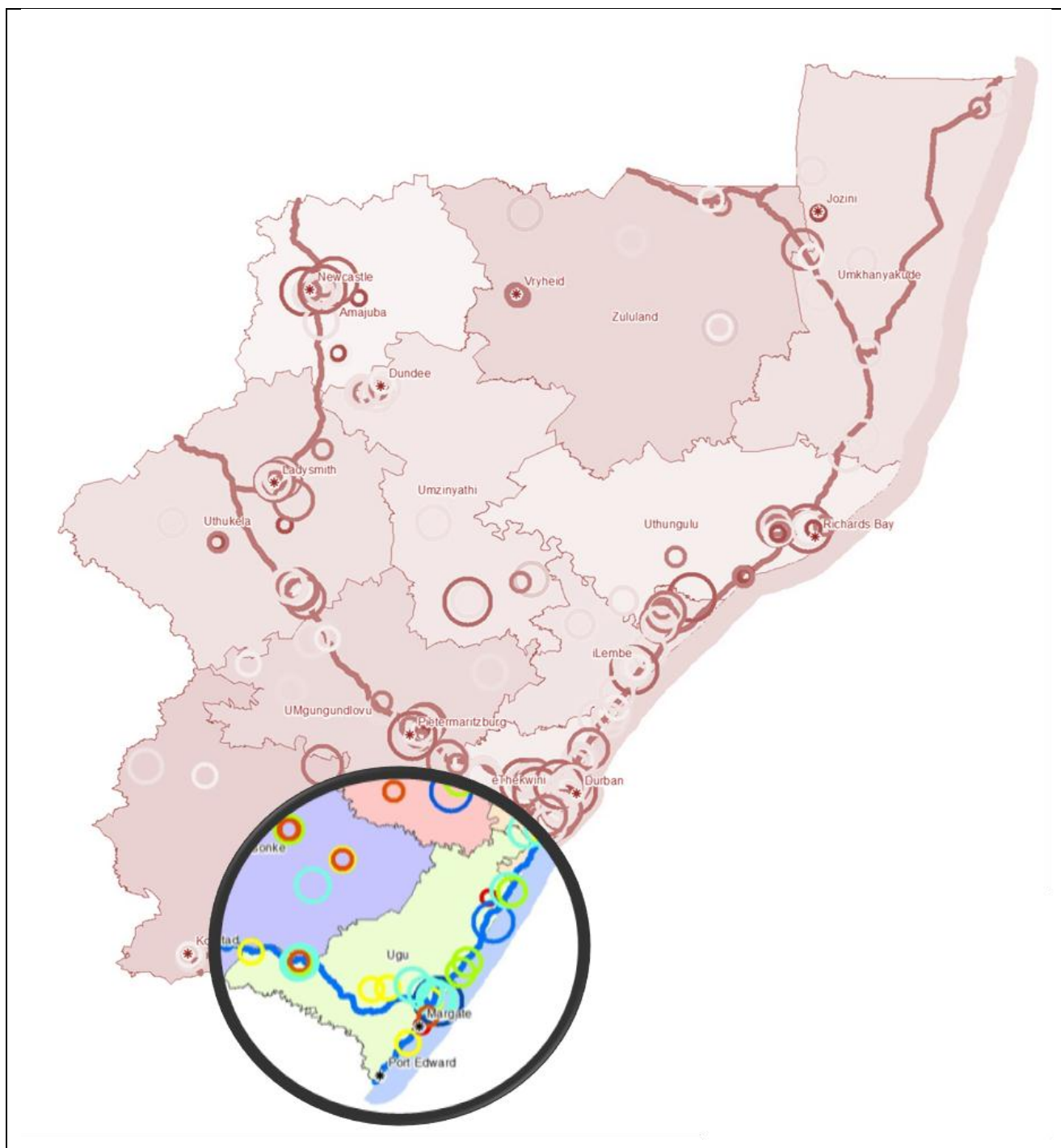


KZN PSEDS

PROFILING DISTRICT ECONOMIC DRIVERS



UGU DISTRICT MUNICIPALITY

A SPATIAL ECONOMIC OVERVIEW

MARCH 2012

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

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

MARCH 2012

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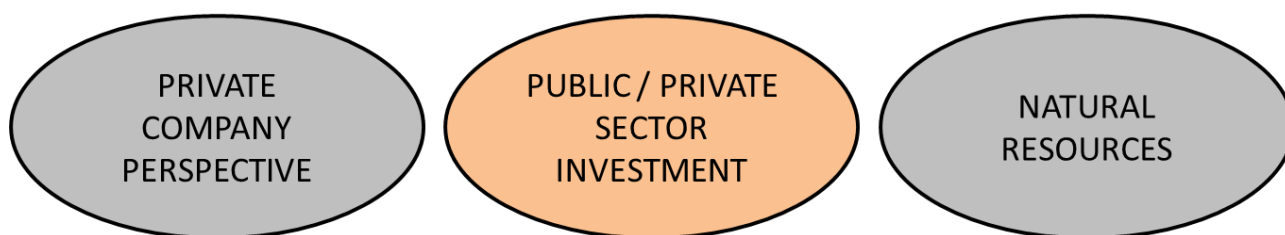
1. BACKGROUND AND APPROACH

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

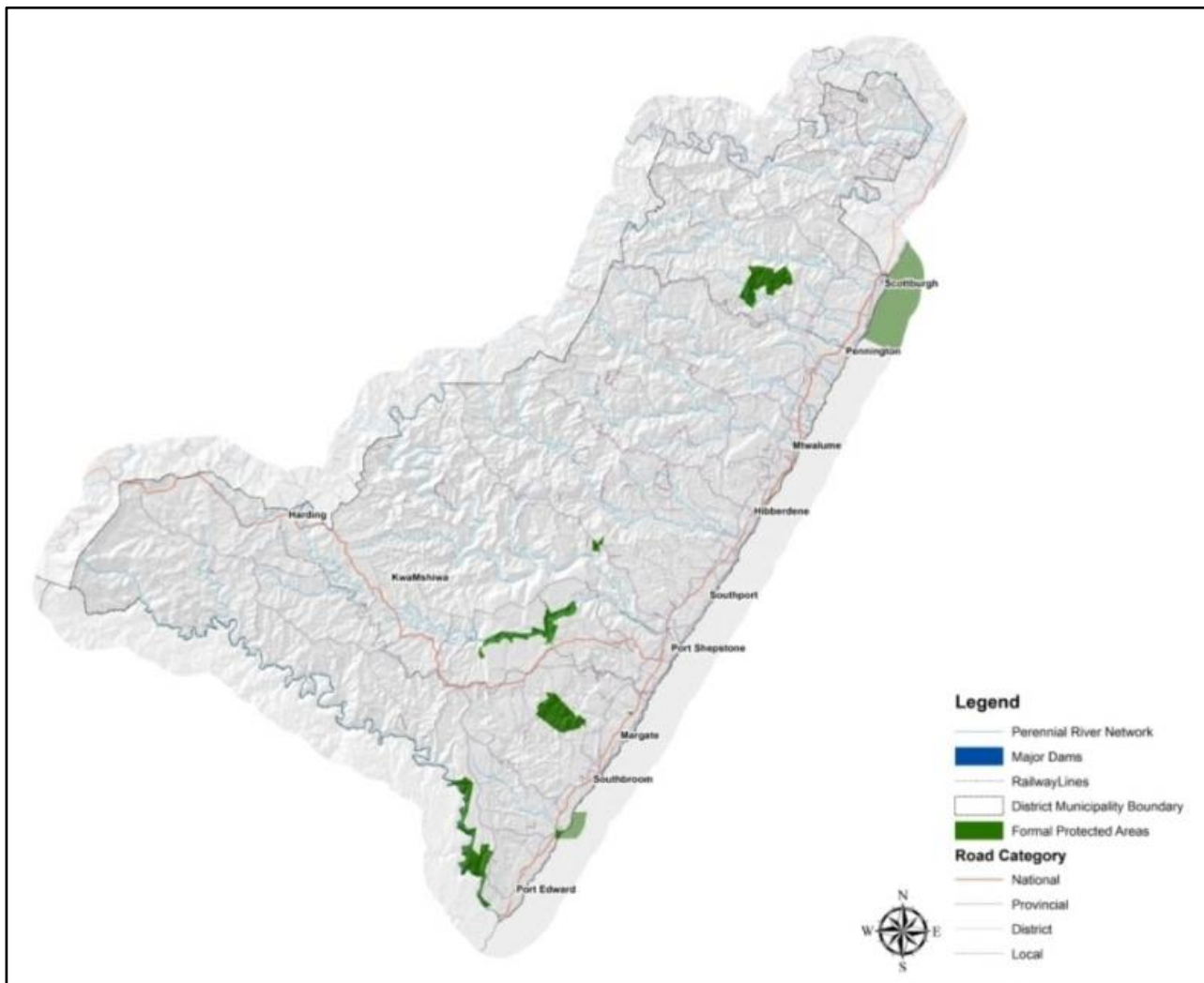
Key spatial features of the Ugu District impacting on economic development include:

- eThekweni and the South Durban Basin, as a key economic development node in the province, is located immediately to the north of the District.
- The N2 stretches through the area from north to south (Scottburgh to Port Shepstone) and east to west (Port Shepstone to Harding).
- An operational rail system stretches along the coast. Historically this system was linked to rail systems servicing the inland areas which have now ceased operation.
- Urban development in the District is concentrated on the coast with the exception of the towns of Umzinto and Harding which is located inland.
- Approximately 70% of economic activity in the District is concentrated in Port Shepstone / Margate area.
- The tourism sector is well-developed along the coast, but tourism infrastructure and facilities are generally outdated (developed in the 1960s and 1970s). The only inland tourism node of note is located around the Oribi Gorge.
- Agricultural activity is generally confined to the coastal strip and inland to the west of Umzinto and Port Shepstone (Oribi Flats) and is dominated by sugar cane and timber, with substantial areas also under bananas and nuts.
- Forestry plantations dominate land use in the western parts of the municipality.
- The bulk of the population of the District is located in rural inland areas on land with limited development potential characterised by severe topography.
- Rural nodes in three of the six municipalities are underdeveloped, i.e. Dududu, Mtwalume and Eziqolweni. In other municipalities rural settlement is dislocated from urban nodes, i.e. Umuziwabantu, Hibiscus Coast and Umdoni.

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



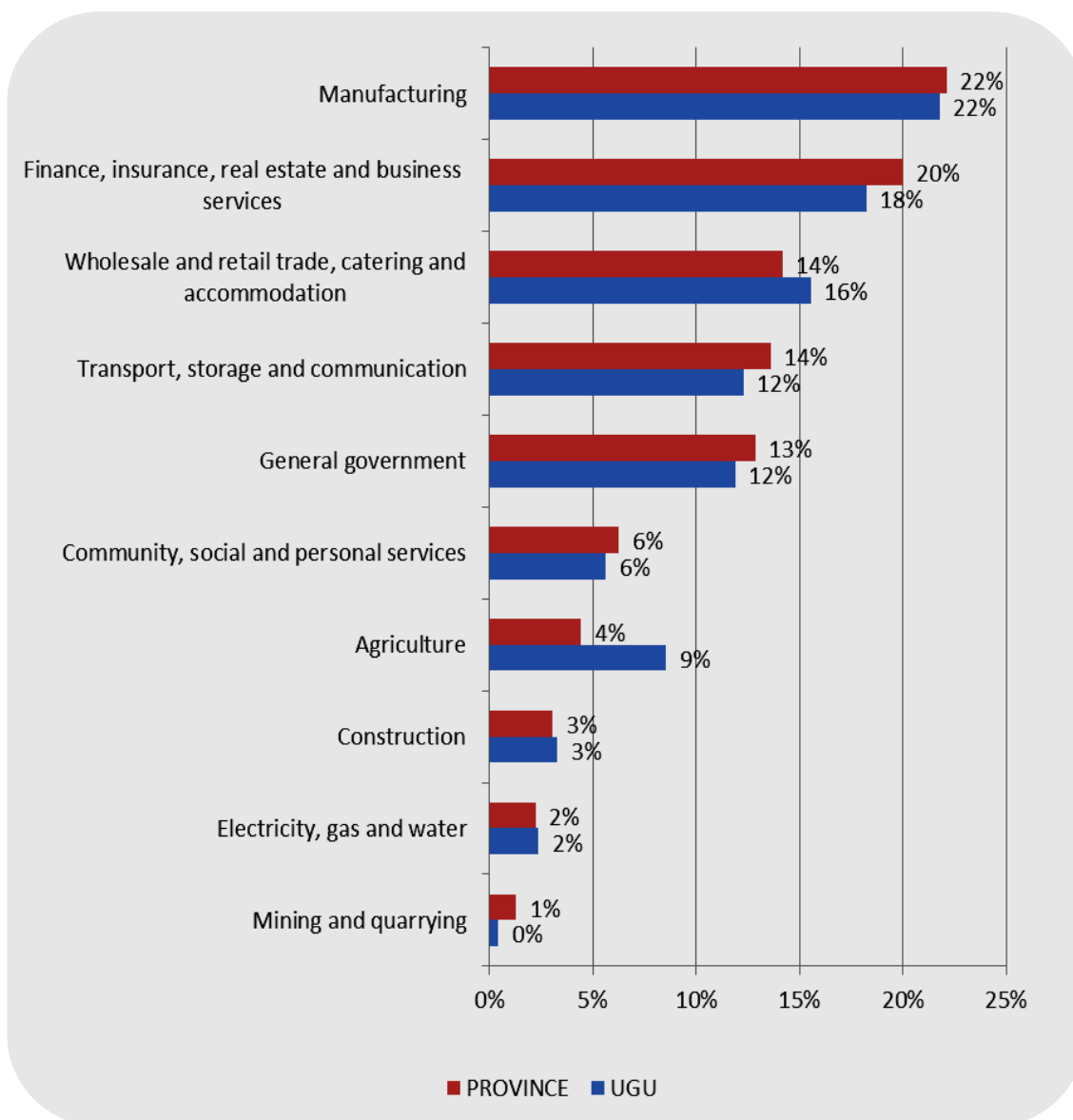
MAP 2.1: SPATIAL ECONOMIC FEATURES



2.3. DISTRICT ECONOMIC CONTRIBUTION

- In overall terms the Ugu District makes a limited contribution to the economy of KwaZulu-Natal. A total of R11.7 billion gross value added (GVA) of a provincial total of R267 billion. This translates to 4.4% of the provincial economy.
- Based on the 2010 GVA figures there is no sector in the provincial economy in terms of which Ugu can be viewed as a provincial driver.
- The comparative figures suggests that manufacturing, finance and real estate, wholesale and retail (including accommodation), transport and storage, as well as the general government sector, all make a contribution of more than R1 billion to the District economy.

DIAGRAM 2.1: 2010 GROSS VALUE ADDED



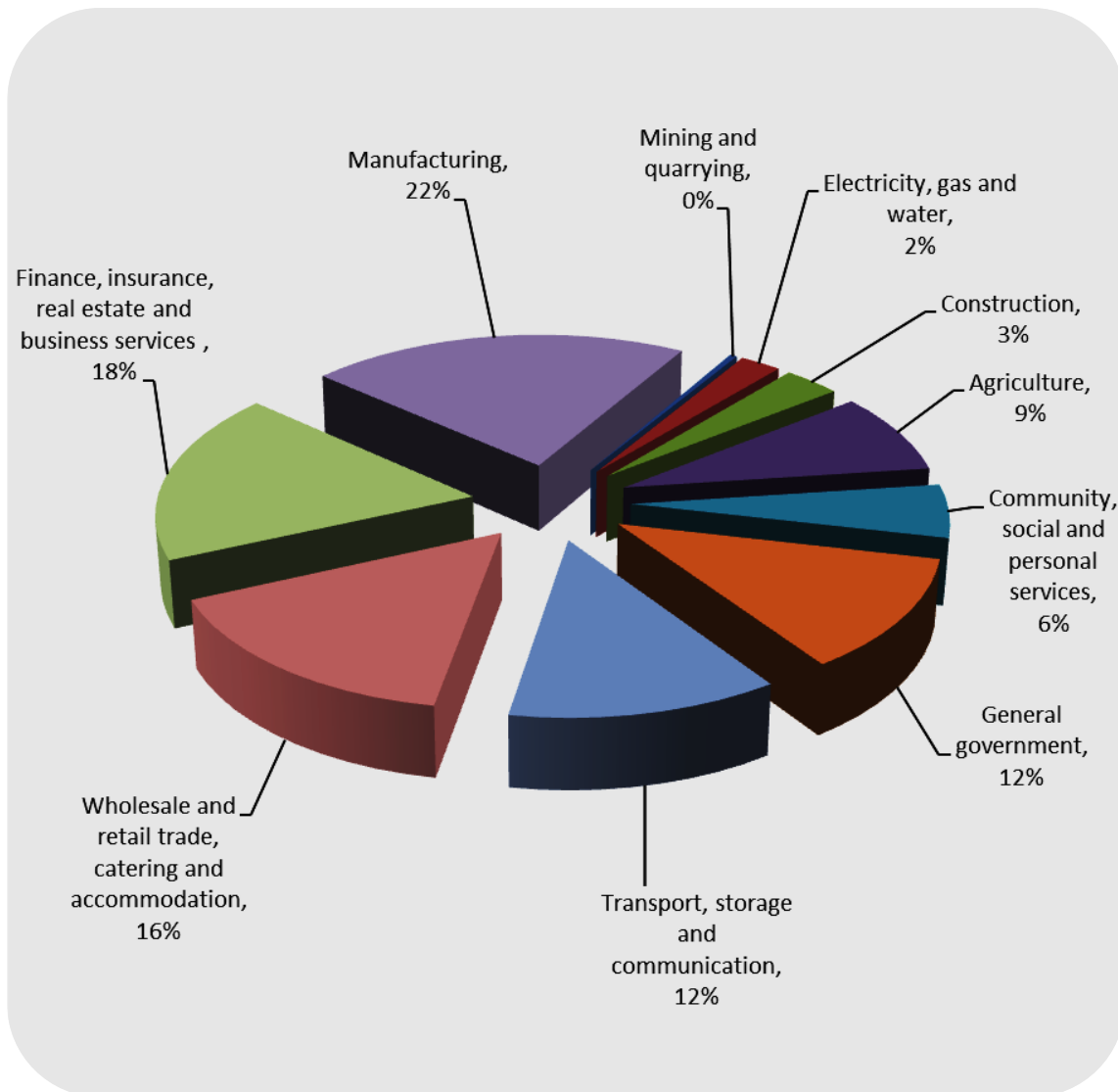
Source: Quantec 2010



2.4. DISTRICT ECONOMIC STRUCTURE

- The diagram below reflects the economic structure of the Ugu District based on 2010 GVA figures.
- As reflected in the previous diagram the dominance of the manufacturing and finance and real estate sectors are evident.
- It is important to note that the two sectors generally viewed as the “drivers” of the economy, viz. tourism (included in wholesale and retail) and agriculture, makes a significantly lower contribution to the economy when compared to the contributions of manufacturing and finance and real estate.
- General government (12%) and community, social and personal services (6%) together make a significant, nearly 20%, contribution to the District economy.

DIAGRAM 2.2: 2010 GROSS VALUE ADDED TOTAL GVA OF R11.706bn



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 contribution by the manufacturing sector to the district economy has decreased over time, as has its contribution to employment in the district. However it remains a key sector in the district economy as it contributed about 22% to the formal economy in 2010.
- A 2007 assessment established that 75% of the 242 registered manufacturing enterprises in Ugu are located in the Hibiscus Coast Municipality, mostly in the Port Shepstone / Marburg and Margate areas (StratPlan 2010).
- The assessment also established that the key industrial sectors in the Ugu district are agri-processing, timber and timber products including furniture, clothing and textiles, food and beverages, arts and crafts and construction related manufacturing.
- Nearly 75% of the manufacturing enterprises in Ugu are small enterprises (less than 50 employees), with a handful of manufacturers in Ugu being medium and large businesses (StratPlan 2010).
- The majority of firms produce only for the local market.



3.2.2. AGRICULTURAL SECTOR

- Agriculture makes an important contribution to economic production in the Ugu District.
- Within the KwaZulu-Natal context the region has become known for specifically banana, nut and coffee production, whereas timber and sugar cane are well-established industries.
- The future direction for development of the sector will be dependent on local and world markets.
- Commercial agricultural activity is generally confined to the coastal strip and also along two corridors stretching inland to Ixopo and Kokstad respectively.
- The Ugu District already has a diversified agricultural economy involving an established commercial farming sector and various corporates.
- Historically, some attention has been given to the development of specifically small scale cane and timber growers in traditional settlement areas, with some success.

3.2.3. TOURISM SECTOR

- Most of the Ugu tourism sector falls, in terms of the products as established by KZN Tourism, into the "South Coast Region". It is suggested that the terms "...Margate, Port Shepstone, Scottburgh, Port Edward, sardines, golf, whales, dolphins, the Oribi Gorge, hibiscus flowers and golden beaches..." are associated with the South Coast / Region.
- A 2010 assessment of the tourism industry suggested that should the region wish to attract foreign tourists the potential of certain sections of the coast, to offer the level of facilities and infrastructure demanded by foreign tourists, should be considered (this is already receiving attention in terms of the support of municipalities for the Blue Flag initiative). The coastal tourism infrastructure is generally out of date and require upgrading (StratPlan 2010).
- Other than private sector initiatives around the Oribi Gorge, no inland tourism initiatives of note have been implemented to complement the coastal tourism product.

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.

- The commercial sector currently makes a major contribution to the economy of the Ugu District Municipality.
- A future spatial development strategy for the District and its constituent municipalities must provide clear guidelines as to the revitalisation and expansion of the commercial sector.
- There is a strong link between the commercial and tourism sectors and the bulk of services are concentrated in the coastal corridor.
- There is an unequal distribution of the sector with rural residents facing various obstacles to access commercial services. Obstacles include distance, road conditions, cost and time.
- The redistribution of commercial services in the District presents an opportunity for the growth of the commercial sector.



3.2.5. GOVERNMENT SECTOR

- The government sector is estimated to make a contribution of around 12% of GVA to the District economy (Quantec 2010).
- On a local municipal level it is generally experienced that the contribution of this sector varies greatly between municipalities. In the case of rural municipalities the government sector is often the only significant contributor to GVA.
- The government sector is a stable employer, but does not at present offer much potential for growth.
- From local economic assessments in rural areas similar to those in the South Coast, it has become apparent that money earned in this sector almost immediately exits the rural area in which it was earned.
- The provision of well-located housing and supporting facilities in rural areas will contribute to improving levels of rural service delivery, as well as impact directly on improving local income circulation in such areas.

3.3. COMPANIES INTERVIEWED

A total of 48 companies were interviewed in the Ugu District in order to obtain a better understanding of the major firms, their characteristics and challenges faced by them. 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).

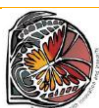


TABLE 3.1: COMPANIES INTERVIEWED (SEE ANNEXURE A FOR DETAIL ON DISTRIBUTION OF SAMPLE IN LOCAL MUNICIPALITIES)

COMPANY NAME	2010 ANNUAL T/O (REVENUE OR SALES)	EMPLOYEES RANGE	PRODUCT CATEGORY
Agriculture, hunting, forestry and fishing			
Temba Forestry	Medium	Medium	Timber Logging Services
Outlook Farm	Medium	Large	Agricultural Commodities
Crookes Brothers	Medium	Large	Agricultural Commodities
Glen Rose Farms cc	Small	Medium	Sugar and Related
Malton Farm (Pty) Ltd	Not provided	Not confirmed	Not known
Community, social and personal services			
Lake Eland Game Reserve	Medium	Medium	Tourism Accommodation +
Hibiscus Private Hospital	Large	Large	Medical Services
Construction			
R & R Builders	Small	Small	Construction Services
Financial intermediation, insurance, real estate and business services			
SSI Engineers and Environmental Consultants Port Shepstone	Medium	Small	Engineering Consulting
Beekman Group	Not provided	Not confirmed	Real Estate Services
Manufacturing			
SA Breweries Port Shepstone	Not provided	Medium	Beverages
Kulucrete South Coast	Medium	Large	Cement Products
Harding Treated Timbers (Pty) Ltd	Not provided	Large	Timber Treated
Kulu Snacks (Pty) Ltd.	Medium	Large	Food Production
Highcroft Sawmills cc	Medium	Large	Timber Products



COMPANY NAME	2010 ANNUAL T/O (REVENUE OR SALES)	EMPLOYEES RANGE	PRODUCT CATEGORY
Illovo Sugar - Umzimkhulu Mill	Large	Large	Sugar and Related
Illovo Sugar - Sezela Mill	Large	Large	Sugar and Related
Aljo Timbers Industries (Pty) Ltd	Medium	Medium	Timber Furniture
Goldenglo Candle and Soap	Not provided	Not confirmed	Soap, Candles and Oil
Guy Payn Sawmills (Pty) Ltd	Not provided	Not confirmed	Timber Products
Harding Bakery	Small	Small	Bread and Confectionary
Marburg Manufacturers (Pty) Ltd	Not provided	Large	Clothing
MP Clothing Manufacturing	Small	Medium	Clothing
Ngeli Mills	Medium	Small	Maize flour
NPC Concrete	Medium	Medium	Cement
Nu-Mymtex	Not provided	Medium	Textiles
Qual Chem	Medium	Medium	Cleaning Products
Shiva Clothing cc	Not provided	Large	Clothing
Singtex Clothing	Not provided	Large	Clothing
Thembaletu Bricks and Blocks	Not provided	Medium	Bricks and paving products
Twin Stream Manufacturing	Small	Large	Timber Products
Wood Street Furniture Manufacturing	Medium	Medium	Timber Furniture
Mining and quarrying			
Natal Portland Cement Simuma Plant	Large	Large	Cement
Idwala Carbonates	Large	Large	Minerals



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			
Bargain wholesalers	Large	Large	Retail
Hibberdene Superspar	Not provided	Medium	Retail
Harding Spar	Medium	Medium	Retail
Oribi Gorge Guest Farm	Small	Medium	Tourism Accommodation +
Pumula Beach Hotel	Medium	Medium	Tourism Accommodation +
Blue Marlin Hotel Scottburgh	Small	Medium	Tourism Accommodation +
Ingeli Forest Lodge	Medium	Medium	Tourism Accommodation +
Avondale's Self-catering Cottage	Not provided	Not confirmed	Tourism Accommodation +
Crown Eagle B&B	Not provided	Small	Tourism Accommodation +
Green Acres B&B	Not provided	Small	Tourism Accommodation +
Kapenta Bay Hotel	Not provided	Not confirmed	Tourism Accommodation +
Le May's Guest House	Not provided	Small	Tourism Accommodation +
Le Paradis Lodge	Not provided	Small	Tourism Accommodation +
Spar Scottburgh	Medium	Medium	Retail



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 has been identified and interviewed. The table below 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.

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

SECTOR AND SUB-SECTORS	NO. OF COMPANIES
Agriculture, hunting, forestry and fishing	5
Agriculture, hunting and related services	4
Forestry, logging and related services	1
Community, social and personal services	2
Recreational, cultural and sporting activities	1
Health and social work	1
Construction	1
Construction	1
Financial intermediation, insurance, real estate and business services	2
Real estate activities	1
Other business activities	1
Manufacturing	22
Manufacture of food products, beverages and tobacco products	7
Manufacture of textiles, clothing and leather goods	5
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials; manufacture of paper and paper products; etc	4
Manufacture of other non-metallic mineral products	3
Manufacture of furniture; manufacturing n.e.c.; recycling	2
Manufacture of coke, refined petroleum products and nuclear fuel; manufacture of chemicals and chemical products; manufacture of rubber and plastic products	1
Mining and quarrying	2
Other mining and quarrying	2
Wholesale and retail trade; repair of motor vehicles, motor cycles and personal and household goods; hotels and restaurants	14
Hotels and restaurants	10
Retail trade, except of motor vehicles and motor cycles; repair of personal household goods	3
Wholesale and commission trade, except of motor vehicles and motor cycles	1
TOTAL	48



From the table, and the more detailed information obtained through the questionnaire it is suggested that, based on an assessment of the surveyed companies, the key sub-sectors in which major companies are located are:

- Agriculture, hunting, forestry and fishing (specifically forestry and sugar)
- Manufacture of food products, beverages and tobacco products
- Manufacture of furniture; manufacturing n.e.c.; recycling
- Manufacture of wood and of products etc
- Manufacture of other non-metallic mineral products
- Manufacture of textiles, clothing and leather goods
- Hotels and restaurants

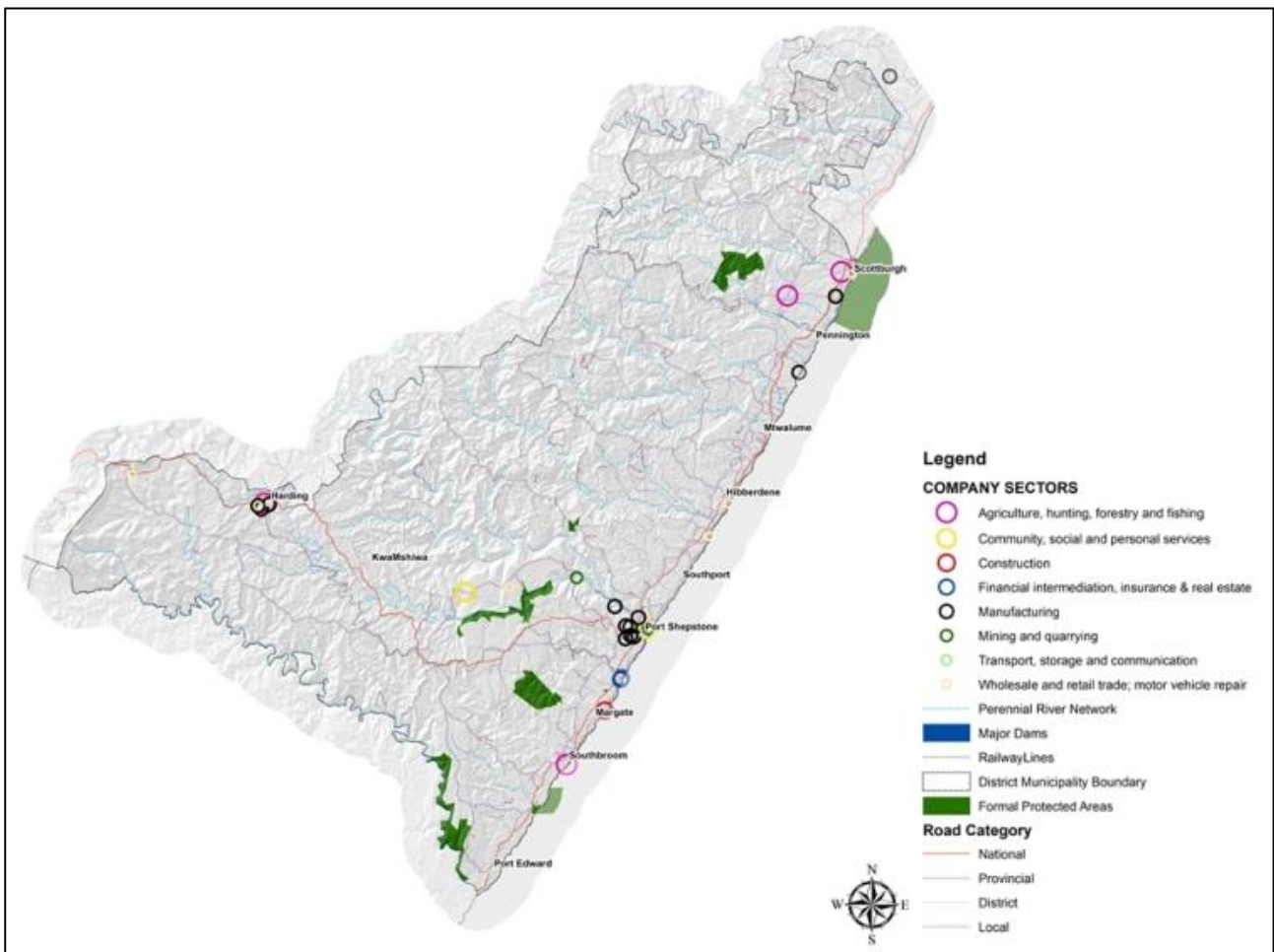


3.5. SPATIAL DISTRIBUTION OF SURVEYED COMPANIES

SECTORS

- The majority of the major companies identified in Ugu are located in the coastal strip and along the N2 stretching from Port Shepstone to Harding.
- Major manufacturing companies is located in the Port Shepstone / Marburg area, with the exception of sugar and timber mills located closer to the source of raw materials, but still in relative proximity to the N2.
- It is observed that the majority of the population in the District still resides in rural areas dislocated from the opportunities presented by these companies. The rural areas of Umuziwabantu (with some opportunities), Vulamehlo, Umzumbe and Eziqoleni refers.

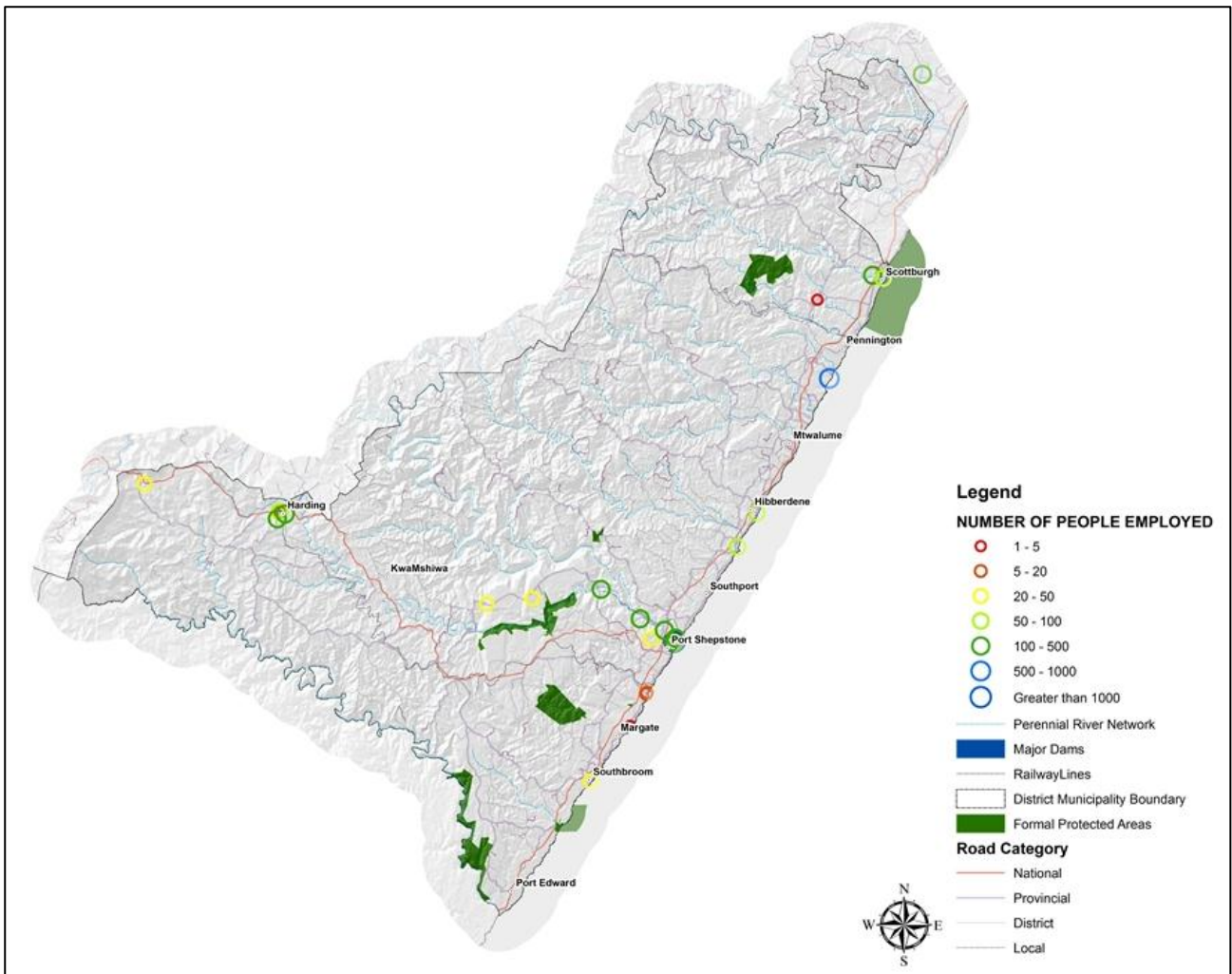
MAP 3.1: SPATIAL DISTRIBUTION OF SURVEYED COMPANIES BY ECONOMIC SECTORS



EMPLOYMENT

- The contribution that major companies make to employment in the District is confirmed. It is noted that these employment opportunities are generally located along the N2 national route of the District.
- The major employers in the District employs between 300 and 900 people.
- Considering a total estimated 2010 formal sector employment of 87 536 (Quantec 2010) people in the District, the 42 companies in the Ugu District that supplied the information on number of people employed (the sample), employs an estimated 5 983 people representing 6.8% of the formal employment of the District.

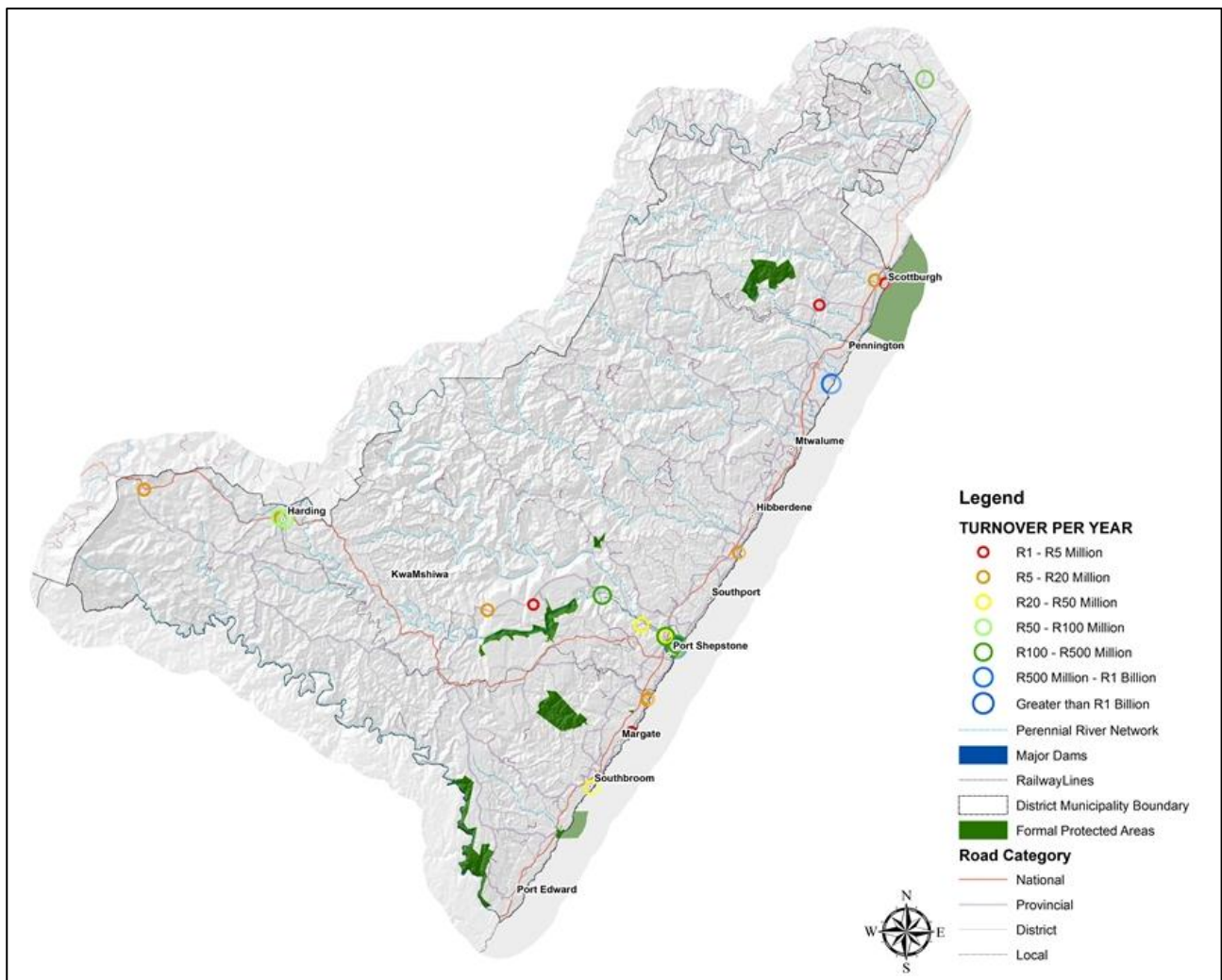
MAP 3.2: SPATIAL DISTRIBUTION OF SURVEYED COMPANIES BY NUMBER OF PEOPLE EMPLOYED



TURNOVER

- Those firms with a turnover of more than R100 million are generally located on the coast, with Idwala Carbonates the exception being located at the source of the raw material inland of Port Shepstone.
- The impact of the sugar industry on the District economy is again confirmed through the turnover figures of the two major sugar mills in the area.
- On a provincial level the survey established that major retailers generally have a turnover of between R50 million and R100 million and employs between 50 and 100 people. Considering that most urban areas have a number of major retailers the wholesale and retail sector makes an important contribution to the District economy.

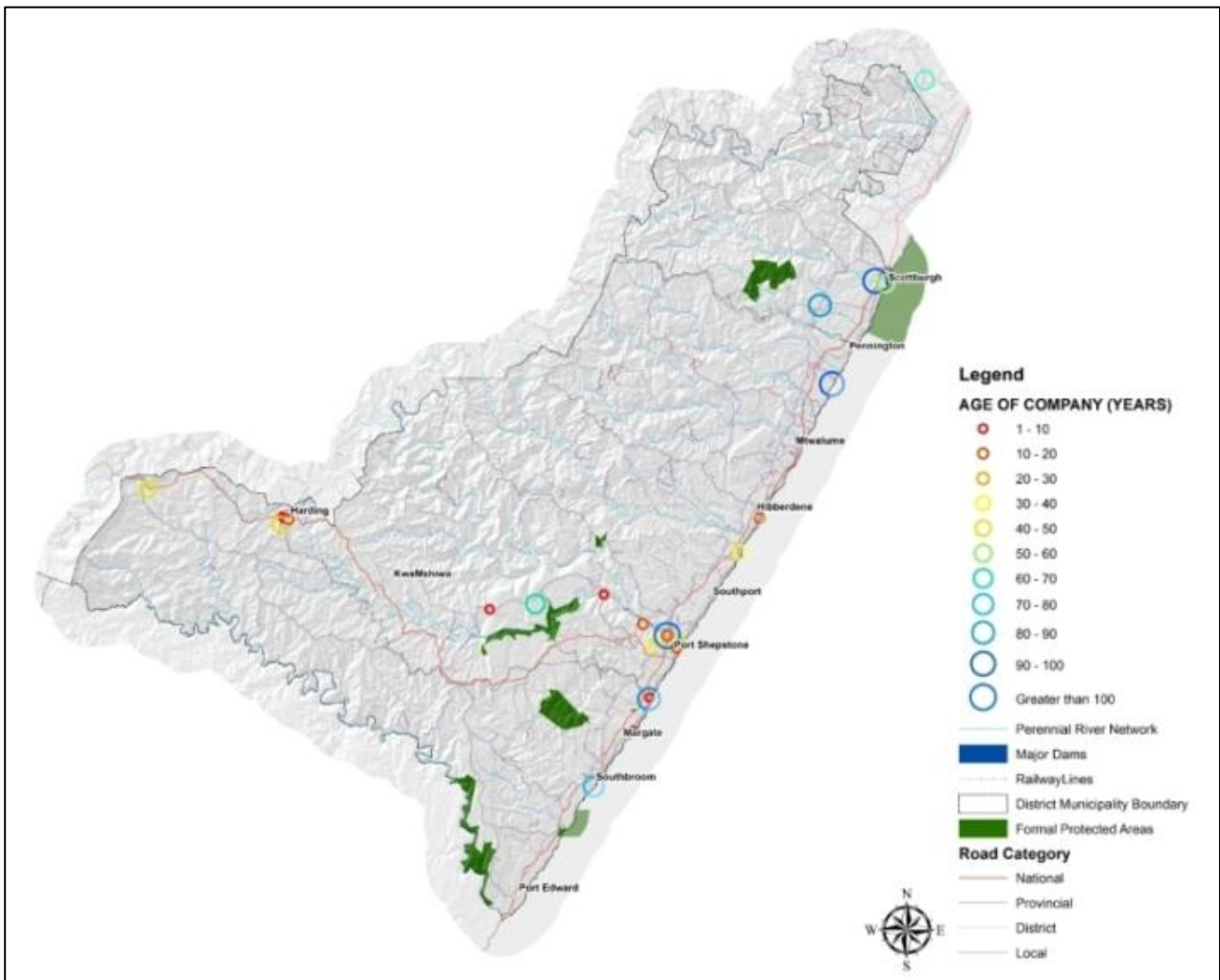
MAP 3.3: SPATIAL DISTRIBUTION OF SURVEYED COMPANIES BY TURNOVER PER YEAR



COMPANY AGE

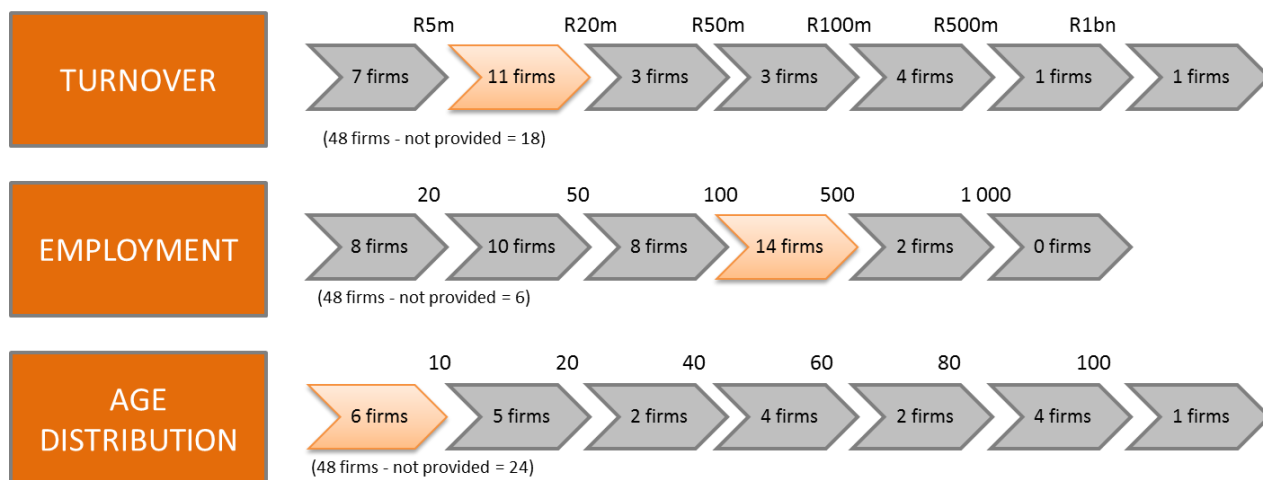
- In terms of spatial distribution the older companies, those older than 80 years, are located on the coast and relates primarily to the sugar industry.
- In the diagram overleaf it is reflected that 25% of the major companies interviewed are younger than 10 years and a further 21% younger than 20 years. This suggests that new business opportunities are still being explored and that the economy of the area is vibrant.
- It is also noted that the older companies are generally in stagnant or declining sectors.

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:

- Approximately 30% of the firms interviewed had an annual turnover of more the R50 million.
- The majority of major firms interviewed employ between 100 and 500 persons.
- Twenty five percent of firms interviewed were established in the past 10 years and nearly 40% in the past 20 years.

3.7. MAJOR COMPANIES SURVEYED

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

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

COMPANIES LISTED EMPLOY BETWEEN 900 AND 150 PEOPLE		
NO	COMPANY	OVERVIEW
1	Marburg Manufacturers (Pty) Ltd	The major employers of Ugu are an interesting combination of manufacturing, agri-processing, agricultural and mining firms. Clothing and textiles feature strongly in the manufacturing sector, with Kulu Snacks being a good example of a small town company that has grown to provincial significance. Agri-processing activity includes the Sezela and Umzimkhulu Mills, as well as a number of timber mills, processors and manufacturers. Illovo and Crookes Brothers remain major contributors to the Ugu economy. Idwala Carbonates represent the mining industry in the area and Kulucrete and a number of smaller building material manufacturers confirms the regional role, including the Eastern Cape, fulfilled by companies in the Ugu District.
2	Illovo Sugar - Sezela Sugar Mill	
3	Singtex Clothing	
4	Harding Treated Timbers (Pty) Ltd	
5	Outlook Farm	
6	Bargain wholesalers	
7	Illovo - Umzimkhulu Sugar Mill	
8	Crookes Brothers	
9	Hibiscus Private Hospital	
10	Kulucrete South Coast	
11	Kulu Snacks (Pty) Ltd.	
12	Highcroft Sawmills cc	
13	Twin Stream Manufacturing	
14	Idwala Carbonates	



3.8. UGU COMPANIES EXPORTING

PRODUCTS EXPORTED:

Only four companies interviewed in Ugu indicated that they are exporting products. The products exported include:

- Agricultural commodities;
- Furniture;
- Cement; and
- Minerals.

The percentage of production exported by these firms are generally below ten percent and therefore insignificant. Not one of the companies can be classified as an exporting company (i.e. more than 50% of production is exported).

TABLE 3.4: UGU EXPORTING IN THE PROVINCIAL CONTEXT

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

Incl. Water, electricity, sanitation.

- The 24 companies interviewed collectively mentioned 31 challenges they experience with utility services
- 48% of the challenges listed related to electricity supply
- 26% of the challenges listed related to water supply and water quality

TABLE 3.5: UTILITY CHALLENGES

UTILITY CHALLENGE	MENTIONS	%
Electricity erratic	12	39%
Water supply	7	23%
Telecommunications	5	16%
Electricity limitations	2	6%
Solid waste removal	2	6%
Electricity costs	1	3%
Sewerage non-existent	1	3%
Water quality	1	3%
TOTAL	31	100%

TRANSPORT CHALLENGES

Only 5 out of 24 companies mentioned transport challenges, suggesting that this is not a significant problem in Ugu. The transport challenges mentioned related to:

- Fuel / transport costs
- Road Maintenance
- Durban harbour delays Transport companies delays
- Rail unreliable
- Road maintenance

TABLE 3.6: TRANSPORT CHALLENGES

TRANSPORT CHALLENGE	MENTIONS	%
Road maintenance	1	20%
Rail unreliable	1	20%
Durban harbour delays	1	20%
Fuel / transport costs + Road Maintenance	1	20%
Transport companies delay	1	20%
TOTAL	5	100%

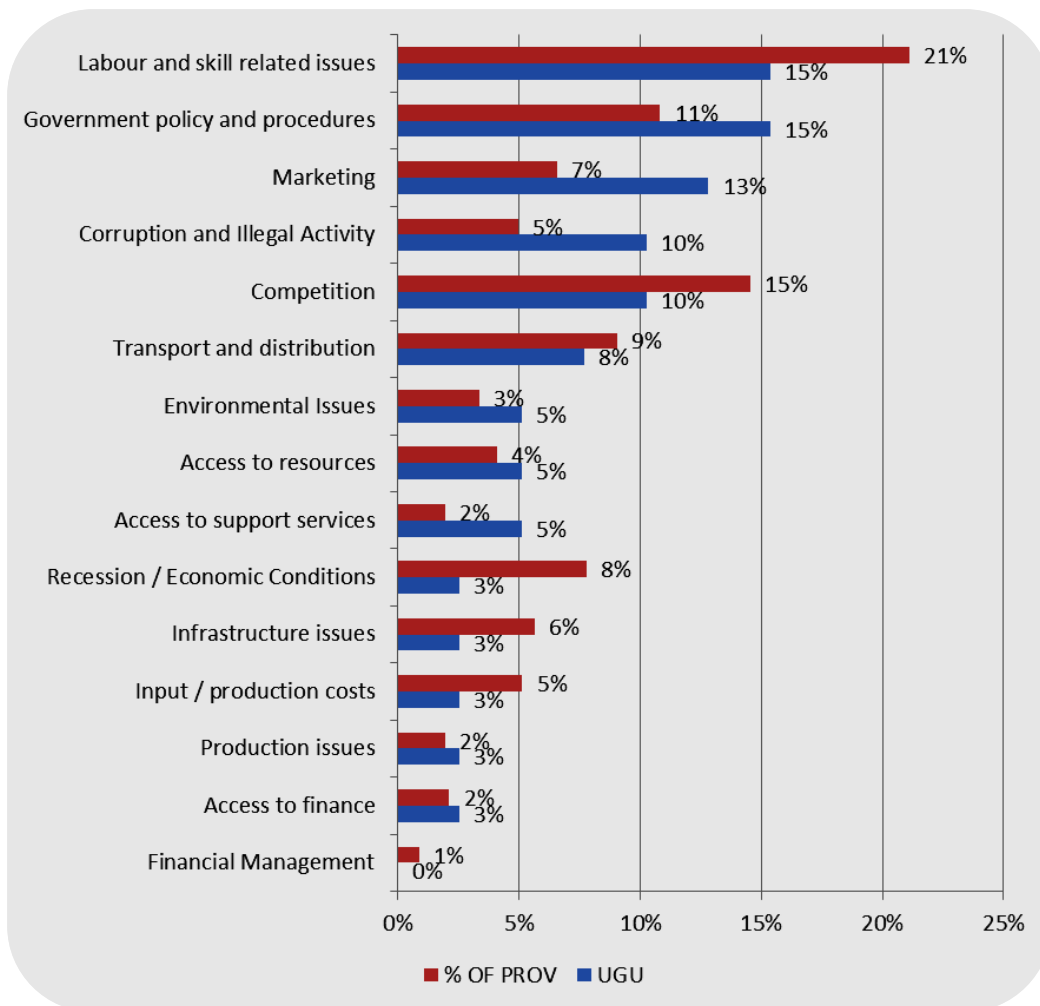


3.10. OTHER CHALLENGES

Asked to identify other general challenges impacting on the economic growth Ugu companies highlighted the following:

- Labour and skills related issues (less emphasis placed on this than on a Provincial level);
- Government procedures and policy;
- Marketing of products and services;
- Corruption and illegal activity; and
- Competition.

DIAGRAM 3.2: OTHER CHALLENGES



3.11. INTERVIEWEE COMMENTS

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

- Farming community very negative at the moment due to unsure political future;
- Tourism declining due to inadequate maintenance & development of infrastructure and lack of investment opportunities due to red tape;
- Manufacturing declining - investors are cautious because of infrastructure and availability of transport;
- Transport - rail transport inadequate & expensive;
- Investment- little investment from government & private sector into local economy;
- Employment - high levels due to low education levels, mostly rural areas & availability of jobs;
- Education - good schools but very few tertiary institutions available and those available do not cater for the requirements of industries in the region.

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 Ugu District, it is evident that the major sector driving the District economy is the manufacturing sector. Within this sector the following sub-sectors fulfil an important role in the local economy, viz. the food, clothing and textiles, and timber and timber products sub-sectors.

On the basis of the findings of this project, the following sectors have been identified as being the key economic drivers in the Ugu District. Following the categorisation of companies provided by McCarthy in the introduction to the provincial report on this project the following is noted:

- Older more established companies with a sizeable number of employees and annual turnover in the Ugu context. These companies are located in the following sectors:
 - Agriculture:
 - Farming relating to various agricultural commodities
 - Manufacturing :
 - Processing of agricultural products
 - Mining :
 - Extraction and processing of raw materials
 - Tourism:
 - Established large scale tourism facilities
- The newer smaller perhaps more dynamic companies creating a 'churn' effect in the district (i.e. having an impact) include those located in the following sectors:
 - Manufacturing:
 - Clothing
 - Wood products
 - Food processing and packaging



- Services:
 - Medical services
 - Social services
- Trade:
 - Wholesale and retail
 - Tourism and hospitality (newer smaller boutique hotels, B&Bs, restaurants, SPAs, game reserves etc)

It is noted by McCarthy that companies in these sectors are important for the future economic growth of the economy of Ugu in that they are often recent entrants into the market outside of the 'traditional box'. In a sense they are therefore 'testing the economic waters' and if they succeed will be the forerunners of a range of new sectors in the district.



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.

From the table of historic, current and future projects that follows the following general comments can be made:

- From a Municipal and Public Sector investment perspective there has been substantial focus on supporting the tourism and agricultural sectors, as well as providing communities with improved access to basic services. Key historic projects of the District include various bulk water and reticulation initiatives, the establishment of the Ugu Fresh Produce Market and the Ugu Sports and Leisure Centre.
- The focus on strengthening the sugar cane and timber growing sectors in order to sustain the downstream processing and manufacturing sectors continue and in 2010/11 the District conducted studies for each of the sectors with a view to their “rejuvenation”.
- Future projects, such as the Margate Airport, the upgrading of nodes and facilities in Margate, Port Shepstone and Scottburgh, the Hibberdene Small Craft Harbour and the Big Five Game Reserve, places a strong emphasis on the tourism sector.
- The Provincial Department of Transport is continuing to improve linkages between the coast and rural hinterland through the surfacing of the St. Faiths Road and the maintenance of the P63.
- Despite manufacturing being a driving sector in the economy the only project of note supporting this sector that has been implemented to date is the upgrading of the Park Rynie Industrial Area (an area where limited production takes place, which is mostly occupied by service industries).



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

LOCAL MUNICIPALITY	SECTOR	PROJECT NAME	PROJECT STATUS	FUNDING SOURCE(S)	BUDGET
Hibiscus	Facilities supporting econ. dev.	Margate taxi rank, Gamalakhe taxi rank	Historic	HCM	no info
Hibiscus	Facilities supporting econ. dev.	Ugu Fresh Produce Market	Historic		R 1,200,000
Hibiscus	Facilities supporting econ. dev.	Ugu Sports and Leisure Centre	Historic	Ugu & Cogta	no info
Umuziwabantu	Facilities supporting econ. dev.	Harding Town Rehabilitation	Historic	Cogta	no info
Ezinqoleni	Bulk infrastructure	Ezinqoleni bulk water extensions	Current	MIG	R 22,000,000
Ezinqoleni	Bulk infrastructure	Umtanvuna bulk water extensions	Current	MIG	R 25,000,000
Hibiscus	Bulk infrastructure	Bulk pipeline & reservoir extension	Current	Ugu DM	R 10,000,000
Hibiscus	Bulk infrastructure	Oatslands landfill site	Current	HCM	R 6,000,000
Hibiscus	Bulk infrastructure	Upgrade of Reynolds & Memorial substation	Current	HCM	R 7,000,000
Hibiscus	Bulk infrastructure	Water scheme	Current	Ugu DM	R 10,000,000
Mdoni	Bulk infrastructure	Landfill site	Current		no info
Hibiscus	Establishing new nodes / developments	KwaXolo Caves	Current	Cogta	R 5,000,000
Mdoni	Establishing new nodes / developments	Upgrade Park Rynie Industrial area	Current	DEDT & UGU	no info
Hibiscus	Facilities supporting econ. dev.	Beautification of Port Shepstone main beach front	Current	HCM	no info
Hibiscus	Facilities supporting econ. dev.	Margate Airport	Current	Cogta	R 10,000,000
Ugu	Facilities supporting econ. dev.	Ugu Khuphuka Furniture manufacturing project - shared facility	Current	DEDT	R 3,500,000
Umzumbe	Link / access infrastructure	St Faith's Road Surfacing	Current	DoT	no info
Vulamehlo	Link / access infrastructure	P63 Upgrade	Current	DoT	no info
Ezinqoleni	Establishing new nodes / developments	Ezingolweni Town Rehabilitation	Future	MIG	no info



LOCAL MUNICIPALITY	SECTOR	PROJECT NAME	PROJECT STATUS	FUNDING SOURCE(S)	BUDGET
Ugu	Other	Craft Commercialisation project	Future	National Lottery	R 2,800,000
Various	Other	Sugar Industry Revival – Investment on Small Farmers	Future		R 2,800,000
Hibiscus	Establishing new nodes / developments	Margate CBD Upgrade	Future Concept	Determine	no info
Hibiscus	Establishing new nodes / developments	Coastal Mariculture Initiative	Future Concept	Determine	no info
Umdoni	Establishing new nodes / developments	Scottburgh Beach Front Upgrade	Future Concept	Determine	no info
Umdoni	Establishing new nodes / developments	Park Rynie Industrial Development	Future Concept		no info
Umzumbe ao	Establishing new nodes / developments	Big 5 Game Reserve in Umzimkhulu Valley	Future Concept	Determine	no info
Hibiscus	Facilities supporting econ. dev.	Hibberdene Small Craft Harbour	Future Concept	Determine	R 2,500,000,000
Vulamehlo	Facilities supporting econ. dev.	Umkomazi River Dam	Future Concept		no info
Hibiscus	Link / access infrastructure	N2 Wild Coast Route	Future Concept	Private Sector	no info



4.3. MUNICIPALITY IDENTIFIED CHALLENGES

ECONOMIC DEVELOPMENT CHALLENGES IDENTIFIED BY MUNICIPAL SECTOR

- The LED practitioners interviewed in Ugu confirmed that current high levels of unemployment is one of the major challenges for economic development in this District.
- The lack of appropriate infrastructure to support economic development was also highlighted by interviewees. On a provincial level this challenge received the most mentions.
- Challenges relating to land issues and the implementation of LED strategies were also viewed as significant by half of the respondents.

TABLE 4.2: MUNICIPALITY CHALLENGES

CATEGORIES OF CHALLENGES	UGU		KWAZULU - NATAL	
	NO OF RESPONSE	% OF UGU RESPONSES	NO OF RESPONSE	% OF KZN RESPONSES
Unemployment	5	26%	16	10%
Infrastructure	4	21%	35	22%
Land Issues	3	16%	17	11%
Implementation of LED Strategy/ Plans	3	16%	22	14%
Recession	2	11%	5	3%
Education	1	5%	8	5%
Other	1	5%	11	7%
Rates And Services Availability and Cost	0	0%	9	6%
Skills Migration		0%	15	10%
Health		0%	2	1%
Institutional/ Communication		0%	11	7%
Planning		0%	5	3%
Legislation		0%	1	
TOTAL	19	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, and support with the pro-active implementation and accessing funding for local economic development, are required.



TABLE 4.3: ADDRESSING THE CHALLENGES

REQUIREMENTS FOR ADDRESSING THE CHALLENGES	UGU		KWAZULU - NATAL	
	NO OF RESPONSE	% OF UGU RESPONSES	NO OF RESPONSE	% OF KZN RESPONSES
LED and LED Funding	6	38%	33	24%
Infrastructure/Utilities Required and Funding	5	31%	33	24%
Institutional	1	6%	15	11%
Policy Support	1	6%	11	8%
Land Issues	1	6%	10	7%
Planning	1	6%	8	6%
Communications, Coordination & Consultation	1	6%	6	4%
Capacity Building & Skills Development		0%	9	7%
Economic Opportunities		0%	7	5%
Cost Of Services: Municipal Incentives		0%	5	4%
TOTAL	16	100%	137	100%

4.5. A PUBLIC SECTOR INVESTMENT PERSPECTIVE

The major public sector initiatives that have been implemented over the past two decades include the surfacing of the St Faiths Road, the establishment of the Ugu Fresh Produce Market, sports facilities development relating to the 2010 Soccer World Cup and various other infrastructure, housing and services provision projects. These projects have had a limited impact on altering the inherited unequal spatial structure of the South Coast, where the poor residing in the rural hinterland remains dependent on services and opportunities only available on the coast.

A number of spatially significant initiatives are currently being envisaged for the District, most notably the Wild Coast N2 and the Big Five Game Reserve. A number of “catalytic” projects have also been promoted in the area over the past decade, including the Hibberdene Small Craft Harbour, the Coastal Mariculture Initiative and others. The potential impact of these initiatives on the spatial restructuring of Ugu is, however, viewed as insignificant.

It is suggested that key areas to be considered for future interventions by the public sector should include:

- Upgrading of the coastal tourism infrastructure;
- Supporting the development of the manufacturing sector from Scottburgh to Margate by facilitating new industrial development benefitting from location in proximity to the dig-out port;
- Expanding agricultural production into underutilised traditional rural areas and strengthening the agricultural marketing system;
- Supporting the expansion of the commercial sector into the rural areas of the District, providing easy access to a range of retail and social services;
- Ensuring the economic impact of the government sector operating in rural areas are maximised; and
- Generally, ensuring that relevant infrastructure and services are available to facilitate economic development.



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 for. In addition to this, there are also opportunity costs as a result of lost opportunities, e.g. blue flag beach status lost or unattainable due to polluted estuaries, or viewsheds that have become compromised due to poor land management practices and which are now no longer attractive to tourists.

With the above as background this section:

- Considers the condition of the District's natural capital and the quality of related ecosystem goods and services;
- Provides an overview of ecosystem resources (including allocating a value to the ecosystem resources);
- Illustrate the ecosystem resource linkages between this District and other Districts in KwaZulu-Natal; and
- Provides some insight into the 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 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.

Ugu District is extremely fortunate that just more than 50% of its land cover is currently untransformed and is still on the positive side of the scale in terms of its ability to produce and deliver ecosystem goods and services. However, the condition of this untransformed natural capital has been compromised through a variety of conditions common to all the KZN Districts, i.e. over-grazing, injudicious burning practices, unchecked sheet and gully erosion, the spread of alien invasive plants, the inappropriate placement of infrastructure, and externalities emanating from settlement -, agricultural – and industrial land uses. This situation is evident in the fact that none of the land cover has retained its full ecoservices potential with no areas being allocated an ecoservice score of "3". What has exacerbated this is that the next greatest proportion of land cover is ascribed to agriculture, i.e. just more than 32%, with the bulk of this cover being commercial sugar and timber plantations. Both of these land cover types are renowned for the negative impact that they have on the environment through the wholesale transformation of natural land cover with



the resultant loss in ecosystem goods and compromised ability to deliver ecoservices. Timber plantations are potentially less severe than sugar, but both land cover types are on the negative side of the ecoservice score allocation scale.

While much of the above summary applies to the inland portions of the District, much of the coastal belt, together with the associated estuaries and flood plains, have been compromised through unchecked ribbon development which includes both residential and industrial with associated infrastructure. The unchecked nature of this development has allowed transformation of natural capital that would have provided essential services such as the absorption of the impacts of floods and high seas. Ugu is thus in a position where it is vulnerable to the risk of weather phenomenon generated from both the inland and coastal environments. This vulnerability is being demonstrated at increasing frequency and severity resulting in extremely high costs of disaster management, the loss of opportunity costs, as well as societal costs which often include the loss of life. Pro-active investments into the restoration and sustainable management of natural capital, at a fraction of the latter costs, will result in reduced vulnerability and enhanced resilience to extreme weather events.

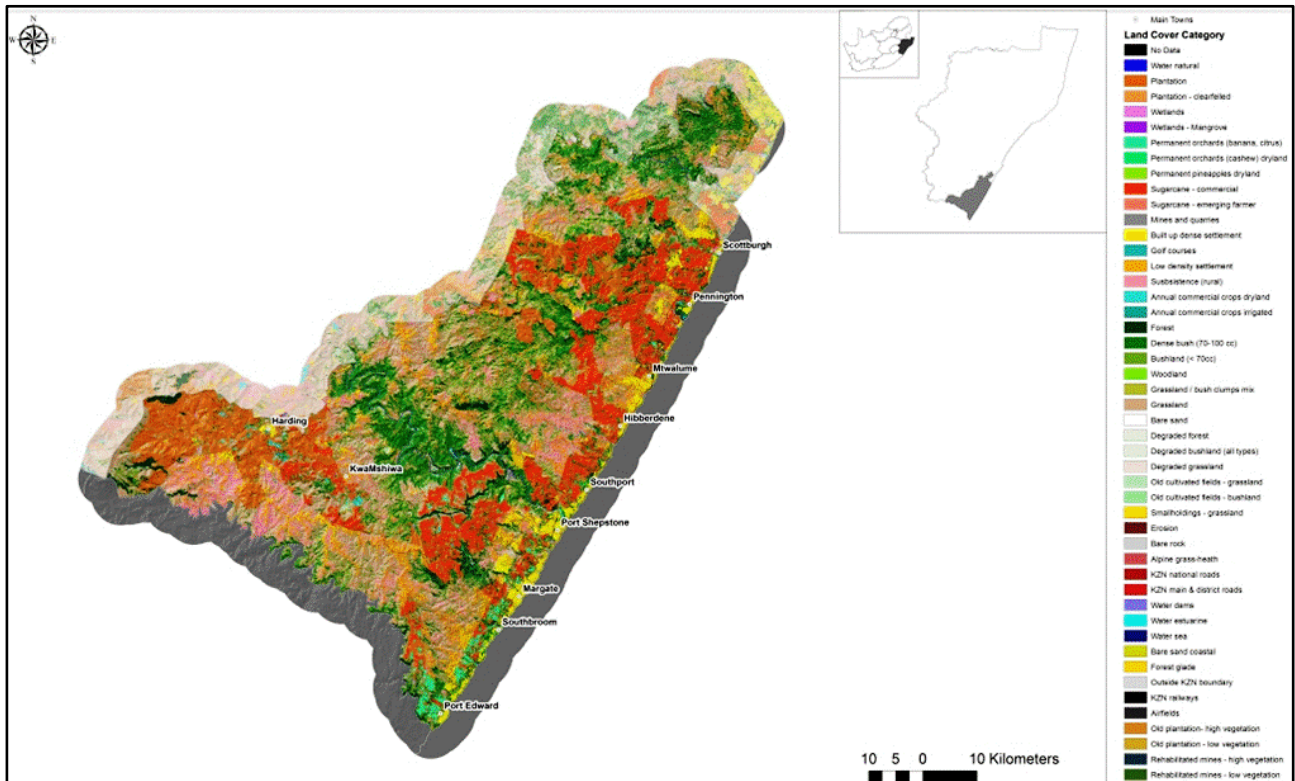
It must be noted that the above analysis does not take the predicted ramifications of climate change into account, as it is based on the current situation. Therefore, if climate change predictions are introduced, the need for investment into the restoration and sustainable management of natural capital will become even more apparent.

Two maps are provided overleaf to illustrate what has been discussed above. The first map reflects the spatial distribution of 47 land cover types in the District, while the second map illustrates the potential of these to deliver ecoservices. Of significance is the allocation of negative ecoservice scores in recognition of the fact that once a natural land cover has been transformed, its ability to produce ecoservice goods is lost and the chances that the replacement land cover will generate dis-service, such as sediments from accelerated erosion, impurities from either point source and non-point source pollution, increased runoff rates due to loss of permeable surfaces for example, will increase based on the nature of the replacement land cover. By comparing the two maps one can make associations between land cover types and ecoservice potential.

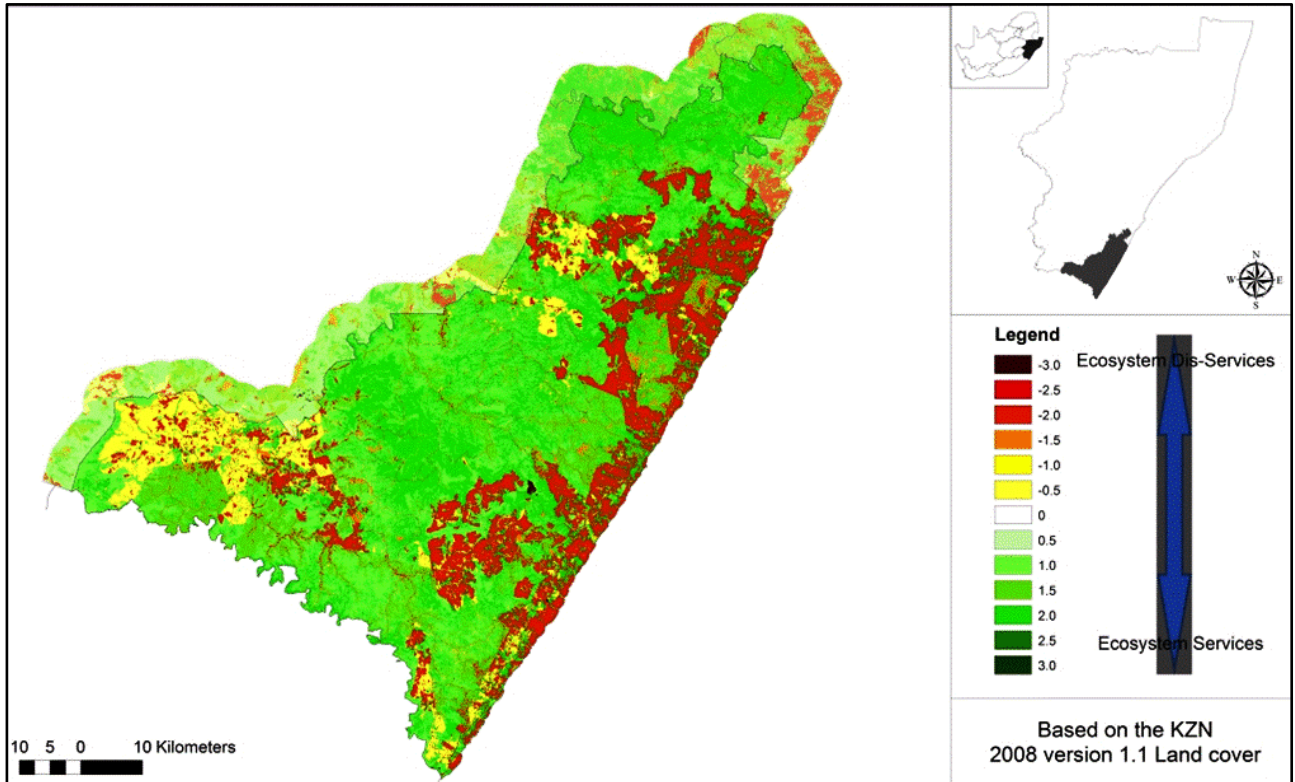
It must also be noted that comparisons made between the 2005 and 2008 land cover data has shown a negative trend in terms of the loss of natural capital in the Province as a whole. This trend can confidently be applied to the Districts as well with the implication being that the current extent of vulnerability alluded to above, will increase if efforts are not immediately implemented to reverse the situation.



MAP 5.1: UGU DISTRICT LAND COVER



MAP 5.2: UGU 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 (EKZMW, 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. This value for Ugu equates to 2.77% of the total value for the Province which must be considered in the context of the District making up 5.35% of the Province's 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
Coastal and dune vegetation	R 15 414 967
Coastal grassland and thickets	R 634 586 808
Estuaries and mangroves	R 50 741 017
Forests	R 259 851 137
Grasslands	R 332 301 077
Near-shore environments and reefs	R 537 390 540
Riparian and floodplain veg and swamp forests	R 283 977 447
Sandy beach, rocky shores and surf zone	R 41 506 546
Savannas	R 447 681 721
Wetlands	R 14 478 171
Rivers	R 1 530 249 937
TOTAL	R 4 148 179 374

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. The two maps that have been included in Section 5.2 provide a spatial illustration of these values and features.

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	284	97243	4509	382	46996	159	48008	81811	225357	0
%	0.06%	19.27%	0.89%	0.08%	9.31%	0.03%	9.51%	16.21%	44.65%	0.00%

Ugu District is located between the Sisonke District and the Indian Ocean. As such it is subjected to the ramifications of land use and land use management in the largest and most important portions of the catchments that feed the rivers that flow into and through the District. The situation is thus very similar to that of iLembe with dense ribbon development immediately along the coast, vast tracts of commercial sugar plantations just inland of the coast, and communal land inland of this. Almost 10% of the 32.32% cover under active agriculture is ascribed to afforestation in the deep inland areas of the District. Coupled with this same land cover type in the adjacent Sisonke exacerbates the vulnerable condition of this District. eThekweni's water stress situation is well known considering the economic profile of the area, but the situation in Ugu district is the same. Local reservoirs have become filled with sediments from the sugar plantations and poor land management upstream, and the water is now being reticulated through bulk supply lines from eThekweni. Not only is this an extremely expensive option, but it ignores the failure of the natural capital to deliver related ecoservices. The potential for natural capital is there, it just requires good management, and in many instances, restoration.

TABLE 5.3: THE EXTENT OF BROAD LAND COVER CATERGORIES AS A PERCENTAGE OF THE UGU DISTRICT

LAND COVER CATEGORY	% COVER
Natural - freshwater	0.45%
Natural - marine	0.06%
Natural terrestrial	50.99%
Natural terrestrial degraded	2.94%
Agriculture - active including commercial and subsistence	32.32%
Agriculture - fallow including commercial and subsistence	0.34%
Mining	0.05%
Settlement (including recreation and infrastructure)	12.84%

5.4. ECOSYSTEM RESOURCE LINKAGES

As natural systems do not recognise political boundaries it is important to include a commentary on the ecosystem linkages that are of relevance to Ugu District. Reference has already been made to the mix of inland and coastal dynamics that influence Ugu's vulnerability, but it is also important to note that as a coastal District, Ugu is directly subject to the ramifications of natural resource use decisions that are taken in the Sisonke District. Indirectly, decisions that are taken in uMgungundlovu also impact on Ugu. Both the direct and indirect influences relate to the assurance of supply of raw water, as well as the quality of this water. Ugu has become water stressed due to the loss of the capacity of its catchments to provide assurance of supply, as well as impoundments that have lost capacity due to sediments displacing water storage capacity. As a result, bulk water has had to be imported from eThekweni at a much greater cost. Whereas Ugu used to be dependent on water produced in its immediate catchments, and the larger catchments emanating from Sisonke, e.g. the Umzimkulu; it is now dependent on water from the uMngeni system, which in itself is being augmented from the Mooi. The Umkomazi system is also soon to be brought into this mix as further inter-basin transfer schemes are developed in the near future.



While the discussion above refers primarily to water supply, i.e. quantity, this also has a direct bearing on Ugu's ability to deal with water quality issues. Again this highlights the vulnerable position of the District in that a reduction in water production capacity, reduces a systems ability to dilute and process impurities. In addition to the reduced catchment integrity within Ugu, the bulk of the upstream portions of the main systems flowing into and through the District are within the Sisonke District. Here the positive impacts of the uKhahlamba Drakensberg Park World Heritage Site become compromised as the systems move through the commercial agriculture (including forestry) and communal lands.

In addition to the linkages related to water, are those related to the spread of alien invasive plants. While the distribution of these tends to be altitudinally determined, there are portions of Ugu that share the distribution range of many of the species common within Sisonke. The vectors of distribution vary according to species but generally they can be categorised according to wind, water and animal vectors. Examples of alien invasive plants relative to these vectors are pines, wattles and brambles respectively. The diversity of alien invasive plants occurring in both Ugu and Sisonke is very high and the associated impacts in the integrity of natural capital are significant, such as loss of viable grazing land, loss of riparian zone integrity, increased abstraction of water, etc. For all of the issues discussed above, it is essential that the ecological linkages between Sisonke and Ugu are recognised and that co-operative mechanisms are put in place to address them.

Finally there is also an off-shore linkage that needs to be recognised and that has to do with sediment plumes and off-shore effluent discharges that are pushed by ocean current either up and/or down the coast. Catchments that are well managed will ensure that sediment loads delivered into the sea during times of floods will be significantly reduced. However, as far as effluent discharges are concerned, increased efficiencies on the part of the activities generating the effluent will be the only way of reducing the potential for them to impact beyond the boundaries of the District.

The linkages discussed here are illustrated in the extract of the provincial land cover map that has been inserted below.

(Provincial map illustrating ecosystem resource linkages between this District and other)



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



Source: Ezemvelo KZN Wildlife

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

From the above discussion it can be seen that the Ugu District has lost its resilience and is extremely vulnerable due to compromised natural capital both within and adjacent to it, particularly inland. While engineering solutions to current problems such as raw water supply, are the most tangible, they are also the most costly and are also subject to environmental risk through compromised natural capital. Linear infrastructure along the coast has proven its vulnerability to floods and sea surges with both rail and road linkages having been washed away. In addition to the costs of repair and disaster management, there are also the opportunity costs that are lost while such repairs are being implemented. Now raw water supply is being added to this linear infrastructure through the laying on of piped water from the north. In an attempt to reduce reliance on these engineered solutions, it is essential that Ugu look to invest in natural capital restoration and management and thereby enhance their resilience and reduce vulnerability.

Every economic sector within Ugu is susceptible to the above vulnerabilities, but there are opportunities associated with the large proportion of the District that has not yet been irreversibly transformed, and that is both inland as well as on the coast. There are some beaches that have managed to obtain and sustain their ‘Blue Flag’ status. A 2005 study by the CSIR indicated that the loss of ‘Blue Flag’ status for Margate Beach resulted in a direct loss of between R19 and R24 million per annum with broader ramifications being in the order of R58 million and R129 million per annum (LeRoux et al, 2005).



Directly related to the need for Ugu to increase its resilience and improve the condition of its natural capital is the emergence of the green economy. A collaboration of researchers from the Industrial Development Corporation (IDC), the Development Bank of South Africa (DBSA), and Trade and Industrial Policy Strategies (TIPS) produced a comprehensive report in 2011 entitled “Green Jobs: An estimate of the direct employment potential of a greening South African economy”. In this report they suggest that there are four main areas within which the green economy is predicted to grow, namely:

- Energy generation, which pertains to the generation of energy from sustainable, renewable and/or alternative sources with low or no carbon emissions;
- Energy and resource efficiency, which captures, among others, initiatives aimed at reducing energy consumption through green buildings, solar water heaters, industrial equipment and public transportation;
- Emission and pollution mitigation, relating to the utilisation of technologies aimed at reducing the harmful emissions associated with highly polluting industries, including air pollution control, electric vehicles, cleaner stoves, recycling, carbon capture and storage and water treatment; and
- Natural resource management, which covers the sustainable management and restoration of natural resources, specifically water, soil and land, as well as the conservation and restoration of ecosystems.

The first three of the above options are primarily related to the private sector and its ability to respond to the opportunities being presented by more efficient solutions to energy and water provision. The fourth however, requires significant government investment and funds are available for natural capital restoration and management projects through the Natural Resource Management Programme of the Department of Environmental Affairs, and the Expanded Public Works Programme of the Department of Public Works. Other incentives exist such as ESKOM rebates for the installation of solar technologies and the Renewable Energy Project of the National Energy Regulator of SA. It is highly recommended that the Ugu District facilitate public private partnerships that stimulate and provide an enabling environment for the green economy to thrive in the District. eThekweni Metro have launched an initiative to do this known as Shisa Solar where the Metro are linking green technology suppliers to community-based implementation opportunities.

Not only does the green economy provide sustainable solutions to many of the environmental issues discussed above, but cost efficient water, food and energy solutions for vulnerable people, including the offer of jobs related to the restoration and management of natural capital. The IDC-DBSA-TIPS study predicts that the green economy will create almost 100,000 jobs in the short-term, and in the medium and long-term 255,000 and 462,000 respectively, and Ugu needs to capitalise on this.

To provide a more detailed perspective, the sectors recognised as opportunities for further economic growth as discussed in Section 3.12 have been used as a point of departure to explore their relationship to and impact on natural capital, as a means to illustrate where there are opportunities and constraints. It is important to note that this assessment also provides a measure of the extent to which these sectors are vulnerable and thus not currently able to sustain their current level of activities, or resilient and are able to accommodate further growth.

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 no structural changes in the economy of the Ugu District over the past two decades could be identified (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 still dependent on industries established well over 100 years ago relating to the sugar and timber industries. However, an encouraging sign is the emergence of smaller companies engaging in tertiary sector activities over the past 20 years, but as yet this is not interpreted as signalling a structural change.

Government and specifically local government in the Ugu District has been pro-active in the identification of so-called catalytic projects that have or that will impact on spatial economic development in the District.

The natural capital of the District has been mismanaged and the impact of floods on this district specifically bears testimony to the negative impact and the costs of such mismanagement.

6.2. KEY SPATIAL ECONOMIC FEATURES

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

- The major regional role of core urban centres, most notably Port Shepstone and Harding, in serving also a much larger Eastern Cape catchment must be considered. This role will potentially expand with the development of the Wild Coast N2 Route.
- The potential negative impact of the relocation of the Durban International Airport on future tourism and business investment in the Ugu District. However, the impact of the dig-out port may negate this.
- The dislocation of rural settlement from urban job opportunities and the underdeveloped nature of the vast rural municipalities of the District, including Vulamehlo, Umzumbe, Ezingoleni and Umuziwabantu.
- The concentration of major businesses along the coastal N2 corridor 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 Ugu District and potentially bring about structural changes, viz.

- The development of the Wild Coast N2 route extending past Port Shepstone to Ramsgate into the Eastern Cape: This route will place the Ugu District centrally on a new corridor linking the ports of Durban with the industrial economies of East London and Port Elizabeth. The regional role of Port Shepstone is also set to be enhanced through this initiative.
- The establishment of a Dig-Out Port on the old Durban International Airport site located in eThekweni: Over the past two decades the focus of industrial and logistics development has been in Durban North and on the North Coast. The establishment of the Dig-Out Port may contribute to a revitalisation of the South Durban Basin industrial area where access to land is already limited. A logical corridor for future industrial expansion will be the South Coast. It should be noted here that access to water may be a major future constraint for industrial development on the South Coast.
- The establishment of a Big 5 Game Reserve in the Umzimkhulu Valley: This initiative is currently believed to be a priority and is receiving favourable interest. Other than the regional impact the location of the Game Reserve has the potential to impact on the economies of three of the rural municipalities in Ugu, i.e. Umuziwabantu, Ezingoleni and Umzumbe.
- The surfacing of the St Faith's Road (current initiative): This major road building initiative is now nearly complete and alters the spatial structure of the Ugu District by providing an additional east-west (north west linkage). The primary benefit from the construction of this route is that it provides improved access to urban centres for a vast number of rural dwellers and is set to allow for new developments along the corridor.

Each of the above will require specific spatial planning responses.

6.4. RECOMMENDATIONS ON GOVERNMENT INTERVENTIONS

6.4.1. SUPPORT CATALYTIC PROJECTS

Support the implementation of "catalytic" projects (or as a first step confirming the feasibility thereof). The currently identified catalytic projects are:

- Margate Airport Upgrade
- Margate CBD Upgrade
- Coastal Mariculture Initiative
- Scottburgh Beach Front Upgrade
- Park Rynie Industrial Development
- Big 5 Game Reserve in Umzimkhulu Valley
- Hibberdene Small Craft Harbour
- Umkomazi River Dam
- N2 Wild Coast Route

An attempt to better understand the potential impact of key initiatives on the District economy is presented overleaf in Diagram 6.1.



DIAGRAM 6.1: UGU ECONOMIC DRIVERS

ECONOMIC DRIVERS		CERTAIN DRIVER	POSSIBLE DRIVER	UNCERTAIN
COMPANIES / SECTOR	Company			
	Sector/Sub-sector/Cluster	Agri-processing Agriculture Tourism Clothing and textiles	Food and beverages	
DEVELOPMENTS	Strategic Developments	Ugu Fresh Produce Market Margate CBD Upgrade Hibberdene Small Craft Scottburgh Beachfront Upgrade	Ezingolweni Town Upgrade Coastal Mariculture Initiative Crookes Bros mixed use development	Harding Town Rehab
	Supporting Facility			
INFRASTRUCTURE	Special Economic Zones	Upgrade Park Rynie Industrial Area Big Five Game Reserve Park Rynie Industrial Dev.		Park Rynie-Umzinto mixed use development corridor
	Link Infrastructure	Margate Airport Revitalisation St Faith's Road Surfacing N2 Wildcoast Route	P63 Upgrade Scottburgh station upgrade	
	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 identification and packaging of opportunities for future industrial development (in the context of resource constraints);
- The upgrading of the considerable tourism infrastructure on the coast;
- The diversification and expansion of the agricultural sector in the District (with due consideration of the competing demands on land in the coastal strip).

6.4.3. ADDRESSING THE CHALLENGES

A key challenge for the future of the District, considering specifically the current contribution of manufacturing to the District economy, will be how to sustain and grow this sector. With extremely limited investment in maintaining and supporting existing industrial infrastructure in the District a strategy to retain existing industries through maintaining and strengthening infrastructure networks should be a priority. To this end the District has already engaged in programmes to support the sugar and timber industries in the region. Focussed investigations are then also required as to the most appropriate approaches to growing this sector, through linkages with the South Durban Basin economy. The identification and packaging of opportunities for future large scale industrial development should be considered.

Relating specifically to industry it is evident from the survey that few businesses in Ugu target the international markets. The challenges for exporting from Ugu should be identified and addressed.

An integrated approach to building on an already established tourism industry must be developed. This will amongst other things require the upgrading of coastal tourism infrastructure and the identification and packaging of new tourism and coastal development opportunities. The Scottburgh Beach Front, the Port Shepstone Beach Front and the Margate CBD are all currently receiving attention in this regard.

More inland, and specifically in the areas where the majority of people in the District are located, the key challenge will be to provide people with better access to retail and social services. This can be achieved through the establishment of well-located nodes where private and public sector investment can be promoted. The expansion of retail and social services could also potentially generate substantial jobs (as established through the major company interviews). Linked to this should be an approach of encouraging specifically rural agricultural production where appropriate.

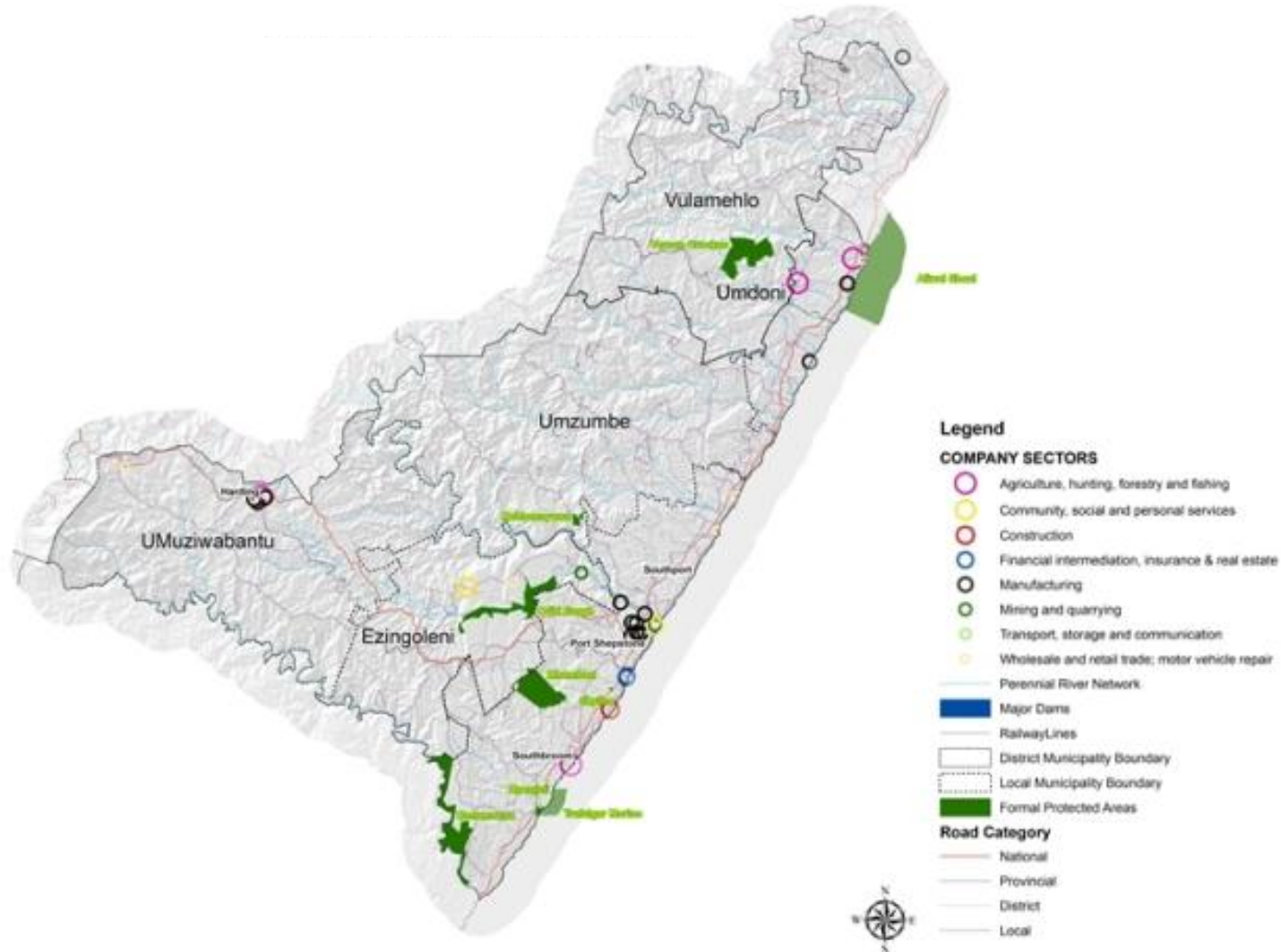


BIBLIOGRAPHY / SOURCES:

StratPlan, 2010. **Ugu District SDF.**



ANNEXURE A: UGU DISTRICT - COMPANY DISTRIBUTION BY SECTOR IN LOCAL MUNICIPALITIES



LIST: COMPANY DISTRIBUTION IN LOCAL MUNICIPALITIES

COMPANY NAME	LOCAL	PRODUCT CATEGORY
Bargain wholesalers	Hibiscus Coast	Retail
Beekman Group	Hibiscus Coast	Real Estate Services
Goldenglo Candle and Soap	Hibiscus Coast	Soap, Candles and Oil
Hibberdene Superspar	Hibiscus Coast	Retail
Hibiscus Private Hospital	Hibiscus Coast	Medical Services
Highcroft Sawmills cc	Hibiscus Coast	Timber Products
Idwala Carbonates	Hibiscus Coast	Minerals
Illovo - Umzimkhulu Sugar Mill	Hibiscus Coast	Sugar and Related
Kapenta Bay Hotel	Hibiscus Coast	Tourism Accommodation +
Kulucrete South Coast	Hibiscus Coast	Cement Products
Lake Eland Game Reserve	Hibiscus Coast	Tourism Accommodation +
Marburg Manufacturers (Pty) Ltd	Hibiscus Coast	Clothing
MP Clothing Manufacturing	Hibiscus Coast	Clothing
Natal Portland Cement Simuma Plant	Hibiscus Coast	Cement
NPC Concrete	Hibiscus Coast	Cement
Oribi Gorge Guest Farm	Hibiscus Coast	Tourism Accommodation +
Outlook Farm	Hibiscus Coast	Agricultural Commodities
Pumula Beach Hotel	Hibiscus Coast	Tourism Accommodation +
Qual Chem	Hibiscus Coast	Cleaning Products
R & R Builders	Hibiscus Coast	Construction Services
SA Breweries Port Shepstone	Hibiscus Coast	Beverages
Shiva Clothing cc	Hibiscus Coast	Clothing
Singtex Clothing	Hibiscus Coast	Clothing
SSI Engineers and Environmental Consultants Port Shepstone	Hibiscus Coast	Engineering Consulting



COMPANY NAME	LOCAL	PRODUCT CATEGORY
Twin Stream Manufacturing	Hibiscus Coast	Timber Products
Wood Street Furniture Manufacturing	Hibiscus Coast	Timber Furniture
Avondale's Self-catering Cottage	Ugu	Tourism Accommodation +
Guy Payn Sawmills (Pty) Ltd	Ugu	Timber Products
Blue Marlin Hotel Scottburgh	Umdoni	Tourism Accommodation +
Crookes Brothers	Umdoni	Agricultural Commodities
Glen Rose Farms cc	Umdoni	Sugar and Related
Illovo Sugar - Sezela Mill	Umdoni	Sugar and Related
Le May's Guest House	Umdoni	Tourism Accommodation +
Le Paradis Lodge	Umdoni	Tourism Accommodation +
Nu-Mymtex	Umdoni	Textiles
Spar Scottburgh	Umdoni	Retail
Themba lethu Bricks and Blocks	Umdoni	Bricks and paving products
Aljo Timbers Industries (Pty) Ltd	Umuziwabantu	Timber Furniture
Crown Eagle B&B	Umuziwabantu	Tourism Accommodation +
Green Acres B&B	Umuziwabantu	Tourism Accommodation +
Harding Bakery	Umuziwabantu	Bread and Confectionary
Harding Spar	Umuziwabantu	Retail
Harding Treated Timbers (Pty) Ltd	Umuziwabantu	Timber Treated
Ingeli Forest Lodge	Umuziwabantu	Tourism Accommodation +
Kulu Snacks (Pty) Ltd.	Umuziwabantu	Food Production
Malton Farm (Pty) Ltd	Umuziwabantu	Not known
Ngeli Mills	Umuziwabantu	Maize flour
Temba Forestry	Umuziwabantu	Timber Logging Services



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.

