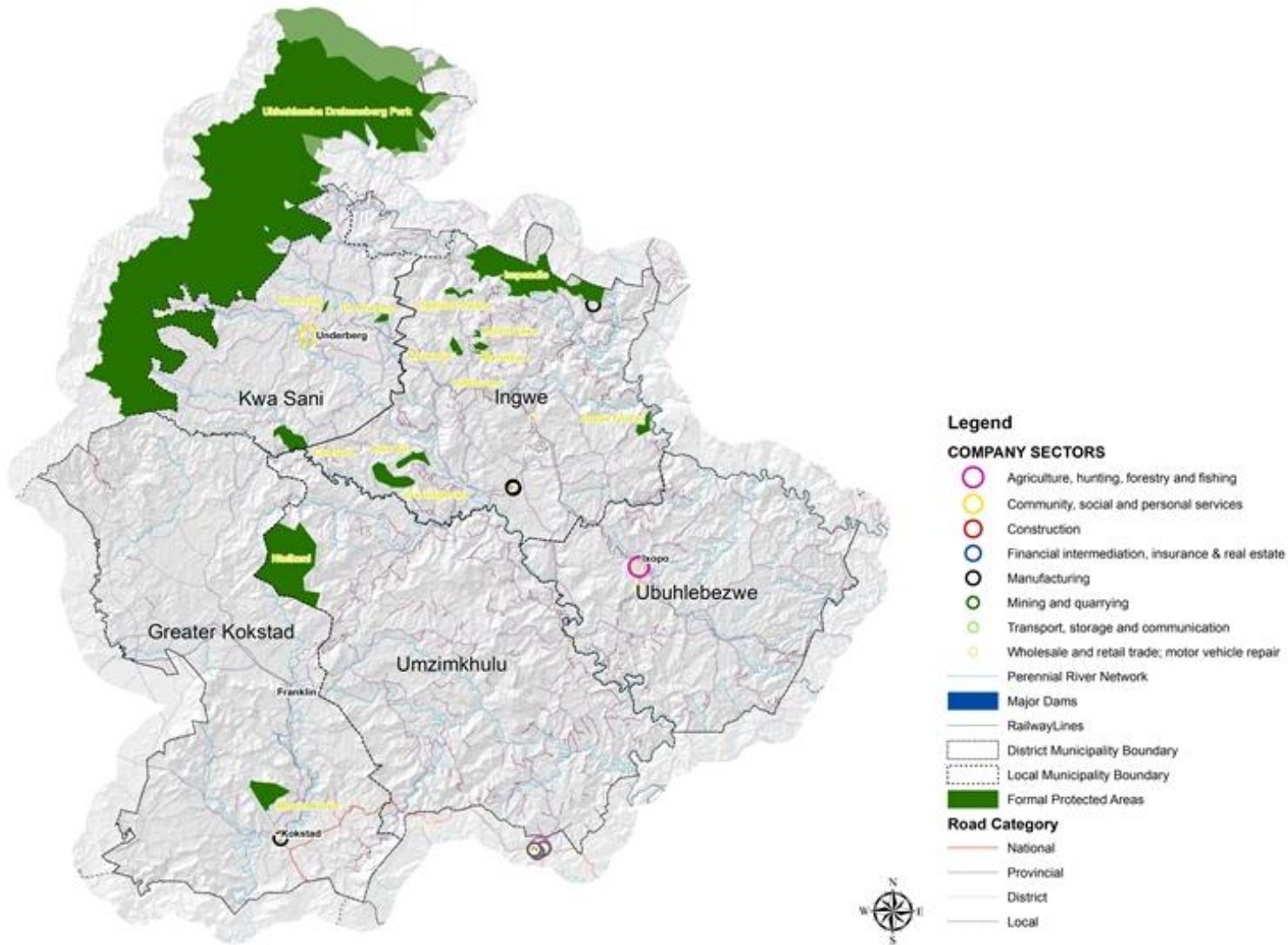
- The extension of the existing proclaimed conservation area linking Bushmans Neck with Sehlaba Thebe and the untransformed sections of the berg north of Matatiele.
- Extending the berg to sea conservation potential, particularly of the Kokstad municipality with the Eastern Cape.
- Pursuing a greening approach to future economic development.
- Setting aside areas for limited industrial and commercial development and growth associated with existing centres.
- Adopting a clearly defined policy on urban expansion outside of defined urban edges.

6.4.3. ADDRESSING NATURAL RESOURCE CONSTRAINTS

The information provided on natural capital and ecoservices in Section 5 is based on 2005 -2008 land cover data and the interpretation of satellite imagery. A comparison of the 2005 and 2008 land cover data shows that the trend is towards increasing land transformation and degradation, and the satellite imagery is unable to distinguish between natural bush and alien invasive plant infestations. It is also unable to distinguish between grasslands that are well managed and those that are over utilised and degraded. The picture that has been presented through the interpretation of this data is thus a very conservative one. In reality the situation on the ground is significantly worse than has been presented here. While a portion of the District is within a high rainfall area with a low rate of evaporation and therefore a positive water balance, i.e. that which is immediately against the boundary with Lesotho; it is only that portion that is within the uKhahlamba Drakensberg Park World Heritage Site that retains a benchmark condition. Outside of this protected area, the bulk of the natural capital that is recognised as being untransformed is under unsustainable livestock management regimes. The potential for this District therefore to produce and deliver strategically significant catchment ecoservices has been significantly reduced.

The significance of this is both to the District itself as well as to the coastal neighbours of eThekweni and Ugu, and by virtue of the planned dams for the Umkomazi River, the uMgungundlovu District will soon become affected as well. It is critical that these linkages are recognised as well as the role that well managed natural capital can play in ensuring the delivery of catchment ecoservices to neighbouring Districts. Reduction in this potential also indicates that the viability of agricultural activities, both commercial and subsistence, in Sisonke are far from sustainable at this point in time.

ANNEXURE A: SISONKE DISTRICT – COMPANY DISTRIBUTION BY SECTOR IN LOCAL MUNICIPALITIES



LIST: COMPANY DISTRIBUTION IN LOCAL MUNICIPALITIES

COMPANY NAME	LOCAL	PRODUCT CATEGORY
Clover SA Kokstad	Greater Kokstad	Dairy Products / Logistics
East Griqualand Tractors	Greater Kokstad	Equipment Sales
Rhino Cash and Carry	Greater Kokstad	Retail
Singisi Forest Products	Greater Kokstad	Sawn logs
Ashtonvale Guest Farm	Ingwe	Tourism Accommodation +
Creighton Cheese	Ingwe	Cheese Products
Creighton Dairies	Ingwe	Milk Products
Creighton Hotel	Ingwe	Tourism Accommodation +
Mountain Park Hotel	Ingwe	Tourism Accommodation +
Newlands Spar	Ingwe	Retail
Drakensberg Gardens (Gooderson Leisure)	KwaSani	Tourism Accommodation +
Riverview Manor Hospital	KwaSani	Medical Services
Sani Pass Hotel & Leisure	KwaSani	Tourism Accommodation +
Herdstorm Farm	Ubuhlebezwe	Agricultural Commodities
Kings Grant Country Retreat	Ubuhlebezwe	Tourism Accommodation +
Lewis Stores	Ubuhlebezwe	Furniture Retail
Sutherland Seeds	Ubuhlebezwe	Seed
Sutton Mechanical Services	Ubuhlebezwe	Equipment Sales
Woodburn Estates	Ubuhlebezwe	Agricultural Commodities
SuperSpar Umzumkhulu	Umzimkhulu	Retail



ANNEXURE B: ECONOMIC DRIVERS AND THE ENVIRONMENTAL OPPORTUNITIES AND CONSTRAINTS TO GROWTH

RETAILERS – OPPORTUNITIES AND CONSTRAINTS

OPPORTUNITIES	CONSTRAINTS
<ul style="list-style-type: none"> ▪ Embrace the opportunities inherent in the ‘green economy’ in terms of; <ul style="list-style-type: none"> ○ Ensuring that their own operations are sustainable, and ○ Offering products and services that meet the objective of the development of a ‘green economy’. ▪ Engage with agencies that promote sustainability and enhance operational efficiencies which will reduce operating costs while providing marketing benefits. ▪ Collectively put pressure on the relevant provincial government agencies to enhance the condition of the province’s natural capital to increase resilience and decrease vulnerability. 	<ul style="list-style-type: none"> ▪ Increasing operating costs based on the increasing costs of accessing potable water. ▪ Infrastructure failure due to flood damage resulting in transportation limitations for the movement of stock as well as the inability of staff to get to work. ▪ Increased staff sick leave due to increasing health problems related to water quality issues. ▪ Increased costs of imports and exports through the Durban Harbour through increased costs associated with Transnet having to invest more in dredging sediments and managing water quality problems. ▪ Limits to growth due to current levels of over-exploitation of natural capital and increased value of that which remains untransformed.

BANKING AND FINANCIAL SERVICES – OPPORTUNITIES AND CONSTRAINTS

OPPORTUNITIES	CONSTRAINTS
<ul style="list-style-type: none"> ▪ Embrace the opportunities inherent in the ‘green economy’ in terms of; <ul style="list-style-type: none"> ○ Ensuring that their own operations are sustainable, and ○ Offering products and services that meet the objective of the development of a ‘green economy’. ▪ Engage with agencies that promote sustainability and enhance operational efficiencies which will reduce operating costs while providing marketing benefits. ▪ Collectively put pressure on the relevant provincial government agencies to enhance the condition of the province’s natural capital to increase resilience and decrease vulnerability. ▪ Ensure the integration of sustainability principles in to developments through insisting on full risk assessment and sustainable management in all development funding applications 	<ul style="list-style-type: none"> ▪ Failure to understand the risk that depleted natural capital places on the sustainability of developments increases the risk associated with the financing of such. ▪ Failure to embrace the need to engage with the ‘green economy’ will result in lost marketing benefits as well as increased operating costs. ▪ Financing un-sustainable developments.



MANUFACTURING – OPPORTUNITIES AND CONSTRAINTS

OPPORTUNITIES	CONSTRAINTS
<ul style="list-style-type: none"> ▪ Emergence of the green economy presents an abundance of new technology that can assist manufacturing plants to become more efficient and sustainable. ▪ Sustainable operations offer improved marketing profiles that provide a competitive advantage. ▪ Reduced operational footprint in terms of energy, water and waste will increase the lifespan of manufacturing operations. 	<ul style="list-style-type: none"> ▪ Declining access to water of an adequate quality. ▪ Reduced water quantity decreases systems ability to dilute manufacturing related effluents and increases the risk of liabilities. ▪ Reduced catchment integrity increases the risk of flooding for those manufacturing plants adjacent to large systems like the uThukela. ▪ Agri-processing plants are vulnerable to declining productivity associated with unsustainable farming practices. ▪ Movement of processed goods is dependent on the absence of flood damage to the many river crossings, either moving north to Richards Bay or south to eThekweni. The loss of catchment integrity in the inland sections of the District, as well as in uMgungundlovu and uMzinyathi, places this infrastructure at increased risk.

PETROLEUM COMPANIES – OPPORTUNITIES AND CONSTRAINTS

OPPORTUNITIES	CONSTRAINTS
<ul style="list-style-type: none"> ▪ Off-set impacts emanating from the off-shore buoy on the marine and coastal environment by investing in conservation projects of equal or greater value than the damaged that has been caused in the past and that could be caused in the future. Such conservation projects should be directly related to the enhancement of natural capital capacity to deal with potential spillages from this facility. ▪ Invest in R&D associated with alternative and renewable energy generation. ▪ Invest in technologies that ensure that all externalities from the refining process are internalised. 	<ul style="list-style-type: none"> ▪ The predicted impacts of climate change, particularly the rise in sea level and an increased occurrence of extreme weather events increases the vulnerability of the off-shore buoy and the position of the refineries. ▪ Road and rail routes are vulnerable to extreme weather events which have the potential of disrupting the distribution of petroleum products. To a certain extent, the NMPP may also be compromised if the crossing of drainage lines has not been sufficiently adequate to ensure no damage during times of flooding. ▪ Increased awareness of the environmental externalities associated with the production and use of petroleum products especially if this sector continues to drive ‘business as usual’.



AGRI-PROCESSING – OPPORTUNITIES AND CONSTRAINTS

OPPORTUNITIES	CONSTRAINTS
<ul style="list-style-type: none"> ▪ Embrace the opportunities inherent in the ‘green economy’ in terms of; <ul style="list-style-type: none"> ○ Ensuring that their own operations are sustainable, and ○ Offering products and services that meet the objective of the development of a ‘green economy’. ▪ Engage with agencies that promote sustainability and enhance operational efficiencies which will reduce operating costs while providing marketing benefits. ▪ Collectively put pressure on the relevant provincial government agencies to enhance the condition of the province’s natural capital to increase resilience and decrease vulnerability. 	<ul style="list-style-type: none"> ▪ Increasing operating costs based on the increasing costs of accessing potable water. ▪ Infrastructure failure due to flood damage resulting in transportation limitations for the movement of stock as well as the inability of staff to get to work. ▪ Increased staff sick leave due to increasing health problems related to water quality issues. ▪ Increased costs of imports and exports through the Durban Harbour through increased costs associated with Transnet having to invest more in dredging sediments and managing water quality problems. ▪ Limits to growth due to current levels of over-exploitation of natural capital and increased value of that which remains untransformed.

AGRICULTURE – OPPORTUNITIES AND CONTRAINTS

OPPORTUNITIES	CONSTRAINTS
SUGAR	
<ul style="list-style-type: none"> ▪ Job creation through natural capital restoration work, particularly regarding the eradication of alien invasive plants, reclamation of wetlands, and natural rehabilitation of soils, i.e. reinstating the organic matter content. ▪ The removal and rehabilitation of areas currently under unpermitted plantations. ▪ The release of water, previously consumed by plantations, to alternative uses (including the ecological reserve) downstream, especially estuaries. ▪ Through the introduction of more sustainable operations, agro-chemical loads leached into river systems will decline. ▪ Decreased production costs through the implementation of sustainable farming principles. ▪ Improved marketing opportunities through association and implementation of sustainable farming programmes. 	<ul style="list-style-type: none"> ▪ Unsustainable change to natural soil characteristics, e.g. loss of nutrients, loss of soil fauna, change in chemical composition and structure, leading to the loss of opportunities for alternative productive land use and rehabilitation potential. ▪ Upstream water reduction activities, i.e. timber and sugar plantations, are placing constraints on downstream capacity for economic expansion. ▪ Stream reduction decreases dilution capacity of river systems and therefore exacerbates downstream water quality issues which translates into increased health risks and treatment costs. ▪ Reduced water quantity limits downstream abstraction opportunities. ▪ Increased sediment loads from cleared compartments and road networks resulting in loss of natural capital integrity. ▪ No further land available for expansion of the industry.



OPPORTUNITIES	CONSTRAINTS
TIMBER	
<ul style="list-style-type: none"> ▪ Job creation through natural capital restoration work, particularly regarding the eradication of alien invasive plants. ▪ The removal and rehabilitation of areas currently under unpermitted plantations. ▪ The release of water, previously consumed by plantations, to alternative uses (including the ecological reserve) downstream. 	<ul style="list-style-type: none"> ▪ Unsustainable change to natural soil characteristics by timber species, e.g. loss of nutrients, loss of soil fauna, change in chemical composition and structure, leading to the loss of opportunities for alternative productive land use and rehabilitation potential. ▪ Upstream water reduction activities, i.e. timber plantations, are placing constraints on downstream capacity for economic expansion. ▪ Stream reduction decreases dilution capacity of river systems and therefore exacerbates downstream water quality issues which translates into increased health risks and treatment costs. ▪ Reduced water quantity limits downstream abstraction opportunities. ▪ Increased sediment loads from cleared compartments and road networks resulting into loss of water storage capacity in downstream raw water storage and reticulation systems. ▪ No further land available for expansion of the industry – closed catchment.
LIVESTOCK (primarily cattle on extensive natural pastures)	
<ul style="list-style-type: none"> ▪ Sustainability certification increasingly required by retail outlets provides livestock farmers with an opportunity to enhance the marketability of their products. ▪ Extensive livestock farming is the land use that is most compatible with biodiversity conservation which provides opportunities for recognition for sustainable practices through the KZN Stewardship Programme. ▪ Extensive livestock farming provides a landscape that is conducive to tourism and with many such farms being in close proximity to the uKhahlamba Drakensberg Park, favourable marketing opportunities are present. ▪ This land use has the least impact on the potential for the delivery of ecoservices and farmers can market these to consumers to substantially increase the revenue that can be earned from their land, e.g. sale of watershed services, carbon storage, access to genetic material, etc. 	<ul style="list-style-type: none"> ▪ The only constraints that are imposed on the livestock farmers are those created by themselves through the implementation of unsustainable land use practices such as overstocking and the injudicious use of fire as a management tool. ▪ Directly related to the above is a loss of land cover integrity which predisposes the land to alien plant infestations. ▪ However, even the best managed properties are impacted by alien invasive plants and collaborative efforts are required eradicate these.



OPPORTUNITIES	CONSTRAINTS
DAIRY	
<ul style="list-style-type: none"> ▪ Generation of energy from waste, e.g. biogas. ▪ Rural nature of the operation lends itself to a diversification through the introduction of farm-based tourism opportunities. ▪ Enhanced operation efficiencies lend themselves to recognition and certification thus providing improved marketability and access to discerning and sustainable markets 	<ul style="list-style-type: none"> ▪ Reduced access to water for irrigation of pastures as well as for the milking process through the loss catchment integrity. ▪ Potential liability for impacts on water quality downstream of farm based on the leaching of agro-chemicals from irrigated pastures, as well as from the dairy operations themselves, i.e. eutrophication.
COMMERCIAL CROPS (Irrigated and dryland)	
<ul style="list-style-type: none"> ▪ Job creation through natural capital restoration work, particularly regarding the eradication of alien invasive plants, reclamation of wetlands, and natural rehabilitation of soils, i.e. reinstating the organic matter content. ▪ The removal and rehabilitation of areas currently under unpermitted crops. ▪ The release of water, previously consumed by crops, to alternative uses (including the ecological reserve) downstream. ▪ Through the introduction of more sustainable operations, agro-chemical loads leached into river systems will decline. ▪ Decreased production costs through the implementation of sustainable farming principles. 	<ul style="list-style-type: none"> ▪ Access to water through reduced catchment integrity upstream of farms. ▪ Loss of arable land through accelerated erosion and the spread of alien invasive plants. ▪ Reduced soil fertility through excessive crop production leading to a reduction in productivity and increased operating costs. ▪ Reduced water holding capacity of the soil due to unsustainable farming practices
SUBSISTENCE AGRICULTURE	
<ul style="list-style-type: none"> ▪ Carefully selected portions of Ingonyama Trust land which have the potential to support both subsistence and small holder commercial production. ▪ The high levels of unemployment need to be converted into high levels of occupation related to food production, processing and marketing. ▪ The enhancement of current communal land management systems by introducing value to different types of land use (PDA). ▪ Well managed communal lands will present an attractive landscape that has the potential to host a variety of tourism operations, e.g. the Umgano Project. 	<ul style="list-style-type: none"> ▪ Communal tenure and unplanned land allocation systems. ▪ Concentration of existing subsistence agriculture and settlement activities within inappropriate locations, e.g. wetlands and flood plains. ▪ Poor land use practices leading to accelerated soil loss, the spread of alien invasive plants and the loss of natural capital. ▪ The overriding cultural significance of the cultural value of livestock which prevents sustainable management thereof with resultant over-grazing and associated impacts.



TOURISM – OPPORTUNITIES AND CONSTRAINTS

OPPORTUNITIES	CONSTRAINTS
<ul style="list-style-type: none"> ▪ Environmental accreditation programmes such as the ‘Blue Flag Beach’ programme offers significant benefits by acting as an added attraction to a market that is becoming increasingly aware of environmental issues and standards. ▪ Reinstate natural capital along the coastline such as dune, flood plain and estuarine vegetation to increase the diversity of attractions and the resilience of the coastline and associated infrastructure. 	<ul style="list-style-type: none"> ▪ The coastline has been significantly transformed by linear urban development and has lost much of natural features which cause the loss of appeal and well as increased vulnerability to extreme weather events. ▪ The concentration of industry, commerce and residential developments along the coast and rivers increases the threat of water quality issues and the loss of tourism revenues. ▪ Unchecked land transformation and degradation continues to impact on catchment integrity with resultant loss of watershed services and reduced viability for the maintenance of standards required to meet accreditation standards. ▪ Predicted climate change related impacts such as the rise in sea level and increased incidents of extreme weather events places significant constraints on both existing and potential new tourism infrastructure.
OPPORTUNITIES	CONSTRAINTS
<ul style="list-style-type: none"> ▪ Proximity to the uKhahlamba Drakensberg Park World Heritage Site. ▪ Linkages with Lesotho through the Maloti Drakensberg Transfrontier Project and the Maloti Drakensberg Route. ▪ The bulk of the landscape still untransformed or hosting agricultural activities which lend themselves to an aesthetic appeal for a diversity of tourism attractions. ▪ Extreme topography, clean air and relatively clean water make the area attractive to major sporting events such as the Drak Challenge and the Sani2Sea. ▪ Cultural Heritage features such as the Reichenau Mission add to the diversity of attractions. 	<ul style="list-style-type: none"> ▪ Unsustainable land management outside of the uKhahlamba Drakensberg Park World Heritage Site quickly reduces the quality of natural capital and its ability to deliver ecoservices such as clean water. ▪ The virulent spread of alien invasive plants. ▪ Cross-border crime detracts from an enabling and attractive environment to accommodate tourism activities and operations.



GOVERNMENT – OPPORTUNITIES AND CONSTRAINTS

OPPORTUNITIES	CONSTRAINTS
<ul style="list-style-type: none"> ▪ The application of NRM and EPWP (Extended Public Work Programme) funds to address threats to natural capital integrity such as the eradication of alien invasive plants and the restoration of erosion gullies, thus generating ‘green jobs’. ▪ The creation of an enabling environment for and facilitating the implementation of green technologies such as rain water harvesting and biogas generation for both disadvantaged communities as well as commercial operations. ▪ Increased ability to deliver basic services through improved condition of natural capital and the delivery of ecoservices such as clean water, increased winter base flows, reduced flood risk, access to medicinal plants natural building material and fuel wood. ▪ Decreased health risks through improved catchment integrity as discussed above, as well as improved air quality. 	<ul style="list-style-type: none"> ▪ Local government capacity in terms of natural capital management. ▪ Limited cooperative governance capacity required across local government boundaries, across Depts. as well as across sectors. ▪ The virulent spread of alien invasive plants. ▪ Unsustainable land use practices that dominate the District. ▪ Cross-border crime, primarily the theft of livestock places this land use in jeopardy and in danger of being replaced by more unsustainable options, as well as impacting on tourism and sound natural capital management.

MINING - OPPORTUNITIES AND CONSTRAINTS

OPPORTUNITIES	CONSTRAINTS
IDWALA CARBONATES	
<ul style="list-style-type: none"> ▪ The mine has the opportunity of engaging with upstream land owners and users with a view to improving catchment integrity that will increase winter base flow in both river systems and decrease potential liability from pollution caused by storm water runoff from their site. 	<ul style="list-style-type: none"> ▪ Loss of catchment integrity upstream from their operation makes them vulnerable to flooding considering their position immediately adjacent to and within the floodplain for the Umzimkulwana River. ▪ Close proximity to the mouth of the river system increases the risk of liability for water quality issues associated with their operations. ▪ The loss of riparian vegetation translates into the loss of an important buffer between their operations and the river.

