

# ANNEXURE A

***CENTRAL KAROO DISTRICT  
MUNICIPALITY***



***ANNUAL BUDGET 2017/2018 AND  
MTREF – 25 MAY 2017***



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## 1. Glossary

**Adjustments Budgets** – Prescribed in section 28 of the Municipal Finance Management Act. It is the formal means by which a Municipality may revise its budget during a financial year.

**Allocations** – Money received from Provincial and National Treasury.

**Budget** – The financial plan of a Municipality.

**Budget related policy** – Policy of a Municipality affecting or affected by the budget.

**Capital Expenditure** – Spending on municipal assets such as land, buildings and vehicles. Any capital expenditure must be reflected as an asset on a Municipality's balance sheet.

**Cash Flow Statement** – A statement showing when actual cash will be received and spent by the Municipality, and the month end balances of cash and short term investments. Cash receipts and payments do not always coincide with budgeted revenue and expenditure timings. For example, when an invoice is received by the Municipality it is shown as expenditure in the month that the services or goods are received, even though it may not be paid in the same period.

**CKDM** – Central Karoo District Municipality

**DORA** – Division of Revenue Act. The annual piece of legislation that indicate the allocations from National Government to Local Government.

**Equitable Share** – A general grant paid to municipalities. It is predominantly targeted to assist with free basic services.

**GDFI** - Gross Domestic Fixed Investment

**GFS** – Government Finance Statistics. An internationally recognised classification system that facilitates comparisons between municipalities.

**IDP** – Integrated Development Plan. The main strategic planning document of a Municipality.

**KPI** – Key Performance Indicators. Measures of service output and/or outcome.

**MFMA** - Municipal Finance Management Act (No 53 of 2003). The principle piece of legislation relating to municipal financial management.

**MTREF** – Medium Term Revenue and Expenditure Framework as prescribed by the MFMA sets out indicative revenue and projected expenditure for the budget year plus two outer financial years to determine the affordability level.

**Operating Expenditure** – Spending on the day to day expenses of a Municipality such as general expenses, salaries & wages and repairs & maintenance.

**Rates** – Local Government tax based on assessed valuation of a property.

**TMA** – Total Municipal Account

**SDBIP** – Service Delivery Budget Implementation Plan. A detailed plan comprising quarterly performance targets and monthly budget estimates.

**Strategic Objectives** – The main priorities of a Municipality as set out in the IDP Budgeted spending must contribute towards achievement of these strategic objectives.

**Vote** – One of the main segments into which a budget is divided, usually at department level.

## **CHAPTER 1 – MAYOR’S REPORT**

Councilors, municipal manager, head of departments, guests, ladies and gentlemen, good morning to all.

The 2017 Division of Revenue Bill was used as guidance in the preparation of the budget as the Division of Revenue Act, 2017 was not promulgated as at 16 May 2017.

Economic pressures country wide continues to impact on Central Karoo District Municipality, especially considering the limited economic growth in our towns. The country’s economic performance has slowed down over the last couple of years and this had a direct effect on our area. The current economic outlook remains bleak and it is not foreseen that the growth rate will increase dramatically.

The budget I am tabling here today was prepared in accordance with the prescripts of the Municipal Finance Management Act, (Act 56 of 2003), the Municipal Budget Circular for the 2017/18 MTREF as applicable and complies with Generally Recognized Accounting Practice - Local Government.

The budget was compiled, taking into account the Macro-economic growth parameters and also addresses the following National and Provincial Key Performance areas, being:

- Basic service Delivery (BSD)
- Municipal Transformation and Institutional Development (MTID)
- Municipal Financial Viability and Management (MFVM)
- Local Economic Development (LED)
- Good Governance and Public Participation (GGPP)

The following underlying factors were also taken into consideration with the compilation of the 2017/2018 draft budget:

- The current socio-economic circumstances of our communities and especially the high rate of unemployment
- External factors having a direct impact on the budget such as the consumer inflation rate
- The wage agreement concluded between organized labour and the South African Local Government Bargaining Council for the period 1 July 2015 to 30 June 2018
- The implementation of mSCOA

The major sources of revenue can be summarized as follows:

National grants and subsidies – R 26 857 000

Western Cape provincial grants and subsidies – R 1 040 000

Department of Transport and Public Works – R 38 970 000

Addressing revenue generation challenges will remain high on the list of priorities for the Municipality in the MTREF period.

## **ORGANOGRAM**

The Municipality has undergone a full revision of its organogram and the adjusted organogram was used in the preparation of the employee cost budget. The adjusted organogram will support the strategic objectives of the Municipality. The filling of the strategic posts highlighted during the review process has been finalized.

## **MUNICIPAL STANDARD CHART OF ACCOUNTS (MSCOA)**

The Municipality remains committed to the implementation of mSCOA and as the mSCOA Regulations apply to all municipalities and municipal entities with effect from 1 July 2017.

The implementation of a mSCOA compliant system requires a substantial outlay of resources from the Municipality and all engagements with National and Provincial Treasury will continue in order to obtain further financial support regarding the implementation of the SEBATA system.

To quote MFMA Circular 86: *“Technically, for a Municipality to be regarded as mSCOA compliant on 1 July 2017 it must be able to transact across all the mSCOA segments and its core system and all sub-systems (including that of its municipal entities) must seamlessly integrate.”* This means that our system must accommodate seamless integration of the Integrated Development Plan (IDP), Service Delivery and Budget Implementation Plan (SDBIP) and Budget facilities into the core financial system as these documents create a point of departure for the transactional environment come 1 July 2017.

## **ROADS**

The Swartberg Pass was damaged extensively during a flash flood in April. The impact of the flood damage on the planning and budget of the Roads Department will only become clear in the 2017/2018 financial year.

## **IN CONCLUSION**

I would like to thank all parties that was involved in the budget preparation process, including the full review of the budget related policies and the subsequent re-drafting of numerous policies. As Council we must never forget that it is our role to determine policy and the role of the Administration to implement the policies.

**I thank you**  
**CLLR N CONSTABLE**  
**EXECUTIVE MAYOR**

## **CHAPTER 2 – COUNCIL RESOLUTION**

1. That in terms of section 24 of the Municipal Finance Management Act, 56 of 2003, the Annual budget of the Central Karoo District Municipality for the financial year 2017/2018; and indicative allocations for the two projected outer years 2018/2019 and 2019/2020; and the multi-year and single year capital appropriations are approved as set-out in the following tables:
  - 1.1. Budgeted Financial Performance (revenue and expenditure by standard classification);
  - 1.2. Budgeted Financial Performance (revenue and expenditure by municipal vote);
  - 1.3. Budgeted Financial Performance (revenue by source and expenditure by type); and
  - 1.4. Multi-year and single year capital appropriations by municipal vote and standard classification and associated funding by source.
2. That the financial position, cash flow, cash-backed reserve/accumulated surplus, asset management and basic service delivery targets are adopted as set-out in the following tables:
  - 2.1. Budgeted Financial Position;
  - 2.2. Budgeted Cash Flows;
  - 2.3. Cash backed reserves and accumulated surplus reconciliation;
  - 2.4. Asset management; and
  - 2.5. Basic service delivery measurement.
3. That in terms of section 24(2)(c)(ii) of the Municipal Finance Management Act, 56 of 2003 and sections 74 and 75A of the Local Government: Municipal Systems Act 32 of 2000 as amended, the tariffs as set out in annexure A, that were used to prepare the estimates of revenue by source, are approved with effect from 1 July 2017.
4. That in terms of 75A of the Local Government: Municipal Systems Act (Act 32 of 2000) the tariffs for other services, as set out in Annexure A, that were used in compiling the final budget, are approved with effect from 1 July 2017.
5. That in terms of section 24(2)(c)(iii) of the Municipal Finance Management Act, 56 of 2003, the measurable performance objectives for capital and operating expenditure by vote for each year of the medium term revenue and expenditure framework as set out in Supporting Table SA7 are approved.
6. That interest may be charged on all debtors' accounts outstanding for a period of more than 30 days at the prevailing prime interest rate plus 2% charged by the Municipality's Banker.
7. That in terms of the provisions of **Section 75A** of the Municipal Systems Act, 32 of 2000, the notice of the tariff amendments be displayed on notice boards at all municipal offices, libraries, and be advertised in local newspapers.
8. That in terms of the municipal budget and reporting regulations, paragraph 7, the budget policies, as indicated, are approved with effect 1 July 2017.

9. That in terms of section 24(2)(c)(iv) of the Municipal Finance Management Act, 56 of 2003, the final IDP for 2017/2018 – 21/22 be approved.
10. That the Service delivery targets be approved.
11. That the final documents be available for inspection at the municipal offices.

## **CHAPTER 3 – EXECUTIVE SUMMARY**

### **PREFACE**

The budget tabled here today is the MTREF (Medium Term Revenue and Expenditure Framework) for the 2017/2018, 2018/2019 and 2019/2020 financial years as legislatively prescribed in terms of section 16(2) of the Municipal Finance Management Act, Act 56 of 2003 (MFMA).

The following documents were considered in the preparation of the budget:

- The Municipal Finance Management Act, Act 56 of 2003 (MFMA)
- National treasury circular 86 as well as other prior circulars giving guidance on budget processes
- The municipal budget and reporting regulations as issued in Government gazette 32141 on 17 April 2009
- Government Gazette 37577 dated 22 April 2014: Municipal Regulations on Standard Chart of Accounts
- Division of Revenue Bill - (As introduced in the National Assembly (proposed section 76); explanatory summary of Bill published in Government Gazette No. 40610 of 10 February 2017)

### **CAPITAL BUDGET**

The drafting of the IDP runs concurrent with the 2017/2018 budget process in order to update the Medium Term Expenditure Framework (MTEF). The IDP budget link is summarized in the supporting tables attached hereto.

The Medium Term Expenditure Framework should guide the Municipality with regards to its funding requirements in the medium term (3 years).

The aforementioned capital requirements are only indicative of the confirmed funding for the MTEF and do not include issues of priority where funding applications are in process and have not yet been confirmed.

From the MTREF it is clear that the council is once again relying on grants and subsidies for the funding of the majority of its capital requirements.

The Municipality is funding 39% of the capital budget using internally generated funds and the expenditure is focused on replacing the outdated computer equipment, providing office furniture for newly appointed staff and ensuring that the Environmental Health Department has the required tools and equipment to carry out the required testing in line with best practices.

### **Summary Of Capital Budget Per Standardized Project:**

	Approved Budget 2016/17	Revised Budget 2016/17	2017/2018	2018/2019	2019/2020
<b>Additions</b>					
Capital: Non-infrastructure - New - Computer Equipment	10 000	192 000	45 000	50 000	50 000
Capital: Non-infrastructure - New - Furniture and Office Equipment	50 000	70 000	398 000	250 000	250 000
Capital: Non-infrastructure - New - Machinery and Equipment	180 000	1 300 000	711 754	-	-
<b>Additions Total</b>	<b>240 000</b>	<b>1 562 000</b>	<b>1 154 754</b>	<b>300 000</b>	<b>300 000</b>
<b>Grand Total</b>	<b>240 000</b>	<b>1 562 000</b>	<b>1 154 754</b>	<b>300 000</b>	<b>300 000</b>

### **Summary Of Capital Budget Per Municipal Function:**

	Approved Budget 2016/17	Revised Budget 2016/17	2017/2018	2018/2019	2019/2020
1.1 - MUNICIPAL MANAGER			30 000		
1.7 - STRATEGIC PLANNING			30 000		
2.1 - FINANCIAL SERVICES			30 000		
2.3 - FINANCE MANAGEMENT GRANT			200 000	100 000	100 000
3.1 - CORPORATE SERVICES	230 000	262 000	30 000	50 000	50 000
3.4 - ENVIRONMENTAL HEALTH			33 000		
3.5 - CIVIL DEFENCE		1 300 000	701 754		
4.1 - ROADS			100 000	100 000	100 000
<b>Grand Total</b>	<b>230 000</b>	<b>1 562 000</b>	<b>1 154 754</b>	<b>250 000</b>	<b>250 000</b>

### **Summary Of Budget Per Funding Source:**

	Budget 2016/17	Revised Budget 2016/17	2017/2018	2018/2019	2019/2020
Fund: Operational - Revenue - General Revenue - Equitable Share			123 000		
Fund: Operational - Revenue - General Revenue - Operational Revenue	230 000	262 000	30 000	50 000	50 000
Fund: Operational - Transfers and Subsidies - Monetary Allocations - National Government - Local Government Financial Management Grant [Schedule 5B]			200 000	100 000	100 000
Fund: Operational - Transfers and Subsidies - Monetary Allocations - Provincial Government - Western Cape - Other - Financial Management Support		1 300 000	701 754		
Fund: Operational - Transfers and Subsidies - Monetary Allocations - Provincial Government - Western Cape - Public Transport - Planning, Maintenance and Rehabilitation of Transport Systems and Infrastructure			100 000	100 000	100 000
<b>Grand Total</b>	<b>230 000</b>	<b>1 562 000</b>	<b>1 154 754</b>	<b>250 000</b>	<b>250 000</b>



## OPERATING BUDGET

### EXPENDITURE

#### Summary Of Expenditure Budget Per GRAP Item:

	Approved Budget 2016/17	Revised Budget 2016/17	2017/2018	2018/2019	2019/2020
Depreciation & asset impairment	254 904	254 904	250 500	264 779	279 606
Employee related costs	16 760 237	17 427 466	36 117 342	38 086 963	40 229 059
Other expenditure	56 146 509	56 124 610	31 564 244	31 437 039	33 050 398
Remuneration of councillors	3 668 014	3 498 014	3 846 385	4 065 628	4 293 304
(blank)					
<b>Grand Total</b>	<b>76 829 664</b>	<b>77 304 994</b>	<b>71 778 470</b>	<b>73 854 408</b>	<b>77 852 367</b>

The decrease in the operating budget amounts to R5.5 million for the 2017/2018 financial year and represents a decrease of 7.15 % over the 2016/2017 adjustment budget. The decrease in budget can be ascribed to decreases in the number and extend of projects that the Municipality can undertake as a result of a decrease in grant funding.

A summary of the operating budget is attached herewith and includes all operating expenditure necessary for operating the Municipality for the 2017/2018 financial year.

The operating budget was based on the average inflation rate estimates of 6.4 % for 2017/2018, 5.7% for 2018/2019 and 5.6% for 2019/2020 as indicated in the MFMA Circular number 86. Where other factors impacting on the budget are known, it has been calculated as such and is included in the budget figures.

Salary and related expenditure, excluding remuneration of public office bearers, amounts to R 36.117 million or 50 % of the total expenditure. A comparison with the 2016/2017 figures indicate an increase of R 18.7 million. This increase in expenditure is as a direct result of the re-classification of expenditure items in terms of mSCOA, as the Roads salary and related expenditure was previously budgeted as Other Expenditure.

The Roads Department budget was based on the 2017/2018 allocation as contained in the Memorandum of Understanding entered into between the Municipality and the Department of Transport. The allocation also relates to the Department of Transport's financial year that stretches from 1 April 2017 to 31 March 2018. Changes to the Roads budget will therefore be made during the adjustment budget process to allow for the expenditure incurred during 1 April 2016 to 30 June 2017. The impact of the flood damage to the Swartberg Pass on the Roads budget is also not yet known, but it is envisioned that the planned expenditure and projects of the Roads Department will be impacted by rebuilding of the Pass.

### **Summary Of Roads Expenditure Budget Per Combined Project Name:**

	Sum of 2017/2018	Sum of 2018/2019	Sum of 2019/2020
<b>4.1 - ROADS</b>			
Operational: Maintenance - Infrastructure - Corrective Maintenance - Emergency - Roads Infrastructure - Road Structures - Civil Structures	1 609 938	1 701 704	1 797 000
Operational: Maintenance - Infrastructure - Corrective Maintenance - Planned - Roads Infrastructure - Road Structures - Civil Structures	16 266 134	17 199 004	18 167 748
Operational: Maintenance - Infrastructure - Preventative Maintenance - Condition Based - Roads Infrastructure - Road Furniture - Traffic Signs	55 230	58 378	61 648
Operational: Maintenance - Infrastructure - Preventative Maintenance - Condition Based - Roads Infrastructure - Road Structures - Civil Structures	7 083 726	7 487 498	7 906 798
Operational: Maintenance - Infrastructure - Preventative Maintenance - Interval Based - Roads Infrastructure - Road Structures - Civil Structures	7 083 726	7 230 883	7 635 812
Operational: Maintenance - Non-infrastructure - Corrective Maintenance - Emergency - Furniture and Office Equipment	15 041	15 898	16 788
Operational: Maintenance - Non-infrastructure - Corrective Maintenance - Emergency - Machinery and Equipment	744	787	831
Operational: Maintenance - Non-infrastructure - Corrective Maintenance - Emergency - Other Assets - Operational Buildings - Depots - Buildings	45 277	47 858	50 538
Operational: Municipal Running Cost	6 460 185	6 803 741	7 184 750
Operational: Typical Work Streams - Capacity Building Training and Development - ABET and Life Long Learning Programme	250 000	264 250	279 048
	<b>38 870 000</b>	<b>40 810 000</b>	<b>43 100 960</b>

## **REVENUE**

The budgeted revenue (including capital grant revenue) for the 2017/2018 financial year amounts to R 78.882 million.

### **Summary of Revenue Budget per source:**

Row Labels	Budget 2016/17	Revised Budget 2016/17	2017/2018	2018/2019	2019/2020
Agency services	3 711 000	3 711 000	3 418 421	3 588 596	3 789 558
Interest earned - external investments	500 000	550 000	550 000	581 350	613 906
Other expenditure	1 488 767	1 488 767			
Other revenue	39 778 616	39 024 640	41 531 055	42 774 449	45 072 782
Rental of facilities and equipment	50 000	72 000	72 000	76 104	80 366
Transfers and subsidies	31 532 000	32 736 029	26 705 300	29 887 115	32 894 400
Transfers and subsidies - capital (monetary allocations) (National / Provincial and District)		1 300 000	1 000 000	100 000	100 000
<b>Grand Total</b>	<b>77 060 383</b>	<b>78 882 436</b>	<b>73 276 776</b>	<b>77 007 614</b>	<b>82 551 012</b>

### **Summary of Revenue Budget per Municipal Function:**

	Budget 2016/17	Revised Budget 2016/17	2017/2018	2018/2019	2019/2020
1.1 - MUNICIPAL MANAGER	4 499 478	4 623 558	2 157 000	653 966	2 698 295
1.2 - COUNCIL GENERAL EXPENSES	5 474 698	5 474 698	22 595 000	28 426 000	29 394 000
1.3 - INTERNAL AUDIT	1 355 459	1 355 459	900 000	600 000	600 000
1.5 - EDA	665 056				
1.7 - STRATEGIC PLANNING	736 188	936 188			
2.1 - FINANCIAL SERVICES	8 224 221	8 906 221	2 022 000	1 757 454	1 794 271
2.3 - FINANCE MANAGEMENT GRANT	900 000	760 000	1 250 000	1 000 000	1 000 000
3.1 - CORPORATE SERVICES	12 549 336	12 570 365	4 547 421	3 622 824	3 824 023
3.2 - TOURISM	889 442	889 442		0	0
3.4 - ENVIRONMENTAL HEALTH	2 126 927	2 126 927	35 355	37 370	39 463
3.5 - CIVIL DEFENCE	1 040 811	2 640 811	800 000	0	0
3.7 - WORK FOR WATER	1 488 767	1 488 767		0	0
4.1 - ROADS	37 110 000	37 110 000	38 970 000	40 910 000	43 200 960
<b>Grand Total</b>	<b>77 060 383</b>	<b>78 882 436</b>	<b>73 276 776</b>	<b>77 007 614</b>	<b>82 551 012</b>

### **TARIFFS**

It is important to ensure the financial sustainability and economic viability of the Municipality and these principles were therefore applied in the determination of the environmental health tariffs for the 2017/2018 financial year.

### **FINANCIAL VIABILITY AND SUSTAINABILITY**

The Municipality must ensure the financial sustainability of its operations and ensure that it operates as a going concern. The budget for 2017/2018 financial year as well as the outer 2 years are funded.

### **SDBIP (SERVICE DELIVERY AND BUDGET IMPLEMENTATION PLAN)**

The Municipality's business and service delivery priorities were reviewed as part of this year's planning and budget process. The top level service delivery and budget implementation plan will be submitted to the Executive Mayor within 14 days of approval of the Annual Budget and the IDP for approval by the Executive Mayor within 28 days as per section 69 and section 53 of the Municipal Finance Management Act. The SDBIP will be submitted to Council after approval by the Executive Mayor for information purposes.

## **POLICY CHANGES**

Management has conducted the required annual review of all budget related policies. Two workshops were held with the Council and management team to review, update or re-do all budget related policies other than the Long Term Financial Plan.

**S JOOSTE**

**MUNICIPAL MANAGER**

## **CHAPTER 4 – ANNUAL BUDGET TABLES**

See Annexure C

## **CHAPTER 5 – OVERVIEW OF THE ANNUAL BUDGET PROCESS**

The entire budget process is prescribed by the Municipal Finance Management Act.

Section 21(1) (b) of the MFMA requires the mayor to table not later than 10 months before the start of the budget year a time schedule outlining the key deadlines and processes for the preparation, tabling and approval of the Annual Budget, the review of the IDP and budget related policies and any consultation process which would be part of the process.

The time schedule was tabled to the Council in September 2016, the Local Government election was only held in August 2016 and the Council was only constituted on 18 August 2016.

The consultation process involves presenting and eliciting comments from the public and meetings were held in Beaufort West, Laingsburg and Murraysburg.

The following stakeholders are identified:

- 1 community
- 2 senior management
- 3 the work force
- 4 trade unions
- 5 agricultural forums
- 6 general public and interested parties
- 7 local municipalities
- 8 national and provincial sector departments

### ***Political oversight of the process***

The schedule of key deadlines was submitted to management to monitor the progress of the process by officials against the schedule tabled by the Executive Mayor.

### ***Consultations & advertisements***

Advertisements was placed in the local newspapers circulating in the area of jurisdiction and district informing the community of the approval of the budget. No response was received from the community in relation to the tabled budget.

## **Stakeholders**

The following stakeholders have been consulted:

- National Treasury
- Provincial Treasury
- B Municipalities in area
- Provincial sector departments
- Community

A LG MTEC Conformance Assessment was performed. The Conformance Assessment is an important stage of the LG MTEC process in order to ensure compliance with the MFMA, MSA, MBRR, MFMA Circulars and Environmental and Development Planning Legislation and Guidelines.

Provincial Treasury in conjunction with the Departments of Local Government and Environmental Affairs and Development Planning reviewed the tabled Budget, IDP and associated documents. The findings of this conformance assessment was taken into account in the finalization of the Annual Budget.

## **CHAPTER 6 - ALIGNMENT OF ANNUAL BUDGET WITH INTEGRATED DEVELOPMENT PLAN**

### ***The review process focussed on:***

- ❖ Improving the **strategic nature** of the document, thereby ensuring effective use of available data, careful consideration of available resources, as well as exploring locally appropriate solutions to complex development issues.
- ❖ Increasing the usefulness of the document during **implementation** and monitoring.

### ***The process was influenced by:***

- ❖ Project progress information as provided by Heads of Departments
- ❖ An extensive data search to update the analysis chapter.
- ❖ Inputs from community based planning initiatives

The alignment of the IDP with the budget is illustrated in the A Schedule. In addition, find attached as Annexure B the mSCOA project register as included in the IDP.

These allocations are to link up with the Service Delivery and Budget Implementation plan. A Service Delivery and Budget Implementation Plan has been developed and is tabled with the final budget to Council. The final SDBIP needs to be approved within 28 days after the adoption of the budget. KPA's and KPI's have been developed and strategic alignment between IDP, Budget and SDBIP is ascertain.

## **CHAPTER 7 - MEASURABLE PERFORMANCE OBJECTIVES AND INDICATORS**

The Municipality's business and service delivery priorities were reviewed as part of this year's planning and budget process. The top level service delivery and budget implementation plan will be submitted to the Executive Mayor within 14 days of approval of the Annual Budget and the IDP for approval by the Executive Mayor within 28 days as per section 69 and section 53 of the Municipal Finance Management Act. The SDBIP will be submitted to Council after approval by the Executive Mayor for information purposes.

## **CHAPTER 8 – OVERVIEW OF BUDGET RELATED POLICIES**

### **BUDGET RELATED POLICIES**

The prioritization of service delivery and the management of council functions is the key to the budget. Central Karoo District Municipality's budget process is guided and governed by legislation regulations and budget related policies. Central Karoo District Municipality embarked on a process of reviewing all financial and budget related policies during the budget process for 2017/2018 financial year.

Two workshops were held with the Council and management team to review, update or re-do all budget related policies other than the Long Term Financial Plan.

The following policies have been drafted, reviewed or re-done during the annual review process:

1. Credit Control And Debt Collection Policy
2. Supply Chain Management Policy
3. Virement Policy
4. Cash Management And Investment Policy
5. Borrowing Policy
6. Funding And Reserve Policy
7. Asset Management Policy
8. Risk Management Policy
9. MFMA Delegations Register
10. Anti-Corruption And Fraud Prevention Policy
11. Budget Policy
12. Unforeseen And Unavoidable Expenditure Policy
13. Tariff Policy
14. Whistle Blowing Policy
15. The Relief Fund Policy
16. Infrastructure Procurement Policy
17. Municipal Entities Policy
18. Travel And Subsistence Policy
19. Tools Of Trade Policy
20. Overtime Policy
21. Recruitment And Selection Policy
22. Annual Leave
23. Acting Policy
24. Grants In Aid Policy

## **CHAPTER 9 – OVERVIEW OF THE BUDGET ASSUMPTIONS**

The budget for the 2017/2018 financial year was drawn up with the following assumptions and principles taken into account:

- The budget is prepared in terms of the provisions of the Generally Recognized Accounting Practice framework to comply with the provisions of the MFMA GRAP implementation dates.
- The impact of the Municipal Standard Chart of Accounts was taken in to account during the budget preparation to ensure that the Municipality can commence transaction on MSCOA on 1 July 2017.
- Revenue figures are based on realistic estimates of revenue to be collected.
- Actual revenue collected for the current year and realistic revenue projections were taken into account in determining the revenue for the coming year.
- The principals of economic viability and sustainability is applied in all services and where possible no cross subsidization is done between services.
- National growth parameters were used as far as possible for the determination of outer year budget amounts.
- A general salary increase of 7.4 % is used for the determination of the salaries of staff whilst CPI was used for increase in salaries for the Public office bearers
- The Municipality still relies heavily on grants and subsidies for funding of the capital requirements for the 2017/2018 financial year.
- Only funded capital projects are included in the capital estimates for the 2017/2018 financial year.
- Both the capital and operating budgets are informed by the IDP process done through a public participation process.



## **CHAPTER 10 - BUDGET FUNDING**

### **FUNDING OF BUDGET EXPENDITURE**

Operating expenditure to the amount of R 71 778 470 and Capital expenditure of R 1 154 754 will be funded through the following sources:

	<b>2017/2018</b>	<b>2018/2019</b>	<b>2019/2020</b>
Capacity Building Grant	240 000	360 000	480 000
Department of Transport Roads	38 970 000	40 910 000	43 200 960
EPWP Incentive	1 095 000		
Finance Management	1 250 000	1 000 000	1 000 000
Interest earned - external investments	550 000	581 350	613 906
LG SETA	30 000	30 000	30 000
Local Government Equitable Share	22 595 000	28 426 000	29 394 000
Other revenue	5 949 476	5 423 046	5 631 380
Rental of facilities and equipment	72 000	76 104	80 366
Rural Roads Assets Management Systems Grant	1 725 300	201 115	2 120 400
WP Financial Management Support Grant	800 000		
<b>Grand Total</b>	<b>73 276 776</b>	<b>77 007 614</b>	<b>82 551 012</b>

### **FISCAL SUSTAINABILITY OF THE MUNICIPALITY**

Budget control is exercised in order to ensure that operating expenditure does not exceed actual operating revenue received.

The credit control policy will be strictly enforced in the 2017/2018 financial year to ensure that all monies due to the Municipality is collected in further contribution to the sustainable rendering of services.

### **FINANCIAL CHALLENGES AND CONSTRAINTS**

Central Karoo District Municipality faces the following financial challenges:

- 1) Achieving financial stability in the medium term and long term
- 2) Dependence on grant funding
- 3) Managing cost
- 4) Exploring alternative revenue sources

A long term financial plan will be compiled during 2017/2018 to ensure that these challenges are addressed.

## **FINANCIAL RISKS**

Financial risks include:

- Changes in inflation rate and other variables
- Unemployment trends
- Global financial instability

## **FUNDING COMPLIANCE IN TERMS OF SECTION 18 OF THE MFMA**

In compliance with the requirements of Section 18 of the MFMA, the revenue budget was based on the following principles:

- Realistically anticipated revenue to be collected.
- Actual revenue of previous years was taken into account.
- Capital projects were only included if funding confirmation was received, either by means of the DORA allocations as promulgated or by means of commitment from funding institutions.

## **PARTICULARS OF PLANNED SAVINGS OVER THE MEDIUM TERM**

The principle of value adding in all aspects of the administration and service rendering is applied and no expenditure is incurred unless value is added to the municipal administration or services. Care is taken in administrative and supply chain processes to ensure that real economic benefit flows to the Municipality as a result of funds being spent.

The following expenditure items are closely monitored:

- Travelling and subsistence
- Telephone expenses.
- Overtime and standby allowances
- Workshops and conferences.
- Fuel and maintenance expenditure in respect of service delivery vehicles

## **CONTRIBUTIONS OR DONATIONS IN CASH OR IN-KIND**

No donations are budgeted for the 2017/2018 financial year. Support to the community will be given in terms of the Mayoral Fund policy.

## **PARTICULARS OF THE MUNICIPALITY'S INVESTMENTS**

Investments are made when funds are available in line with the Cash management and Investment policy.

## PARTICULARS OF BANK OVERDRAFTS AND CREDIT FACILITIES

The Municipality does not have a bank overdraft facility.

## PARTICULARS OF GRANTS AND SUBSIDIES RECEIVED

The budgeted grants to be received for the 2017/2018 financial year are as follows:

<b>GRANT</b>	<b>2016/17</b>	<b>2017/18</b>	<b>Movement</b>	<b>% movement</b>	<b>2018/19</b>	<b>% fluctuation 2018/19</b>	<b>2019/20</b>	<b>% fluctuation 2019/20</b>
<b>DIVISION OF REVENUE ACT 2016/17</b>								
EQUITABLE SHARE	19 416 000	22 595 000	3 179 000	16,4%	28 426 000	25,8066%	29 394 000	3,41%
LOCAL GOVERNMENT FINANCIAL MANAGEMENT GRANT	1 250 000	1 250 000	-	0,0%	1 000 000	-20,0%	1 000 000	0,0%
RURAL ROADS ASSET MANAGEMENT SYSTEM GRANT	1 866 000	1 917 000	51 000	2,7%	2 117 000	10,4%	2 232 000	5,4%
MUNICIPAL SYSTEMS IMPROVEMENT GRANT	-	-	-	n/a	3 124 000	n/a	-	-100,0%
EXPANDED PUBLIC WORKS PROGRAMME INTEGRATED GRANT	1 000 000	1 095 000	95 000	9,5%	-	-100,0%	-	n/a
<b>TOTAL ALLOCATIONS AS PER DORA</b>	<b>23 532 000</b>	<b>26 857 000</b>	<b>3 325 000</b>	<b>14,1%</b>	<b>34 667 000</b>	<b>29,1%</b>	<b>32 626 000</b>	<b>-5,9%</b>
<b>WC SUPPORT GRANTS 2017/18 - 2019/20</b>								
WC FINANCIAL MANAGEMENT SUPPORT GRANT	2 430 000	-	(2 430 000)	-100,0%	-	0,0%	-	0,0%
MUNICIPAL DROUGHT SUPPORT GRANT	300 000	-	(300 000)	-100,0%	-	0,0%	-	0,0%
FIREFIGHTING CAPACITY BUILDING GRANT	1 300 000	800 000	(500 000)	-38,5%	-	-100,0%	-	0,0%
WC FINANCIAL MANAGEMENT CAPACITY BUILDING GRANT	120 000	240 000	120 000	100,0%	360 000	50,0%	480 000	
MUNICIPAL PERFORMANCE MANAGEMENT GRANT	21 029	-	(21 029)	-100,0%	-	0,0%	-	0,0%
INTEGRATED DEVELOPMENT PLAN GRANT	200 000	-	(200 000)	-100,0%	-	0,0%	-	n/a
<b>TOTAL ALLOCATIONS</b>	<b>4 371 029</b>	<b>1 040 000</b>	<b>(3 331 029)</b>	<b>-76,2%</b>	<b>360 000</b>	<b>-65,4%</b>	<b>480 000</b>	<b>33,3%</b>
<b>DEPARTMENT OF ROADS GRANTS 2017/18 - 2019/20</b>								
GENERAL MAINTENANCE	18 210 000	19 120 000	910 000	5,0%	20 080 000	0,0%		
SPECIFIC PROJECTS	18 900 000	19 850 000	950 000	5,0%	20 830 000	0,0%		
	37 110 000	38 970 000	1 860 000	5,0%	40 910 000	5,0%		
<b>TOTAL INCOME</b>	<b>65 013 029</b>	<b>66 867 000</b>	<b>1 853 971</b>	<b>2,9%</b>	<b>75 937 000</b>	<b>13,6%</b>		

## **CHAPTER 12 – ALLOCATIONS AND GRANTS MADE BY THE MUNICIPALITY**

No budget provisions were made for allocations or grants made by the Municipality, other than a provision for the audit of CKEDA for the period 1 July 2016 to 30 September 2016.

## **CHAPTER 13 – COUNCILLOR ALLOWANCES AND EMPLOYEE BENEFITS**

The budget for Council Allowances was prepared based on a CPI related increase on the current allowances as contained in the Remuneration Of Public Office Bearers Act : Determination Of Upper Limits Of Salaries, Allowances And Benefits Of Different Numbers Of Municipal Councils.

The budget for senior management was prepared based on a CPI related increases on the current salary packages and the information contained in the Draft Notice: Upper limits of total remuneration packages payable to Senior Managers for 2017/2018.

The South African Local Government Bargaining Council entered into a three-year Salary and Wage Collective Agreement for the period 01 July 2015 to 30 June 2018. The preparation of the 2017/18 MTREF constitutes implementation of the last year of the agreement which municipalities must implement, thus 2017/18 Financial Year – average CPI (Feb 2016 – Jan 2017) + 1 per cent.

## **CHAPTER 14 – MONTHLY TARGETS – REVENUE, EXPENDITURE AND CASH FLOW**

The targets are detailed in the budget tables, included in Annexure C

## **CHAPTER 15 – ANNUAL BUDGETS AND SDBIP PLANS – INTERNAL DEPARTMENTS**

Refer to Chapter 4 and 5 of the IDP and the final SDBIP

## **CHAPTER 16 – ANNUAL BUDGETS AND SDBIP PLANS – MUNICIPAL ENTITIES**

The municipal entity – Central Karoo Economic Development Agency (CKEDA) is in the process of being deregistered. The Municipality budgeted for the audit fees to be paid re CKEDA for the period 1 July 2016 to 30 September 2016.

## **CHAPTER 17 - CONTRACTS HAVING FUTURE BUDGETARY IMPLICATIONS**

There are no contracts with future budgetary implications other than operational contracts such as the contract for the financial system with SEBATA.

## **CHAPTER 18 – CAPITAL EXPENDITURE DETAILS**

The capital requirements are only indicative of the confirmed funding for the MTEF and do not include issues of priority where funding applications are in process and have not yet been confirmed.

The Municipality is funding 39% of the capital budget using internally generated funds and the expenditure is focused on replacing the outdated computer equipment, providing office furniture for newly appointed staff and ensuring that the Environmental Health Department has the required tools and equipment to carry out the required testing in line with best practices.

### **Summary Of Capital Budget Per Standardized Project:**

	Approved Budget 2016/17	Revised Budget 2016/17	2017/2018	2018/2019	2019/2020
<b>Additions</b>					
Capital: Non-infrastructure - New - Computer Equipment	10 000	192 000	45 000	50 000	50 000
Capital: Non-infrastructure - New - Furniture and Office Equipment	50 000	70 000	398 000	250 000	250 000
Capital: Non-infrastructure - New - Machinery and Equipment	180 000	1 300 000	711 754	-	-
<b>Additions Total</b>	<b>240 000</b>	<b>1 562 000</b>	<b>1 154 754</b>	<b>300 000</b>	<b>300 000</b>
<b>Grand Total</b>	<b>240 000</b>	<b>1 562 000</b>	<b>1 154 754</b>	<b>300 000</b>	<b>300 000</b>

### **Summary Of Capital Budget Per Municipal Function:**

	Approved Budget 2016/17	Revised Budget 2016/17	2017/2018	2018/2019	2019/2020
1.1 - MUNICIPAL MANAGER			30 000		
1.7 - STRATEGIC PLANNING			30 000		
2.1 - FINANCIAL SERVICES			30 000		
2.3 - FINANCE MANAGEMENT GRANT			200 000	100 000	100 000
3.1 - CORPORATE SERVICES	230 000	262 000	30 000	50 000	50 000
3.4 - ENVIRONMENTAL HEALTH			33 000		
3.5 - CIVIL DEFENCE		1 300 000	701 754		
4.1 - ROADS			100 000	100 000	100 000
<b>Grand Total</b>	<b>230 000</b>	<b>1 562 000</b>	<b>1 154 754</b>	<b>250 000</b>	<b>250 000</b>

### **Summary Of Budget Per Funding Source:**

	<b>Budget 2016/17</b>	<b>Revised Budget 2016/17</b>	<b>2017/2018</b>	<b>2018/2019</b>	<b>2019/2020</b>
Fund: Operational - Revenue - General Revenue - Equitable Share			123 000		
Fund: Operational - Revenue - General Revenue - Operational Revenue	230 000	262 000	30 000	50 000	50 000
Fund: Operational - Transfers and Subsidies - Monetary Allocations - National Government - Local Government Financial Management Grant [Schedule 5B]			200 000	100 000	100 000
Fund: Operational - Transfers and Subsidies - Monetary Allocations - Provincial Government - Western Cape - Other - Financial Management Support		1 300 000	701 754		
Fund: Operational - Transfers and Subsidies - Monetary Allocations - Provincial Government - Western Cape - Public Transport - Planning, Maintenance and Rehabilitation of Transport Systems and Infrastructure			100 000	100 000	100 000
<b>Grand Total</b>	<b>230 000</b>	<b>1 562 000</b>	<b>1 154 754</b>	<b>250 000</b>	<b>250 000</b>

### **CHAPTER 19 – LEGISLATION COMPLIANCE STATUS**

The Municipal Finance Management Act brought about uniformity, accountability and control measures to local government in terms of financial reporting and budgeting. The Act required a high level of transformation financial disciplines and planning.

New budget regulations were published in Gazette nr. 32141 on 17 April 2009. The object of these regulations is to secure sound and sustainable management of the budgeting and reporting practices of municipalities by establishing uniform norms and standards and other requirements for ensuring transparency, accountability and appropriate lines of responsibility in the budgeting and reporting process. The 2017/2018 budgets for all municipalities needs to comply with these regulations.

## CHAPTER 20 – OTHER SUPPORTING DOCUMENTATION – SERVICE LEVEL STANDARDS

### PERFORMANCE LEVELS STANDARDS

Performance Indicators listed below outline the minimum requirement expected by the council with regards to generic administrative tasks. Some services or teams undertaking specialist administrative tasks may require service

Service Area	Key Performance Indicator	Monitoring period	Weighting/ Priority	Required performance level (Minimum performance level)									
				Date/Period (Year)									
				1	2	3	4	5	6	7	8	9	10
	<i>Definition - Summary of requirement</i>	<i>Monthly, quarterly etc</i>	<i>High, Medium, Low</i>										
Answering telephones	To answer telephone calls within 5 rings or 15 seconds	Monthly	High	80%	85%	90%	95%	100%	100%	100%	100%	100%	100%
Complaints	% of complaints dealt with in accordance with the council's procedure.	Quarterly	High	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Answering correspondence	Number of working days in which correspondence is dealt with (not including complaints correspondence)	Monthly	High	14	14	12	12	10	10	8	8	5	5
Mail/Post	Outgoing mail cleared every day	Monthly	High	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Filing	Updating databases- new information to be entered (days)	Monthly	High	1	1	1	1	½	½	½	½	¼	¼
Filing	Clear all filing (days)	Monthly	High	5	4	4	3	2	1	1	1	1	1
Financial	Payment of invoices	Monthly	High	5	4	4	3	2	1	1	1	1	1
Financial	Time taken to issue invoices (in working day)	Monthly	High	14	12	9	7	5	4	3	2	1	1

## **CHAPTER 21 – ANNUAL BUDGET - ENTITIES**

The municipal entity – Central Karoo Economic Development Agency (CKEDA) is in the process of being deregistered. The Municipality budgeted for the audit fees to be paid re CKEDA for the period 1 July 2016 to 30 September 2016.

No IDP, Annual Budget or SDBIP has thus been compiled for the municipal entity, DKEDA as the entity will not be functional during 2017/2018 and will not enter into any transactions.

## **CHAPTER 22 – MUNICIPAL MANAGER'S QUALITY CERTIFICATE**

I, **Sefanus Jooste**, municipal manager of Central Karoo District Municipality hereby certify that the annual budget and supporting documentation have been prepared in accordance with the Municipal Finance Management Act and the regulations made under the Act, and that the annual budget and supporting documents are consistent with the Integrated Development Plan of the Municipality.

**STEFANUS JOOSTE**

**Municipal Manager of the Central Karoo District Municipality**

**DC5**

A handwritten signature in black ink, appearing to read 'S. Jooste', is written over a horizontal line.

**25 May 2017**



# ANNEXURE A

# CENTRAL KAROO DISTRICT MUNICIPALITY

## SECTION: MUNICIPAL HEALTH SERVICES

**RATES: 2017/18 FINANCIAL YEAR**

Rates are based on actual cost; Calculations were done on an EHP salary, including fringe benefits before the new budget year, plus a percentage increase ( 6%) and then rounded to the nearest R10.00; Rates are determined by the time spend on a service - R230 = full hour, R115 = half an hour and R60 for quarter of an hour; With the rounding the 6% decreased to 4.55%; In the previous book year the NHLS Laboratorium closed in Cape Town and samples were redirected to Johannesburg with a lot of difficulties and the credibility of the results were in dispute. The NHLS provided their own transport and did not ask VAT on the services rendered. With the change to Merieux Nutri Science the CKDM has to pay for the courier and VAT that brought higher costs to the CKDM and client, where applicable.

1	WATER QUALITY MONITORING	Total Cost	COMMENTS
1,1	<b>SAMPLING</b>		
1.1.1	<b>Bacteriological Water Sampling: -</b> * On behalf of Water Services Authority (WSA) / Private Premises; or * Application for a CoA / HC for a food or other premises not serviced by a WSA  <b>Per sampling session + actual costs:-</b>  * Administration cost  * Bacteriological Laboratory Cost for one (1) sample  * Courier cost per sample	Sub-total  R465,00  R115,00  R250,00  R100,00	  4,55% Actual cost Actual cost
1.1.2	<b>Chemical Water Sampling: -</b> * On behalf of Water Services Authority (WSA) / Private Premises; or * Application for a CoA / HC for a food or other premises not serviced by a WSA  <b>Per sampling session:-</b>  * Administration cost  * Laboratory Cost (Water) (Depend on determinants tested)  * Courier cost per sample	Sub-total  R215.00 plus Quote cost  R115,00 Quote required R100,00	  (Quote required before sampling) 4,55% Actual cost Actual cost
1.1.3	<b>Follow-up samples: -</b> Where a sample does not meet the set standards after a person in charge was notified, in writing, of the date of such follow-up sample and the responsibility to pay for such sample(s), if the follow up sample is not compliant	As above (1.1.2)	
2	<b>FOOD CONTROL</b>	<b>Total Cost</b>	<b>COMMENTS</b>

2, 1	ISSUING OF CERTIFICATE OF ACCEPTABILITY (CoA) TO FOOD PREMISES			
Premises must be operated under a valid Certificate of Acceptability issued by an EHP, to the effect that the premises comply with the requirements of food safety related legislation.				
A CoA may be withdrawn by an EHP where conditions of the premises are such that they pose a hazard or risk to the service users.				
CoA's must be renewed by an EHP;				
* In case of change of Person in Charge;				
* In the case of renovations/additions to the existing premises; and				
* If the services moves from one premises to another.				
No application forms are accepted without proof of payment of application fee				
2.1 .1	CoA's for food premises i.t.o. Regulation for General Hygiene Requirements for Food Premises & the Transport of Food, R962 of 2012	R230,00	4,55%	
2, 2	ISSUING OF OTHER FOOD RELATED CERTIFICATES			
2.2 .1	Export Certificates ito. foodstuffs.	R230,00	4,55%	
2.2 .2	Certificate for the removal/destruction of food stuffs, unfit for human consumption.	R115,00	4,55%	
2.2 .3	Competency Certificates to Milking Sheds ito. Regulations relating to Hygiene Requirements for Milking Sheds, the Transport of Milk & related matters, R961 of 2012	R460,00	109.09% - Milking sheds only get an initial CoC. The possibility that it could be in a remote area as well as the complexity of such a service, a 2 hour rate was allocated.	
2.2 .4	Inspection carried out in terms of R962 with reference to an application for the lifting of a ban on the use of a premises or facility (Per hour or part of an hour spend on the application)	R230,00	4,55%	
2, 3	MILK SAMPLING			
2.3.1	Bacteriological Sampling - Unpasteurized milk and milk products for sale to the public	R715,00	4,55%	
	Per sampling session + actual costs: -			Sub-total
	* Administration cost			R115,00
	* Bacteriological Laboratory Cost for one (1) sample			R500,00
	* Courier Cost for one sample			R100,00
2, 4	FOLLOW-UP SAMPLES: FOOD			
2.4.1	Follow-up samples - where a sample does not meet the set standards after a person in charge was notified, in writing, of the date of such follow-up sample and the responsibility to pay for such sample(s), if not compliant - Failing determinant will be tested again	Depend on determinants tested for		
	Per sampling session + actual costs: -	Sub-total	R215,00	

	* Administration cost	R115,00		4,55%
	* Bact Laboratory Cost (Food) - depend on determinants tested.	Plus Determinants tested for		
	* Courier cost for one sample	R100,00		
	<b>Cost per determinant: -</b>	<b>Sub-total</b>		
	Coliforms	R119,63		6% - Provision for possible lab. cost increase
	E-Coli	R133,53		6% - Provision for possible lab. cost increase
	Staphylococcus Aureus	R135,95		6% - Provision for possible lab. cost increase
	Total Microbial Count	R107,55		6% - Provision for possible lab. cost increase
	Feecal Coliforms	R127,49		6% - Provision for possible lab. cost increase
	Bacillus: Aerobic Mesophilic Sporeformers	R146,22		6% - Provision for possible lab. cost increase
	Salmonella	R177,63		6% - Provision for possible lab. cost increase
	Yeast & Molds	R135,95		6% - Provision for possible lab. cost increase
	Other	Quote required		
<b>3</b>	<b>HEALTH SURVEILLANCE OF PREMISES</b>		<b>Total Cost</b>	<b>COMMENTS</b>
<b>3, 1</b>	<b>ISSUING OF HEALTH CERTIFICATES (HC) TO PUBLIC PREMISES</b>			
	Premises must be operated under a valid Health Certificate issued by an EHP, to the effect that the premises comply with EH norms and standards.			In terms of the new Norms and Standards a premises will now have to apply on an <b>annual</b> basis for a Health Certificate, therefore therefor the decrease in the rate
	A health certificate may be withdrawn by an EHP where conditions of the premises are such that they pose a hazard or risk to the service users.			
	Health certificates must be renewed by an EHP;			
	* Annually, or as otherwise indicated below; * In case of change of ownership; * In the case of renovations/additions to the existing premises; and * If the services moves from one premises to another.			
	No application forms are accepted without proof of payment of application fee			
<b>3.1.1</b>	Issuing of <b>Health Certificate</b> to Person in Charge with <b>1st APPLICATION</b> for -	<b>R115,00</b>		Decrease of 47.73% on previous HC rate
<b>3.1.2</b>	<b>RE-ISSUING</b> of Health Certificate to same Person in Charge thereafter for -	<b>R60,00</b>		Decrease of 72.73% on previous HC rate
	* Child Care Centres (incl. Youth care centers, ECD's, Drop-inn centers, care, Partial care, Hostels & Respite care)	Annually		
	* Nursing Homes	Annually		
	* Maternity Homes	Annually		

	* Old Age Homes	Annually	
	* Schools	Every 2 years	
	* Accommodation Establishments	Annually	
	* Beauty Salons - Annually	Annually	
	* Swimming pools & Spa Baths	Annually	
	* Offensive Trades	Annually	
3, 2	ISSUING OF MUNICIPAL HEALTH REPORTS (HR)		
3.2.1	Health Report in respect of an application for trading license in terms of the Businesses Act (Except for Food Premises)	R230,00	4,55%
4	MANAGEMENT OF HUMAN REMAINS	Total Cost	COMMENTS
4, 1	ISSUING OF CERTIFICATE OF COMPETENCY (CoC) TO MORTUARIES, FUNERAL UNDERTAKERS & CREMATORIUM		
Mortuaries, funeral undertaker's premises and crematorium premises must comply with requirements of the Regulations relating to the Management of Human Remains, R363 of 22 May 2013 published in terms of the National Health Act.			
Certificate of Competency may be withdrawn by an EHP where conditions of the premises are such that they pose a hazard or risk to the service users.			
Certificate of Competency must be renewed by an EHP;  * Every 2nd year; * In case of change of Certificate Holder - transfer; and * If the services moves from one premises to another.			
4.1.1	Issuing of Certificate of Competency to Person in Charge with 1st APPLICATION	R115,00	Decrease of 47.73% on previous CoC rate
4.1.2	RE-ISSUING of Certificate of Competency to same Person in Charge thereafter	R60,00	Decrease of 72.73% on previous CoC rate
4, 2	MONITORING OF EXHUMATION / RE-BURIAL OF HUMAN REMAINS		
Before permission for an approval may be granted the following must be obtained:  * A letter from the municipality indicating that the exhumation request is approved from a municipal perspective; * Copies of the I.D. documents of the deceased and the individual requesting the exhumation; * Copy of the death certificate;  * An affidavit from the next of kin stating that they are the closest living relative, why they want the body exhumed and where it will be reinterred; and  * Confirmation that the exhumations and re-interment will be done by a registered undertaker, with the details of the funeral.			
4.2 .1	Monitoring of Exhumation / Re-burial of human remains	R575,00	4,55%

# ANNEXURE B

Combined name-MUNICIPAL STANDARD CLASSIFICATION	KPI Indicator/Objective	Combined name-PROJECT	5 Digit Project Number
1.1 - MUNICIPAL MANAGER	Approved policies to enhance service delivery	Operational: Infrastructure Projects - Existing - Upgrading - Roads Infrastructure - Roads	10001
1.1 - MUNICIPAL MANAGER	Approved policies to enhance service delivery	Operational: Maintenance - Non-infrastructure - Corrective Maintenance - Emergency - Machinery and Equipment	10002
1.1 - MUNICIPAL MANAGER	Approved policies to enhance service delivery	Operational: Typical Work Streams - Capacity Building Training and Development - Workshops, Seminars and Subject Matter Training	10003
1.1 - MUNICIPAL MANAGER	To ensure the financial viability and sustainability of the Municipality	Operational: Infrastructure Projects - Existing - Upgrading - Roads Infrastructure - Roads	10004
1.1 - MUNICIPAL MANAGER	To improve road safety conditions	Operational: Infrastructure Projects - Existing - Upgrading - Roads Infrastructure - Roads	10005
1.1 - MUNICIPAL MANAGER	To Manage the Municipality to effectively deliver services within the legal framework	Operational: Infrastructure Projects - Existing - Upgrading - Roads Infrastructure - Roads	10006
1.1 - MUNICIPAL MANAGER	To Manage the Municipality to effectively deliver services within the legal framework	Operational: Typical Work Streams - Capacity Building Training and Development - Leadership Development	10007
1.1 - MUNICIPAL MANAGER	Approved policies to enhance service delivery	Capital: Non-infrastructure - New - Computer Equipment	20011
1.2 - COUNCIL GENERAL EXPENSES	To Manage the Municipality to effectively deliver services within the legal framework	Operational: Maintenance - Non-infrastructure - Corrective Maintenance - Emergency - Machinery and Equipment	10008
1.2 - COUNCIL GENERAL EXPENSES	To Manage the Municipality to effectively deliver services within the legal framework	Operational: Typical Work Streams - AIDS/HIV, Tuberculosis and Cancer - Aids Day	10009
1.2 - COUNCIL GENERAL EXPENSES	To Manage the Municipality to effectively deliver services within the legal framework	Operational: Typical Work Streams - Community Development - Youth Projects - Youth Development	10010
1.2 - COUNCIL GENERAL EXPENSES	To Manage the Municipality to effectively deliver services within the legal framework	Operational: Typical Work Streams - Functions and Events - Special Events and Functions	10011
1.2 - COUNCIL GENERAL EXPENSES	To Manage the Municipality to effectively deliver services within the legal framework	Operational: Typical Work Streams - Sport Development - Marathons, Sport and Recreation	10012
1.3 - INTERNAL AUDIT	Approved policies to enhance service delivery	Operational: Typical Work Streams - Capacity Building Training and Development - Workshops, Seminars and Subject Matter Training	10013
1.3 - INTERNAL AUDIT	Compliance to legislative requirements	Operational: Typical Work Streams - Capacity Building Training and Development - Workshops, Seminars and Subject Matter Training	10014
1.5 - EDA	To create an enabling environment for the promotion of economic development	Operational: Typical Work Streams - Local Economic Development - Training	10015
1.7 - STRATEGIC PLANNING	To create an enabling environment for the promotion of economic development	Capital: Non-infrastructure - New - Furniture and Office Equipment	20001
1.7 - STRATEGIC PLANNING	To create an enabling environment for the promotion of economic development	Operational: Typical Work Streams - Local Economic Development - Training	10016
1.7 - STRATEGIC PLANNING	To create an enabling environment for the promotion of economic development	Operational: Typical Work Streams - Strategic Management and Governance - IDP Planning and Revision	10017
2.1 - FINANCIAL SERVICES	To ensure the financial viability and sustainability of the Municipality	Capital: Non-infrastructure - New - Furniture and Office Equipment	20002
2.1 - FINANCIAL SERVICES	To ensure the financial viability and sustainability of the Municipality	Operational: Maintenance - Non-infrastructure - Corrective Maintenance - Emergency - Machinery and Equipment	10018
2.1 - FINANCIAL SERVICES	To ensure the financial viability and sustainability of the Municipality	Operational: Typical Work Streams - Capacity Building Training and Development - Workshops, Seminars and Subject Matter Training	10019
2.1 - FINANCIAL SERVICES	To ensure the financial viability and sustainability of the Municipality	Operational: Typical Work Streams - Property Rates Act Implementation - Valuation	10020

2.3 - FINANCE MANAGEMENT GRANT	To ensure the financial viability and sustainability of the Municipality	Capital: Non-infrastructure - New - Furniture and Office Equipment	20003
2.3 - FINANCE MANAGEMENT GRANT	To ensure the financial viability and sustainability of the Municipality	Operational: Typical Work Streams - Financial Management Grant - Budget and Treasury Office	10021
2.3 - FINANCE MANAGEMENT GRANT	To ensure the financial viability and sustainability of the Municipality	Operational: Typical Work Streams - Financial Management Grant - Interns Compensation	10022
2.3 - FINANCE MANAGEMENT GRANT	To ensure the financial viability and sustainability of the Municipality	Operational: Typical Work Streams - Financial Management Grant - Training Minimum Competency	10023
3.1 - CORPORATE SERVICES	To ensure the financial viability and sustainability of the Municipality	Capital: Non-infrastructure - New - Furniture and Office Equipment	20004
3.1 - CORPORATE SERVICES	To ensure the financial viability and sustainability of the Municipality	Capital: Non-infrastructure - New - Machinery and Equipment	20005
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3.4 - ENVIRONMENTAL HEALTH	To identify the possible environmental impacts of activities & the development of measures to minimize, mitigate and manage these impacts	Capital: Non-infrastructure - New - Furniture and Office Equipment	20007
3.4 - ENVIRONMENTAL HEALTH	To identify the possible environmental impacts of activities & the development of measures to minimize, mitigate and manage these impacts	Capital: Non-infrastructure - New - Machinery and Equipment	20008
3.4 - ENVIRONMENTAL HEALTH	To identify the possible environmental impacts of activities & the development of measures to minimize, mitigate and manage these impacts	Operational: Maintenance - Non-infrastructure - Corrective Maintenance - Emergency - Machinery and Equipment	10036
3.4 - ENVIRONMENTAL HEALTH	To identify the possible environmental impacts of activities & the development of measures to minimize, mitigate and manage these impacts	Operational: Typical Work Streams - Capacity Building Training and Development - Workshops, Seminars and Subject Matter Training	10037



3.4 - ENVIRONMENTAL HEALTH	To identify the possible environmental impacts of activities & the development of measures to minimize, mitigate and manage these impacts	Operational: Typical Work Streams - Environmental - Air Quality Management	10038
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# ANNEXURE B



## rural development & land reform

Department:  
Rural Development and Land Reform  
REPUBLIC OF SOUTH AFRICA

# AGRI-PARK MASTER PLAN

## Central Karoo District Municipality

### Western Cape Province

### April 2016



MANAGING FOR EXCELLENCE



Agri-Park Details	
<b>Province:</b>	Western Cape
<b>District:</b>	Central Karoo
<b>Agri-Hub Site:</b>	Beaufort West (Beaufort West Local Municipality)

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Department of Rural Development and Land Reform

\_\_\_\_\_ Date: \_\_\_\_\_ / \_\_\_\_\_ /2016

Director: Service Delivery Co-ordination  
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Department of Rural Development and Land Reform

\_\_\_\_\_ Date: \_\_\_\_\_ / \_\_\_\_\_ /2016

Municipal Manager: Central Karoo District Municipality

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## List of Abbreviations

Abbreviation	Description
<b>ABET</b>	Adult Basic Education and Training
<b>ABP</b>	Area Based Plan
<b>APAP</b>	Agriculture Policy Action Plan
<b>CARA</b>	Conservation and Agricultural Resource Act
<b>CASP</b>	Comprehensive Agriculture Support Programme
<b>CBO</b>	Community Based Organisation
<b>CBNRM</b>	Community-based Natural Resource Management
<b>CIF</b>	Capital Investment Framework
<b>CKDM</b>	<b>Central Karoo District Municipality</b>
<b>CKDRDP</b>	Cape Karoo District Rural Development Plan
<b>CRDP</b>	Comprehensive Rural Development Programme
<b>CSIR</b>	Council for Scientific and Industrial Research
<b>DBE</b>	Department of Basic Education
<b>DBSA</b>	Development Bank of Southern Africa
<b>DEA</b>	Department of Environmental Affairs
<b>PDEDAT</b>	Provincial Department of Economic Development and Tourism
<b>DFI</b>	Development Finance Institutions
<b>DM</b>	District Municipality
<b>DMA</b>	District Municipal Area
<b>DoE</b>	Department of Energy
<b>DRDLR</b>	Department of Rural Development and Land Reform
<b>EA</b>	Enumeration Area
<b>EIA</b>	Environment Impact Assessment
<b>EMF</b>	Environmental Management Framework
<b>EPWP</b>	Expanded Public Works Programme
<b>ETDP-SETA</b>	Education, Training and Development Practices- Sector Education and Training Authority
<b>FAO</b>	Food and Agriculture Organisation
<b>FET</b>	Further Education and Training
<b>FPL</b>	Food Poverty Line
<b>FPSU</b>	Farmer Production Support Units
<b>FR</b>	Functional Regions
<b>GDP</b>	Gross Domestic Product
<b>GVA</b>	Gross Value Added
<b>HDI</b>	Human Development Index
<b>HIV/AIDS</b>	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
<b>HR</b>	Human Resource
<b>ICT</b>	Information Communications and Technology



<b>IDC</b>	Industrial Development Corporation
<b>IDP</b>	Integrated Development Plan
<b>IGR</b>	Intergovernmental Relations
<b>IPAP</b>	Industrial Policy Action Plan
<b>IWRM</b>	Integrated Water Resource Management
<b>LED</b>	Local Economic Development
<b>LM</b>	Local Municipality
<b>LRAD</b>	Land Redistribution for Agricultural Development
<b>LUMS</b>	Land Use Management Strategy
<b>M &amp; E</b>	Monitoring and Evaluation
<b>MDG</b>	Millennium Development Goals
<b>MFMA</b>	Municipal Financial Management Act
<b>MIG</b>	Municipal Infrastructure Grant
<b>MPT</b>	Municipal Planning Tribunal
<b>MSDF</b>	Municipal Spatial Development Framework
<b>MTSF</b>	Medium Term Strategic Framework
<b>NARYSEC</b>	National Rural Youth Corps Strategy
<b>PSDF</b>	Western Cape Provincial Spatial Development Framework
<b>NDA</b>	National Development Agency
<b>NDP</b>	National Development Plan
<b>NEMA</b>	National Environmental Management Act
<b>NFSD</b>	National Framework for Sustainable Development
<b>NGO</b>	Non-Governmental Organisation
<b>NGP</b>	New Growth Path
<b>NMT</b>	Non-Motorised Transport
<b>NPO</b>	Non-Profit Organisation
<b>NSDP</b>	National Spatial Development Perspective
<b>NSSD</b>	National Strategy for Sustainable Development
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>PIC</b>	Public Investment Corporation
<b>PLAS</b>	Proactive Land Acquisition Strategy
<b>PPP</b>	Public Private Partnership
<b>RDP</b>	Rural Development Plan
<b>REID</b>	Rural Enterprise and Industrial Development
<b>RID</b>	Rural Infrastructure and Development
<b>SALGA</b>	South African Local Government Association
<b>SANBI</b>	South African National Biodiversity Institute
<b>SANRAL</b>	South African National Road Agency Limited
<b>SANS</b>	South African National Standards
<b>SDF</b>	Spatial Development Framework
<b>SETA</b>	Sector Education and Training Authority
<b>SIP</b>	Strategic Integrated Project
<b>SLP</b>	Social And Labour Plans

<b>SLAG</b>	Settlement for Land Acquisition Grant
<b>SMME</b>	Small Medium Micro Enterprise
<b>SPLUMA</b>	Spatial Planning And Land Use Management Act
<b>SPISYS</b>	Spatial Planning Information Systems
<b>StatsSA</b>	Statistic South Africa
<b>SWOT</b>	Strength, Weakness, Opportunities and Threats
<b>TOD</b>	Transit Orientated Development
<b>TRANCRAA</b>	Transformation of Certain Rural Areas Act
<b>TVET</b>	Technical Vocational Educational and Training
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organisation
<b>WFW</b>	Working for Water
<b>WWTW</b>	Waste Water Treatment Works
<b>WSA</b>	Water Service Authority
<b>WSP</b>	Water Service Provider

## Executive Summary

### Report Purpose:

This report has been commissioned by the Department of Rural Development and Land Reform to inform the way forward with the Eden District Agri Park initiative. This draft Central Karoo District Agri Park Master Plan provides a broad framework to guide the way forward. However, this report must continue to evolve and be viewed as work in progress as additional information comes to light and as the stakeholder engagement process deepens moving forward.

The purpose of the report is to provide a 10 year Agri-Park Master Plan Framework regarding priority agri-park agriculture commodities and agri-processing initiatives, required facilities and services, institutional options, and way forward issues regarding planning processes and detailed feasibility analysis so that The Eden District's emerging farmers can strengthen their participation in agriculture value chains.

### Western Cape Agriculture Sector:

The agricultural sector in the Western Cape employs about 160,000 people (2014) or 8.4% of all Provincial employment and its Gross Value Added grew at an annual average of 1.9% between 2003-2013 with future estimates and projections forecasting annual average growth of 2.3% between 2015-2020.

Although the region is regarded as climatically relatively stable, it has become increasingly prone to damaging climate extremes and disasters with direct damage costs associated with climate-related extreme events amounting to over R5 billion since 2003. The sector also faces significant non-climatic drivers and pressures including global market instability and rising input costs, competition against highly subsidised counterparts internationally, water and energy supply uncertainties, serious disease outbreaks, labour unrest, and land reform process uncertainties. All these factors are compounded by a growing urban population that is making demands on land, food and water.

According to the WWF-SA (2013), "South Africa has no surplus water and all future development will be constrained by this fact. Farmers will have to double their use of water by 2050 if they are to meet growing food demands using current farming practices. To avoid a crisis, water supply needs to be enhanced and water use efficiency increased."

### Central Karoo District Situation Analysis:

The Central Karoo District Municipality is the largest district in the Province spanning 38,854km<sup>2</sup>. It is comprised of three local municipalities: Laingsburg, Prince Albert and Beaufort West, and the District Management Area. The seat of the district is Beaufort West which is located along the N1 between Cape Town and Johannesburg.

In 2008, the total commercial farm area in the District was estimated at 3.9 million HA, with 34,970 HA transferred under land reform, and 23,230 HA under commonage land area. The Central Karoo District has a small number of agricultural commodities including small stock, stone fruit, Lucerne, fallow, planted perennial pastures and natural grazing areas. The Central Karoo District does not have large areas under irrigation and this places a constraint on the expanded production of many commodities. In terms of live-stock, large numbers of goats and sheep are concentrated in the District.

In the Central Karoo District in 2013, there were approximately 85,000 goats, over 415,000 sheep, over 11,000 cattle, 11,000 ostrich and 1,100 pigs. The Karoo Lamb Brand is becoming increasingly recognised and is one of the District's key competitive advantages.

#### **Priority Central Karoo District Agri Hub Commodities**

The Central Karoo District proposed Agri Park commodities have been identified using specific criteria and stakeholder inputs which include the potential for participation and growth for small and emerging farmers. The CK's selected dominant commodity for immediate (years 1 onwards) agri park focus is small stock (mainly goats and sheep) including meat, wool, and leather processing. A number of other commodities are also identified for medium and long term (3-10 years) agri park linkages (including vegetables, lucerne, flowers, and goat milk processing).

Increasing the productivity of the producers in the smallholder sector should be a major industry objective. This objective should start with the improvement of infrastructure, education of extension officers and simplified and easier access to credit (Spies, 2011). Various initiatives exist to improve live-stock management and the Agri Hub will need to strengthen partnerships with these initiatives.

There are at least five abattoirs in the District although none of these are operating at full capacity and the drought is further impacting on difficulties in finding sufficient supply of animals. The proposed strategy involves forming a partnership with one of the three abattoirs in Beaufort West to minimise infrastructure upgrading costs and maximise emerging farmer access to the value chain.

Key identified opportunities include the possibility of supplying major government institutions in the District including the Oudtshoorn Army base, the scope to apply new innovative technologies for the waterless cleansing of wool (Western Cape Department of Agriculture feasibility study underway), and linkages on the Tannery side with the numerous game farms in the District. Compliance with health standards and livestock improvement initiatives linked to emerging farmer partnerships to strengthen farm and financial management and access to credit will be critical to maximise these opportunities.

#### **Food processing opportunities in the Central Karoo District**

District food processing opportunities have been identified with potential in the short term (0-2 years), and medium to long term (2-10). While immediate the implementation focus of the Agri Park will be on the short-term opportunities, it is also important that planning and preparation to develop the medium and longer term processing opportunities also takes place in the short term. The medium and longer term opportunities will require production planning and emerging farmer capacity development in order to maximize emerging farmer participation in these opportunities.

##### **Short Term: 0-2 years:**

As a result of consultation and inputs received into this Master Plan (including via the Central Karoo Rural Development Plan (CKRDP) (2015) consultation process), the following proposals emerged:

- a) Upgrading and partnership with one or more selected abattoirs in Beaufort West<sup>1</sup> (possibly to include training required for ZA certification veterinary approval). Ideally, irrigated pastures

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<sup>1</sup> Existing abattoirs are not operating to capacity and are sourcing animals from as far afield as outside the Western Cape. It is not deemed feasible to expand the number of abattoirs in the District. Instead a strategy to optimize emerging farmer access to, and partnerships with, existing abattoirs is

and/or a feedlot business should be located close to the Agri-Hub using purified waste water to round off stock before being slaughtered for the premium meat market;

- b) Investigating the feasibility of one Tannery to be located in Beaufort West (given the existence of three abattoirs and its logistical centrality) <sup>2</sup>;
- c) Waterless Wool and Mohair Cleaning & Processing Facility Feasibility (if the outcomes of the current study are positive it is proposed that the facility requirements are identified and where possible located at the Agri Park in Beaufort West); and
- d) Lucerne (including from production areas in Rietbron, Nelspoort, Laingsburg and other areas in the District)) and linkages with a possible Lucerne pill processing facility to be established in Eden District.

In addition, the following medium and longer term processing opportunities have been identified for further investigation in the **Medium Term: 2-4 years:**

1. Resuscitation of the hydroponics project which could focus on:
  - Flowers (currently mainly grown around mainly at Prince Albert) to serve various markets including the local tourism and conference industry (e.g. Roses).
  - Vegetables (the possibility of producing vegetables close to the agri-park site should be investigated further).
2. Goat Milk Product Manufacturing: Laingsburg Goat Milk Project<sup>3</sup>: According to the Laingsburg Municipality, this project could consist of “building a Goat Milk Factory and selling area, 10 Small Farmers with 30 “Switserse” goats selling milk to the factory the products are then be processed and, packaged, labelled and distributed”. Apparently local Businesses are willing to buy the products.
3. Vegetables (depending on potential production quantities and locations) including the revival and restructuring of the currently dormant hydroponics project in Beaufort West).

**And in the Long Term: 5-10 years:**

1. Olive processing (Also SA olives branding support to obtain SA olives sticker is needed). It is not yet clear if the planting of additional olive trees on or close to the agri-park site should be investigate further. Ideally, a partnership or partnerships with existing olive processors should be explored to improve emerging farmer access to olive processing facilities;
2. The possibility of planting prickly pears on or close to the agri park site has also been raised and requires further investigation; and
3. Stone Fruits: Apricots (and possibly other fruits including figs) and proposed Prince Albert fruit drying facility, as well as Pomegranate initiative in Murraysburg (and also possibly linked to hydroponics feasibility at Beaufort West), as well as the feasibility prickly pears processing (either in close proximity to the agri hub in Beaufort West and/or the production area of Matjiesfontein).

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regarded as the best way to optimize emerging farmer development and broader economic benefits to the District.

<sup>2</sup> The assessment is that there is not sufficient volume for more than one tannery in the District to be feasible.

<sup>3</sup> The goat milk project may be confined to a fairly small local project and whether it should be a priority processing opportunity for the District Agri Park Master Plan will need further discussion by District role-players.

## Agri hub Strategy

The Central Karoo District Agri Hub will contribute to the following outcome: Vibrant, equitable and sustainable rural communities. The Agri-Park Vision is as follows:

*The Central Karoo DM Agri-Park will be a well-managed initiative that involves good coordination and involvement between emerging and commercial farmers (as well as the three spheres of government) in its governance and management (including effective monitoring and evaluation of operations and projects) and where emerging farmers are empowered with the necessary support, resources, knowledge, and skills to sustainably manage farm production, access processing opportunities and supply value chains and access markets without necessarily relying on ongoing government funding.*

The Agri-Park Mission Statement is as follows:

*The Central Karoo Agri Park will assist to address the needs of emerging farmers to strengthen their ability to participate in both local and international (where relevant) value chains by coordinating and supporting improved access to capacity development (e.g. farm management) and other support services and facilities (e.g. access to equipment, water, transport, processing, cold and normal storage, packaging and distribution as well as market information and research) in order to meet the standards and other purchasing requirements of relevant supply chain buyers, thereby helping to retain and create jobs and improve the incomes of emerging farmers and farm workers*

**Proposed Goal Statement for Central Karoo DM Agri-Park:** By 2025 Central Karoo DM's rural areas and towns would be transformed into thriving areas in terms of jobs, food security and opportunities to prosper.

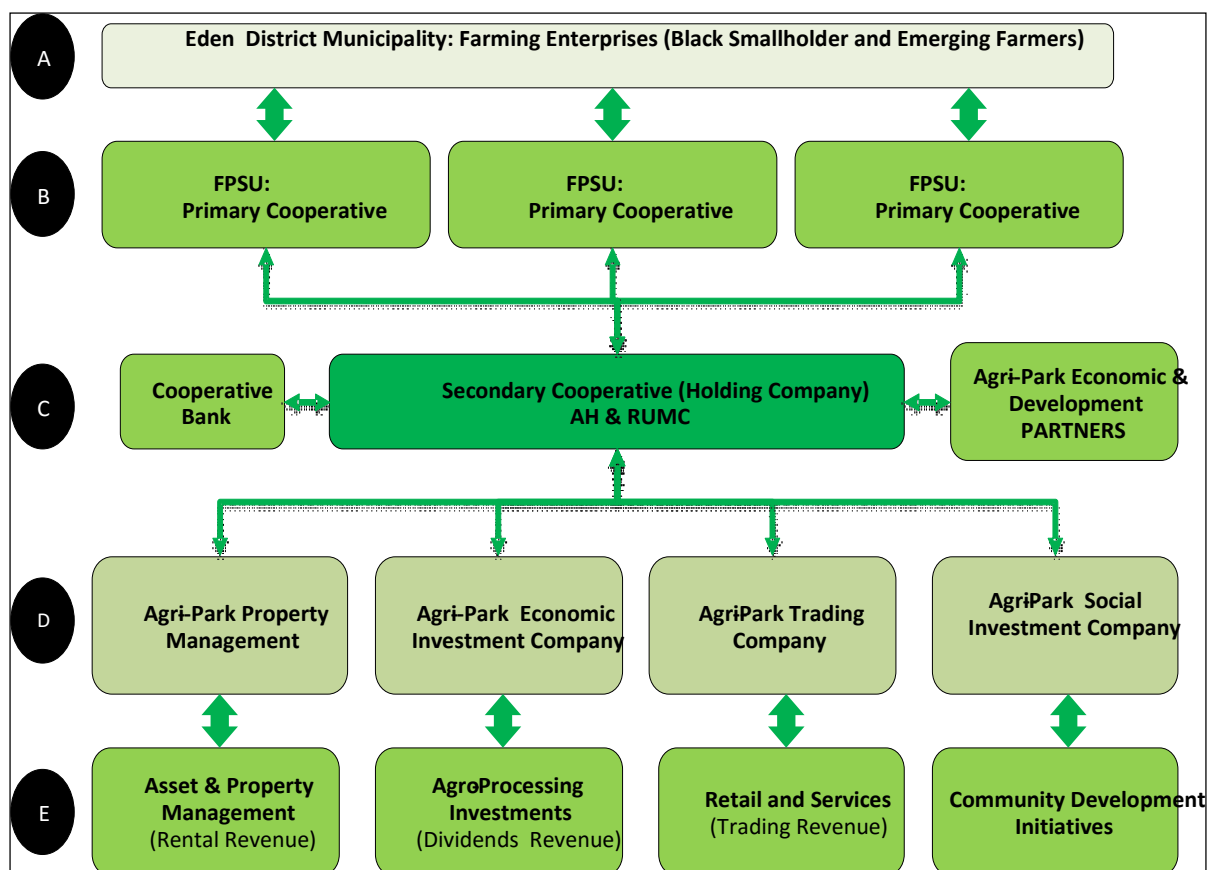
To achieve the proposed Agri-Park Goal, the following objectives aligned to the Agri-Park draft policy framework are proposed for the implementation of Central Karoo Agri-Park:

### **Objective 1: Transformation and Modernization**

### **Objective 2: Agri-Park Infrastructure Development**

**Objective 3: Agri-Park Governance and Management:** To enhance agricultural productivity, the Agri-Park is to enable producer ownership of 70% of the equity in Agri-Parks, with the state and commercial interests holding the remaining 30% minority shares (see Figure below); and allowing smallholder producers to take full control of Agri-Parks by steadily decreasing state support over a period of ten years. As the Lead Sponsor, the DRDLR must appoint a suitably qualified and experienced Agri-Park Manager who will facilitate the formal establishment of the Agri-Park and its constituent institutional arrangements to ensure that the Agri-Park (at FPSUs and Agri-Hub levels) provides a comprehensive range of Farmer Support Services for farming excellence.

**Figure 1 Proposed Agri-Park Ownership, Governance and Management Model**



**Objective 4: Agri-Park Funding:** To facilitate funding, and investment for the development of the **Agri-Park** over the next 5 years

**Objective 5: Agri-Park Farmers and Communities Development:** To provide technical support and extension services to **Agri-Park** beneficiaries over the next 10 years and beyond.

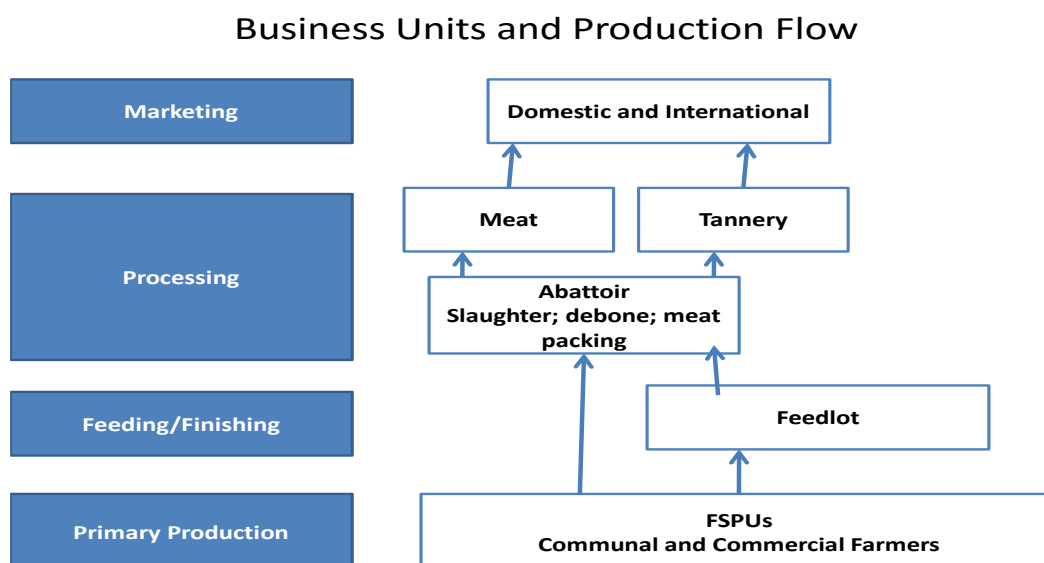
**Objective 6: Agri-Park Implementation Capacity:** To enhance the capacity and capability of officials responsible for the implementation of the Agri-Parks over the next 3 years.

### Agri hub Infrastructure Plan

An Agri-Park **is not only physical buildings** located in single locations (like ordinary industrial parks) per district **but** it is a **networked innovation system** of agro-production, processing, logistics, marketing, training and extension **services** located in District Municipalities. As a network it **enables** the **growth** of market-driven **commodity value chains** and contributes to the achievement of **rural economic transformation (RETM)**. An AP contains three **service collections**: Farmer Production Support Unit (**FPSU**), an Agri-Hub (**AH**); and the Rural Urban Market Centre (**RUMC**) which may service multiple districts.

Beaufort West in the Beaufort West LM has been identified as a AH due to its strategic central location as the district gateway and agro-processing potential due to the good road transport networks crossing the district (in particular the N1 linking to both Cape Town and Johannesburg).

This Agri-Hub will support the feeder Farmer Production Support Units.

**Figure 2 Agri Hub Production Flow and Business Units**

Primary production of livestock will take a place at the FSPUs level including communal and commercial livestock farmers and from government owned farms under the land reform programme. Some of the emerging livestock farmers with small number of stocks will be arranged into cooperatives to reduce their transaction costs. Livestock from the FSPUs will be delivered either to the feedlot or abattoir depending on the size of the animal. Smaller animals will be delivered to the feedlot for fattening before being delivered to the abattoir.

The **Agri-Hub** in Beaufort West should include a wide range of facilities and support services including: An Abattoir (one of the three existing in Beaufort West) and linked irrigated pastures (10 ha) to round off animals for the premium meat market; Training facilities; Intake, storage and dispatch facility of about 2000 m<sup>2</sup> for animals and Lucerne; Small packing and cooling facility for vegetables and/or fruit (medium term); Local market facility to sell local produce; Office space (open plan office with desks), boardroom (2) facilities, internet cafe and secretarial services for local emerging farmers; Main production input supply facility (most probably a cooperative) of about 2000 m<sup>2</sup> (shop to purchase production inputs); Main mechanization centre and equipment servicing and repair centre; Extension services with shared offices at the training centre; Veterinary services through the local animal protection association; Market information centre with shared offices at the training centre.

Five Agri FPSUs have been identified:

- Murraysburg: linked to 6400 HA commonage land: small stock improvements, lucern production (shared equipment), possibly fruit
- Prince Albert: small stock improvements, fruit and vegetable production and processing, flowers.
- Lainsburg: small stock improvements, fruit and vegetable production and processing.
- Merwerville and/or Possibly Leeu Gamka- small stock improvements and lucerne production (with shared equipment) linked to possible processing plant (located in Central Karoo or Eden District to be investigated).



- Nelspoort: small stock improvements and Lucerne (100 HA possible production potential) (Vuyani Dev. Trust).<sup>4</sup>

Ideally the FPSUs should be located on municipal land wherever possible. Each Municipality needs to identify the detailed location and land for FPSUs in consultation with emerging farmers. Linkages with existing infrastructure and facilities should be maximised wherever possible. The **FPSUs** should include the following facilities and support services: Small Produce handling facility – receipt and dispatch of produce from the catchment areas (mainly animals, but also other produce); Mechanization and repair centre; Local market facility to sell produce locally; FPSU production input supply facility (a local branch of the main production input supply facility); Small meeting and internet facility.

The Rural Urban Market Centre Unit (RUMC) will link and contract producers and markets through contracts; acts as a holding-facility, releasing produce to urban markets based on seasonal trends and provides market intelligence and information feedback, to the AH and FPSU, using the latest information and communication technologies. The site for Central Karoo RUMC has not been confirmed. It is however proposed that the Central Karoo and Eden District should seriously consider a shared Rural Urban Market Centre either at Beaufort West or Oudtshoorn depending on a more detailed analysis of commodity linkages and logistical requirements including access to relevant local and regional markets.

There are also plans underway to strengthen the Oudtshoorn Airport's ability to service cargo needs and there may be synergies between the Agri-Park and future airport development and cargo feasibility. At the same time discussions are also underway to strengthen the Beaufort West airport and its ability to service freight. A holistic assessment of regional airport development is needed as the Agri Park initiative unfolds.

Regarding market access and maximising access to local markets, it is proposed that the RUMC explore the potential to establish a District Agri Hub Procurement Framework Contract to facilitate streamlined procurement from local producers by a wide range of national, provincial and local government institutions. It is also proposed that a national brand be developed for Agri Parks which can strengthen market awareness and market access.

### Agri hub Implementation Plan

The Agri Park implementation will continue to evolve as new developments unfold. It will be important for implementation to take place in as coordinated a manner as possible and therefore the pending appointment of a District Agri Park Manager will assist in this regard and provide a key focal point for all stakeholders to interact with.

This 10 year Agri Park Master Plan implementation plan therefore contains the following:

- a) Agri Park Success Factors based on international experience;
- b) Agri Park Implementation monitoring plan to guide the monitoring of the agri park (it will be critical for stakeholders to agree on key indicators to be monitored and for regular progress

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<sup>4</sup> Casidra has identified a plan to strengthen the Vuyani Development Trust (which has suffered from poor livestock, financial and farm management as well as skills deficits) and this needs to be implemented and linked to the Agri Hub and FPSU planning process.

reports on these indicators to be presented and discuss at the agri park stakeholder meetings such as the DAPOTT and DAMC))

- c) Agri Park Risk Management Plan: it will be critical for key risk managers to be identified and who are responsible to implementing actions to mitigate the key risks facing the successful implementation and operation of the Agri Park.
- d) Agri 10 Park High Level 10 year implementation plan to provide an indication of the phased implementation approach; and
- e) Agri Park Strategic Partnership Framework to provide an indication of the wide range of partnerships which will need to be explored, facilitated and defined to ensure the successful operation of the Agri Park.

### Way Forward and Next Steps

This master plan will be taken forward by the District which will facilitate its ongoing evolution and implementation with a wide range of partners and support organisations. The following next steps can be identified:

A number of specific feasibility studies, consultation and further research will now be required during the course of 2016 to further detail the Agri Park and processing opportunities, including the identification of possible implementation partners and facility planning requirements:

1. **DRDLR to clarify with District Municipality if 2015/16 funding for agri-park projects can be rolled-over to 2016/17.**
2. **DRDLR to finalise appointment District Agri Park Managers** (Stakeholders have strongly requested that the Agri Park Managers be located at the District level so that meaningful coordination and implementation can take place).
3. **DRDLR to provide clarity on Agri Park service providers** to the DAPOTT AND DAMC who have been appointed to assist with required detailed feasibility studies as well as detailed facility designs and costing so that coordination can take place at a District Level.
4. **Identification of Beaufort West Abattoir Strategic Partner including possible Certification/registration of abattoirs in the Central Karoo:**  
An analysis of the capacity, use and suitability of all the existing abattoirs in Central Karoo and a costing and motivation of the upgrading of some of them to export the "Karoo" brand. An indication of the requirements for the farms and the abattoirs to obtain the "Karoo" brand to be explored to inform the feasibility of the proposal.

The possible need to to develop and issue an Expression of Interest from existing abattoir owners in Beaufort West should be investigated after initial consultations with the three abattoir owners. Initial discussions should include briefings on the agri park model and proposed institutional arrangements. The agri-park requirements would need to inform this EOI.

A feasibility study will then be needed, including identifying any possible infrastructure upgrade needs. The results of this study should be used to inform the refined institutional arrangements including clarity on the participation of emerging farmers.

**5. Beaufort West Tannery Feasibility:**

The Abattoir feasibility should be conducted in parallel with the Tannery feasibility study (the possibility of combining these two feasibilities into one feasibility should also be considered). Issue of location, volumes, markets and institutional arrangements should all be addressed. Linkages to the game industry should be investigated. DAPOTT to approve feasibility ToR.

**6. Central Karoo and Eden District Lucerne Pill processing feasibility:**

A joint feasibility into the above covering both Districts needs to be initiated and which links to emerging farmer Lucerne production areas in both Districts. DAPOTT to approve feasibility ToR.

**7. Beaufort West Hydroponics Feasibility and Business Plan:**

A feasibility study is required into the above including whether this can be linked to flower industry opportunities. A business plan must be developed which is based on vegetable production as the core focus and which includes the identification of a cost-efficient market access logistics plan as well as water-efficient water re-use processes in order to enhance market feasibility. A minimum size of 16,000m<sup>2</sup> of production area should be explored to enhance feasibility (this will require an expansion of existing infrastructure). DAPOTT to approve feasibility ToR.

**8. The District and Local Municipalities will need to make provision for the Agri Park in their Integrated Development Plans (IDPs) (including possible infrastructure and services needed for the Agri Hub, FPSUs, and RUMC), Local Economic Development Plans, and Spatial Development Frameworks (SDFs). In addition, Local Municipalities must ensure an agri park representative is nominated to participate in future DAPOTT meetings. In addition, Local Municipalities (together with the District Municipality, DRDLR, and Provincial Department of Agriculture) will need to identify specific sites for the Farmer Production Support Units (ideally such sites should be aligned to any nodes identified in local SDFs). District and Local Municipalities to engage emerging farmers to refine facility and service requirements at FPSUs. If EIA processes are required, the possibility of an EIA class application for all Agri Park EIAs should be investigated to speed up the planning process and ensure it is efficient:**

- a) Murraysburg: linked to 6400 HA commonage land: small stock improvements, lucern production (shared equipment), possibly fruit
- b) Prince Albert: small stock improvements, fruit and vegetable production and processing, flowers.
- c) Lainsburg: small stock improvements, fruit and vegetable production and processing.
- d) Merwerille and/or Possibly Leeu Gamka- small stock improvements and lucerne production (with shared equipment) linked to possible processing plant (located in Central Karoo or Eden District to be investigated).
- e) Nelspoort: small stock improvements and Lucerne (100 HA possible production potential) (Vuyani Dev. Trust)

**9. DRDLR to facilitate a meeting with both Eden and Central Karoo Districts to discuss (and agree on) the location of the Rural Urban Market Centre (Oudtshoorn or Beaufort West).**

10. The outcome of the Western Cape Department of Agriculture waterless wool and mohair cleaning study should be discussed with all stakeholders and possible implications for the Agri Park identified (including for the site in Beaufort West as well as for the emerging farmer capacity development plan in point 12 below).

11. Additional research and studies will also be required including but not limited to the following:

**Skills Development and Training opportunity (through e.g. NARYSEC & South Cape College):**

Training and skills required for the agro processing opportunities should be identified to inform Training Courses and opportunities (explore partnerships with NARYSEC). Consider synergies between the locality of the Beaufort West Youth Hub's training component in relation to the industrial area or the Agri Park site where additional training opportunities can be created such as welding or "block men".

**Analysis of State Owned Land in Central Karoo:**

An analysis of all state owned land is required to determine the use of all state owned farms in the Central Karoo to determine the current use of the farms and whether these farms could be better utilized for Land Reform purposes, prior to acquiring more privately owned farms. Even though it is not an agro processing opportunity, it is still considered to be a critical component of rural development in the Central Karoo. The study should distinguish between farms acquired by DRDLR for Land Reform and farms owned by other state departments.

12. Detailed design of agri park and FPSU facilities should commence as informed by detailed user needs analysis. Existing facilities should be used wherever possible. Additional infrastructure support requirements (e.g. bulk infrastructure) to be identified as part of this process. Any land ownership and planning process implications (e.g. re-zonings, EIAs) to be identified and process initiated
13. Resource Mobilization, Collaboration and Partnerships including clarification of funding sources to be initiated by the District and DRDLR to clarify funding arrangements.
14. Detailing of agri-park desired institutional arrangements to be informed through detailed legal advice.
15. Regarding market access and maximising access to local markets, it is proposed that the RUMC explore the potential to establish a District Framework Contract to facilitate stream-lined procurement from local producers by a wide range of national, provincial and local government institutions. It is also proposed that a national brand be developed for Agri Parks which can strengthen market awareness and market access.
16. The Development of a small stock improvement and farm management programme should proceed to clarify how all relevant role-players can strengthen emerging farmers in the District. Key industry associations, the Provincial Department of Agriculture, and private sector role-players such as the Merino Konsortium, need to be engaged with. The possibility

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of organising a District Emerging Farmer Capacity Building consultative workshop to discuss this process should be considered.

## CHAPTER ONE INTRODUCTION AND BACKGROUND

### 1.1. Introduction

The Department of Rural Development and Land Reform's (DRDLR) Office of the Chief Director: Rural Development: Service Delivery Coordination appointed Camissa Institute of Human Performance (Pty) Ltd (Camissa) and Managing for Excellence (Pty) Ltd Joint Venture (Camissa) to develop a Master Agri-Park Business Plan for and with the Central Karoo District Municipality to inform the operationalisation of the District Agri-Park.

*Figure 3 Central Karoo District located within the Western Cape Province*



#### 1.1.1. Report and Master Plan Purpose

The purpose of this Master Plan documents is to serve as a working document to guide the more detailed implementation of the Central Karoo Agri Park.

The Master plan provides a framework to guide the Central Karoo District as it facilitates an ongoing process of detailed stakeholder involvement in implementing the range of inter-linked initiatives which need to be in place for the Agri Park to succeed.

This document needs to be treated as a working document and updated periodically as the broader context and development opportunities and constraints continue to evolve.

#### 1.1.2. Project Context

Eradicating rural poverty is one of the most critical challenges facing the South African government. Despite a great deal of work done by government and other sectors between 1994 and 2000, rural poverty proved to be stubborn and impact was considerably lower than expected. The key problem

seemed not to be the range and quality of development or anti-poverty programmes in existence, but the failure to co-ordinate their activities and provide an integrated package of services that matched local priorities.

Agri-Parks as a concept is new in South Africa though it is practiced in other parts of the world. The concept involves the use of collective farming, farmer-incubator projects, Agri-clusters, and eco-villages. At the same time it assists with land conservation and preservation. It also evokes the traditional model of an agricultural business hub, where multiple tenants and owners operate under a common management structure where for example a range of Agri-Horticultural enterprises may exist. The model must have a strong social mobilization component so that Black farmers (subsistence households, smallholder and emerging) and agri-business entrepreneurs are actively mobilised and organised to support this initiative.

The model also seeks to strengthen existing and create new partnerships within all three spheres of government, the private sector and civil society. Partnerships with Department of Agriculture, Forestry and Fisheries (DAFF) and Department of Cooperative Governance and Traditional Affairs (DCoGTA) are critical.

The Agri-Parks should be:

- Based on economic advantage;
- Have all the elements of the value chain for dominant products; and
- Ultimately lay the foundation for rural industrialisation.

The **objectives** of the Agri-Park are to:-

- The development of the a Black farming class in terms of technical expertise and ability to supply the market sustainably and at the desired market quality;
- Emerging Black farmers working in joint Ventures to participate in supplying the Agri-Park;
- Private farmers to join the Agri-Park as a lucrative investment opportunity; and
- Develop partnerships with other government stakeholders to develop critical economic infrastructure such as roads, energy, water, ICT and transportation/logistics corridors that support the Agri-Park value chain.

The **guiding principles** of Agri-Park establishment are:

- One Agri-Park per District (44) with focus on the 27 priority districts.
- Agri-parks must be farmer controlled.
- Agri-parks must be the catalyst around which rural industrialization will takes place.
- Agri-parks must be supported by government for a period of 10 years to ensure economic sustainability.
- Strengthen partnership between government and private sector stakeholders to ensure increased access to services (water, energy, transport) and production on the one hand, while developing existing and create new markets to strengthen and expand value-chains on the other.
- Maximise benefit to existing state land with agricultural potential in the provinces, where possible.
- Maximise access to markets to all farmers, with a bias to emerging farmers and rural communities.
- Maximise the use of high value agricultural land (high production capability).
- Maximise use of existing agro-processing, bulk and logistics infrastructure, including the availability of water, energy and roads.
- Support growing-towns and revitalisation of rural towns, in terms of high economic growth, high population growth over past 10 years and promote rural urban linkages.

### **1.1.3. Agri Park Master Plan Scope and objectives**

Camissa and Managing for Excellence was expected to:

- a) Develop a Central Karoo **District Municipality** Master Agri-Park Business Plan, aligning the Agri-Park model developed by the DRDLR and the dominant Commodity Value Chain (s) in the specific district
- b) Develop the Master Agri-Park business Plan in line with the commodities in the respective:
  1. Farmer Production Support Units (linked to farmers and farming areas;
  2. Agri-Hub and feeder FPSUs; and
  3. Rural Urban Market Centre and linkages with Agri-Hubs and FPSUs.
- c) The Business Plan must highlight existing and possible new agro-processing initiatives, possible synergies and linkages based on market analysis and financial viability.
  1. **Three possible agro-processing business opportunities** must be identified
  2. An **institutional/organisational plan** must be developed showing how existing farmer support organisations, support services (private and public sector) and farmers will be linked to the Agri-Park model
- d) Consider during the development of the Business Plan, but not limited to:
  1. Review all existing documentation available in terms of status quo information, maps and reports for the district under consideration this would include social, economic, and institutional matters
  2. To work with the district identified representatives and the DRDLR provincial office to develop Agri-Park Master Business Plan aligned to the Agri-Park model.
  3. To utilise tools developed by the DRDLR and CSIR. Identify the dominant commodity value chains through liaison with the district and local municipalities and the following should be considered:
    - ii. Socio-economic viability and sustainability:
    - iii. SWOT analysis that includes legal, environmental, financial and technical analysis
    - iv. Identify current agro-processing initiatives and possible synergies, linkages and opportunities to buy into existing businesses.

#### 1.1.4. Methodology and Process Followed

The Agri-Parks development and establishment is an initiative of the South African Government aimed at transforming rural areas and contributing to the growth and development of the agricultural sector. The Agri-Park Master Plan implementation will cut-across national and provincial government structures, district and local municipalities, and various stakeholders including beneficiary farming enterprises.

The development of this AP Master Plan followed steps outlined below:

<b>Step One</b>	• Project inception and consultations
<b>Step Two</b>	• Provincial and Municipal engagements
<b>Step Three</b>	• Information gathering and Analysis
<b>Step Four</b>	• Development and compilation of the analysis report
<b>Step Five</b>	• Analysis Report inputs gathering exercises (further engagements and consultations)
<b>Step Six</b>	• Review and finalisation of the analysis report



<b>Step Seven</b>	• Development of Agri-Park Master Business Plan
<b>Step Eight</b>	• Agri-Park Master Business Plan inputs gathering exercises (further engagements and consultations)
<b>Step Nine</b>	• Review and finalisation of the Agri-Park Master Business Plan
<b>Step Ten</b>	• Project Closure

#### 1.1.5. The Agri-Park Master Business Plan

This APMBP draws on the findings, recommendations and conclusions of the Situational Analysis report (see annexure A) for the **CKDM** which was part of phase 1 for the drafting of this APMBP. In terms of the above definition the APMBP for the **CKDM** can be described as an operational network of agriculturally driven production, contracts and value adding business interventions, spatially situated at carefully selected/chosen Agri-Hub (AH) site, Farmer Production Support Units (FPSUs) sites and Rural Urban Marketing Centre (RUMC) site to provide technical support and assistance to Black smallholder and emerging commercial farmers.

The AH, FPSUs and RUMC are also selected/chosen to facilitate the movement of agricultural outputs to consumers and fits a specific typology to match its objective, leading to the clustering and location of smallholder and emerging farmers with the focus on enhancing their access to physical, economic and social capital, production inputs, agricultural outputs, finance, markets, extension services, education and training and organisation opportunities.

This APMBP is anchored on sound principles of sustainable development (people, planet and profit), financial viability and business management and governance as these are the foundation of sustainable Agri-Parks and inclusive agricultural and rural economic growth and development.

#### 1.1.6. Instructions for Reading this Master Plan and Report Structure

This report contains the following sections:

<b>Chapter 1:</b>	Introduces the APMBP project scope and methodology used, and also outlines a background to the Agri-Park concept and to this Master Plan
<b>Chapter 2:</b>	Provides a summary of the situational analysis conducted to inform the Master Plan with emphasis on dominant commodity analysis, District Agri-Park, SWOT, and findings and conclusions.
<b>Chapter 3:</b>	Drawing from chapter two analyses, this chapter proposes the District Agri-Park Strategy aligned to the provincial agriculture and district priorities for the establishment of the Agri-Park across the Local Municipalities.

<b>Chapter 4:</b>	Provides the physical and spatial context in which the District Agri-Park Master Plan can be situated, as a connection point within the different spatial locations.
<b>Chapter 5:</b>	Looks towards the implementation of the District Agri-Park Master Business Plan and identifies way forward issues.

## 1.2. Background and Context

### 1.2.1 Introduction

Most rural areas in South Africa face the triple structural challenges of unemployment, poverty and inequality as can be attested by the profiling of Comprehensive Rural Development Programme sites by the DRDLR in the 27 priority districts in South Africa. This is an unwanted economic legacy of the apartheid state that still haunts us. This is most aptly evident in the crisis of rural underdevelopment, underutilisation and unsustainable use of productive land (including redistributed and state-owned land), the plight of Black small-scale and emerging farmers across the country.

The overall purpose of rural development is to improve the quality of life of rural households, enhancing food security through a broader base of rural industrial and agricultural production and exploiting the varied economic potential of each rural district municipality. In response to the above, the Department developed the Agri-Park concept for South Africa as one of the potential strategies to address the issues of rural poverty, unemployment and inequality.

Agri-Parks as a concept is new in South Africa though it is practiced in other parts of the world. The concept draws on existing models from countries such as Mexico, India, Netherlands, amongst others and experience and empirical evidence from these countries show that Agri-Parks offer a viable solution in addressing social and economic inequalities, unemployment and poverty by promoting agro-industrialisation within small-scale farming and emerging commercial farming sectors, thus ensuring that the escalated land distribution, more inclusive restitution and strengthen land rights are accompanied by equitable, efficient and well-planned land and agricultural development. The first draft version of the Agri-Parks Policy (2015) defines an Agri-Park as:

**An Agri-Park is a networked innovation system of agro-production, processing, logistics, marketing, training and extension services located in District Municipalities. As a network it enables the growth of market-driven commodity value chains and contributes to the achievement of rural economic transformation.**

The draft Agri-Park Policy was developed to address issues such as underdevelopment, hunger, poverty, joblessness, lack of basic services, and the challenges faced by small-farmers and emerging commercial farmers in terms of limited access to physical, economic and social capital, production inputs, finance, markets, extension services, education and training and organisation opportunities. The DRDLR recognizes that significant economic growth points do exist in rural areas of South Africa which remains under-exploited or unexploited. The DRDLR further recognizes that the current agricultural production and business is maintained in some rural areas and leveraged to address the growth of small-scale farmers and emerging commercial farmers in the agricultural sector and by

doing so attend to the development of the rural areas in such a way that we narrow the gap between the industrial side of some rural economies and the currently underdeveloped, underutilised and unsustainable rural component.

The Agri-Parks model seeks to strengthen existing and create new partnerships within all three spheres of government, the private sector and civil society.

### 1.2.2 Agri-Park Model

The **draft Agri-Park Policy outcome** is to establish Agri-Parks in all of South Africa's District Municipalities that will kick start the **Rural Economic Transformation** for these rural regions. This policy outcome is to be realised through the implementation of the Agri-Park Model that is driven by the principles outlined in figure 1. The five principles are:

#### 1) Targeted Commodity(ies) Producers

A District Municipality, based on its **agricultural comparative advantage** will target one or more commodities. The targeted commodity is the first primary contributing driver for social and economic development of a District Municipality and local farmers. The producers or farmers are to be provided with support in order for their produce to move from their respective farm gate (point A) to consumer plate and/or finished products (point B) linked to the commodity value chain.

- a. **Market:** The farmers or producers primary outputs is supplied to FPSU and/or local community markets

#### 2) Farmer Production Support Unit

At locally based and accessible FPSU, the farmers are provided with production, technical and infrastructure support. The farmers aggregated farmers outputs is supplied to the linked Agri-Hub .

- b. **Market:** The FPSU suppliers primary and/or processed farmers produce to the local community market, Agro-processors (at the Agri-Hub) and RUMC.

#### 3) Agri-Hub

The farmers produce (input) is processed in large scale at the Agri-Hub. The Agri-Hub also provides quality production support services to the farmers including product development and improvement (i.e. Innovation, Research and Development) and links the farmers to the targeted commodity value chain.

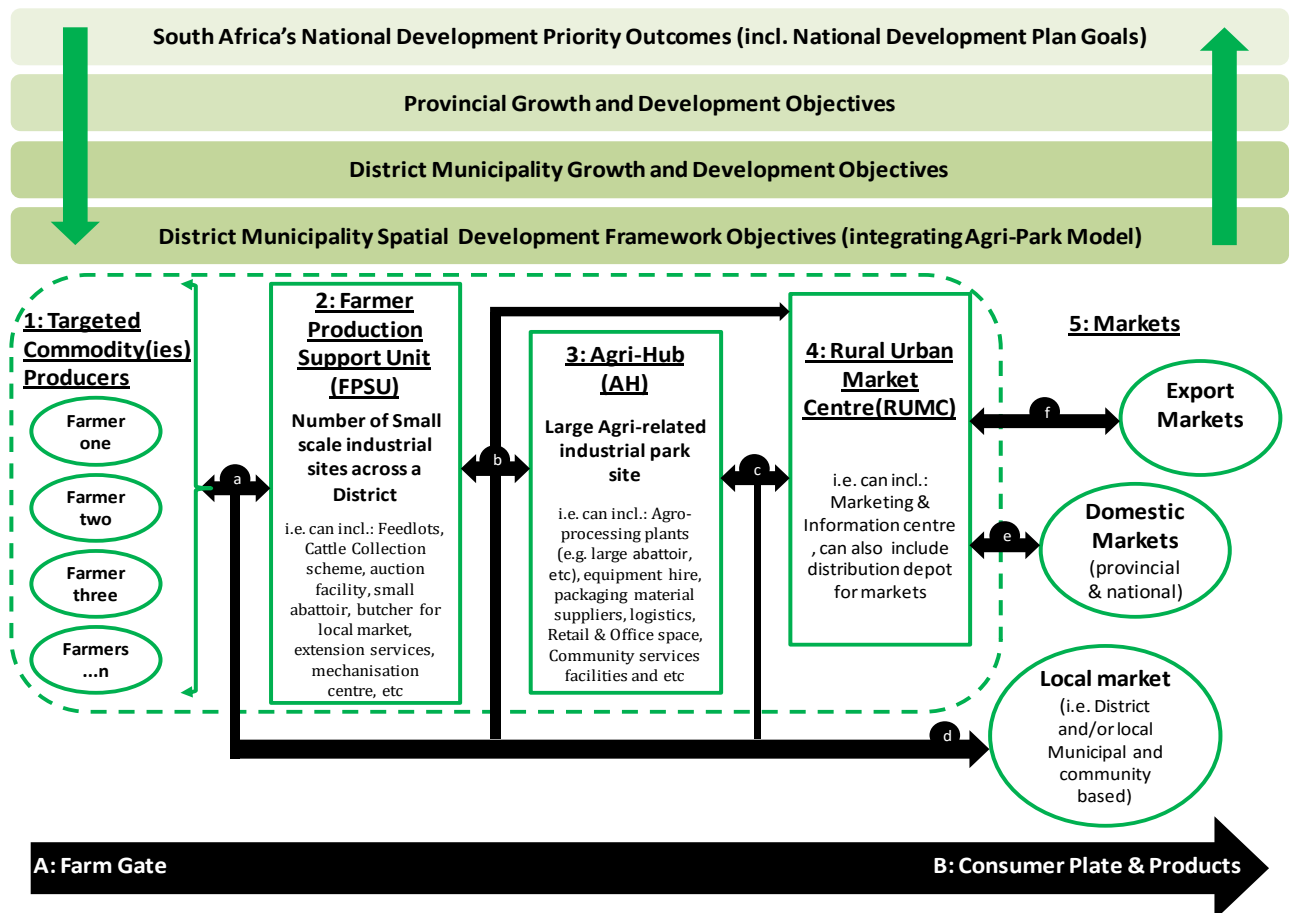
- c. **Market:** The Agri-Hub mainly supplies agro-processed products through the RUMC and local market.

#### 4) RUMC

The RUMC functions as a marketing and distribution channel for primary products from FPSU and processed products from the Agri-Hub. The RUMC is also an information nerve centre for the Agri-Park and facilitates for information flow between the market and producers.

- d. **Market:** The RUMC is a market access facilitator for both domestic and export markets.

**Figure 4: Adapted Agri-Park Model**



## 5) Markets

Sustainable markets are essential to the success of the Agri-Park. The markets include (d) local municipality or community based market; (e) domestic markets provides a foundation for export market; and (f) export markets contributes to farmers and agro-processing competitiveness, and foreign currency earnings for local economies.

### 1.2.3 Agri-Park Institutional Framework

**Table 1 Agri Park Institutional Framework**

Levels of Sphere of Government	Agri-Park Task Team		Agri-Park Committee		Agri-Park Aligned Land Reform	
	Name	Mandate	Name	Mandate	Name	Mandate
National	NAPOTT	Strategic management and oversight on the roll out of the Agri-Parks program Monitor progress against the business and project plans Assist with resolving any blockages at district and provincial level	National Agri-Park Advisory Council	National Agri-Parks Advisory Council (NAAC) will provide oversight to the functionality of the District Agri-Parks Management Councils (DAMCs), organise markets, both domestically and internationally, control the quality of products, and provide advice to the political authority.		
Provincial	PAPOTT	Provincial Operations management: implementation Provide technical support and guidance for planning and implementation Identify projects that contribute to Agri-Parks business plan and to compile a provincial project register Monitor implementation Report to National Operations Team				
District	DAPOTT	District operations management implementation Provide technical support and guidance for implementation Oversight of the implementation of the district plan Coordinate relevant stakeholders as per plan Manage expenditure against business plan Identify district projects that contribute to the Agri-Parks business plan and to compile a district project register Report to provincial operations task team	DAMC	The DAMC will act primarily as the voice of key stakeholders in the relevant districts and will leverage support for the Agri-Park developments. It will therefore not consist of government representatives but will interface with various structures at provincial and district level to provide advice and support. It will also act as an independent watchdog in relation to the development of the Agri-Park.	DLRC	The overall aim of the DLRCs is to facilitate the protection, promotion, provision and fulfilment of the rights, and responsibilities, in the management of district land ownership and use that is consistent with South Africa's Constitution.

## **CHAPTER TWO: CENTRAL KAROO AGRI-PARK TARGETED COMMODITY<sup>5</sup>**

### **2.1 Introduction**

The Central Karoo District proposed agri park commodities have been identified using the following criteria:

- a) The presence of an existing sustainable production advantage (both currently and into the future); and
- b) Commodities produced by small and emerging farmers which could help them achieve economic independence and sustainability, contribute to GDP growth for the district and where they require support in order for this to happen.
- c) Input from the District and Local Municipalities;
- d) Input from the DAMC;
- e) The impact and possible future impact of the commodity(ies) on the local economy by way of contribution to the GDP and job creation. Commodities with high potential growth and high potential of job creation.

The commodities of importance in the Central Karoo District Municipality have been identified in the Situation Analysis as:

- Small stock
- Lucerne
- Stone fruits
- Olives
- Vegetables

The CK's selected dominant commodity for immediate (years 1 onwards) agri park focus is small stock (mainly goats and sheep) including meat, wool, and leather processing. A number of other commodities are also identified for medium and long term (3-10 years) agri park linkages.

The chapter outlines the small stock subsector and industry forces, consumption and production, industry structure and links with the Agri-Park, and value chain players.

### **2.2 Small-stock sub-sector**

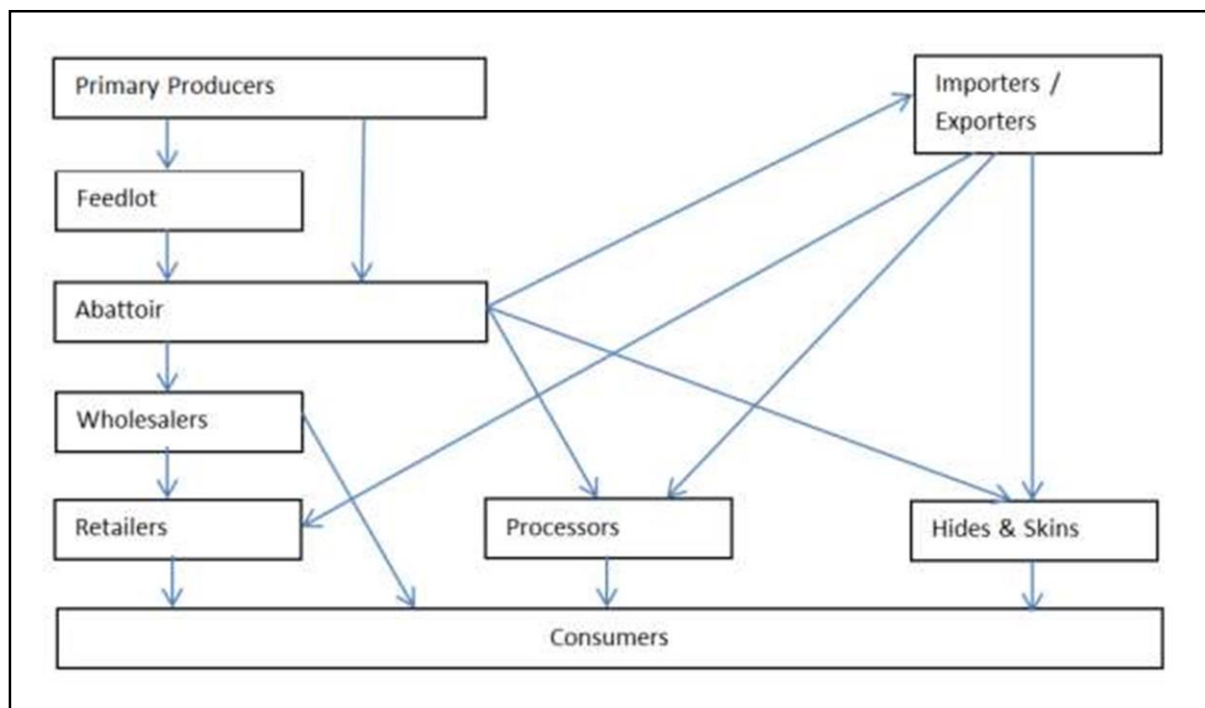
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<sup>5</sup> Refer to the Central Karoo Situation Analysis annexed hereto as Annexure A for further details.

## The Sheep Value Chain

Figure 3 indicates the sheep value chain.

**Figure 5 Sheep Value Chain**



The main segments of the mutton marketing channels consists of the following:

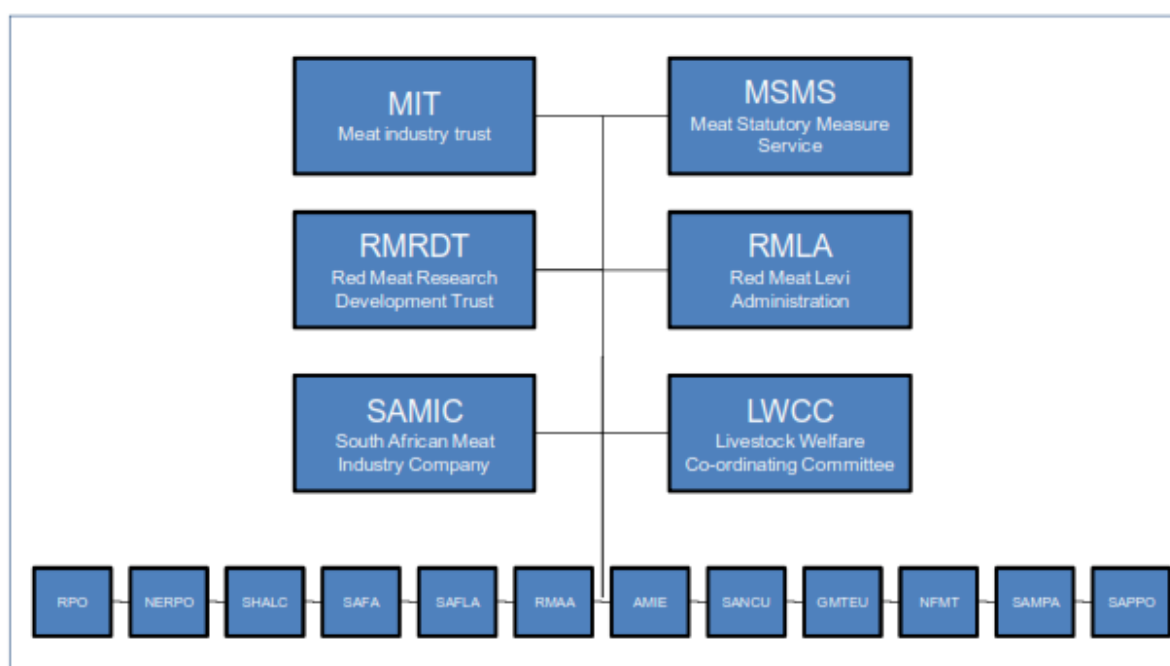
- The farmer who produces sheep and lamb for mutton and/or wool
- After approximately 5/6 years of shearing, sheep are sold directly to feedlots, abattoirs or on auction
- Sheep are slaughtered, and meat from the abattoir is distributed through wholesalers, retailers and butcheries
- Certain portions of the production is exported (primarily by abattoirs), while the rest is processed
- Imports of mutton is done by retailers, wholesalers and processors
- The final channel of the mutton value chain ends with consumer purchase.

Value chains for livestock products, especially meat, are very complex (Frohberg, 2009). This complexity begins at the production level, which depends on a feed supply chain that must ensure a timely supply of safe inputs. It continues through processing and retailing; these involve many steps and food items of animal origin are often more perishable than crop-based foods. The resulting interdependence among the companies in the food supply chain for animal products exerts substantial pressure for coordination beyond that provided by cash market transactions. Companies in a food supply chain may put in place vertical coordinating mechanisms such as contracts, licences and strategic alliances to manage relationships with suppliers and customers. Firms operating at the same stage within the

value chain may establish horizontal relationships in the form of cooperative groups for dealing with down- and upstream business partners and for ensuring product quality. Contracts are the most common mechanism for vertical coordination. For primary producers, contracts allow the establishment of more secure relationships with business partners, both to guarantee a price prior to selling or buying, thereby reducing market risks regarding price, and to specify quantity and quality. From the point of view of the contractor/buyer, contracts provide for much closer linkages with farmers and may offer them greater control over production decisions of the farmers. Selling contracts may be entered into with down-stream processors such as packing companies, while up-stream agreements may be in place between, for instance, the feed industry and animal producers.

Vertical integration entails a closer degree of coordination and occurs when two or more successive stages of the food supply chain are controlled and carried out by a single firm. In the extreme, the entire chain can be integrated. Examples of such vertical integration include companies that link farms and buying entities. Meat packers often own pig farms and cattle feedlots and dairy farmers may produce their own feed instead of buying it. In the case of vertically integrated firms, product transfers are determined by internal decisions rather than through market prices. Horizontal coordination may also be necessary for a well-functioning supply chain. Processors can reduce transaction costs by dealing with one farm organization, such as a cooperative, instead of many small-scale farms. Cooperative organization can bring three main types of benefits to farmers: arranging for the selling of farmers' produce to down-stream business; exchange of information with partners in the food supply chain and its dissemination among the farmers; and providing advice to farmers on how to achieve the required levels of quality of the raw product. In many of the least developed countries, cooperatives are crucial for small-scale farms to remain in business and, perhaps, to keep farmers out of poverty

The South African Red Meat Industry Forum (see [www.readmeat.co.za](http://www.readmeat.co.za)) is structured as follows:





Various associations exist including the Red Meat Producers Organisation, Merino SA, Lamb and Mutton SA, and the National Emerging Red Meat Producers Organisation.

### **Consumption**

South African red meat production has kept up with consumption, although there has been some export of higher-grade meat and import of lower grades that consumers are becoming more health conscious and price competition from other sources of protein, especially poultry meat, are becoming more important (Jooste and Taljaard 2004).

The top four international trends consumers currently focus on when making food choices, include health, convenience, pleasure and environmental sustainability. Locally produced lamb and mutton have a unique advantage, as recent studies have shown that these products have the ability to be positively positioned within each of the four trend categories. Lamb and Mutton SA have been actively involved in implementing a consumer education programme to improve consumer awareness and understanding of consumer perception of lamb and mutton to pro-actively and re-actively convey the message that mutton can be part of a healthy diet (Botes, 2013). According to Lamb and Mutton SA, even doctors and dieticians are not well informed about the true value of lamb and mutton.

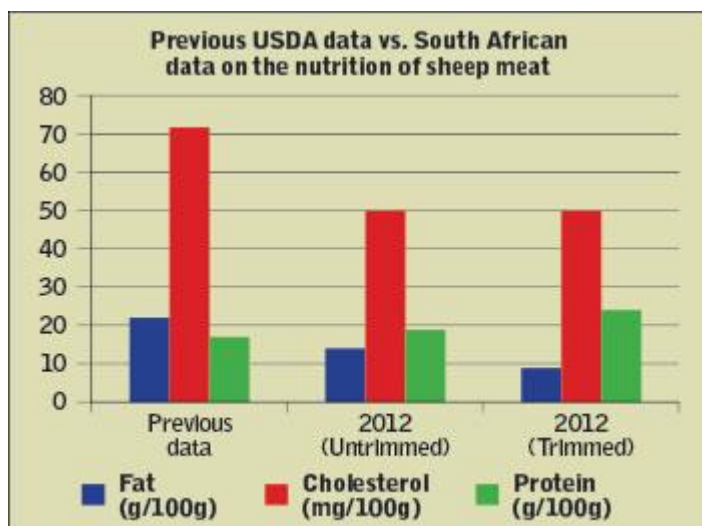
The growing demand for livestock products in developing countries has been driven by economic growth, rising per capita incomes and urbanization. The relationship between per capita income and meat consumption shows a strongly positive effect of increased incomes on livestock consumption at lower income levels but a less positive, or even negative, effect at high levels of GDP per capita.

Lamb meat comes from young animals. In the sheep grading system they are 'A' grade, and to achieve that grading they should not have real teeth yet. As soon as they get two real teeth they are classified 'AB' and are no longer lambs. The meat from these older animals is known as mutton. After 'AB' the next rating is 'B' and then 'C'. These are all mutton. According to the definition then, all lamb is 'A' grade as anything else is classified as mutton.

Lambs are usually slaughtered somewhere between 3 and 7 months of age, and the average carcass you see at the butcher weighs between 16 and 24 kilograms. In general, the younger it is slaughtered, the less it weighs.

The red meat industry of SA conducted a consumer research study in 2004 and found consumers felt that mutton and lamb were not healthy. Some also thought meat was not a rich source of protein or vitamins such as iron and zinc. Studies were conducted by the University of Pretoria and the Agricultural Research Council (ARC), and found that sheep meat had much less fat than previously thought. In fact, when the fat is trimmed from the lamb, it is left with less fat than a similar portion of chicken (such as a drumstick) without skin would have. The fat content of sheep meat has decreased over time.

**Figure 6 difference in nutrient content found in mutton from the United states (previous) vs. South African mutton per 100g of meat.**



### ***The Karoo Lamb Brand***

The grazing ground of the sheep plays a huge role in the Karoo lamb and mutton having a distinct taste. The sheep graze among grasses, fragrant bushes and fragrant shrubs and has been scientifically proven to affect the flavour of the meat. Real Karoo lamb comes from sheep pastured on the veld among at least two of the six fragrant indigenous shrubs namely, Kaokbos (*Eriocephalus eruciodes*), Anerkaroo (*Pentzia incana*), Skaapbossie (*Pentzia spinescens*) Rivierganna (*Salsola glabrescens*) and Silverkaroo (*Plinthus karrooicus*), Boegoekaroo (*Pteronia glauca*).

The Department of Trade and Industry is currently working on an agreement on Geographical Indicators (GIs) and that includes the protection of the “Karoo Lamb” by setting out clear criteria of the geographic area and food that sheep must eat to be branded as “Karoo Lamb”. There are also perceived differences between Karoo and non-Karoo lamb among consumers. According to a study by Tessa Weissnar from the University of Pretoria (Weissnar, n.d.) Karoo lamb is generally preferred by consumers because its brand signifies confidence in local produce, its taste and consequent perceived higher quality. Currently the price difference margin between non-Karoo and Karoo lamb is willingness to purchase is not very large. There is evidence that that proves that consumers are willing to pay a higher price for origin status compared to a quality that comes from an unknown brand. This supports the protection of Karoo Lamb and that for which consumers are prepared to pay premium rates. This will potentially increase the profits of farmers that want their meat branded as “Karoo Lamb”. Figure 4 indicates the entire Karoo Brand area.

There has been a continuous increase in the price of mutton from 2004 to 2012 mainly as a result of the inflation factor, insufficient supply and consumer lifestyle. There was a large decrease in the price of mutton in 2013. The price of mutton in 2004 was R20.13/Kg however in 2014 it was R41.59/Kg and this means that in a period of 10 years the increase was R21.46/kg (Department of Agriculture, 2014).

Variability in prices is a big concern in the industry (as well as for consumers). Spies (2011) found that asymmetry in price transmission (APT) was found in both the beef and lamb value chains, indicating inefficiencies within the chain. Causality in the lam industry was found whereby a change in price at producer level “causes” changes at retail level.

Meat consumption is expected to increase both per capital and overall in South Africa as per-capita incomes continue to increase and as urbanization continues- with one forecast for Sub-Saharan Africa forecasting a doubling of per capita consumption between 2000 and 2050 from 11 to 22kgs/ person/ year:

	PER CAPITA CONSUMPTION OF MEAT	
	2000	2050
	(kg/person/year)	
Central and West Asia and North Africa	20	33
East and South Asia and the Pacific	28	51
Latin America and the Caribbean	58	77
North America and Europe	83	89
Sub-Saharan Africa	11	22

Source: Rosegrant and Thornton, 2008.

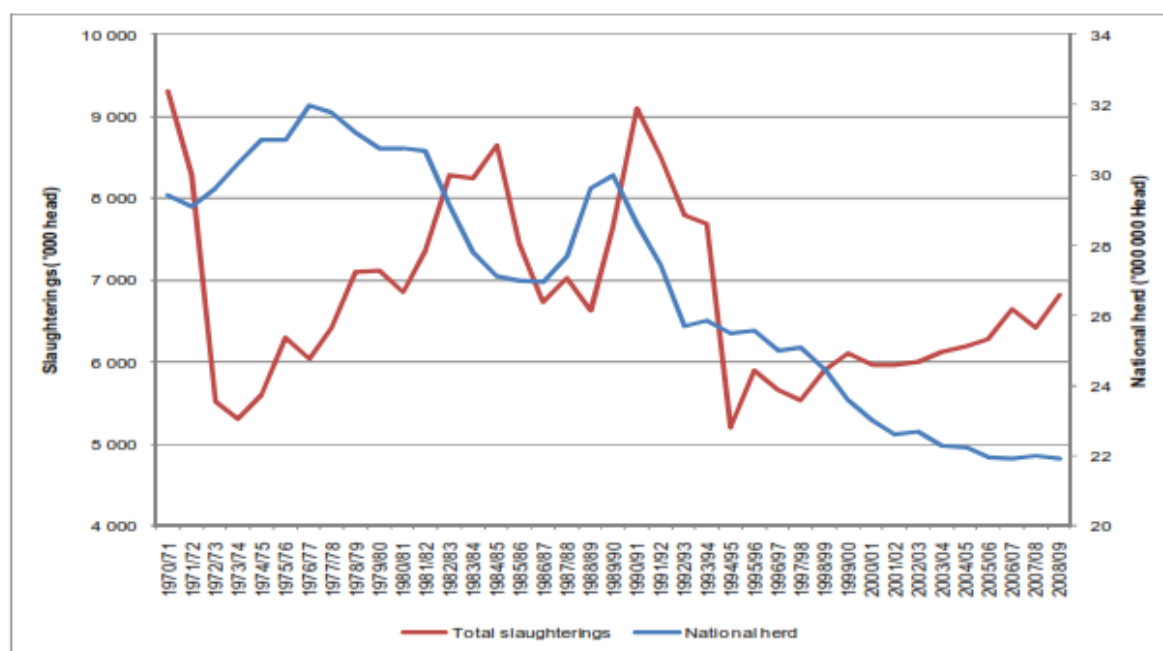
### **Production and Inputs**

Globally, the application of advanced breeding and feeding technology has spurred significant productivity growth. Technological advances, and thus productivity growth, have been less pronounced for beef and meat from small ruminants. The use of hybridization and artificial insemination has accelerated the process of genetic improvement. The speed and precision with which breeding goals can be achieved has increased considerably over recent decades.

Not traditionally considered as a mutton producing country, South Africa represents 0.01% of world exports for lamb, ranking at number 31. South Africa is not competitive regarding the exportation of mutton, with the importation of cheap, frozen red meat portions supplementing the local demand. The biggest mutton export markets for South Africa have been primarily SADC countries (Mozambique, DRC and the Congo). The mutton production industry is known to have a high multiplier effect.

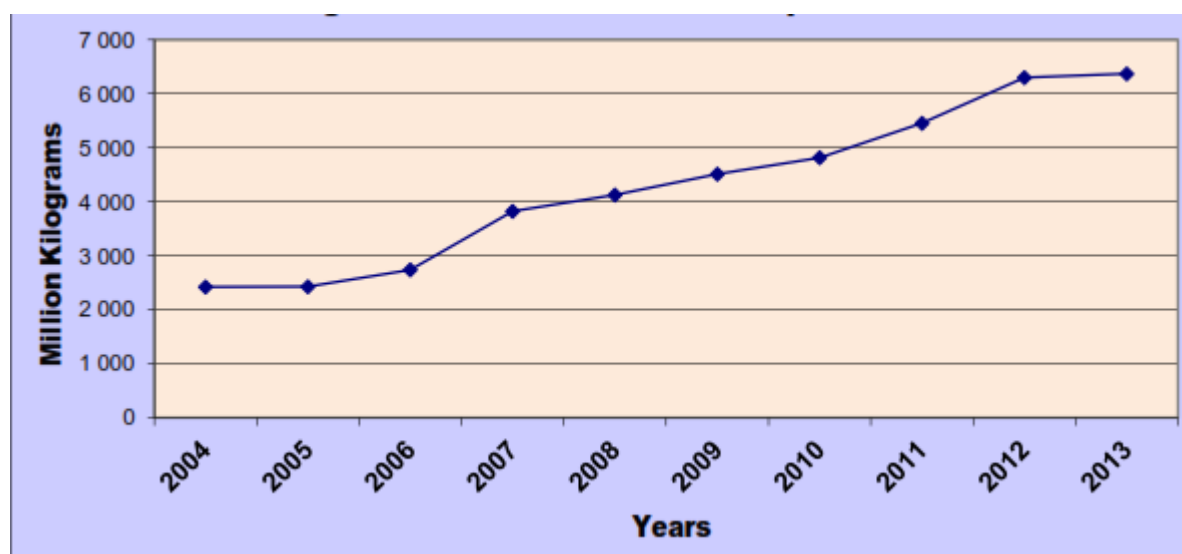
The national sheep herd has been steadily declining since the early 1990s. The main contributing factors responsible for this decline in animal numbers, amongst others, includes the conversion from sheep to beef production and the conversion from sheep to game farming in major sheep production areas. These conversions were mainly brought about by the increase in stock theft, predation and, to a lesser extent, climatic changes resulting in drought conditions within some major sheep producing regions (Spies, 2011)

### **Figure 7 South African sheep herd and slaughtering from 1970 to 2009**



At the same time, the gross weight of mutton production has grown between 2004 and 2013:

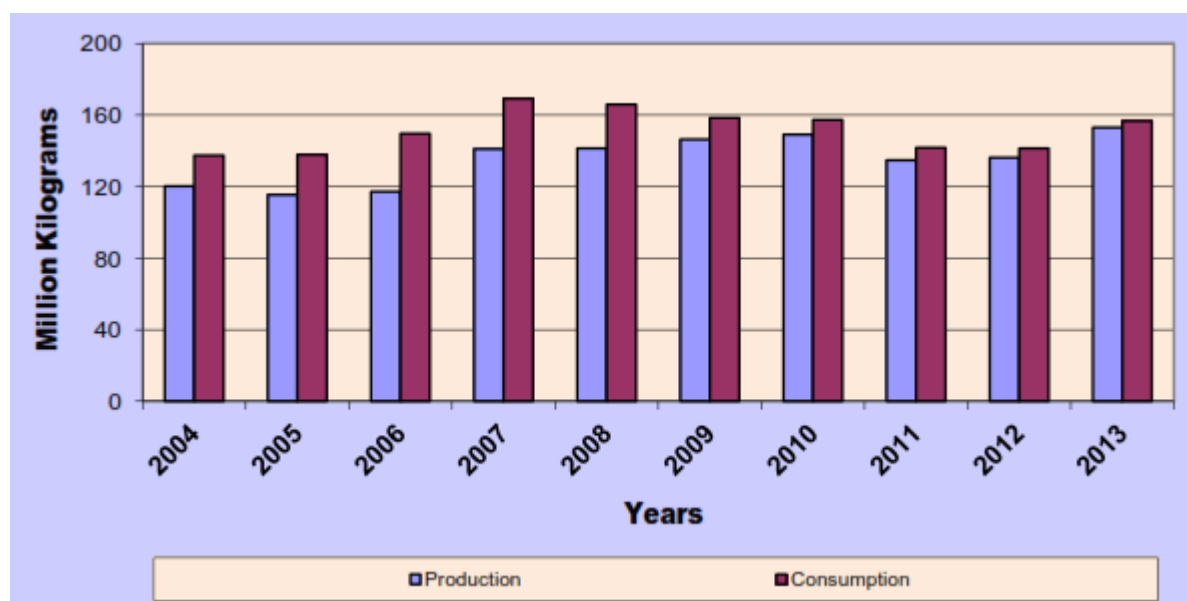
**Figure 8 Gross weight of mutton production in South Africa: 2004- 2013**



Source: DAFF. 2015.

The amount of mutton consumed is more than what was domestically produced in 2013. This shows that South Africa will still remain a net importer of mutton to satisfy the local demand.

**Figure 9 Mutton production and consumption trends in South Africa: 2004- 2013**



In the Central Karoo District in 2013, there were approximately 85,000 goats, over 415,000 sheep, over 11,000 cattle, 11,000 ostrich and 1,100 pigs.

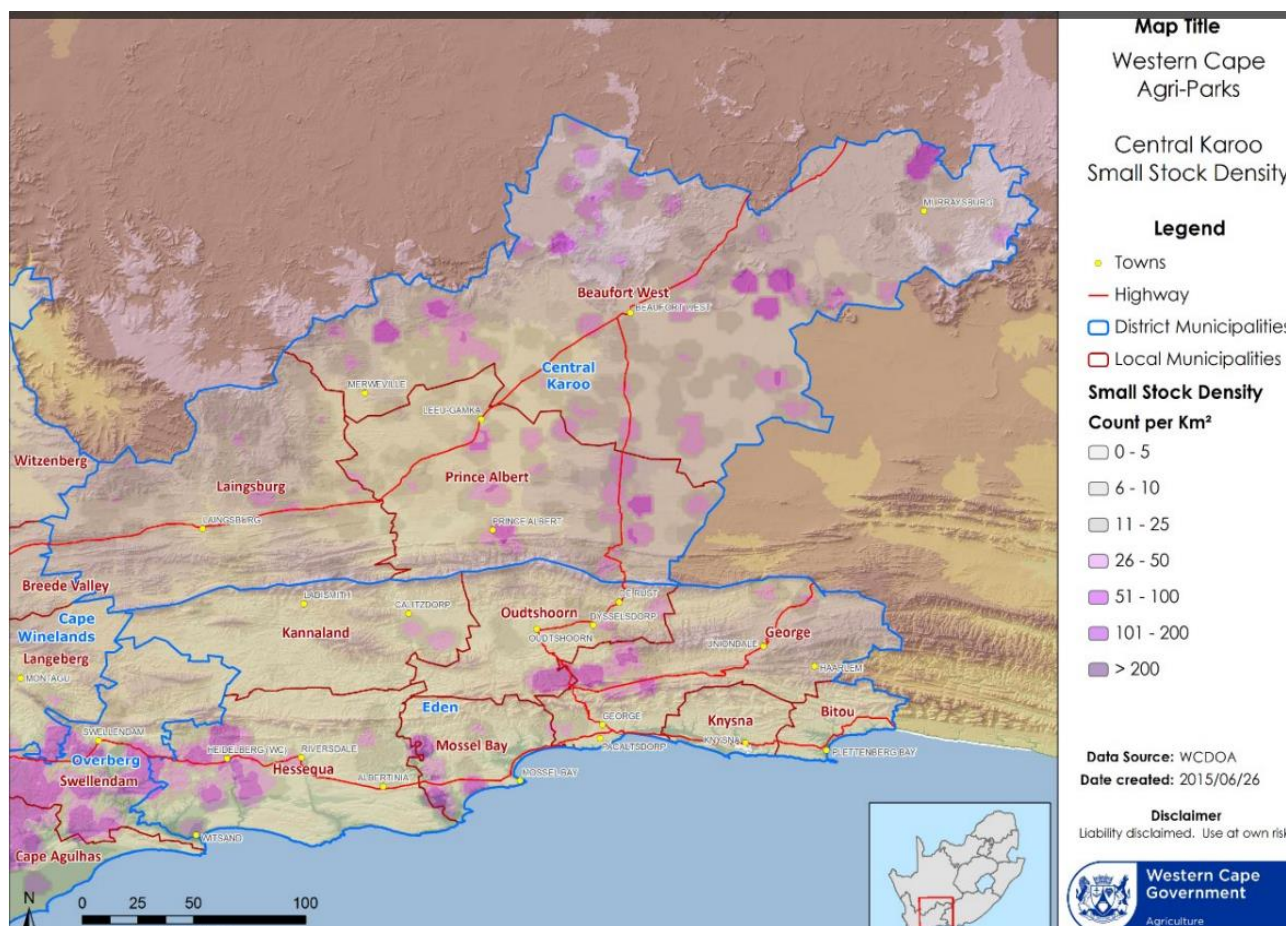
**Table 2 Central Karoo District: Livestock Numbers per Municipality 2013**

Beaufort West		Prince Albert		Lainsburg		District Total
Type	Count	Type	Count	Type	Count	
Cattle	7468	Cattle	2062	Cattle	1912	11,442
Goats	53269	Goats	24022	Goats	7395	84,686
Horses	861	Horses	236	Horses	180	1,277
Ostriches	5544	Ostriches	5634	Ostriches	182	11,360
Pigs	357	Pigs	453	Pigs	374	1,184
Sheep	248494	Sheep	76112	Sheep	92604	417,210

Source: Western Cape Agriculture Commodity and Infrastructure Census 2013 [Accessed at <http://www.elsenburg.com/gis/apps/agristats/>]

It is clear that sheep are the dominant commodity in the District, followed by goats. The majority of the sheep in the District Municipality are found in Beaufort West.

**Figure 10 mall Stock Density in Central Karoo District**



Source: Source: Western Cape Agriculture Commodity and Infrastructure Census 2013 [Accessed at <http://www.elsenburg.com/gis/apps/agristats/>]

The main sheep breeds that are found the CKDM are Dorper sheep (72%), Merinos (12.5%), Afrino/crossbreed (8.7%). Dorper sheep are farmed by 80% of the farms, Afrino/crossbreeds by 27% of the farms, Angoras by 27 % and Merinos by 6.7%. The average flock sizes are 326 Sub Sector Unit (SSU's) for Dorper sheep, 117 SSU's for Afrino crossbreeds, 677 SSU's for Merinos and 90 SSU's. (Jordaan&Grobler, 2011).

It is clear that sheep are the dominant commodity in the District, followed by goats. The table above indicated that the majority of the sheep in the District Municipality are found in Beaufort West.

The main agricultural products in the Central Karoo District are wool, mohair, mutton and skins. The wool and mohair is exported and very little local value addition takes place. This farming forms the core of the wool farming industry in the region. The Central Karoo District is responsible for the largest wool production in South Africa, while meat production makes the second largest contribution to the economy of the region (CKDM, 2010). For each Merino sheep the average quantity of wool per shear is 4-5 kg. Currently the wool price for clean wool is R110.17 per kg (BKB, 2014).

Sheep farming also provides an income from the skin. Sheep skins are produced from both main breeds, Merino and Dorper (DAFF, 2012g). Cape Town is the largest exporter of mutton in the Western Cape owing to the volumes passing through the harbour and international airport. The value of imports is substantially more than the value of exports, confirming the imbalance



in supply and demand (SmartAgri & ACDI, 2015).

In addition, game farming has been growing rapidly in South Africa as well as the Central Karoo and is one of the fastest-growing branch of agriculture in South Africa (World Wildlife Fund). The majority of game ranches found in Limpopo, the Northern Cape and the Eastern Cape. The total area covered by these privately owned ranches now exceeds that of all national parks and provincial nature reserves put together (World Wildlife fund). In terms of game ranching, game is considered to be an agricultural product as defined in the Marketing of Agricultural Products Act of 1996.

In South Africa there are two types of sheep: those bred for meat – the most famous one is the Dorper, and those bred for meat and wool – of which the Merino is the best-known. Roughly a third of the lamb meat we eat comes from the former type and the rest from the latter. The type a specific farmer breeds depends on a number of factors, with geographical location the most important.

A 2013 study comparing the relative financial performance of woolled and mutton sheep farming in Laingsburg found the following (Conradie and Landman. 2013):

*This paper investigated the relative financial performance of woolled and mutton sheep and the determinants of woolled sheep ownership for 34 full-time sheep farms in Laingsburg South Africa, where rainfall is only 128 millimetres per annum. A comparison of fourteen woolled sheep flocks and eight similar sized mutton flocks revealed 1) a slightly but insignificantly higher unit production cost for wool producers, 2) a 21% but insignificantly higher net farm income per breeding ewe for woolled sheep, 3) a significantly lower tagging percentage for woolled sheep and 4) a significantly lower predation percentage for woolled sheep. The percentage of woolled sheep in the flock was a logit function of farm size, size of the irrigated (crop) area, tradition and terrain ruggedness, although the latter was not significant. Farmers in extensive grazing areas should take notice of woolled sheep's ability to compete and the wool industry should pay attention to further improving the reproductive performance of this sheep type. The finding of woolled sheep's apparent lower susceptibility to predators deserves further study as it could become a strong argument for why farmers ought to switch (back) to woolled sheep.*

The agricultural inputs that farmers have are feed, seed, manure, chemicals and equipment. The farmers purchase the agricultural inputs from suppliers such as BKB2 in Beaufort West.

The small stock industry in South Africa, as well as the Central Karoo District, is characterised by dualism, particularly at the production stage. The sub-sector is characterised by the commercial / formal and emerging / informal producers. Emerging farmers face particular challenges regarding both live-stock as well as land-management (e.g. overstocking the land's grazing capacity), access to affordable veterinary support, losses through theft and predators, access to credit and financial cash flow management, access to abattoirs and commercial markets due to quality challenges and meeting standards as well as transport costs. In general, input costs have been rising faster than income for small emerging farmers and many have not survived as a results. As one report notes:

*Most of South Africa's grazing land is stocked beyond its long-term carrying capacity. Overstocking is most evident in the communal rangelands of Limpopo, KwaZulu-Natal and the Eastern Cape, which support more than half of South Africa's cattle. Overstocking can cause*

*trampling and crusting of the soil and denude the veld of vegetation. This leads to reduced productivity, reduced soil fertility and erosion. As much as 91% of South Africa is defined as arid or semi-arid, and it is in these areas that land degradation (compounded by climate change) can lead to desertification and the irreversible loss of productive land (Gbetibouo & Ringler, 2009).*

Increasing the productivity of the producers in the smallholder sector should be a major industry objective. This objective should start with the improvement of infrastructure, education of extension officers and simplified and easier access to credit (Spies, 2011).

Various initiatives exist to improve live-stock management. For example, Merino SA has a Merino Plan in place. The Merino Konsortium is also engaged in talks with government to form partnerships with emerging farmers and assist emerging farmers with live-stock and farm management as well as access to markets. In addition, the Red Meat Producer's Organisation has published guidelines for good farm management practices, managing predators and other issues.

More than 80% of lamb and mutton are pasture fed, which means they graze naturally on open fields. More than 60% of South African beef are produced on natural or cultivated pastures, with the majority finished off for two months in feedlots. Most of these animals are slaughtered as age A, fat code 2 carcasses (A2). A clear cyclical trend in the number of slaughterings is evident. According to Lubbe (1990), this trend is caused by the cyclical nature of female animal slaughterings. The author investigated the decomposition of price time series components in the red meat industry. He states that the combined effect of rainfall, variations in production capacity and price expectations produce an environment conducive to relatively stable prices. Furthermore, livestock expansion and liquidation processes are fuelled by the rainfall cycle and rainfall expectations. Lubbe (1990) concludes that agricultural policy and farmers' strategies could be more effective if the existence and nature of price and rainfall cycles are known.

Eales (1979) points out that many factors influence the actual level of slaughtering in a particular year and this causes a fluctuation in the volume slaughtered from year to year. The factors identified by Eales (1979) are the following:

- The general state of the economy and the purchasing power of households.
- The price of beef in relation to the consumer price index (i.e. whether consumers regard meat as expensive or not).
- The competition from substitutes such as broiler chickens.
- The relative prices of other agricultural commodities used as inputs in beef production, such as maize; and
- The relative price of agricultural inputs such as land, labour, fuel, fertilisers, pesticides and insecticides.

The impacts of the current drought being experienced in South Africa on this industry will only be fully known once the length of the drought is known (Red Meat Producer's Association) and various scenarios exist. If the drought persists, it is likely that more young female animals will in the short term



end up in the feedlot and most likely be slaughtered, which can have an influence on female percentage and thus supply, as well as on prices in the long term. Further emergency slaughters will take place in the short term, but supply will not rise drastically because herds are already diminished. Producers prices will in the short term be somewhat lower. In the long term, supply will seriously be under pressure with prices rising above the inflation rate. The consumer price of red meat will increase because of more expensive grain and feed prices and the impact of the lower supply of slaughter stock from farms. Grain and feed prices as well as input costs will drastically increase.

### **Processing and Distribution**

#### **Meat**

There are three abattoirs located in Beaufort West as well as one in Nelspoort (50km north-east of Beaufort West) and one in Laingsburg.

#### **Wholesale**

This function is largely integrated into the abattoirs, especially the A and B level. There are still some wholesalers who purchase several carcasses from the abattoirs and then sell them to butchers, but this is primarily from the C and D grade abattoirs and in small quantities.

#### **Retail**

The retail function, where product is sold directly to the end user, is split between a variety of different actors. In the cities, this is increasingly being handled by supermarkets that are mostly selling finished, packaged product. Butchers still provide quite a bit of the retail service.

#### **Channels**

Different sub sector studies define channels based on various factors. In this report, the channels used in the map are defined according to the type of a producer. There are five main channels through which product flows from production through to the markets. At one extreme, there is the communal small producer channel and at the other extreme is the vertically integrated commercial feedlot company, which does everything from birthing the calves to butchering and packaging the cattle.

#### **Channel 1 – The small communal farmer**

The small communal farmer channel is the most disaggregated channel in the map. Here, small farmers occasionally sell cattle when they need some funds. There are a great number of cattle farmers, but the volume of formal commercial trade is quite small. Most of the cattle are either purchased via direct sale to the E and F grade abattoirs or end user or to speculators. There are no good statistics on this total nationwide.

#### **Channel 2 – The larger communal farmer**

The larger communal farmer channel is one that is on the way to towards a more commercial approach, except that the farmers still keep their cattle with the communal herd. This has many negative impacts on the quality of their cattle as they cannot control breeding and feeding. The larger communal farmer is more likely to take his cattle to the auction, if he has access, but still relies on

direct sales to private households as well as the speculators and agents to purchase his cattle on an ad hoc basis.

The larger communal farmer is showing more tendencies towards treating his animals like a commercial business. They would like to get their own land, but do not fully understand the economics behind commercial cattle farming.

### **Channel 3 – The small and emerging commercial farmers**

The small and emerging commercial farmers are located in the commercial farming areas. They have greater access to the auctions where they feel that they can get a transparent price. Generally they do not have large numbers of cattle to sell per annum, They are still largely dependent on the auction for the sale of their animals, but because they have more animals they might also have some closer relations with the larger abattoirs, even though they generally do not have enough animals for sale at any point in time to warrant a truck load. The A and B grade abattoirs become more prominent in this channel and are now driving the purchase of the animals as they increasingly need through put. They have a more aggressive set of agents and buyers who are purchasing at auction and are linking in more closely to the markets. Some of the emerging farmers and small commercial farmers are selling their cattle as weaners into the feedlot system.

### **Channel 4 – Commercial veld fed**

The commercial veld fed cattle are found increasingly in the areas without good grain production, but where there is extensive land. They hold the animals for 2-3 years to bring them to selling weight. They are dealing either through the auction or with direct sales to the abattoirs.

### **Channel 5 – Commercial Feedlot**

The commercial feedlot channel is now the dominant channel in the industry. It accounts for about 80 percent of slaughtered animals, taking them through from the weaner stage, through the feedlots to the supermarkets and butchers. The production is carried out across the country, but the cost of transporting the weaners to the feedlots is taken into account in the sale price to the farmer.

#### **Sales mechanisms**

There are four sales mechanisms between farmers and their buyers.

- Informal markets/direct sale to households
- Direct contract sale;
- Auctions;
- Sale to speculators/agents

Informal markets. Large stock and small stock owned by developing farmers are sold through an informal market in rural areas (Nkosi and Kirsten, 1993 and USAID, 2003). These types of markets as noted by (Coetzee et al, 2004) cited by NERPO (2006) are characterised by a high degree of seasonality, poor market information pertaining to prices and quality required. Despite all the pitfalls, Nkosi and Kirsten (1993) found that informal markets are the preferred outlets by the emerging farmers. This trend was confirmed by ComMark Trust (2004) and ECIAfrica (2005), who found that very few emerging farmers sold their livestock at auctions during the periods prior to Christmas and Easter seasons. These periods coincide with the return of family members from urban areas and thus an increased demand for traditional livestock slaughtering (NERPO, 2006). The price paid is always a subject of negotiation between buyer and sellers.

Direct contract sale. As the level of integration in the industry increases, the prevalence of direct contract sales between weaner producers and the feedlots is increasing. In some cases prices are fixed in advance and the farmers are able to better plan the economics of their production. The contract prices are not necessarily public knowledge, but they are often better for the farmer and the abattoir, since there is no middleman involved.

Auctions. The auction industry, which used to dominate, is decreasing as the level of integration in the industry increases. The auctions are still popular in the areas with lower levels of direct sales. The small and larger communal farmers sell their cattle through this sale mechanism. Auctions handle either weaners or older cattle, and are effective mechanisms for setting transparent prices in the rural areas, particularly for smaller cattle herders who do not have good price information.

Speculators/agents. The third main form of sale is to speculators or agents from the abattoirs. Some speculators are purely independent, while others work in conjunction with abattoirs, but their modus operandi is quite similar – both get to keep the difference between the sales price and the purchase price. While a speculator will usually buy for his own account, he is sometimes tasked with purchasing for specific individuals who need a cow for a specific purpose. Abattoirs will tell their agents what price they will pay, then leave the agents to get the best price they can. This effectively makes them speculators as well, as the agents have little incentive to develop transparent pricing relations with the farmers to stimulate their participation in the market.

### **Feedlots and finishing**

A feedlot is a confined area with watering and feeding facilities where livestock are completely hand or mechanically fed to produce consistently quality meat (Olivier, 2004). The animals do not eat pasture plants, but are fed grain-based diets, hay or silage. South African feedlots as highlighted by (SAMIC, 2002) cited by Olivier (2004) normally buy cattle from extensive cattle farmers, weaner calves with live mass of 200 kg at an age of 205 days and add 105 kg carcass through extensive feeding of about 100 days, eventually slaughtering an animal at 215 kg carcass mass.

The South African feedlot industry is a flourishing industry that produces approximately 75% of all beef produced in the country, which in real terms is in the region of 1,35 million head per annum with a one-time standing capacity of approximately 420 000 head (SAFA, 2003) cited by Olivier (2004). Following the deregulation of the South African meat industry in the 1990's, a number of larger feedlots have now vertically integrated into processing, wholesaling and even retailing their own beef products (SAFA, 2003). At present there are approximately 70 feedlots in South Africa. The main players in the feedlot industry are Karan Beef, Kollosus, Sparta Beef, SIS, Beefcor, EAC Claassen Group, Charmer and Beefmaster. According to Jooste et al, (2003) cited by Olivier (2004) these feedlots account approximately 70% to 80% of cattle in the feedlot industry, depending on the number of animals standing in the feedlot at specific point in time.

## Shearing and Wool<sup>6</sup>

### *Shearing*

The factors that contribute to the price of wool are the generic quality of the sheep, lambing percentage of the sheep, feed quality, grazing quantity and grazing quality and these factors contribute to the total income that a wool producer receives for wool. For the farmers in the Central Karoo to get high returns for wool there will have to be a strict adherence to these standards. On average wool is more than three times more expensive than other commodities such as cotton and nylon. The shearing of the sheep occurs at the shearing sheds that each farm has. BKB sends shearers to the different sheep farms to shear the wool. The farmer is responsible for paying the shearers and BKB pays the farmers for the wool.

and initiative flows from the recent success and outcomes of a R8 million BKB-funded pilot at BKB's newly established shearing college, which has already provided training and employment to 120 beneficiaries. The critical shortages of skilled shearers is compelling established South African commercial wool and mohair farmers in main production regions of the Eastern Cape, Northwest, Free State, Northern Cape and Western Cape to use around 1700 foreign national shearers from neighbouring African countries every year.

The Merino and Dorper sheep are sheared on the different farms and also used for meat. BKB is then responsible for transporting the wool from different farms in the Central Karoo to the auction in Port Elizabeth. There are 2,400 different types of wool grades and this gets sorted in Port Elizabeth. Sorting this large amount of wool grades in the Central Karoo would not be feasible as large quantities are collected from a wide market area and auctioned, and the Central Karoo is spatially located. There is also not enough water in the Karoo to wash the wool. Approximately 20 litres of water is required to wash 1 kg of wool and the CKDM does not have sufficient water to clean wool on such a large scale.

Wool is processed in the following stages:

1. **Sheep** – the wool is sheared from the sheep (this happens on the farm).
2. **Fleece** – the wool that is shorn is called fleece and sometimes called “grease wool” because of the lanolin and oil in the wool. The fleece has to be cleaned before it is processed into yarn (this happens on the farm).
3. **Skirting a fleece** – the wool from the belly, back and legs of sheep is often full of manure. The processing of removing the manure is called skirting. The fleece is then sorted into various types (this happens on the farm). The wool is then transported from the CKDM to PE to be washed.
4. **Washing the wool** – soap or detergent is then used to remove the grease from the wool. Approximately 20 litres of water are required to wash 1kg of wool (this happens in PE and also Uitenhage).
5. **Picking** – the washed wool is then dried “picked” or “teased” and this begins the process of opening up the locks of wool and transforming it into a consistent web. The wool is then put through a picker which opens the locks and the fluffy wool is blown into a room (this

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<sup>6</sup> The Central Karoo Agri Park Master Plan Situation Analysis report contains a detailed mohair industry value chain analysis which is not repeated in this document. The introduction of new wool processing technology in the Western Cape could impact on value chain dynamics and see more wool processing taking place in the Province.

happens in PE).

6. **Carding** – wool fibres are put through a series of combing steps called carding. On a large scale this is done with machine driven drums that are covered with “card cloth” and that combs the wool multiple times by transferring it back and forth from one drum to the other as it is passed through the series of drums (this is done in PE).
7. **Roving** – the final stage of the carding process divides the web into small strips which are called pencil rovings. At the end of the card these are collected on large spools. These spools of pencil roving are placed on the spinning frame to make a yarn. Pencil roving cannot be handled much because it is too delicate, so when processing fibre for hand spinners the roving is removed from the machines earlier and wound into balls (this is done in PE).
8. **Spinning** – when the roving comes off the card it has no twist. The oil and the natural hooks that exist on the surface of the wool fibres hold it together. The spinning frame puts the actual twist on the roving turning it into yarn. Wooden bobbins are used to collect this (this is done in PE).
9. **Wind and/or Skeining** – when the wooden bobbins are full of yarn they are placed on a cone winder. The yarn is then transferred to paper cones for use in knitting machines and weaving.
10. **Finishing** – there are different ways of finishing the yarn. It is sometimes essential to remove the lubricant by washing, which also “sets the twist” which enables the fibres to open up, fluff out and make a loftier yarn (this is done in PE)

Auctions have been centralised in Port Elizabeth and take place once a week during the season (June to August). The price of the bale is formulated through the quality, supply and demand of each individual lot. The lower the quality of wool the lower the price +10% of buyers use the wool for domestic use and ±90% of the buyers buy the wool for export. Wools of different quality are marked and packed in different bales. Different quality bales are auctioned and bales in each lot are sold to the highest bidder. After the auction the wool is destined for export are warehoused in three major ports e.g. Durban, Cape Town and Port Elizabeth. The wool is exported predominantly to the UK, Germany, Japan, China, France, Italy, South Korea and Taiwan. The garments made from the wool are made in different countries all over the world.

### Slaughtering

Most slaughtering is done through abattoirs. The abattoir industry is responsible for the conversion of livestock to meat. The process remains critical to ensure a safe and wholesome product to consumers. The Meat Safety Act, 2000 (Act 40 of 2000) addresses measures to promote the safety of meat and animal products, and to establish and maintain essential national standards in respect to abattoirs. One classification of abattoirs is into high, low and rural output as follows:

*Table 3 Abattoir categories and slaughter units as described in the Meat Safety Act and Regulations*

	Red Meat	Poultry	Ostriches	Game
<b>High Throughput</b>	21 –	2001 –	21 –	21 –
<b>Low Throughput</b>	3 – 20	51 – 2000	3 – 20	3 – 20
<b>Rural</b>	1 – 2	1 - 50	1 – 2	1 – 2
<b>1 Slaughter unit =</b>	1 bovine	1 fowl	2 Ostriches	1 medium game
	6 sheep	1 duck		6 small game
	4 porkers	1 pheasant		Large game to be determined by PEO
	2 baconers	1 guinea fowl		
	1 sausage pig	½ goose		
		¼ turkey		

Source: Department of Agriculture, Forestry and Fishers. 2012.

Table 4 Total number of red meat and poultry abattoirs in South Africa by Province. 2012

Province	High Throughput		Low Throughput		Rural	
	Red Meat	Poultry	Red Meat	Poultry	Red Meat	Poultry
Eastern Cape	12	2	19	11	35	6
North West	10	10	12	20	10	0
Mpumalanga	12	5	19	13	0	2
Gauteng	10	7	15	23	0	1
Limpopo	10	3	13	6	39	0
KZN (North)	8	0	9	10	5	3
KZN (South)	9	7	7	14	2	2
Free State	25	4	25	33	17	0
Western Cape	20	8	36	9	1	3
Northern Cape	13	0	24	12	8	0
<b>Totals</b>	<b>129</b>	<b>46</b>	<b>179</b>	<b>151</b>	<b>117</b>	<b>17</b>
	<b>Total Red Meat</b>		<b>425</b>			
	<b>Total Poultry</b>		<b>214</b>			

The abattoir industry can be divided into: (1) abattoirs which are linked to feedlot sector, the wholesale sector or are owned by municipalities; and (2) abattoirs that are mainly owned by farmers and SMMEs. The former abattoirs are predominantly class A and B abattoirs while the latter are usually classified as C, D and E class abattoirs. In most cases the A and B class abattoirs comply with statutory measures while it is questionable if the majority of the C, D and E class abattoirs comply with the statutory measures (Davidson 2003).

Abattoirs that seek to export meat must have a veterinary approved meat establishment with

an export (ZA number) number that is granted through an application process by the NEO (National Executive Officer) at the Department of Agriculture. The abattoirs in the CKDM are C, D and E class abattoirs. None of the abattoirs in the CKDM have a ZA certification with a ZA number and that limits the scope of the market to be local.

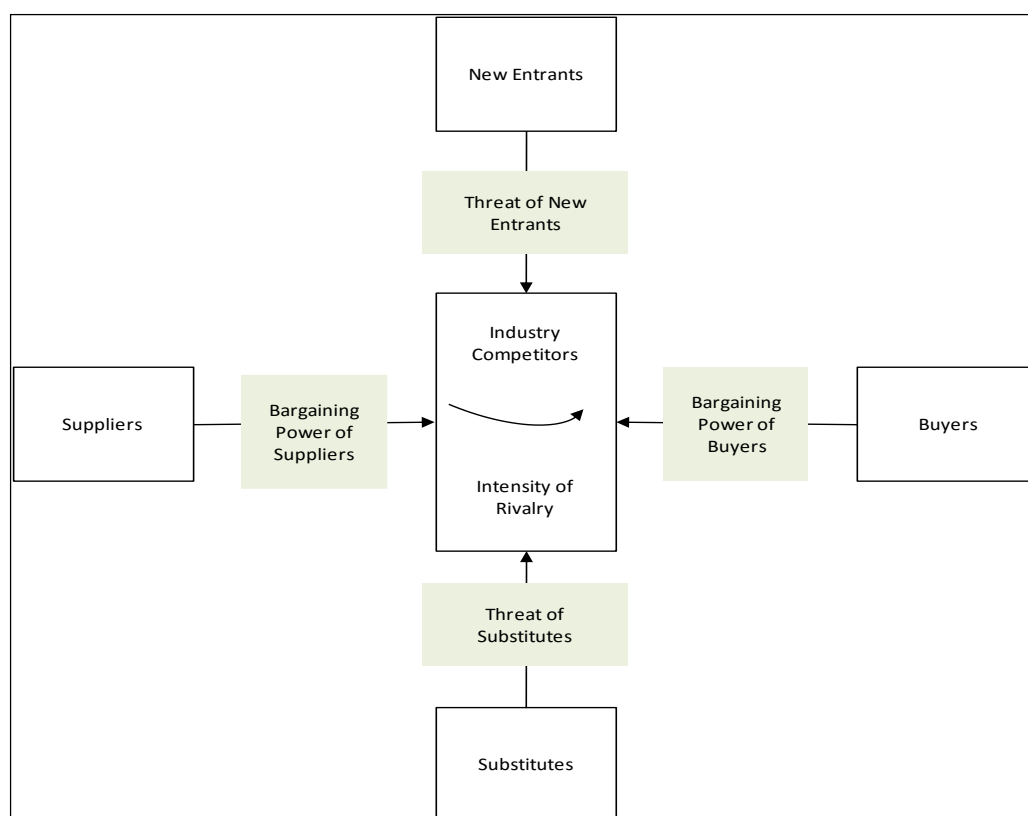
Inspection services within the abattoirs are also important. The largest abattoirs have inspectors provided by SAMIC (SAMIC currently provides vets and inspectors for 42 abattoirs), but the smaller ones do not, which hurts their ability to track diseases. Measles is the most common disease being tracked, and the level of infection in an abattoir can affect its profitability. But it can only be tracked if there are vets and inspectors. SAMIC has a shortage of vets and meat inspectors relative to the demand. The DAFF submitted a proposal in 2012 to re-examine how the cost of meat inspections at abattoirs are provided and funded. The outcome of this process needs to be ascertained as it impacts on the feasibility of smaller abattoirs (DAFF. 2012)

### **Industry analysis**

An industry analysis using Porter's diamond as well as the identification of strengths, weaknesses, opportunities and threats is outlined below. Porters Five-Forces Model is used as an analysis model for the assessment of the vegetable industry in South Africa. The five-forces outlined in diagram 4 are:

- **Competition** - assessment of the direct competitors in a given market
- **New Entrants** - assessment in the potential competitors and barriers to entry in a given market
- **End Users/ Buyers** - assessment regarding the bargaining power of buyers that includes considering the cost of switching
- **Suppliers** - assessment regarding the bargaining power of suppliers
- **Substitutes** - assessment regarding the availability of alternatives

**Figure 11 Porter Five-Force Model: Elements to be applied to the Horticultural Industry in SA**



Source: (Oliver G. C., 2004)<sup>7</sup>

**Table 5 Lamb and Mutton industry analysis**

PORTER'S FIVE FORCE ANALYSIS	
Supplier Power	Compliance with the Karoo brand and an overall shortage of supply relative to demand give suppliers some power although agents can manipulate prices of meat received by producers.
Buyer Power	South Africa exported greater quantities of lamb to Mozambique, Democratic Republic of Congo (DRC) and Congo.
Intensity of Rivalry / Competition	<p>The top exporters of lamb carcasses and half carcasses, fresh or chilled are United Kingdom, Ireland, Spain, Australia, and Netherlands and the top exporters of sheep carcasses and half carcasses, fresh or chilled are United Kingdom, Namibia, Australia, Pakistan and Sudan.</p> <p>Large producers practice effective live-stock management and have access to credit required to access markets and abattoirs, whereas emerging producers battle in these areas.</p>

<sup>7</sup> Oliver G. C. (2004); An Analysis of the South African Beef Supply Chain: From Farm to Fork; <https://ujdigispace.uj.ac.za/bitstream/handle/10210/296/GertOlivier.pdf?sequence=1>; [accessed on 10 December 2015]



Threat of Substitution	<p>Cheaper, frozen portions of lamb, mutton and beef are imported from Australia and the US and have flooded the South African meat industry in recent years.</p> <p>Lower-income consumers substitute white meat for red meat. Middle and upper income consumers are developing increasing awareness of meat health benefits.</p> <p>Many substitutes exist for wool and mohair products but consumer awareness of their superior qualities can drive loyalty for middle to upper income consumers.</p>
Threat of New Entrants	<p>The threat of new entrants is medium:</p> <p>Commercial and other durable barriers exist as it pertains to entry into the market. In addition, there exist tariff barriers (these may include quotas, specific tariffs and entry price systems, ad valorem tariffs) and non-tariff barriers (these may include product standards, sanitary and phyto-sanitary standards, food health and safety issues, food labelling and packaging, product certification procedures, quality assurance and other standards and grades). Abattoirs have key standards that must be met by suppliers. Health standards govern the slaughter and retail of animals.</p> <p>An increasing amount of new entry threats to production is therefore not a heightened risk to the mutton industry.</p>

The identified strengths, weaknesses, opportunities and threats facing the Central Karoo sheep industry are as follows:

**Table 6 Central Karoo Sheep Industry SWOT Analysis**

<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Growing per capita national demand for meat.</li> <li>• Emerging farmers require collaboration as cooperatives areas</li> <li>• Emerging farmer- State- Partnerships with existing abattoirs and improved certifications</li> <li>• Supply contracts with state institutions in the District (e.g. Oudtshoorn Army Base)</li> <li>• Increased income levels resulting in an increase in per capita consumption.</li> <li>• Value chain partnerships with cooperatives and Contracting with firms.</li> <li>• Processing opportunities including game, the use of new technologies for wool processing, and partnerships with existing abattoirs as well as olive processing facilities.</li> <li>• Western Cape Province Alternative Crops Fund will support multi-stakeholder funding to</li> </ul>	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Sheep farming represents a high labour multiplier industry.</li> <li>• Mutton serves as an important and healthy source of protein.</li> <li>• Existing abattoir facilities.</li> <li>• Growing recognition of Karoo Brand.</li> </ul>
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<p>support the development and testing of alternative crops which can assist agriculture production to adapt to climate change and the changing production potential of the District;</p> <ul style="list-style-type: none"> <li>• The potential for commercial farmers currently supplying the national retailers to form mentorship and supply partnerships with smaller and emerging farmers to build their capacity and link them to retail value chains.</li> </ul>	
<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Inability to compete with red meat producing countries like the US and Australia. Additionally, cheap meat imports flood South African markets, having a destabilising effect on commercial and small scale farmers</li> <li>• High interest rates which affect availability of funds for farmers.</li> <li>• Climate change, drought and climatic conditions and access to sufficient water for animals. This may require farmers to decrease their flock sizes in order to prevent losses due to a lack of grazing capacity.</li> <li>•</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Smaller abattoirs do not comply with the Meat, Health and Safety Acts and require upgrading.</li> <li>• Emerging farmer livestock management and quality of animals not sufficient to access formal markets and abattoirs.</li> <li>• Veterinary services in South Africa are uncoordinated and insufficient and increase the risks due to pests and diseases.</li> <li>• Emerging farmers struggle with access to credit, cash flow management and high input costs. <ul style="list-style-type: none"> <li>• Stock losses due to predators and stock theft threaten sustainability.</li> <li>• Smallholder and emerging farmers do not have sufficient access to credit, transport, storage infrastructure, water licences, markets</li> <li>• Smallholder and emerging farmers compliance with food safety and quality standards</li> </ul> </li> </ul>

The Agri Park will need to coordinate and facilitate linkages with a wide range of industry role-players at both the production level (e.g. regarding existing producer support initiatives) as well as processing and market access levels. A few of the industry structure linkages with Agri-Park shown in below:

**Table 7 Lamb and Mutton Industry bodies linked with Agri-Park**

Agri-Park Model			
Emerging Farmers	Farmer Production Support Unit	Agri-Hub	Rural Urban Centre Market
<b>Links with Meat Industry Organisations</b>			
<ul style="list-style-type: none"> <li>• <b>NERPO:</b> Commercialise emerging &amp; mainstream black farmers</li> <li>• <b>RPO:</b> Lobby &amp; Information sharing (mouthpiece)</li> <li>• <b>LCKC:</b> Livestock welfare</li> <li>• <b>Merino SA.</b></li> <li>• <b>Informal markets</b></li> <li>• <b>Rural abattoirs</b></li> <li>• <b>Urban abattoirs</b></li> <li>• <b>Commercial Farmers</b> (individual, independent forums and associations)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>MAA:</b> Training, Information &amp; Networking</li> <li>• <b>SAFA:</b> Technical and Technology support</li> <li>• <b>SAFLA:</b> Advise and Marketing</li> <li>• <b>SAMPA:</b> Meat-processing and related industries</li> <li>• <b>SHALC:</b> Tanneries representative body</li> <li>• <b>NAWACO-</b> Women in cooperatives</li> <li>• <b>Retailers</b> (Spar, Massmart, Pick n Pay, Shoprite/Checkers, Fruit &amp; Veg City)</li> <li>• <b>ARC-training,</b> information and networking</li> </ul>	<ul style="list-style-type: none"> <li>• <b>AMIE SA:</b> Information sharing (mouthpiece)</li> <li>• <b>NMFT/NFMT:</b> Retail meat trade (information)</li> <li>• <b>RPO:</b> Lobby &amp; Information sharing (mouthpiece)</li> <li>• <b>SAFLA:</b> Advise and Marketing</li> <li>• <b>Agents</b></li> <li>• <b>Market and Price Information</b></li> <li>• <b>Cape Wools SA.</b></li> <li>• <b>Retailers</b></li> </ul>	
<b>Industry Representative Bodies (see above and including):</b> <ul style="list-style-type: none"> <li>▪ Industry Representative Body: Red Meat Industry Forum (RMIF)</li> <li>▪ Levy Administrator: (implementation, administration and enforcement): Meat Statutory Measures Services (MSMS) and Red Meat Levy Administration (RMLA)</li> <li>▪ Research: Red Meat Research Development Trust (RMRDT) and Red Meat Research &amp; Development South Africa (RMRDSA)</li> <li>▪ Quality Assurance: South African Meat Industry Company (SAMIC)</li> <li>▪ Training, Research and Administration: Meat Industry Trust (MIT)</li> <li>▪ Sheep Forum of South Africa.</li> <li>▪ National Wool Growers Association (NWGA).</li> <li>▪ South African Meat Industry Company (SAMIC).</li> <li>▪ Lamb and Mutton SA.</li> <li>▪ National Emergent Red Meat Producer's Organisation (NERPO).</li> <li>▪ Red Meat Producer's Organisation (RPO).</li> </ul>			
<b>Links with Public Sector Organisations</b>			
<ul style="list-style-type: none"> <li>• <b>Information, Research and Training:</b> Agricultural Research Council (ARC)</li> <li>• <b>Support, Training, Funding &amp; Information:</b> National, Provincial and Local Agriculture department and development agencies (e.g. North Cape Development, Trade and Investment promotion Agency)</li> <li>• <b>Funding and Support:</b> DRLR, DAFF, The dti, the National Empowerment Fund (NEF) and Industrial Development Corporation (IDC), Small Enterprise Development Agency (Seda), Small Enterprise Finance Agency (Sefa)</li> </ul>			

## 2.3 Central Karoo Agro-Processing Opportunities in the Short, Medium and Long Term

Food processing opportunities in the Central Karoo have been identified with potential in the short term (0-2 years), medium term (2-4 years) and long term (5-10 years). While immediate the implementation focus of the agri park will be on the short-term opportunities, it is also important that planning and preparation to develop the medium and longer term processing opportunities also takes place in the short term. The medium and longer term opportunities will require production planning and emerging farmer capacity development in order to maximize emerging farmer participation in these opportunities.

### Short Term: 0-2 years:

As a result of consultation and inputs received into this Master Plan (including via the Central Karoo Rural Development Plan (CKRDP) (2015) consultation process), the following proposals emerged:

- e) Upgrading and partnership with one or more selected abattoirs in Beaufort West<sup>8</sup> (possibly to include training required for ZA certification veterinary approval). Ideally, irrigated pastures and/or a feedlot business should be located close to the Agri-Hub using purified waste water to round off stock before being slaughtered for the premium meat market;
- f) Investigating the feasibility of one Tannery to be located in Beaufort West (given the existence of three abattoirs and its logistical centrality)<sup>9</sup>;
- g) Waterless Wool and Mohair Cleaning & Processing Facility Feasibility (if the outcomes of the current study are positive it is proposed that the facility requirements are identified and where possible located at the Agri Park in Beaufort West); and
- h) Lucerne (including from production areas in Rietbron, Nelspoort, Lainsburg and other areas in the District)) and linkages with a possible Lucerne pill processing facility to be established in Eden District.

In addition, the following medium and longer term processing opportunities have been identified for further investigation:

### Medium Term: 2-4 years

4. Resuscitation of the hydroponics project which could focus on:
  - Flowers (currently mainly grown around mainly at Prince Albert) to serve various markets including the local tourism and conference industry (e.g. Roses).
  - Vegetables (the possibility of producing vegetables close to the agri-park site should be investigated further).

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<sup>8</sup> Existing abattoirs are not operating to capacity and are sourcing animals from as far afield as outside the Western Cape. It is not deemed feasible to expand the number of abattoirs in the District. Instead a strategy to optimize emerging farmer access to, and partnerships with, existing abattoirs is regarded as the best way to optimize emerging farmer development and broader economic benefits to the District.

<sup>9</sup> The assessment is that there is not sufficient volume for more than one tannery in the District to be feasible.

5. Goat Milk Product Manufacturing: Laingsburg Goat Milk Project<sup>10</sup>: According to the Laingsburg Municipality, this project could consist of “building a Goat Milk Factory and selling area, 10 Small Farmers with 30 “Switserse” goats selling milk to the factory the products are than be processed and, packaged, labelled and distributed”. Apparently local Businesses are willing to buy the products.
6. Vegetables (depending on potential production quantities and locations) including the revival and restructuring of the currently dormant hydroponics project in Beaufort West).

#### **Long Term: 5-10 years.**

1. Olive processing (Also SA olives branding support to obtain SA olives sticker is needed). It is not yet clear if the planting of additional olive trees on or close to the agri-park site should be investigate further. Ideally, a partnership or partnerships with existing olive processors should be explored to improve emerging farmer access to olive processing facilities;
2. The possibility of planting prickly pears on or close to the agri park site has also been raised and requires further investigation; and
3. Stone Fruits: Apricots (and possibly other fruits including figs) and proposed Prince Albert fruit drying facility, as well as Pomegranate initiative in Murraysburg (and also possibly linked to hydroponics feasibility at Beaufort West), as well as the feasibility prickly pears processing (either in close proximity to the agri hub in Beaufort West and/or the production area of Matjiesfontein).

In terms of the mohair industry, it is understood that limited scope exists for additional processing in the District at this time and that further stakeholder inputs are needed to clarify what processing opportunities exist (if any) in the District. The status and feasibility of the proposed Waterless Wool and Mohair Cleaning & Processing Facility Feasibility (depending on the outcomes of the feasibility study) needs to be ascertained and if the results are positive the possibility of locating the required facilities at the agri-park in Beaufort West should be discussed and explored.

## **2.4 Summary and Conclusion**

The Agri-Park initiative of Government offers small scale farmers the unique opportunity to become viable and profitable business owners.

The challenge now facing small-scale and subsistence cattle producers is to transform the informal livestock production which prevails on both communal and private owned land to a vibrant commercial livestock production system. The industry needs to stop thinking of small-scale farmers as subsistence (which implies a struggle to survive and not an effort to build a business that thrives).

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<sup>10</sup> The goat milk project may be confined to a fairly small local project and whether it should be a priority processing opportunity for the District Agri Park Master Plan will need further discussion by District role-players.

One way of achieving this is to develop an inclusive and equitable value chain partnerships which strengthen emerging farmers and their ability to manage their farms and livestock through improved support which will in turn support market access. Small-scale farmers are fully capable of becoming profitable businesses but this will require a coordinated support approach which can be facilitated by the agri park.

## **CHAPTER THREE: CENTRAL KAROO DISTRICT MUNICIPALITY AGRI-PARK STRATEGY**

### **1.3 Introduction**

The Central Karoo District Municipality is the largest district in the Province spanning 38,854km<sup>2</sup>. It is comprised of three local municipalities: Laingsburg, Prince Albert and Beaufort West, and the District Management Area. The seat of the district is Beaufort West which is located along the N1 between Cape Town (about 500 kilometres away) and Johannesburg.

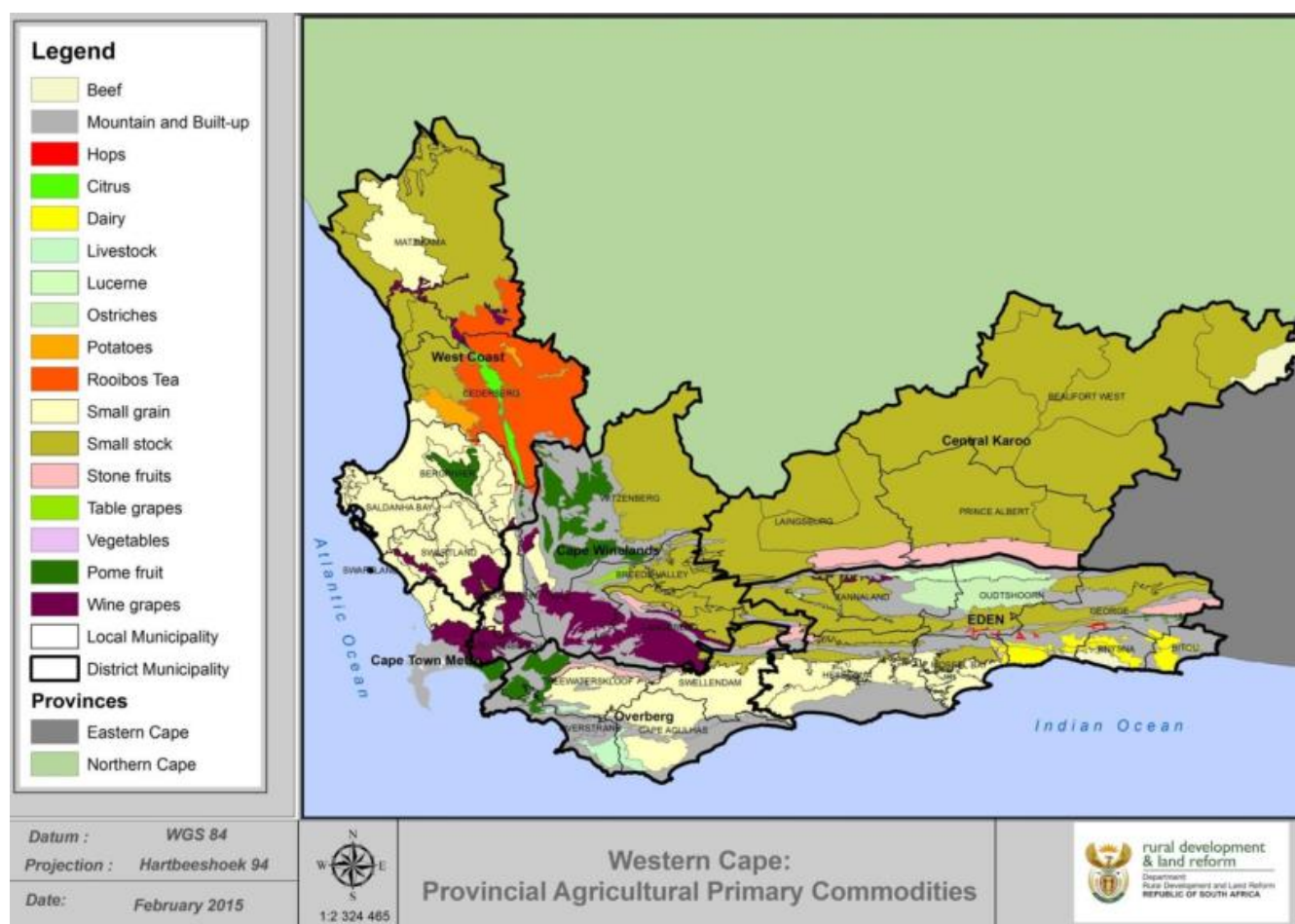
In 2008, the total commercial farm area in the District was estimated at 3.9 million HA, with 34,970 HA transferred under land reform, and 23,230 HA under commonage land area. The Central Karoo District has a small number of agricultural commodities including small stock, stone fruit, Lucerne, fallow, planted perennial pastures and natural grazing areas. The Central Karoo District does not have large areas under irrigation and this places a constraint on the expanded production of many commodities. In terms of live-stock, large numbers of goats and sheep are concentrated in the District.

### **1.4 Central Karoo Economic Profile**

The biggest contributor to the Central Karoo District's economy is the finance and business services sector (which contributes 28.59% of Gross Geographic Product in 2013 or R453.37 million). Agriculture contributes 8.71% directly to the Central Karoo District's Gross Geographic or R138.05 million in 2013 and employs approximately 2100 people directly. The indirect backward and forward linkages mean that agriculture's contribution to the District economy is greater than its R138 million direct contribution. The primary agriculture commodities are small stock (goats and sheep) and stone fruit (apricots).

Agriculture has been identified as the sector that is best positioned to address issues of high unemployment, poverty and inequality and provide the foundation for inclusive growth.

### **Figure 30 Western Cape Spatial Distribution of Primary Agriculture Commodities**



Source: Department Rural Development and Land Reform. April 2015. Western Cape Rural Economic Transformation Model Draft Status Quo Report – Version 3

The top 10 commodities in terms of land area under cultivation (2013) per municipality are listed below according to type, hectares planted, and locality in the table below.

**Table 8 Central Karoo District: Top 10 crops per Municipality 2013**

Beaufort West			Prince Albert			Lansburg		
Rank	Area (Ha)	Crop	Rank	Area (Ha)	Crop	Rank	Area (Ha)	Crop
1	2472.7	Planted Pastures Perennial	1	1539.8	Lucerne	1	935.8	Weeds
2	2270.4	Lucerne	2	366.0	Fallow	2	660.7	Lucerne
3	1287.1	Fallow	3	330.2	Weeds	3	567.7	Planted Pastures Perennial
4	499.6	Natural grazing	4	283.7	Olives	4	418.0	Natural grazing
5	350.7	Planted Pastures	5	165.5	Natural grazing	5	362.3	Fallow
6	93.0	Olives	6	120.1	Wine Grapes	6	276.6	Onions
7	61.0	Weeds	7	108.5	Planted Pastures Perennial	7	163.0	Small Grain Grazing
8	27.0	Crops unknown	8	78.6	Onions	8	106.9	Apricots
9	7.7	Fruit unknown	9	54.2	Apricots	9	60.9	Peaches
10	1.8	Table Grapes	10	27.9	Planted Pastures	10	54.2	Olives

Source: Western Cape Agriculture Commodity and Infrastructure Census 2013 [Accessed at <http://www.elsenburg.com/gis/apps/agristats/>]

The Central Karoo District does not have large areas under irrigation and this places a constraint on the expanded production of many commodities:

**Table 34 Central Karoo District Land Under Cultivation, Dry Land, and Irrigated Fields by HA by Municipality**

Indicator	Beaufort West	Laingsburg	Prince Albert
Area (Ha)	2191661.4	878448.9	815291.0
Cultivated Land (Ha)	7070.9	3760.9	3143.4
Dry Land Fields (Ha)	2848.4	1558.8	838.2
Irrigated Fields (Ha)	2347.8	492.8	1444.0
Other (Ha)	1874.7	1709.4	861.1

Source: Western Cape Agriculture Commodity and Infrastructure Census 2013 [Accessed at <http://www.elsenburg.com/gis/apps/agristats/>]

The Central Karoo District Agri-Park site is located in Beaufort West in Beaufort West LM which is one of the three local municipalities in the district. The municipality has approximately 49,000 residents and had an unemployment rate of 33% in 2013. The municipality's economy is mainly based on the surrounding agricultural activities, tourism, and linked to traffic passing through the area along the N1.

## 1.5 Central Karoo Agri Park Strategy: Outcome, Vision, Mission, Goal and Objectives

The Central Karoo Agri Park outcome and outputs are as follows

### 1.5.1 Agri Park Outcome

Outcome 7	Vibrant, equitable and sustainable rural communities
Outputs	1) Sustainable agrarian reform with a thriving farming sector 2) Improved access to affordable and diverse food 3) Improved rural services to support livelihoods 4) Improved employment and skills development opportunities 5) Enabling institutional environment for sustainable and inclusive growth

### 1.5.2 Agri Park Vision

The vision statement describes why an Agri-Park exists and what the achievement of its mandate would result in. Furthermore, it is a compelling view of the future, able to motivate stakeholders alike. At the same time, it should be ambitious, yet realistic and credible.

**Proposed Vision Statement for Central Karoo District Agri-Park**



*The Central Karoo DM Agri-Park will be a well managed initiative that involves good coordination and involvement between emerging and commercial farmers (as well as the three spheres of government) in its governance and management (including effective monitoring and evaluation of operations and projects) and where emerging farmers are empowered with the necessary support, resources, knowledge, and skills to sustainably manage farm production, access processing opportunities and supply value chains and access markets without necessarily relying on ongoing government funding.*

In the further development of the Agri-Park, the district stakeholders are to review the proposed vision in order to align with district municipality aspirations.

### **1.5.3 Agri Park Mission**

The mission statement describes why the Agri-Park exists and what it does.

**Proposed Mission Statement for Central Karoo District Agri-Park:**

*The Central Karoo Agri Park will assist to address the needs of emerging farmers to strengthen their ability to participate in both local and international (where relevant) value chains by coordinating and supporting improved access to capacity development (e.g. farm management) and other support services and facilities (e.g. access to equipment, water, transport, processing, cold and normal storage, packaging and distribution as well as market information and research) in order to meet the standards and other purchasing requirements of relevant supply chain buyers, thereby helping to retain and create jobs and improve the incomes of emerging farmers and farm workers*

### **1.5.4 Agri Park Goal and Objectives**

Goals and objectives can and should guide action. Goal or objective statements provide direction for planning, for evaluating plans and for guiding projects and actions. A "good" goal statement is SMART:

- Specific
- Measurable

- Acceptable
- Realistic
- Time bound

**Proposed Goal Statement for Central Karoo DM Agri-Park –**

By 2025 Central Karoo DM's rural areas and towns would be transformed into thriving areas in terms of jobs, food security and opportunities to prosper.

In the further development of the Agri-Park, the district stakeholders are to review the proposed goal in order to align with district municipality aspirations.

To achieve the proposed Agri-Park Goal, the following objectives aligned to the Agri-Park draft policy framework are proposed for the implementation of Central Karoo DM Agri-Park:

**Objective 1: Transformation and Modernization**

**Proposed Objective One for Central Karoo DM Agri-Park –**

To transform and modernise rural areas and small towns in the Central Karoo DM through the development of the Agricultural sector over the next 10 years.

The proposed objective among others, addresses issues indicated in the Agri-Park draft policy framework, including the following:

One of the Agri-Park draft policy framework's seeks to contribute to achievement of the NDP's "inclusive rural economy" and target of 1 million jobs created in agriculture sector through creating higher demand for raw agricultural produce, primary and ancillary inputs, as well as generating increased downstream economic activities in the sector.

**Transformation:** The Agri-Parks Programme forms part of the 2011 Green Paper on Land Reform policy review and reformulation process, which has been undertaken with a view to generate reforms that effectively address issues relating to tenure insecurity, food insecurity, rural underdevelopment and inequity in the agricultural sector. 'Agrarian transformation' denotes the 'rapid and fundamental change in the relations (meaning systems and patterns of ownership and control) of land, livestock, cropping and community'. The objective of the strategy is social cohesion and inclusive development of rural economies, in which rural-urban linkages are considered crucial in generating such inclusivity. A transformed rural economy is also inclusive of communal areas, commercial farming areas, rural towns and villages that can be organized to support both agricultural and non-agricultural sectors.

**Modernisation:** The Agricultural Policy Action Plan (APAP) is thus a programmatic response in achieving the above. The Agricultural policy plan vision statement is "***An equitable, productive, competitive, profitable and sustainable Agriculture, Forestry and Fisheries Sector***" growing to the ***benefit of ALL South Africans***". The APAP has 4 policy levers which seek to modernise the agricultural sector, among others for example:

**Equitable Growth and Competitiveness**

- Promoting import substitution and export expansion through concerted value chain/commodity strategies;
- Reducing dependence on industrial and imported inputs;
- Increasing productive use of fallow land; and
- Strengthening R&D outcomes.

### **Objective 2: Agri-Park Infrastructure Development**

#### **Proposed Objective Two for Central Karoo DM Agri-Park –**

To develop an integrated and networked **Agri-Park Infrastructure** over the next 10 years.

According to the Agri-Park draft policy framework, Agri-Park Infrastructure Development must be based on existing and new business plans, infrastructure assessment and commodity and market requirements. This must consists of:

- Formulating infrastructure plans for each Agri-Park and ensuring alignment of plan with key infrastructure programmes, which requires consideration of: Agri-Park size; local building codes, health, sanitation issues; vehicle access and parking requirements; plot size and numbers; and, extent of space needed for common infrastructure facilities (e.g. laboratories, warehouses, quarantine, power generation plant, telecommunications, effluent waste treatment etc.);
- Working out logistical details including those concerning roads, communication networks, energy, bridges, water, and transport;
- Constructing and operationalizing the Agri-Parks, including working out logistical details.

### **Objective 3: Agri-Park Governance and Management**

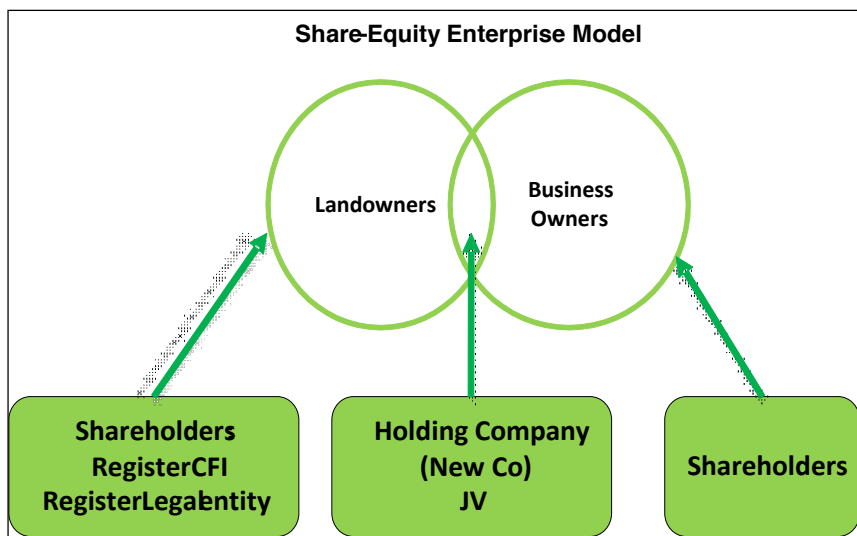
#### **Proposed Objective Three for Central Karoo DM Agri-Park –**

To facilitate the establishment and implementation of a sustainable **Agri-Park governance and management** model over the next 3 years.

To enhance agricultural productivity, the Agri-Park is to:

- Enabling producer ownership of 70% of the equity in Agri-Parks, with the state and commercial interests holding the remaining 30% minority shares (see Figure below) (note that it will probably be advisable to follow a phased approach to enabling producer ownership as capacity building of emerging farmers in governance and management matters will first be required to ensure that they are able to effectively participate as shareholders); and
- Allowing smallholder producers to take full control of Agri-Parks by steadily decreasing state support over a period of ten years.

Figure 12 Agri Park Share-Equity Model



### Proposed Governance and Management Model for the Central Karoo DM Agri-Park –

In response to the Agri-Park draft policy framework share-equity model, a number of principles help to guide the ownership, governance and management question of the envisaged Frances Baard DM Agri-Park, namely:

- **Guiding Principle 1:** An Agri-Park must provide for Emerging Farmer/Producer ownership of the majority of Agri-Parks equity (70%), with the state and commercial, including Commercial Farmers, interests holding minority shares (30%). Simultaneously, all the shareholders must not view an Agri-Park as an immediate financial benefit vehicle. Rather, it must be considered as a vehicle to drive sustainable rural industrial development to secure the future of the affected rural community.

In practice, this suggest that profits generated by the Agri-Park Holding Company (Secondary Cooperative) must be ploughed back into expanding the Agri-Park infrastructure (industrial Park) or into necessary community socio-economic development projects and, in that way, slowly but surely building a stronger rural economy and community.

- **Guiding Principle 2:** As the Lead Sponsor, the DRDLR must appoint a suitably qualified and experienced Agri-Park Manager who will facilitate the formal establishment of the Agri-Park and its constituent institutional arrangements to ensure that the Agri-Park (at FPSUs and Agri-Hub levels) provides a comprehensive range of Farmer Support Services for farming excellence.

Practically, the organization and management of the Agri-Park, through its constituent Hub, FPSUs and RUMC, would be best optimized through the five abovementioned business units to provide services to Farmers and their communities, namely;

- Sourcing and supplying Farmers will all necessary farming inputs i.e. Farmers' shops or wholesaling.
- Providing access and linkages to farming technical services like processing facilities, farming technologies and laboratory services ensuring that Farmers yield high quality and quantity of maize.
- Promoting and ensuring investment within the Agri-Park sites/units in agri-processing and manufacturing activities linked to the main commodity that belies the Agri-Park
- Providing easier access to a comprehensive range of farming business and financial support services.
- Providing Farmers with market intelligence and market access support for farm produce, including manufactured agri-products, to gain maximum local and export market access. This function will be best located under the Rural Urban Market Centre (RUMC) which is an invariable component of the envisaged Agri-Park concept.

- **Guiding Principle 3:** The Agri-Park will be subject to influence and support of the government especially through DAMC, DAPOTT, DLRC, PAPOTT, NAPOTT for purposes of initiating implementing and sustaining Agri-Park operations.

Practically, the main task of the Agri-Park Manager will be to ensure that optimum cooperation and alignment is maintained between the Agri-Park and the abovementioned government initiated and supported institutions.

The table and figure below outlines a proposed Agri-Park ownership, governance and management model.

**Table 9 Proposed Agri-Park Ownership, Governance and Management Model**

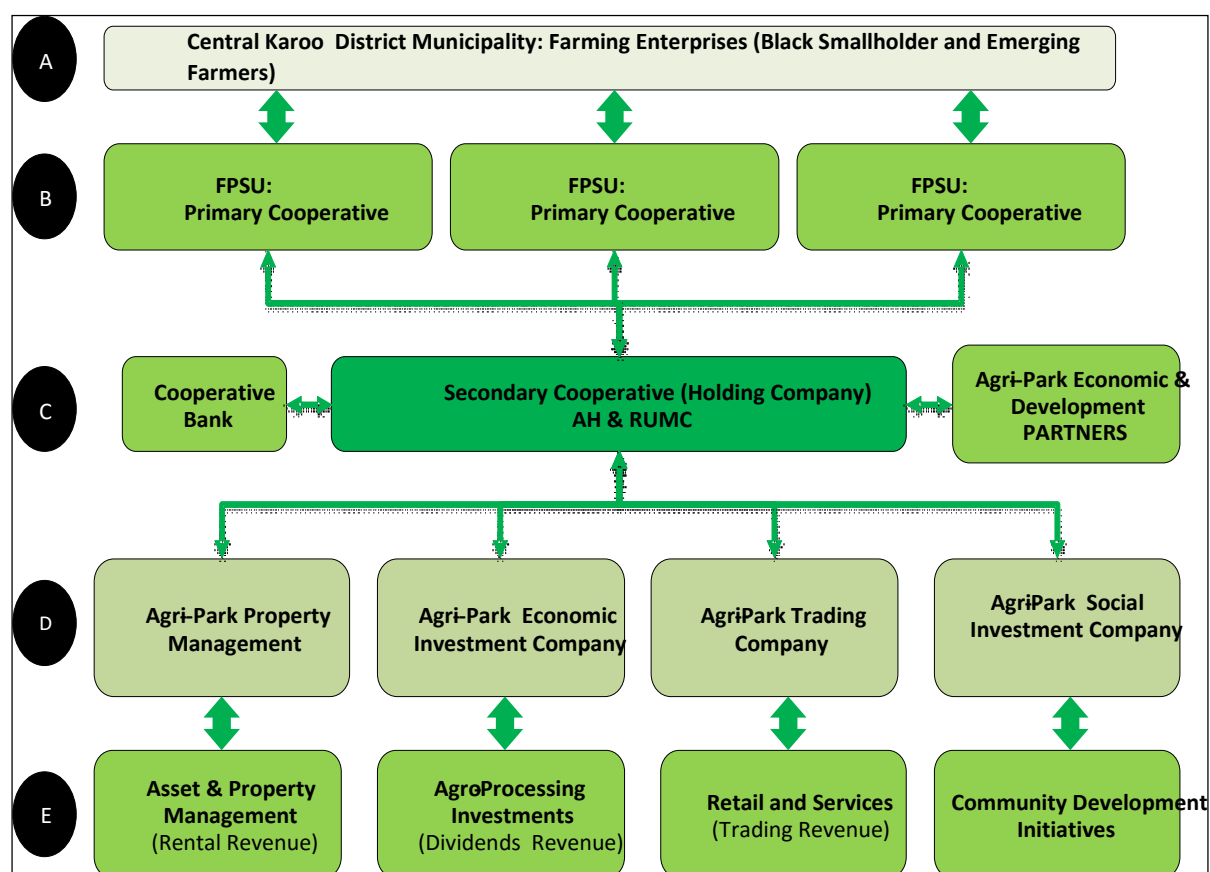
Level	Ownership	Governance	Management
<b>A</b>	Independently-owned Small-holder Farms and Farming Enterprises. However, these could also include local Black Commercial Farmers	Private Governance arrangements linked to legal ownership status of the farming enterprise.	Private management arrangements decided upon by each farming enterprise
<b>B</b>	A group of Farmers, at least 5 Members, will form and register a Primary Cooperative whose mission is to serve their common farming needs and interests. E.g. Livestock Farmers  For the Agri-Park, Farmers will be clustered geographically based FPSU locations and their respective catchment areas. across the district Each cluster will then form and own a Primary Cooperative linked to each FPSU.	The Governance of the Cooperatives must in terms Cooperatives Act 14 of 2005. To assist in this matter, each cooperative is required to develop and adopt a Constitution. .  Chiefly, members of each cooperative will be required to elect a Board of Directors, to serve for two years, whose main responsibility will be to manage the business affairs of the cooperative.  The business affairs of the Cooperative must be audited and Audited Reports, including Audited Financial Statements must be presented to Members at each AGM.	Board of Directors whose main responsibility will be to manage the business affairs of the cooperative.  To dispense with its management duty, the Board has the power to appoint staff and engage external expert service providers.

Level	Ownership	Governance	Management
<b>C</b>	<p>A Secondary Cooperative is formed and owned by two or more Primary Cooperatives. The main responsibility of the Secondary Coop is to serve the common farming needs and interests of the Primary Coops. E.g. Commodity marketing or bulk sourcing of inputs.</p>	<p>The Governance of the Cooperatives must in terms Cooperatives Act 14 of 2005. To assist in this matter, each cooperative is required to develop and adopt a Constitution. .</p> <p>Chiefly, members of each Secondary Coop will be required to elect a Board of Directors, to serve for two years, whose main responsibility will be to manage the business affairs of the cooperative.</p> <p>The business affairs of the Cooperative must be audited and Audited Reports,</p>	<p>Board of Directors whose main responsibility will be to manage the business affairs of the cooperative.</p> <p>To dispense with its management duty, the Board has the power to appoint staff and engage external expert service providers.</p> <p>It is proposed that the Board Members of a Secondary Cooperative comprise of at least one Board Member from each of its member Primary Cooperatives in order to streamline strategic thinking.</p>
<b>D</b>	<p>The Agri-Park Holding Company will establish and/or wholly or partly acquire a range of special-focus enterprises covering property management, economic investment, trading and social investment. Thus ownership of the said enterprises will either be 100% or split with external investors.</p>	<p>The special-focus enterprises will be separate legal entities (Juristic Persons) with own governance and audit arrangements suitable for each enterprises.</p> <p>As a subsidiaries, each enterprise will report to and account to the Agri-Park Holding Company.</p> <p>It will be advisable that the Board Members of the Holding Company be included in the governance arrangements of the special focus enterprises in order</p>	<p>Each special-focus enterprise will assemble its own management arrangements best suited for its core business.</p> <p>However, the Agri-Park Holding Company will provide strategic management and performance direction to each special-focus enterprise.</p>

Level	Ownership	Governance	Management
		to bear influence upon them.	



Figure 13 Proposed Agri-Park Ownership, Governance and Management Model



#### Objective 4: Agri-Park Funding

##### Proposed Objective Four for the Central Karoo DM Agri-Park –

To facilitate funding, and investment for the development of the **Agri-Park** over the next 5 years.

The Agri-Park initiative of Government offers small scale farmers the unique opportunity to become viable and profitable business owners. To achieve these two things need to happen. Firstly it is to see agriculture amongst smallholder, family farms and emerging farmers as a business. The more it is treated as a business, a way to create wealth, the more it will promote development and improve people's lives in rural areas. Secondly, is to provide financing and funding and attract investment in Agri-Parks that will transform family owned farms, smallholder and emerging farmers into market orientated commercial producers.

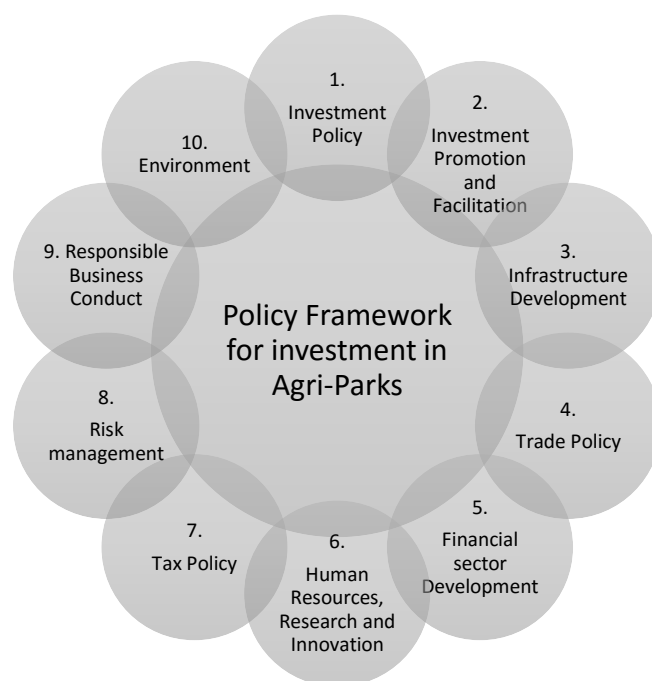
The renewed emphasis on and need for rural development in South Africa exposes the limited capacity of the Development Finance System(DFS) and other development agencies to transform the rural economy and reach marginalised enterprises in rural areas, notably the former Bantustans, where many of these Agri-Parks will be formed. This limitation is in line with the general inefficiency of the enterprise finance segment of the DFS. Improved coordination and collaboration is clearly a core requirement for successful rural development financing, particularly within an institutional reality of

differentiated roles and responsibilities amongst a number of State entities (and to which number one could then add the multitude of private sector and community entities). Government could create a platform that could oversee and direct improved collaboration between different role players in providing rural finance. This could be initiated by establishing an inclusive national rural financing forum. The most obvious location for this would be the National Rural Development Agency (RDA) and Financing Facility, which the DRDLR has indicated it intends establishing. As the national government Department with the mandate for rural development, DRDLR would be the champion and shareholder of the RDA

### Proposed Policy Investment Framework for Investing in Agri-Parks

Private (commercial farming agri-businesses, banks, processors, venture capitalists, investment companies, Agri-BEE entrepreneurs, agri-cooperatives (Senwes, GWK, VBK, etc), etc and non-private sector investment (not-for-profit organisations, stokvels, state development finance institutions, international development finance institutions, foreign donor partners, etc are essential if Agri-Parks are to fulfil their vital function of contributing to rural economic development, poverty reduction and food security in districts. A wide range of private and non-private sector investors are already involved in agriculture in South Africa, the trick is to attract them to invest in Agri-Parks and ensuring that the investment is sustainable.

**Figure 14 Agri Park Investment Framework**



Source: Adapted from OECD, 2013

### Proposed Policy Investment Framework for Investing in Agri-Parks

#### 1. Investment policy:

The quality of investment policies directly influences the decisions of all investors. Transparency, policy coherence and stability, and non-discrimination can boost confidence. Secure access to energy

and water, well-functioning input and output markets and effective mechanisms for enforcing contracts and good governance and management of parks are also critical in attracting investment.

## **2. Investment promotion and facilitation**

By highlighting profitable investment opportunities and providing investment incentives, investment promotion and facilitation measures can be effective instruments to attract Agri-Park investment provided they aim to leverage the comparative advantage of the district's agricultural potential.

## **3. Infrastructure development**

Well-developed rural infrastructure, including good irrigation networks and transportation and storage systems and a reliable access to energy and to information and communication technologies, can effectively attract private investors in Agri-Parks.

## **4. Trade policy**

Open, transparent and predictable agricultural trade policies can improve the efficiency of resource allocations both domestically and across borders, thus facilitating scale economies, boosting productivity and rates of return on investment and fostering food security.

## **5. Financial sector development**

Efficient financial markets (formal and informal) can allocate capital to innovative and high return investment projects of both large and small agricultural investors, thus increasing revenues and generating economic activities.

## **6. Human resources, research and innovation**

Strong human capital and dynamic agricultural innovation systems are critical to attract further investment in Agri-Parks. Policies should support high-quality education and well-functioning extension and advisory services to enhance human capital. They should promote partnerships between national, local and international research, better connect research with demand and effectively protect intellectual property rights (e.g. ICT) to build effective innovation systems.

## **7. Tax policy**

Sound tax policy enables districts and local municipalities to raise revenue while attracting further investment from both large (agribusiness, commercial farmers, BEE-entrepreneurs, etc. and small investors (cooperatives, "agropreneurs", stokvels, etc.).

## **8. Risk management**

There is much skepticism and doubt about Agri-Parks as new phenomena in South Africa, effective risk management instruments (insurance, forward contracts, extension services, government encouraging diversification, etc.) can mitigate this risk, thus ensuring Agri-Park investors a more stable income and creating a predictable environment favorable to investment.

## **9. Responsible business conduct**

Policies promoting recognized principles for responsible business conduct (RBC) (laws and regulations, communicate RBC norms and standards, support investors' efforts and inter-governmental consultations) help attract Agri-Park investments that are both environmentally and socially

sustainable, thereby bringing both short-term and long-term economic and development benefits to investors.

## 10. Environment

Strong and well-enforced environmental policies contribute to both attracting responsible investors and ensuring a sustainable use of existing natural resources, in particular land and water, renewable energy, integrated waste management thereby fostering long-term food security and mitigating climate change.

### **Objective 5: Agri-Park Farmers and Communities Development**

#### **Proposed Objective Five for the Central Karoo DM Agri-Park –**

To provide technical support and extension services to **Agri-Park** beneficiaries over the next 10 years and beyond.

The challenge now facing family farms, small-scale and emerging farmers are to transform their agricultural production which prevails on both communal and private own land to a vibrant commercial production system. The industry needs to stop thinking of small-scale farmers as family farmers (implies a struggle to survive and not an effort to build a business that thrives). One way of achieving this is to develop an inclusive and equitable farmer development framework, to ensure improved market linkages, to develop the relevant management, market access, production and business skills among developing farmers, and to ensure that the appropriate infrastructure is in place to subsequently create a vibrant commercial production system. Small-scale and emerging farmers are fully capable of becoming profitable business entrepreneurs. The development of a production system and plan becomes imperative for Government, non-governmental organisations and the private sector to provide small-scale farmers with the technical support and extension services to thrive.

- Capacity-building and support to smallholder farmers and communities through provision of land, education, training and development, farm infrastructure, extension services, production inputs and mechanization inputs (all of which should be aligned to priority commodities as set out in the APAP);
- Developing detailed production and capacity building (in situ training) plans for farms located in proximity of identified Agri-Park and FPSUs sites;
- Support and assist farmers organise themselves into agro-clusters around the FPSUs and AHs;
- Ensuring access of producers to improved infrastructure (water, irrigation, energy, roads, information, communication and technology) to carry products through the value chain process and to markets, as well as sharing critical market information;
- The provision of agricultural extension services allows farmers to be informed of new agricultural technologies (especially ICT), obtain advice on best agricultural practices (including video links), and obtain assistance with dealing with adverse shocks such as insect infestation or plant disease (Dercon et al., 2006);
- Establishment of Cooperative/Village Banks at FPSUs and AHs;

- Research and development in innovative ITC platforms (agricultural data, information and statistics);
- Establishing preferential procurement mechanisms to both promote the entrance of new producers and other entrepreneurs, as well as support existing ones; and,
- Finalizing off-take agreements per each identified commodity and Agri-Park.

#### **Objective 6: Agri-Park Implementation Capacity**

##### **Proposed Objective Six for the Central Karoo DM Agri-Park –**

To enhance the capacity and capability of officials responsible for the implementation of the Agri-Parks over the next 3 years.

- Creating and institutionalizing technical and operational tasks teams to manage all phases of Agri-Park development and implementation;
- Establishing the proposed National Agri-Park Project Support Facility, which will coordinate and support district-based operational teams;
- Coordinating Agri-Park development with other DRDLR programmes targeted at increasing the pace of land acquisition and redistribution;
- Organization and mobilization of stakeholders and communities residing in identified site localities through participatory consultation on Agri-Parks model, site selection and identification of production areas to receive support;
- Conducting a Socio-economic analysis for each of these areas, in which district connectors (gateways), areas of economic growth/ decline, economic functional zones are all identified; and income, employment statistics and access to utility services data (to water, sanitation, energy etc.) is collated;
- Conducting a National spatial, commodity, value chain and market analysis to determine target sites through identification of high value commodities, growing production areas and available infrastructure;
- Generating site specific maps containing district specific narratives and selection criteria for initial identification of sites;
- Further development of evaluation criteria for assessing Agri-Parks proposals;
- Weighing each Agri-Park proposal against this evaluation criteria and other important findings from previous analyses to make final determinations on Agri-Park sites; and,
- Signing resolutions for the establishment of Agri-Parks with each District Municipality identified.

## CHAPTER FOUR: CENTRAL KAROO DISTRICT AGRI-PARK INFRASTRUCTURE PLAN

### 4.1 Introduction

An Agri-Park is **not only physical buildings** located in single locations (like ordinary industrial parks) per district **but** it is defined as:

A **networked innovation system** of agro-production, processing, logistics, marketing, training and extension **services** located in District Municipalities. As a network it **enables** the **growth** of market-driven **commodity value chains** and contributes to the achievement of **rural economic transformation (RETM)**. An **AP** contains three **service collections**:

- a. Farmer Production Support Unit (**FPSU**) with a focus on primary production towards **food security**;
- b. Agri-Hub (**AH**); and
- c. The Rural Urban Market Centre (**RUMC**) which may service multiple districts.

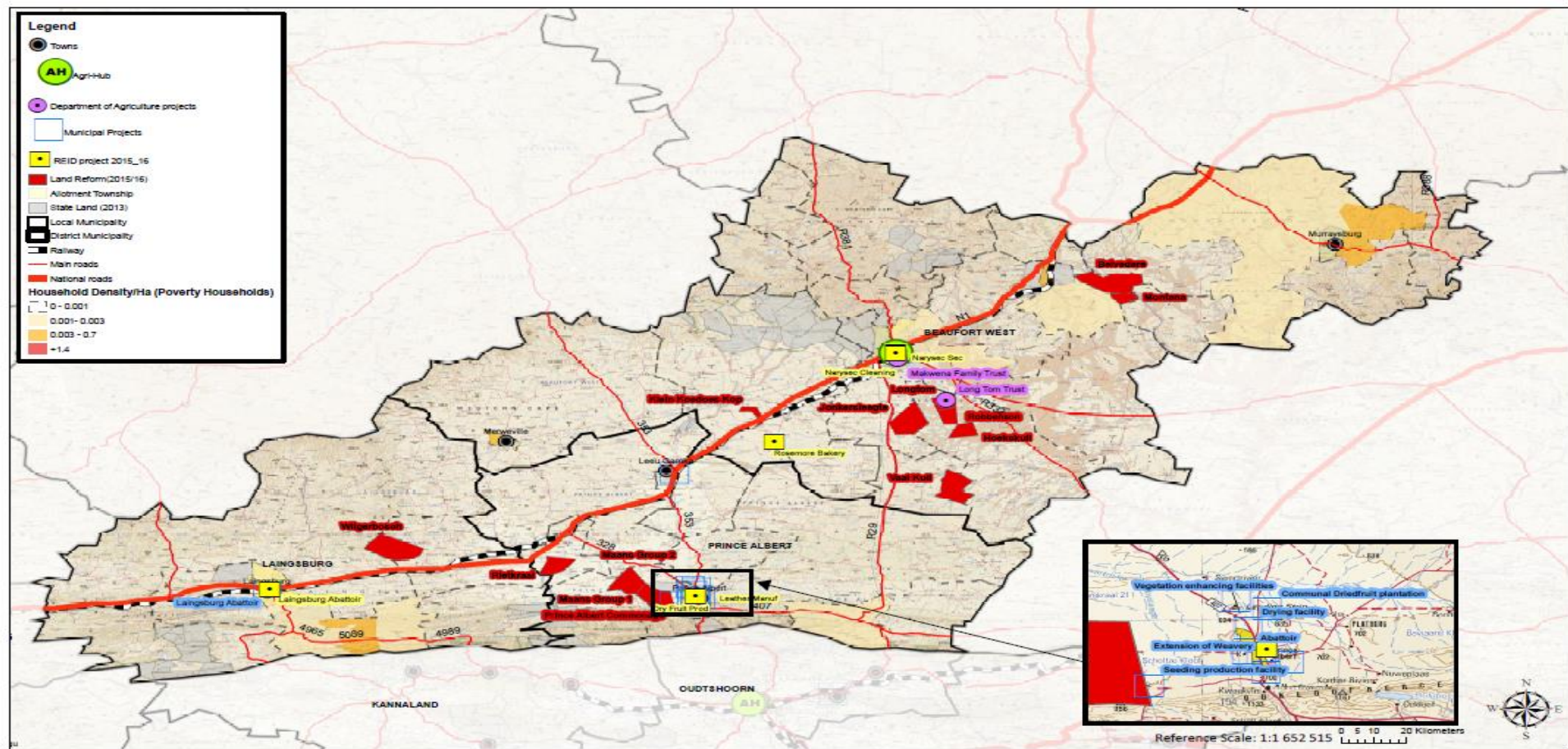
### 4.2 The Central Karoo Agri-Hub and FPSU's

Beaufort West in the Beaufort West LM has been identified as a AH due to its strategic central location as the district gateway and agro-processing potential due to the good road transport networks crossing the district (in particular the N1 linking to both Cape Town and Johannesburg). The town of Beaufort West was proposed after a number of consultative meetings between the Department of Rural Development and Land Reform's PSSC officials, Western Cape Department of Agriculture, Land Reform and Rural Development, Central Karoo District Municipality and other key stakeholders as well as an analysis of key criteria. The site was proposed for the following reasons:

- Beaufort West is the district gateway with a central location with and accessibility to the N1 and regional transport routes;
- The existing abattoir facilities in the town;
- PLAS farms located to the South of the town;
- CASP projects to the north;
- Land reform projects implemented to the South of the town;
- Location of a CRDP site;
- Restitution claims to the east of the town; and
- Retail stores as well as other business services and inputs located in the town.



Figure 15 Proposed Agri Hub Location



Central Karoo Agri-Park Locations

October 2015

Source: DRDLR 2015

According to CSIR (2016), the Agri-Hub is a production, equipment hire, processing, packaging, logistics and training (demonstration) unit as indicated in the figure below:

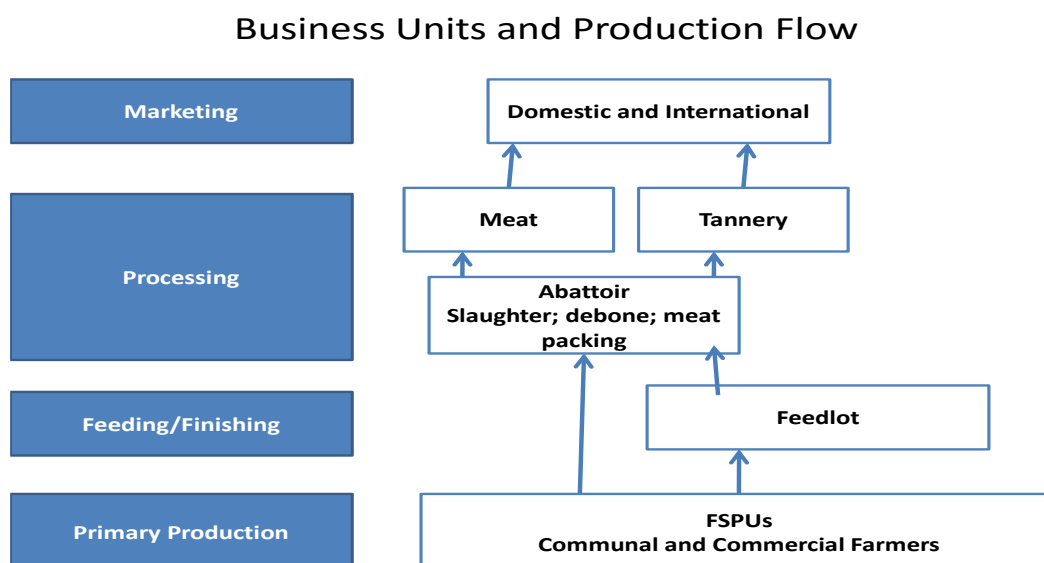
**Figure 16: Agri-Hub Conceptual Layout Plan**



The site for the potential Agri-Park in Beaufort West has been approved by the Municipality in 2015. This proposed site is located along the N1 and is 1km from the town centre.

This Agri-Hub will support the feeder Farmer Production Support Units.



**Figure 17 Agri Hub Production Flow and Business Units**

### Primary Production

Primary production of livestock will take a place at the FSPUs level including communal and commercial livestock farmers and from government owned farms under the land reform programme. Some of the emerging livestock farmers with small number of stocks will be arranged into cooperatives to reduce thier transaction costs. The FSPUs are the backbone of the Agri park hubs. Consistent flow of livestock from this units to the agri-hub is critical for the sustainability of the Agri Hub.

### Feeding/Finishing

Livestock from the FSPUs will be delivered either to the feedlot or abattoir depending on the size of the animal. Smaller animals will be delivered to the feedlot for fattening before being delivered to the abattoir. Older animals will be delivered directly to the abattoir; however some will be delivered to the custom feeding programmes for fattening.

The **Agri-Hub** should include the following facilities and support services:

- An Abattoir (one of the three existing in Beaufort West) and linked irrigated pastures (10 ha) to round off animals for the premium meat market. The abattoir should have an estimated capacity 150 cattle, 800 sheep, 500 goats and 100 pigs per month. It will receive stock from the FPSUs.
- Training facilities including lecture halls and lodging for 20 trainees.
- Intake, storage and dispatch facility of about 2000 m<sup>2</sup> for produce from the feeder FPSUs:
  - Cattle, sheep, goats and pigs to go directly to the abattoir or to the pastures for rounding off from FPSUs as indicated earlier.
  - Lucerne from FPSUs to go to market and / or possible feed production plant (yet to be identified)
- Small packing and cooling facility for vegetables and/or fruit (medium term).
- Local market facility to sell local produce of about 200 m<sup>2</sup>.

- Office space (open plan office with desks), boardroom (2) facilities, internet cafe and secretarial services for local emerging farmers.
- Main production input supply facility (most probably a cooperative) of about 2000 m<sup>2</sup> ( shop to purchase production inputs like fertilizer, chemicals, seed irrigation equipment, small tools, etc) to be operated with a strategic partner along the following lines:
  - A small farmer / emerging farmer (client) will approach the cooperative for production inputs for a specific crop and quantity.;
  - The cooperative and client will enter into a supply / purchase contract stipulating, crop or farming enterprise, quantity and timing, e.g. number of sheep or area to be planted with crop and when planting will take place. From this it will be clear as to what is needed, when and how much;
  - The cooperative will inspect the clients operations on a regular basis to ensure that the client adheres to the contract;
  - The contract will also stipulate that the client must deliver the produce to the cooperative who will grade and pay the client market price minus the costs of the inputs supplied. The cooperative will then on sell the produce delivered to one of the other facilities in the Agri-Hub for further processing of packaging;
  - Cooperative personal will, as part of their service, supply extension services to the client;
- Main mechanization centre and equipment servicing and repair centre with a shed of 500 m<sup>2</sup> and yard of 2000 m<sup>2</sup> to effect major repairs to the fleet of trucks, tractors and vehicles that service the hub and its feeder FPSU's.
- Collection services linked to the mechanization centre.
- Extension services with shared offices at the training centre.
- Veterinary services through the local animal protection association – waiting room, consultation rooms (2), operating theatre and small animal housing facility. Large animals will be housed at the pastures and abattoir. The veterinarian will also inspect the abattoir.
- Market information centre with shared offices at the training centre.

The Central Karoo District Land Reform Committee (DLRC) has made the following proposals for further consideration as the Agri Park Master Plan process moves forward. These proposals are often either detailed consultations or separate studies which can be identified as part of the detailed agri park feasibility and business planning work required:

**Agricultural Equipment Shared Service (Access to tractors/graders/bakkies and implements):**

The end users to be analysed and may include emerging farmers in the vicinity, their mentors and other affected parties. The critical element of this project is to find a suitable location for storage of equipment and vehicles in accessible, suitable locations which includes the size, visual impact, permitted land use (maintenance, storage and fuel) requirements associated with such a use. Storage of agricultural equipment may be suitable on agricultural land whilst storage of fuel may only happen on business or industrial zoned land. A consideration must be given to emerging farmers that already received their own tractors from the DRDLR and the actual need in this area. Institutional and ownership arrangements: Consideration must be given to the optimal use of buildings such as existing Municipal Depots through a partnership arrangement with the Municipality. The

number of staff members and the type of skill for such an operation to be defined, to enable immediate implementation.

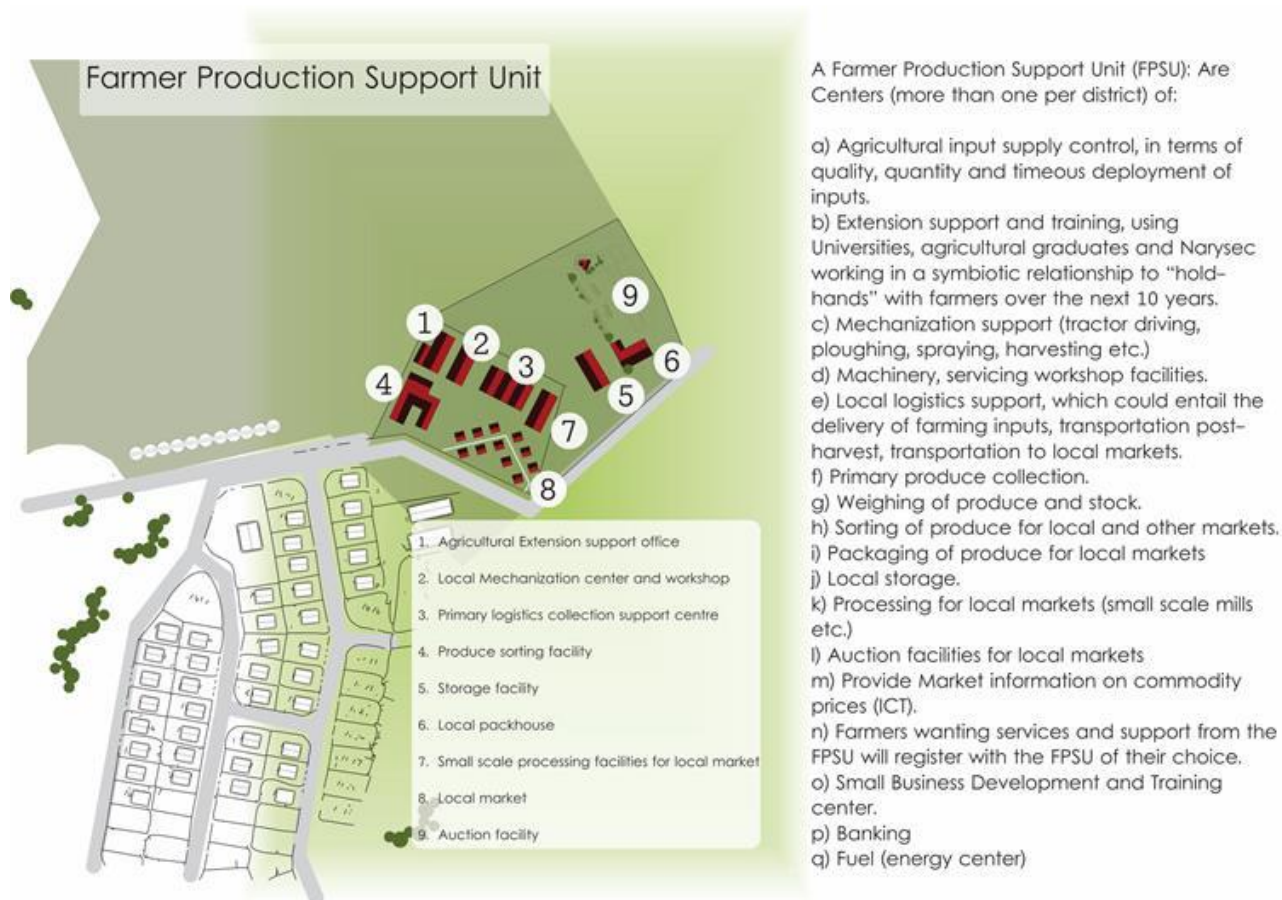
#### Alternative use for the rail/Transnet buildings abutting the Agri Hub site in Beaufort West:

Instead of constructing new buildings and due to the locality of these existing buildings in close vicinity to the Agri Hub site, consideration be given to the use these buildings to compliment the Agri-Park concept. Suggestions included housing for staff or for students busy with training at the Youth Hub. The synergies between the key sites in Beaufort West must be considered when the 3 proposals are formulated the, the Agri Park site (former Hydroponics site), the vacant industrial land across the N1 from the Agri-Park site, the Transnet properties abutting the site and the recently constructed Youth Hub

#### Agri Farmer Production Support Units (FPSU) feeding into the Beaufort West Agri-Hub:

According to CSIR (2016), the FPSU is a rural outreach unit connected with the Agri-hub. The FPSU does primary collection, some storage, some processing for the local market, and extension services including mechanisation as perthe following layout plan:

**Figure 18: FPSU Conceptual Layout Plan**



Five Agri FPSUs have been identified (it is possible that stakeholders may identify the need for additional FPSUs as the Agri Park initiative implementation proceeds):

1. Murraysburg: linked to 6400 HA commonage land: small stock improvements, lucern production (shared equipment), possibly fruit
2. Prince Albert: small stock improvements, fruit and vegetable production and processing, flowers.
3. Lainsburg: small stock improvements, fruit and vegetable production and processing.
4. Merwerville and/or Possibly Leeu Gamka- small stock improvements and lucerne production (with shared equipment) linked to possible processing plant (located in Central Karoo or Eden District to be investigated).
5. Nelspoort: small stock improvements and Lucerne (100 HA possible production potential) (Vuyani Dev. Trust).<sup>11</sup>

Ideally the FPSUs should be located on municipal land wherever possible. Each Municipality needs to identify the detailed location and land for FPSUs in consultation with emerging farmers. Linkages with existing infrastructure and facilities should be maximised wherever possible.

This **FPSUs** should include the following facilities and support services:

- Small Produce handling facility – receipt and dispatch of produce from the catchment areas (mainly animals, but also other produce): +-2000m<sup>2</sup>
- Mechanization and repair centre: +- 400 m<sup>2</sup>.
- Collection services linked to the mechanization centre.
- Local market facility to sell produce locally: +- 200 m<sup>2</sup>.
- FPSU production input supply facility (a local branch of the main production input supply facility): +- 500 m<sup>2</sup>
- Storage facility for Lucerne: +-200 m<sup>2</sup>.
- Small meeting and internet facility: +- 100 m<sup>2</sup>.

Note: The above FPSU facilities need not necessarily be located in one location / on the same piece of land. For example, the local market facility should be located to take advantage of local demand (and which may include tourists visiting an area) and therefore should be carefully located to maximise exposure to local demand (for example, along a main route and/or at a local node).

#### 4.3 Proposed Rural Urban Market Centre

The Rural Urban Market Centre Unit (RUMC) has three main purposes:

- Linking and contracting rural (AH and FPSUs), urban and international markets through contracts.
- Acts as a holding-facility, releasing produce to urban markets based on seasonal trends.
- Provides market intelligence and information feedback, to the AH and FPSU, using the latest information and communication technologies.

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<sup>11</sup> Casidra has identified a plan to strengthen the Vuyani Development Trust (which has suffered from poor livestock, financial and farm management as well as skills deficits) and this needs to be implemented and linked to the Agri Hub and FPSU planning process.

The site for Central Karoo RUMC has not been confirmed. It is however proposed that the Central Karoo and Eden District should seriously consider a shared Rural Urban Market Centre either at Beaufort West or Oudtshoorn depending on a more detailed analysis of commodity linkages and logistical requirements including access to relevant local and regional markets. A single RUMC will not only save on development and operational costs, but it will also create economy of scale and bargaining muscle in negotiations with local and overseas buyers.

Oudtshoorn has possible advantages including: It is closer to support educational institutions, the Western Cape Department of Agriculture Research Farm and Technology testing facilities, and the George airport for time sensitive and export oriented activity. In addition, access to the South African Army Base (which includes the Infantry School) is key as one of the major local buyers that the Agri Park needs to target as a supplier. Beaufort West is located along the N1 in terms of road or rail based cargo and supplies.

There are also plans underway to strengthen the Oudtshoorn Airport's ability to service cargo needs and there may be synergies between the Agri-Park and future airport development and cargo feasibility. At the same time discussions are also underway to strengthen the Beaufort West airport and its ability to service freight. A holistic assessment of regional airport development is needed as the Agri Park initiative unfolds.

Regarding market access and maximising access to local markets, it is proposed that the RUMC explore the potential to establish a District Framework Contract to facilitate stream-lined procurement from local producers by a wide range of national, provincial and local government institutions.

It is also proposed that a national brand be developed for Agri Parks which can strengthen market awareness and market access.

#### **4.4 PESTEL Assessment of the Agri-Park**

A PESTEL analysis is a framework or tool used to analyse and monitor the macro-environmental (external operating environment) factors that have an impact on an organisation. The result of which is used to identify threats and weaknesses that is used in a **SWOT analysis**.

PESTEL stands for:

- P – Political
- E – Economic
- S – Social
- T – Technological
- E – Environmental
- L – Legal
- 

The PESTEL analysis for the Central Karoo Agri-Park is indicated in the Table below:

**Table 10 PESTEL analysis for the Central Karoo Agri-Park**

Political	<ul style="list-style-type: none"> <li>• National focus on agrarian reform, rural development and sustainable rural communities</li> <li>• IPAP &amp; APAP focus on agro-processing and bio-fuels</li> <li>• Backlogs in land restitution and lack of support to new land owners</li> <li>• Focus on agriculture and rural development in Provincial and District Municipality Growth and Development Strategies</li> <li>• Focus on food security, nutrition and food sovereignty</li> <li>• Political administration interface</li> <li>• Agri-BBBEE</li> <li>• Lack of support to smallholder farmers</li> <li>• Unemployment; poverty and inequality</li> <li>• Trust relations between government, private sector, civil society, labour, traditional leaders</li> <li>• Historical land issues</li> <li>• Intergovernmental relations</li> <li>• Public service capacity, capability and competence</li> <li>• Corruption, nepotism and cronyism</li> <li>• Policy consistency, certainty, continuity and implementation</li> </ul>
Economic	<ul style="list-style-type: none"> <li>• Agricultural inputs costs (seeds, pesticides, fertilisers, equipment, etc)</li> <li>• Alternative markets (government, local and informal markets)</li> <li>• IPAP &amp; APAP financial support to high priority agricultural products and agro-processing</li> <li>• Lack of smallholder and emerging farmers access to markets, credit, transport, finance, extension services, etc</li> <li>• Domination of markets by large commercial farmers</li> <li>• Volatility and speculation in commodity market</li> <li>• Exchange rates</li> <li>• Potential for inclusive growth</li> <li>• Potential for increased job creation</li> <li>• Seasonal nature of employment</li> <li>• Increase cost of electricity and inconsistent supply to rural areas</li> <li>• Drought</li> <li>• Increased food demand</li> <li>• Currency volatility and stability</li> <li>• Micro-economic policy</li> <li>• Retailers</li> <li>• Competitiveness</li> <li>• Public Private Partnerships</li> <li>• Policy consistency</li> <li>• Imports</li> <li>• Economic structural issues</li> </ul>

	<ul style="list-style-type: none"> <li>• Rejuvenation and expansion (irrigation schemes)</li> </ul>
Social	<ul style="list-style-type: none"> <li>• Crime</li> <li>• Social capital and social cohesion</li> <li>• HIV/AIDS</li> <li>• Unresolved CPA disputes</li> <li>• Migration out of rural areas reducing agricultural workforce</li> <li>• Perception that agriculture is an unattractive sector amongst the youth</li> <li>• Availability of social basic services such as health, education, etc</li> <li>• Low levels of skills development in agricultural sector</li> <li>• NARYSEC</li> <li>• Potential to create viable smallholder businesses</li> <li>• Uneven development in rural areas</li> </ul>
Technological	<ul style="list-style-type: none"> <li>• Indigenous and modern technology</li> <li>• Technology for family farmers and smallholder farmers</li> <li>• New greenhouse and hydroponic technology</li> <li>• ICT innovative digital platforms (prices, markets, weather, etc)</li> <li>• R&amp;D</li> <li>• Renewable energy sources</li> <li>• Productivity</li> <li>• Logistics</li> <li>• Small scale processing technology</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>• Limited water supply</li> <li>• Limited water licences</li> <li>• Ecological sustainable farming methods</li> <li>• Climate change</li> <li>• Devastating effects of drought</li> <li>• Water management</li> <li>• Energy management</li> <li>• Land Use management</li> <li>• Natural Resources</li> <li>• Renewable energy</li> <li>• Waste and by-products</li> </ul>
Legal	<ul style="list-style-type: none"> <li>• Effective by-laws</li> <li>• Complimentary legislative and policy frameworks</li> <li>• Implementation and compliance of food safety standards and quality control</li> <li>• Land Reform and Rural Development legislation and policy frameworks-Daff synergy and complimentary</li> <li>• EIA cumbersome process</li> </ul>

#### 4.5 Central Karoo Agri-Park SWOT Analysis

A review of the significant trends, issues and changes in the external environment in which **Central Karoo District Municipality Agri-Park** will operate identified several key factors that are likely to have a significant influence on the development and the implementation of the draft Agri-Park. The Agri-Park SWOT analysis are proposed to inform decisions on the development and implementation of the Agri-Park Programme (see Chapter 5).

##### 4.5.1. Strengths

- Cooperation between the municipality and the emerging farmers.
- Land availability
- Development aspiring communities
- Local municipality that articulates their plight.
- Accessible local governance system
- Participation process enshrined in the Constitution

##### 4.5.2. Weakness

- Large portion of population unemployed
- Low mitigation to the negative impacts of climate change as can be witnessed with the continued desertification and current drought
- Large distances between areas having a potential negative impact of transportation of certain agricultural products
- Poor water management : high water debts and inefficient uses of groundwater sources
- Lack of agricultural facilities for small scale and emerging farmers in rural areas

##### 4.5.3. Opportunities

Spatial clustering is forms the essence of agri-parks concept. In practice clustering can take many forms and there could also be varied combination of agricultural and non-agricultural activities. Some of the advantages of clustering are:

- Closing the cycle
- Coordination, cooperation, networking and collaboration
- Improved social cohesion
- Reducing transport requirements
- Improve animal welfare
- Restricting disease outbreaks
- Reduce the gap between producer and consumer
- Generate economic and social benefits
- Development of infrastructure networks to create sustainable ecological system
- Integrated spatial planning-SPLUMA
- AgriBEE- encourage Black entrepreneurs to take advantage
- Connecting development corridors
- Knowledge management- universities, agricultural colleges



- Growth of agro-processing
- Intensive labour agriculture & agri- processing
- Efficient use of space
- Renewable energy sources-solar
- Agro-production and agro-processing
- Setting of food standards and quality and conducting certification
- ICT- less reliable on extension officers for certain needs
- Market information
- Economies of scale
- PPPs
- Efficiency of resource allocation and utilisation
- Improved markets
- Agriculture becomes the focal point
- Synergy between non-agri-production like energy production, waste and water management
- Trade centre

#### **4.5.4. Threats**

- Stifling bureaucracy
- Poor intergovernmental relations between the three spheres of government
- Alignment between various Agri-Parks committees and DLRCs-too many committees
- Technical capacity at district and local municipal levels
- Scarcity and degradation of land, water and soil
- Post-harvest food lost and wastage
- Low support for producers
- Duplication of effort
- Fragmented and uncoordinated planning
- Slow pace of regulatory approvals e.g. EIAs, water approvals
- Ineffective models of producer support. Absence of uniform criteria and definitions. Unable to effectively plan, invest or measure smallholders
- Slow pace in the issuing of water licences
- Proposed Incentive Programme for Climate Smart Agriculture (CSA) remains unfunded.
- Competing demands of land
- Import (dumping) e.g., AGOA
- 20% growth in consumer demand, met by 10% imports
- Veterinary services inadequate and not accessible
- Commercialisation of communal herd owning 40% of national herd.
- Import 50% of wheat. Progressive replacement of wheat by canola and soya
- Greatest's contributor to agricultural exports/trade but is the least transformed sector
- Under investment in R&D (0.1%) capacity & infrastructure
- Inability to apply/integrate innovation
- Aging senior researchers

- 75% of local procurement under discussion between National Treasury and Department of Small Business Development
- Greater synergy between IPAP and APAP
- Climate change- drought, flooding and fires
- Soil degradation
- Reduction in water supply in terms of rain and stream flows

## CHAPTER FIVE: CENTRAL KAROO DISTRICT AGRI-PARK IMPLEMENTATION PLAN

### 5.1. Introduction

The Agri Park implementation will continue to evolve as new developments unfold. It will be important for implementation to take place in as coordinated a manner as possible and therefore the pending appointment of a District Agri Park Manager will assist in this regard and provide a key focal point for all stakeholders to interact with.

This 10 year Agri Park Master Plan implementation plan therefore contains the following:

- f) Agri Park Success Factors based on international experience;
- g) Agri Park Implementation monitoring plan to guide the monitoring of the agri park (it will be critical for stakeholders to agree on key indicators to be monitored and for regular progress reports on these indicators to be presented and discuss at the agri park stakeholder meetings such as the DAPOTT and DAMC))
- h) Agri Park Risk Management Plan: it will be critical for key risk managers to be identified and who are responsible to implementing actions to mitigate the key risks facing the successful implementation and operation of the Agri Park.
- i) Agri 10 Park High Level 10 year implementation plan to provide an indication of the phased implementation approach; and
- j) Agri Park Strategic Partnership Framework to provide an indication of the wide range of partnerships which will need to be explored, facilitated and defined to ensure the successful operation of the Agri Park.

### 5.2. Critical Success Factors

International lessons of experience have revealed that at least seven generic success factors can be identified for Agri-Parks. These include:

**Table 11 Agri Park Success Factors based on International Experience**

<ul style="list-style-type: none"> <li>Production Systems and Innovation:</li> </ul>	<p>Engage expertise support for Agri-Park to implement systems and innovate.</p> <p>A culture of Research and Development to be inculcated in the enterprise.</p> <p>Develop a plan that integrates the necessary R&amp;D with the overall Agri-Park strategic plan.</p> <p>Identify and prioritise R&amp;D projects based on the contribution of the likely research outcomes to overall industry performance.</p> <p>Encourage a long-range program approach rather than commission a series of independent projects.</p> <p>Ensure that R&amp;D is commercially focused on the product outcome.</p> <p>Build long-term relationships with competent and experienced research providers.</p>
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<ul style="list-style-type: none"> <li>Enterprise and Industrial Development Support and enablers:</li> </ul>	<p>The development and support of the enterprise needs to be on both the enterprise and industry development levels. With a view to drawing on these interventions benefits to critical mass or scale.</p> <p>Recognise the importance of being a certain size before successful commercialisation can be possible.</p> <p>Focus on growth at both enterprise and industry levels with a view to drawing on these benefits once critical mass has been achieved once critical mass has been achieved.</p> <p>Recognise the contributions to growth possible through partnering throughout the supply chain, and through mentoring of new industry players.</p> <p>Encourage collective marketing and branding programs.</p> <p>The enterprise development, amongst others will cover leadership development and retention; business planning; businesses formalisation e.g. coops registration and business resourcing. Facilitate access to enablers such as finance, appropriate technology, business development services, electricity, appropriate roads and bridges, etc.</p>
<ul style="list-style-type: none"> <li>Quality Product Development:</li> </ul>	<p>The Agri-Park to develop skills in food product development.</p> <p>Compliance with industry codes of good practice in terms of product description and quality assurance.</p> <p>Standardisation of terminology and the way products are graded, labelled and traded.</p>
<ul style="list-style-type: none"> <li>Brand Building and Marketing:</li> </ul>	<p>All world-class low-tech enterprises are exceptionally good at building their brands, and protect their trademarks and logos. Linked to enterprise development support, the Agri-Park needs to develop a branding look and feel (also incorporating its wide word web presence).</p> <p>The Agri-Park to develop a precise marketing plan and allocate resources for the promotion of the enterprise products.</p>
<ul style="list-style-type: none"> <li>Business linkages and supply chains:</li> </ul>	<p>Empower local distributors to get product to the market.</p> <p>Establish vertical and horizontal business linkages.</p> <p>Identify the market (or market segment) to be targeted.</p> <p>Identify sustainable supply chain partners most appropriate to the chosen market segment.</p> <p>Establish effective, ongoing, structured lines of communication between the supply chain partners.</p> <p>Project a realistic view of the industry's position and outlook.</p> <p>Build relationships based upon mutual benefit along the supply chain.</p>
<ul style="list-style-type: none"> <li>Governance and management</li> </ul>	<p>Competent Agri-Park management and governance.</p> <p>Business management systems and structures need to be in place.</p> <p>Business principles of profit, people and planet.</p>

	<p>Good practice corporate governance should be adhered to at all times.</p> <p>Comply with corporate governance legislative, policy and regulatory frameworks (public and private sector).</p>
<ul style="list-style-type: none"> <li>Supply contracts in place for key inputs:</li> </ul>	<p>The prices of agricultural inputs are incredibly volatile due to factors such as adverse weather conditions and insect infestations. To negate this, long-term fixed-price supply contracts with local farmers, suppliers (e.g. packaging company) and distributors is crucial.</p>

The following factors should be considered for the establishment and/or operationalisation of a processing plant:

**Table 12 Key Considerations Informing Establishment of Processing Plants**

Location:	<p>The basic objective is to choose the location which minimises the average production cost, including transport and handling. It is an advantage, all other things being equal, to locate a processing unit near the fresh raw material supply. An adequate supply of good water, availability of labour pool, proximity to rail or road transport facilities and adequate markets are other important requirements.</p>
Processing planning:	<p>A well planned commodity processing centre must be designed to operate for as many months of the year as possible. This means the facilities, the buildings, the material handling and the equipment itself must be inter-linked and coordinated properly to allow as many products as possible to be handled at the same time, and yet the equipment must be versatile enough to be able to handle many products without major alterations. A typical processing centre or factory should process four or five types of commodities at different times of the year.</p>
Processing systems (Scalability):	<p><b>Small-Scale Processing.</b> This can be done at FPSUs for small-scale farmers for personal subsistence or for sale in nearby markets. In this system, processing requires little investment: however, it is time consuming and tedious.</p> <p><b>Intermediate-Scale Processing.</b> In this scale of processing, a group of small-scale processors pool their resources. This can also be done by individuals. Processing is based on the technology used by small-scale processors with differences in the type and capacity of equipment used. The raw materials are usually grown by the processors themselves or are purchased on contract from other farmers. These operations are usually located on the production site in order to assure raw materials availability and reduce cost of transport. This system of processing can provide quantities of processed products to supply nearby urban areas.</p>

	<p><b>Large-Scale Processing.</b> Processing in this system is highly mechanised and requires a substantial supply of raw materials for economical operation. This system requires a large capital investment and high technical and managerial skills. For example, because of the high demand for foods in recent years many large-scale factories were established in developing countries. Some succeeded, but the majority failed, especially in West Africa. Most of the failures were related to high labour inputs and relatively high cost, lack of managerial skills, high cost and supply instability of raw materials and changing governmental policies. Perhaps the most important reason for failure was lack of adequate quantity and regularity of raw material supply to factories. Despite the failure of these commercial operations, they should be able to succeed with better planning and management, along with the undertaking of more in-depth feasibility studies.</p>
Choice of processing technologies	<p>The basis for choosing a processing technology ought to combine labour, material resources and capital so that not only the type and quantity of goods and services produced are taken into account, but also the distribution of their benefits and the prospects of overall growth. These should include:</p> <ul style="list-style-type: none"> <li>• increasing farmer/artisan income by the full utilisation of available indigenous raw material and local manufacturing of part or all processing equipment;</li> <li>• cutting production costs by better utilisation of local natural resources (solar energy) and reducing transport costs;</li> <li>• generating and distributing income by decentralising processing activities and involving different beneficiaries in processing activities (investors, newly employed, farmers and small-scale industry);</li> <li>• maximising national output by reducing capital expenditure and royalty payments, more effectively developing balance-of-payments deficits through minimising imports (equipment, packing material, additives), and maximising export-oriented production;</li> <li>• maximising availability of consumer goods by maximisation of high-quality, standard processed produce for internal and export markets, reducing post-harvest losses, giving added value to indigenous crops and increasing the volume and quality of agricultural output</li> </ul>

### 5.3. Agri-Park Strategy Implementation Monitoring Framework: outcomes, outputs, targets activities and key assumptions

The following indicators and targets are proposed for further refinement in order to monitor implementation of the Agri Hub and achievement of the Agri Hub objectives. Stakeholders will need to define and agree on the key targets:

**Table 13 Agri Park Objectives, Outputs, Targets, Indicators and Activities**

<b>STRATEGIC OBJECTIVE 1: Transform Rural South Africa through a modernised agricultural sector</b>			
<b>Outcome(s)</b>	<b>Measure (Outputs)</b>	<b>Targets &amp; Milestones (Indicators)</b>	<b>Activities</b>
CK District Agricultural Sector transformed and modernised	Vibrant CK District community and Food Security	% increase in households monthly income (socio impact)	Implement and manage agri park
	Percentage contribution of Agricultural to CK District economy	% increase in absolute value of of District's Agricultural sector production (econ impact)	Implement and manage agri park
	Increased agricultural beneficiation (agro-processing activities)	% increase in agricultural beneficiation activities	Implement and manage agri park
	Number Black Industrialists Developed	# of black industrialists in agro-processing developed	Implement and manage agri park

<b>STRATEGIC OBJECTIVE 2: Develop Integrated and Networked Agri-Park Infrastructure</b>			
<b>Outcome(s)</b>	<b>Measure (Outputs)</b>	<b>Targets &amp; Milestones (Indicators)</b>	<b>Activities</b>
CK District Agri-Park Operational	Number of Agri Hubs (AH) developed	<ul style="list-style-type: none"> <li>AH Property Management Contract finalised</li> <li>% occupancy of operational enterprises</li> <li>One AH developed by 2018</li> </ul>	<ul style="list-style-type: none"> <li>Land acquisition and zoning</li> <li>Infrastructure Development Process (i.e. feasibility and design, professional teams, implementation and hand over)</li> </ul>
	Number of Farmer Production Support Units (FPSU) developed	<ul style="list-style-type: none"> <li>FPSU Property Management Contract finalised</li> <li>% occupancy of operational enterprises</li> <li>Two FPSUs established by 2018</li> </ul>	<ul style="list-style-type: none"> <li>Land acquisition and zoning</li> <li>Infrastructure Development Process (i.e. feasibility and design, professional</li> </ul>

STRATEGIC OBJECTIVE 2: Develop Integrated and Networked Agri-Park Infrastructure			
Outcome(s)	Measure (Outputs)	Targets & Milestones (Indicators)	Activities
			teams, implementation and hand over)
	Number of Rural Urban Market Centres (RUMC) established	<ul style="list-style-type: none"> <li>RUMC Property Management Contract finalised</li> <li>% of business linkages facilitated by RUMC</li> <li>Shared RUMC developed by 2018</li> </ul>	<ul style="list-style-type: none"> <li>Land acquisition and zoning</li> <li>Infrastructure Development Process (i.e. feasibility and design, professional teams, implementation and hand over)</li> </ul>

STRATEGIC OBJECTIVE 3: Establish and implement a sustainable Agri-Park governance and management model			
Outcome(s)	Measure (Outputs)	Targets & Milestones (Indicators)	Activities
CK District Agri-Park Sustainably managed and operated	A farmer led company established through the company act	<ul style="list-style-type: none"> <li>Articles of association</li> </ul>	<ul style="list-style-type: none"> <li>Develop Articles of Association for Agri-Park</li> </ul>
	Management company responsible for both development and administration established	<ul style="list-style-type: none"> <li>Management contract</li> </ul>	<ul style="list-style-type: none"> <li>Develop management contract for Agri-Park hubs and FPSUs</li> </ul>
	District Statutory body responsible for oversight established	<ul style="list-style-type: none"> <li>Memorandum of Understanding</li> <li>Municipal resolution</li> </ul>	<ul style="list-style-type: none"> <li>Develop Memorandum of understanding</li> <li>Establish district oversight body through resolution</li> </ul>

STRATEGIC OBJECTIVE 4: Generate funds and secure investment			
Outcome(s)	Measure (Outputs)	Targets & Milestones (Indicators)	Activities
Direct Investment generated for CK District Agri-Park	Investment promotion	<ul style="list-style-type: none"> <li>Promoted investment opportunities in the Agri-Parks</li> </ul>	<ul style="list-style-type: none"> <li>Create investment material</li> <li>Develop bankable business plans</li> </ul>



STRATEGIC OBJECTIVE 4: Generate funds and secure investment			
Outcome(s)	Measure (Outputs)	Targets & Milestones (Indicators)	Activities
			<ul style="list-style-type: none"> <li>Present investment opportunities to potential investors</li> </ul>
	Partnerships established	<ul style="list-style-type: none"> <li>Partnerships established for the various opportunities in the Agri-Parks</li> </ul>	<ul style="list-style-type: none"> <li>Actively promote partnerships to potential investors</li> <li>Meet potential partners</li> <li>Present bankable business plans to potential partners</li> </ul>
	Investment generated	<ul style="list-style-type: none"> <li>Investment in the Agri-parks generated</li> </ul>	<ul style="list-style-type: none"> <li>Generate partnership agreements</li> <li>Institute development of investment</li> </ul>

STRATEGIC OBJECTIVE 5: Improve coordinated delivery of support services (i.e. extension services)			
Outcome(s)	Measure (Outputs)	Targets & Milestones (Indicators)	Activities
CK District Farmers producing competitive produce	Smallholder and Emerging Farmers businesses profitable and sustainable	<ul style="list-style-type: none"> <li>Extension services operational</li> <li>Support services operational</li> <li>Collection scheme operational</li> <li>Farmers delivering quality product to market</li> </ul>	<ul style="list-style-type: none"> <li>Develop extension services in the Agri-Hub</li> <li>Develop support services model</li> </ul>
	Smallholder and Emerging Farmers technical capacity and skills enhanced	<ul style="list-style-type: none"> <li>Training material developed</li> <li>Farmers trained</li> </ul>	<ul style="list-style-type: none"> <li>Develop training material</li> <li>Train farmers</li> </ul>

STRATEGIC OBJECTIVE 6: Improve Agri-Park Programme Implementation			
Outcome(s)	Measure (Outputs)	Targets & Milestones (Indicators)	Activities
CK District Municipality effectively and efficiently coordinating and facilitating the implementation of the Agri-Park	Agri-Park generating income for the municipalities (rates and taxes)	Amount of municipal rates and service fees paid p.a.	Agri park businesses pay rates and service charges.
	Agri-Park provided with reliable and consistent municipal services	Continuous service delivery and consistent service standards as per municipal service charter.	Municipal service delivery.
	Capacitated coordinating structure operational	Municipal participation coordinated and effective.	Agri park coordinating structures effectively attended by relevant level of officials and / or Councillors
	Agri-Park contribution Monitoring and Evaluation	Agreed monitoring plan with clear responsibilities for collection, monitoring and reporting to key decision-making structures to inform decision-making	Quarterly Performance Monitoring reports submitted to decision-making structures which inform agri park decision-making

The following key assumptions can be identified and which will also need to be monitored and reported on as part of the Agri park monitoring plan:

**Table 14 Agri Park Implementation assumptions to be monitored**

Agri-Park Outcomes	Agri-Park Measure (Outputs)	Assumptions Description (External Factors beyond Agri-Park control, e.g. drought etc.)	Will the assumption hold true?		Possible to redesign outcomes and outputs to influence external factors (Yes/No)
			Possibly (tick)	Very unlikely (tick)	
Eden District Agricultural Sector transformed and modernised	Vibrant Eden District community and Food Security	Emerging farmers will be able to produce high volumes of vegetables and poultry meat	✓		Yes
	Percentage contribution of Agriculture to Eden District economy	Reduction in vegetable production due to limited water rights for expansion	✓		No





Agri-Park Outcomes	Agri-Park Measure (Outputs)	Assumptions Description (External Factors beyond Agri-Park control, e.g. drought etc.)	Will the assumption hold true?		Possible to redesign outcomes and outputs to influence external factors (Yes/No)
			Possibly (tick)	Very unlikely (tick)	
	Increased agricultural beneficiation (agro-processing activities)	Resources will be invested in the value chain	✓		Yes
	Number Black Industrialists Developed	Black entrepreneurs willing to participate in the agricultural sector	✓		Yes
Eden District Agri-Park Operational	Number of Agri Hubs (AH) developed	Government putting the required resources in the Agri-Park	✓		No
	Number of Farmer Production Support Units (FPSU) developed	Government putting the required resources in the Agri-Park	✓		No
	Number of Rural Urban Market Centres (RUMC) established	Government putting the required resources in the Agri-Park	✓		No
Eden District Agri-Park Sustainably managed and operated	A farmer led companies established through a companies Act and/or Cooperatives Act	Farmers willing to work as cooperative		✓	Yes
	Management company responsible for both development and administration established	Right partners identified to participate in the Agri-Parks		✓	Yes
	District Statutory body responsible for oversight established	People with right calibre appointed to serve on the body		✓	Yes
Direct Investment generated for Eden District Agri-Park	Investment generated	Private individuals willing to invest in the Agri-Parks	✓		Yes
	Partnerships established	Private individuals willing to partake in the Agri-Parks		✓	Yes
Eden District Farmers producing competitive produce and/or livestock	Beneficiary farmers businesses profitable and sustainable	Emerging farmers employing proper business management aspects in their businesses		✓	Yes
	Quality vegetable production increased	Proper production systems followed and farmers practising the best GAP	✓		Yes








Agri-Park Outcomes	Agri-Park Measure (Outputs)	Assumptions Description (External Factors beyond Agri-Park control, e.g. drought etc.)	Will the assumption hold true?		Possible to redesign outcomes and outputs to influence external factors (Yes/No)
			Possibly (tick)	Very unlikely (tick)	
	Beneficiary farmers technical capacity and skills enhanced	The beneficiaries will be interested in this type of training	✓		Yes
Eden District Municipality effectively and efficiently coordinating and facilitating the implementation of the Agri-Park	Agri-Park generating income for the municipalities (rates and taxes)	Development of efficient collection systems		✓	Yes
	Capacitated coordinating structure operational	People with proper skills employed on various structures		✓	Yes
	Agri-Park socio-economic contribution Monitored and Evaluated	Proper monitoring and evaluation system in place	✓		Yes

#### 5.4. Agri-Park 10-Year Implementation Plan

The following high level 10 year implementation plan provides an indication of the agri-parks phased implementation:

**Table 15 Agri Park 10 Year Implementation Plan**

CK Agri-Park 10-Year Implementation Plan			Phase One	Phase Two	Phase Three
Strategic Objective	Outcome(s)	Measure (Outputs)	2016 - 2018	2019 - 2021	2022 - 2025
SO: 1	CK District Agricultural Sector transformed and modernised	Vibrant CK District community and Food Security			
		Percentage contribution of Agricultural to CK District economy			
		Increased agricultural beneficiation (agro-processing activities)			
		Number Black Industrialists Developed	3	3	3
SO: 2	CK District Agri-Park Operational	Number of Agri Hubs (AH) developed	1		
		Number of Farmer Production Support Units (FPSU) developed	2	2	2
		Number of Rural Urban Market Centres (RUMC) established	1		
SO: 3	CK District Agri-Park Sustainably managed and operated	A farmer led company established through a companies act	X		
		Management company responsible for both development and administration established	X		
		District Statutory body responsible for oversight established	X		
SO: 4		Investment generated			

CK Agri-Park 10-Year Implementation Plan			Phase One	Phase Two	Phase Three
Strategic Objective	Outcome(s)	Measure (Outputs)	2016 - 2018	2019 - 2021	2022 - 2025
	Direct Investment generated for CK District Agri-Park	Partnerships established	2	3	5
		Investment promotion			
SO: 5	CK District Farmers producing competitive produce	Farmers businesses profitable and sustainable			
		Farmers technical capacity and skills enhanced			
		Agri-Park generating income for the municipalities (rates and taxes)			
SO: 5	CK District Municipality effectively and efficiently coordinating and facilitating the implementation of the Agri-Park	Agri-Park provided with reliable and consistent municipal services			
		Capacitated coordinating structure operational			
		Agri-Park contribution Monitoring and Evaluation			

## 5.5. Strategic Risks Assessment and Mitigation Plan

A wide range of risks exist which can undermine the successful establishment and operation of the agri park. It is essential that risk managers are identified and appointed to manage these risks and to implement mitigating actions to minimise either the likelihood of these risks occurring or the potential negative impacts that these risks might have on the Agri Park. District stakeholders will need to develop a detailed and District-specific risk management plan which is informed by the following framework:

Table 16 Agri Park Risks Management Framework

Agri-Park Outcomes	Agri-Park Measure (Outputs)	Risk Description	Probability of risk occurrence					Strategy for mitigation/C controls
			(1) Very Low	(2) Low	(3) Moderate	(4) High	(5) Very High	
Eden District Agricultural Sector transformed and modernised	Vibrant <u>Eden District</u> community and Food Security	Farmers unable to produce quality vegetables			√			Farmers assisted to follow planting seasons of various vegetables
	Percentage contribution of Agricultural to <u>Eden District</u> economy	Farmers not supplying enough vegetables to the market for sales			√			Creating incentives for farmers to supply their vegetables through Agri-Parks processing facilities
	Increased agricultural beneficiation (agro-processing activities)	Required resources not being made available		√				Proper budgeting by all spheres of government participating in the Agri-Parks
	Number Black Industrialists Developed	Required resources not being made available			√			Proper budgeting by all spheres of government participating in the Agri-Parks
Eden District Agri-Park Operational	Number of Agri Hubs (AH) developed	Unavailability of funds to fund the infrastructure				√		Proper budgeting by all spheres of government participating in the Agri-Parks and the government prioritizing Agri-Parks as project to drive rural development
	Number of Farmer Production Support Units (FPSU) developed	Unavailability of funds to fund the infrastructure				√		Proper budgeting by all spheres of government participating

Agri-Park Outcomes	Agri-Park Measure (Outputs)	Risk Description	Probability of risk occurrence					Strategy for mitigation/C controls
			(1) Very Low	(2) Low	(3) Moderate	(4) High	(5) Very High	
								in the Agri-Parks and the government prioritizing Agri-Parks as project to drive rural development
	Number of Rural Urban Market Centres (RUMC) established	Unavailability of funds to fund the infrastructure				✓		Proper budgeting by all spheres of government participating in the Agri-Parks and the government prioritizing Agri-Parks as project to drive rural development
Eden District Agri-Park Sustainably managed and operated	A farmer led companies established through a Companies Act and/or Cooperatives Act	Farmers not cooperating for the success of the cooperatives		✓				Training of farmers about the benefits of participating in cooperatives
	Management company responsible for both development and administration established	Individuals appointed not advancing the interest of the farmers				✓		Transparent appointment of management company with proper screening.
	District Statutory body responsible for oversight established	Unqualified people being appointed on the body				✓		Appointment of key personnel with right skills and qualifications
Direct Investment generated for Eden	Investment generated	Investors viewing Agri-Parks as unprofitable			✓			Proper marketing of Agri-Parks



Agri-Park Outcomes	Agri-Park Measure (Outputs)	Risk Description	Probability of risk occurrence					Strategy for mitigation/C controls
			(1) Very Low	(2) Low	(3) Moderate	(4) High	(5) Very High	
District Agri-Park	Partnerships established	Private sector not willing to participate in the Agri-Parks				✓		Proper marketing of Agri-Parks
Eden District Farmers producing competitive produce and/or livestock	Beneficiary farmers businesses profitable and sustainable	Farmers not applying proper business management processes in their businesses				✓		Conduction of training needs assessment of the farmers and training on business management
	Quality beef production increased	The farmers not farming with quality cattle breed			✓			Selection of well-known breeding stock adaptable to the region
	Beneficiary farmers technical capacity and skills enhanced	Farmers offered training programmes that doesn't address their needs			✓			Conduction of training needs assessment of the farmers and providing relevant training programmes
Eden District Municipality effectively and efficiently coordinating and facilitating the implementation of the Agri-Park	Agri-Park generating income for the municipalities (rates and taxes)	Proper systems not being put in place				✓		Designing of proper collection system and enforcing the collection thereof
	Capacitated coordinating structure operational	Unqualified people being appointed on the structure of agri-parks				✓		Appointment of key personnel with right skills and qualifications
	Agri-Park socio-economic	Well defined M				✓		A well-defined M&E

Agri-Park Outcomes	Agri-Park Measure (Outputs)	Risk Description	Probability of risk occurrence					Strategy for mitigation/Controls
			(1) Very Low	(2) Low	(3) Moderate	(4) High	(5) Very High	
	contribution Monitored and Evaluated	& E framework not being put in place						framework with indicators designed.

## 5.6 Agri-Park Implementation Partnerships

The following framework should be used to start identifying potential strategic partners including government agencies, private sector organisations and international organisations to be involved in various aspects of the Agri Hub:

**Table 17 Agri Park Partnership Identification Framework**

Strategic Objective	Measure (Outputs)	Potential Strategic Partners	Potential Private Sector Organisations	International Organisations
SO: 1	Vibrant CK District community and Food Security			
	Percentage contribution of Agricultural to CK District economy			
	Increased agricultural beneficiation (agro-processing activities)			
	Number Black Industrialists Developed			
SO: 2	Number of Agri Hubs (AH) developed			
	Number of Farmer Production Support Units (FPSU) developed			
	Number of Rural Urban Market Centres (RUMC) established			
SO: 3	A farmer led company established through a companies act			
	Management company responsible for both development and administration established			

Strategic Objective	Measure (Outputs)	Potential Strategic Partners	Potential Private Sector Organisations	International Organisations
	District Statutory body responsible for oversight established			
SO: 4	Investment generated			
	Partnerships established			
	Investment promotion			
SO: 5	Smallholder and Emerging Farmers businesses profitable and sustainable			
	Quality meat production increased			
	Smallholder and Emerging Farmers technical capacity and skills enhanced			
SO: 5	Agri-Park generating income for the municipalities (rates and taxes)			
	Agri-Park provided with reliable and consistent municipal services			
	Capacitated coordinating structure operational			
	Agri-Park contribution Monitoring and Evaluation			

## 5.7 Way Forward and Recommendations

A number of specific feasibility studies, consultation and further research will now be required during the course of 2016 to further detail the Agri Park and processing opportunities, including the identification of possible implementation partners and facility planning requirements:

- DRDLR to clarify with District Municipality if 2015/16 funding for agri-park projects can be rolled-over to 2016/17.**
- DRDLR to finalise appointment District Agri Park Managers** (Stakeholders have strongly requested that the Agri Park Managers be located at the District level so that meaningful coordination and implementation can take place).
- DRDLR to provide clarity on Agri Park service providers** to the DAPOTT AND DAMC who have been appointed to assist with required detailed feasibility studies as well as detailed facility designs and costing so that coordination can take place at a District Level.

**4. Identification of Beaufort West Abattoir Strategic Partner including possible Certification/registration of abattoirs in the Central Karoo:**

An analysis of the capacity, use and suitability of all the existing abattoirs in Central Karoo and a costing and motivation of the upgrading of some of them to export the "Karoo" brand. An indication of the requirements for the farms and the abattoirs to obtain the "Karoo" brand to be explored to inform the feasibility of the proposal.

The possible need to develop and issue an Expression of Interest from existing abattoir owners in Beaufort West should be investigated after initial consultations with the three abattoir owners. Initial discussions should include briefings on the agri park model and proposed institutional arrangements. The agri-park requirements would need to inform this EOI.

A feasibility study will then be needed, including identifying any possible infrastructure upgrade needs. The results of this study should be used to inform the refined institutional arrangements including clarity on the participation of emerging farmers.

**5. Beaufort West Tannery Feasibility:**

The Abattoir feasibility should be conducted in parallel with the Tannery feasibility study (the possibility of combining these two feasibilities into one feasibility should also be considered). Issue of location, volumes, markets and institutional arrangements should all be addressed. Linkages to the game industry should be investigated. The DAPOTT to approve the Feasibility ToR.

**6. Central Karoo and Eden District Lucerne Pill processing feasibility:**

A joint feasibility into the above covering both Districts needs to be initiated and which links to emerging farmer Lucerne production areas in both Districts. The DAPOTT to approve the Feasibility ToR.

**7. Beaufort West Hydroponics Feasibility**

A feasibility study is required into the above including whether this can be linked to flower industry opportunities. A business plan must be developed which is based on vegetable production as the core focus and which includes the identification of a cost-efficient market access logistics plan as well as water-efficient water re-use processes in order to enhance market feasibility. A minimum size of 16,000m<sup>2</sup> of production area should be explored to enhance feasibility (this will require an expansion of existing infrastructure). DAPOTT to approve feasibility ToR.

**8. The District and Local Municipalities will need to make provision for the Agri Park in their Integrated Development Plans (IDPs) (including possible infrastructure and services needed for the Agri Hub, FPSUs, and RUMC), Local Economic Development Plans, and Spatial Development Frameworks (SDFs). Local Municipalities must also ensure an agri park representative is nominated to participate in future DAPOTT meetings. In addition, Local Municipalities (together with the District Municipality, DRDLR, and Provincial Department of Agriculture) will need to identify specific sites for the Farmer Production Support Units (ideally**

such sites should be aligned to any nodes identified in local SDFs). District and Local Municipalities to engage emerging farmers to refine facility and service requirements at FPSUs. If EIA processes are required, the possibility of an EIA class application for all Agri Park EIAs should be investigated to speed up the planning process and ensure it is efficient:

- a) Murraysburg: linked to 6400 HA commonage land: small stock improvements, lucerne production (shared equipment), and possibly fruit.
  - b) Prince Albert: small stock improvements, fruit and vegetable production and processing, flowers.
  - c) Lainsburg: small stock improvements, fruit and vegetable production and processing.
  - d) Merwerville and/or Possibly Leeu Gamka- small stock improvements and lucerne production (with shared equipment) linked to possible processing plant (located in Central Karoo or Eden District to be investigated).
  - e) Nelspoort: small stock improvements and Lucerne (100 HA possible production potential) (Vuyani Dev. Trust)
9. DRDLR to facilitate a meeting with both Eden and Central Karoo Districts to discuss (and agree on) the location of the Rural Urban Market Centre (Oudtshoorn or Beaufort West).
  10. The outcome of the Western Cape Department of Agriculture waterless wool and mohair cleaning study should be discussed with all stakeholders and possible implications for the Agri Park identified (including for the site in Beaufort West as well as for the emerging farmer capacity development plan in point 12 below).
  11. Additional research and studies will also be required including but not limited to the following:

**Skills Development and Training opportunity (through e.g. NARYSEC & South Cape College):**

Training and skills required for the agro processing opportunities should be identified to inform Training Courses and opportunities (explore partnerships with NARYSEC and existing FET colleges and other training providers). Consider synergies between the locality of the Beaufort West Youth Hub's training component in relation to the industrial area or the Agri Park site where additional training opportunities can be created such as welding or "block men".

**Analysis of State Owned Land in Central Karoo:**

An analysis of all state owned land is required to determine the use of all state owned farms in the Central Karoo to determine the current use of the farms and whether these farms could be better utilized for Land Reform purposes, prior to acquiring more privately owned farms. Even though it is not an agro processing opportunity, it is still considered to be a critical component of rural development in the Central Karoo. The study should distinguish between farms acquired by DRDLR for Land Reform and farms owned by other state departments.

12. Detailed design of agri park and FPSU facilities should commence as informed by detailed user needs analysis. Existing facilities should be used wherever possible. Additional

infrastructure support requirements (e.g. bulk infrastructure) to be identified as part of this process. Any land ownership and planning process implications (e.g. re-zonings, EIAs) to be identified and process initiated

13. Resource Mobilization, Collaboration and Partnerships including clarification of funding sources to be initiated by the District and DRDLR to clarify funding arrangements.
14. Detailing of agri-park desired institutional arrangements to be informed through detailed legal advice.
15. Regarding market access and maximising access to local markets, it is proposed that the RUMC explore the potential to establish a District Framework Contract to facilitate streamlined procurement from local producers by a wide range of national, provincial and local government institutions. It is also proposed that a national brand be developed for Agri Parks which can strengthen market awareness and market access.
16. The Development of a small stock improvement and farm management programme should proceed to clarify how all relevant role-players can strengthen emerging farmers in the District. Key industry associations, the Provincial Department of Agriculture, and private sector role-players such as the Merino Konsortium, need to be engaged with. The possibility of organising a District Emerging Farmer Capacity Building consultative workshop to discuss this process should be considered.

The proposed next steps and high level three year implementation plan can be summarised as follows:

Year	Actions
Y 1	<ul style="list-style-type: none"> <li>• DRDLR finalise appointment District Agri Park Managers (located at the District level).</li> <li>• Conduct Eden and Eden District Lucerne Pellet processing feasibility study.</li> <li>• Conduct feasibility into establishing essential oils processing facility in Grootshoek production area.</li> <li>• Additional research and studies will also be required to develop Agri Park Skills Plan.</li> <li>• Agree on location of the Rural Urban Market Centre (Oudtshoorn or Beaufort West).</li> <li>• Agri-Park performance targets established and incorporated into district IDP and SDF plans, &amp; sector departments</li> <li>• Key commodity development plan developed</li> <li>• Feasibility Studies</li> <li>• Agri-Park sites finalised and land acquired</li> <li>• Agri-Park governance and management structures operationalised</li> <li>• Agri-Park manager contracted</li> <li>• Designs completed, including service requirements regarding water, electricity, waste water disposal</li> <li>• Agri-Park costing model and budgets compiled</li> <li>• Agri-Park funding, investment &amp; partners secured</li> <li>• Agri-Park infrastructure development professional teams procured</li> <li>• Develop and support farmers</li> </ul>
Y 2	<ul style="list-style-type: none"> <li>• Agri-Park infrastructure development initiated and managed</li> <li>• Agri-Park funding, investment &amp; partners secured</li> <li>• Develop and support farmers</li> <li>• Agri-Park markets secured (and District Procurement Framework if feasible)</li> </ul>
Y 3	<ul style="list-style-type: none"> <li>• One Agro-hub industrial site phase developed and operational</li> <li>• Two FPSUs sites developed and RUMC office established and operational</li> <li>• Develop and support farmers, and link to commodity chains</li> </ul>

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## **Annexure: Abattoirs and meat inspections: Extract from 2012 DAFF Report**

*The Meat Safety Act, 2000 prescribes that the owner of an abattoir must procure a meat inspection service for the abattoir. The PEOs are responsible for the determination of the number of inspectors and examiners needed at each abattoir in the Provinces in accordance with section 76(1) of the Poultry Regulations No. R153 of 2006 and section 84 of the Red Meat Regulation No. R1072 of 2004. The PEOs have to consider the following before making a decision on the number of inspection personnel at an abattoir:*

- i. Abattoir design*
- ii. Number of inspection stations*
- iii. Line speed*
- iv. Structural and management aspects* This means that it is the responsibility of the abattoir owner to fund the cost of meat inspection at his/her abattoir. This provision of the Act is a challenge to smaller abattoirs, especially rural abattoirs and low throughput abattoirs that slaughter infrequently. It is therefore crucial that a decision that will be made on meat inspection be able to allow smaller abattoirs to operate and still receive the inspection service as required. In terms of animal and human diseases control, Abattoirs are stations at which most zoonotic and harmful diseases are eliminated. This therefore means that Government has a financial obligation in terms of disease control at abattoirs.

*There are different options on how to recover the cost of meat inspection per abattoir, namely:*

- 1. Cost per individual meat inspection personnel allocated to a particular abattoir, or*
- 2. Cost per slaughter units allocated to the abattoir as per the maximum throughput indicated on the registration certificate., or*
- 3. Cost per throughput category. In this option, high, low and rural throughput abattoirs will have a pre-determined rate independent of the number of inspectors or their allocated slaughter units, or*
- 4. Cost per slaughter unit categories to be determined. In this case a system of grouping abattoirs into categories to be determined independently to the prescribed categories will be created and abattoirs charged according to the category they fit into, or*
- 5. Cost determined according to actual slaughter figure at a predetermined rate per slaughter unit*

## District Name: CENTRAL KAROO – 14 DECEMBER 2016

1. Production Support	Examples of indicators
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- Technical support provided (extension support)



# 1. District Implementation Plan

District Name: CENTRAL KAROO – 14 DECEMBER 2016

Action Item	Indicator	Target	Implementing party					Timeframe (by when)	Estimated Costing (millions)		
			DM	DRDLR	PDA	DAFF	LM		2017/18FY	2018/19FY	2019/20FY
• Infrastructure on farm (CASP, Recap etc.)	No of farms recapitalized/ supported (Wilgerbosch )	1	V	V				01 April 2017 – 30 June 2018	2 500 000	DoA to provide information	DoA to provide information
• New land acquisitions	No of farmers supported	5	V					31 March 2018	3 500 000	20 000 000	5 000 000
2. Operationalization of FPSU (the actual site to be confirmed)											
• Infrastructure on site	Example of indicators	No of projects . e.g. - Admin facility and road construction - Packing facility - Plantation - Abattoir & Processing facility, Branding (Bwest)	2	V	V	V	V	2 years	11 500 000	2 000 000	2 000 000
				V					12 000 000	12 000 000	
				V					3 600 000	17 000 000	
									15 000 000	1 000 000	



# 1. District Implementation Plan

District Name: CENTRAL KAROO – 14 DECEMBER 2016

Action Item	Indicator	Target	Implementing party					Timeframe (by when)	Estimated Costing (millions)		
			DAFF	DRDLR	PDA	DM	LM		2017/18FY	2018/19FY	2019/20FY
• Management structure established	- Management team appointed (operations manager, extension officers deployed; etc	4	✓	✓	✓	✓	✓	31 March 2017			
• Mechanization support provided	- Equipment for Bwest, Prince Albert, Laingsburg, Murraysburg (Tractor, trailer, baler, lucerne cutter, rake, truck, scraper, diesel, shearing equipment, plough, fertilizer spreader) - Infrastructure	4	✓	✓	✓	✓	✓	31 March 2017	6 250 000	4 250 000	12 750 000
• Enterprises supported to be part of FPSU	- Livestock Improvement Scheme - Fruit Production entities to be successfully supported / engaged	2 1	✓	✓	✓	✓	✓	01 April 2017 – 31 March 2018	5 000 000	3 000 000	



# 1. District Implementation Plan

District Name: CENTRAL KAROO – 14 DECEMBER 2016

Action Item	Indicator	Target	Implementing party					Timeframe (by when)	Estimated Costing (millions)		
			DAFF	DRDLR	PDA	DM	LM		2017/18FY	2018/19FY	2019/20FY
3. Agrihub operationalized	<ul style="list-style-type: none"> <li>All studies completed (EIA, feasibility, etc)</li> <li>Construction facilities at least 25% completed</li> </ul>	1 x Agrihub to be fully functional by 2025	✓	✓	✓	✓	✓	5 years	1 500 000	2 500 000	
											10 000 000
1. Infrastructure on site	No of projects e.g. Warehouse, Retail Facility, Tourism Centre, Auction facility, pack houses, mechanization Centre; Cold Storage; admin facility	Functional Agrihub	✓	✓	✓	✓	✓	10 years			18,400 000 (25% of the construction)



# 1. District Implementation Plan - District Name: CENTRAL KAROO – 14 DECEMBER 2016

Action Item	Indicator	Target	Implementing party						Timeframe (by when)	Estimated Costing (millions)			
			DAFF	DRD LR	PDA	DM	LM	2017 /18FY		2018 /19FY	2019 /20FY		
4. Complementary Enterprises supported (across value chain)	Youth to participate in the economy of rural towns x 5	NARYSEC Youth x 2 Prince Albert, Beaufort West, )	✓	✓	✓	✓	✓						
• Nature and type e.g. Transport and logistics enterprises	NARYSEC mobilisation to assist with h/h profiling, distribution of info, promote easy access to DRDLR services	Youth 18-25yrs	✓						2020	80 000	80 000	80 000	
	Recruitment of 60 NARYSEC youth over 3 years		✓							1 800 000	1 800 000	1 800 000	
	Youth to be trained in the identified fields									2 000 000	2 000 000	3 000 000	
		14 Business Plans & EIA's for all projects.	✓	✓					2 years	2 500 000	2 500 000		
		Beneficiaries identification	✓	✓					Ongoing	2 000 000	2 000 000	2 000 000	
		4 x NARYSEC youth	✓						2 years	5 000 000	5 000 000	10 000 000	
		4 x NARYSEC youth											
• Type of support e.g. business planning			✓	✓	✓	✓	✓		2020				
rural development & land reform													
• Finance • Research / Capacity building / Training • Skills audit & development													



Department of Rural Development and Land Reform  
REPUBLIC OF SOUTH AFRICA

CK EDM INITIALS .....

# 1. District Implementation Plan

District Name: CENTRAL KAROO – 14 DECEMBER 2016

Action Item	INDICATOR	TARGET	Implementing party					Timeframe (by when)	Estimated Costing (millions)		
			DAFF	DRDLR	PDA	DM	LM		2017/18FY	2018/19FY	2019/20FY
5. Skills Development e.g. Agri-business -Education and training on value addition and processing opportunities.	Number of NARYSEC youth, farmers and enterprises skilled.	NARYSEC Youth Emerging Farmers Enterprises	✓	✓	✓	✓	✓	2020	5 000 000	5 000 000	5 000 000

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rural development  
& land reform  
Department of Rural Development and Land Reform  
REPUBLIC OF SOUTH AFRICA

CK EDM INITIALS .....

*(Signature)*



# 1. District Implementation Plan

District Name: CENTRAL KAROO – 14 DECEMBER 2016

Action Item	Implementing party (provides funding)					Timeframe (by when)	Estimated Costing (millions)		
	DAFF	DRDLR	PDA	DM	LM		2016/17FY	2017/18FY	2018/19FY
6. Market Access	✓		✓			2020			
• Training and skills development on market intelligence									
• Access to market information	✓		✓			2020			
• New market development	✓		✓			2020			
• Identify state market	✓		✓			2020			
• TOTALS							R 79 535 000	R 81 130 000	R 70 030 000

CK EDM SIGNATURE .....

*CK EDM*

DISTRICT IMPLEMENTATION FRAMEWORK PLANS 2017/18 FINANCIAL YEAR																			
Implementing Agent						Location of Project		Impact				Proposed Monitoring							
PROVINCE	DM	LM Name	PDA/DAF	DB/DLR	DM	LM	Project Description	Agribus code	FPSU code	Commodity	# hectares	# Jobs	Cost of project 17/18	Cost of project 18/19	Cost of project 19/20	Project start date	Project end date	Proposed Monitoring Mechanism	
Cape	Karoo	Beaufort West					Expanding the existing Abator, constructing a processing facility and branding of products. Transportation of life, slaughtered animals, feedlot and composting plant. Cleaning of intestines												
			✓	✓	✓	✓	WC_AH02	WC_AH02_F PSU001	Livestock Financial	10Ha	200	R 15,000,000.00	R 17,000,000.00	R -	1-Apr-17	31-Mar-19	Quarterly DAPOTT reporting.		
				✓	✓		Livestock Improvement Scheme Breeding and ACHOR farm development Schamer identification tags Handling facilities and Bakke, Veterinary equipment		WC_AH02_F PSU002										
							Predator / Fence Control: 4 X 4 Land Cruiser vehicle with all relevant predator control equipment, including operational costs, training of 4 NARYSEC participants		WC_AH02_F PSU003										
									WC_AH02_F PSU004										
									WC_AH02_F PSU005	Small Stock	90000	60 Farmers	R 5,000,000.00	R 5,000,000.00	R -	1-Apr-17	31-Mar-18	Quarterly DAPOTT reporting.	
									WC_AH02_F PSU001										
									WC_AH02_F PSU002										
									WC_AH02_F PSU003										
									WC_AH02_F PSU004										
									WC_AH02_F PSU005										
									WC_AH02_F PSU001	Small Stock	90000	4 + 60 Farmers	R 2,000,000.00	R 2,000,000.00	R 2,000,000.00	1-Apr-17	Ongoing	Quarterly DAPOTT reporting.	
									WC_AH02_F PSU002										
									WC_AH02_F PSU003										
									WC_AH02_F PSU004										
									WC_AH02_F PSU005										
									WC_AH02_F PSU001	Small Stock & Crops	90000	4 + 60 Farmers	R 6,250,000.00	R 4,250,000.00	R 12,750,000.00	1-Apr-17	31-Mar-20	Quarterly DAPOTT reporting.	
									WC_AH02_F PSU002										
									WC_AH02_F PSU003										
									WC_AH02_F PSU004										
									WC_AH02_F PSU005										
									WC_AH02_F PSU001	Small Stock & Crops	76500	0	R 5,000,000.00	R 5,000,000.00	R 10,000,000.00	1-Apr-17	31 March 2019	Quarterly DAPOTT reporting.	
									WC_AH02_F PSU002	Small Stock & fruit	6000	0				1-Apr-17	31 March 2019	Quarterly DAPOTT reporting.	
									WC_AH02_F PSU003	Small Stock & Crops	2500	0				1-Apr-17	31 March 2019	Quarterly DAPOTT reporting.	
									WC_AH02_F PSU004	Small Stock & Crops	3000	0				1-Apr-17	31 March 2019	Quarterly DAPOTT reporting.	
									WC_AH02_F PSU005	Small Stock & Crops	2000	0	R 305,000.00			1-Apr-17	31 March 2019	Quarterly DAPOTT reporting.	
									WC_AH02_F PSU001	Small Stock	2975	2	R 3,500,000.00	R 20,000,000.00	R 5,000,000.00	1-Apr-17	31 March 2019	Monthly DLRC meeting Quarterly DAPOTT reporting.	
							Construction and setting up of infrastructure on site (FPSU) including the road construction in Prince Albert (RID)	WC_AH02	WC_AH02_F PSU002	Small Stock & fruit	50	60	R 11,500,000.00	R 2,000,000.00	R 2,000,000.00	1-Apr-17	31 March 2019	Quarterly DAPOTT reporting.	
							Conduct EIA, feasibility studies, etc and Construction of Agribus	WC_AH02		Small Stock			R 1,500,000.00	R 2,500,000.00	R 10,000,000.00	1-Apr-17	31 March 2020	Quarterly DAPOTT reporting.	

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# ANNEXURE C





# **CENTRAL KAROO DISTRICT MUNICIPALITY**

**63 Donkin Street  
Private Bag X560  
Beaufort West  
6970**

**Fax: 023 – 415 1253  
Tel: 023 – 449 1000  
E-mail: [manager@skdm.co.za](mailto:manager@skdm.co.za)**

**Working together in development & growth**

## **AIR QUALITY MANAGEMENT PLAN (REVISED) 2016/17**



**Compiled by:**

**G. E. van Zyl  
Manager: Municipal Health / Air Quality Officer**

**March 2016**

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## **A.**

## **ABBREVIATIONS**



**AQA** - Air Quality Act;

**AQO** - Air Quality Officer;

**AQOF** - Air Quality Officers Forum;

**AQM** - Air Quality Management;

**AQMP** - Air Quality Management Plan;

**AEL** - Atmospheric Emissions Licensing;

**CKDM** - Central Karoo District Municipality;

**CO** - Carbon monoxide;

**CO<sub>2</sub>** - Carbon Dioxide;

**DEAT** - Department of Environmental Affairs and Tourism;

**EIA** - Environmental Impact Assessment;

**EMI** - Environmental Management Inspector

**GHG** - Green House Gas;

**IPWIS** - Integrated Pollution and Waste Information System;

**IDP** - Integrated Development Plan

**MSA** - Municipal Systems Act;

**NO<sub>2</sub>** - Nitrogen Dioxide;

**NO<sub>x</sub>** - Nitrogen Oxides;

**PM<sub>10</sub>** - Particulate Matter with aerodynamic diameter smaller than 10 micron;

**SO<sub>2</sub>** - Sulphur Dioxide;

**SA** - South Africa.

## **B. PURPOSE OF AIR QUALITY MANAGEMENT PLAN**



Parliament saw fit to pass the AQA, Act 39 of 2004, in 2006. This Act resulted in a paradigm shift in air pollution control in SA as its main aim is the protection of ambient air quality, i.e. the air that all people are exposed to on a daily basis. At the onset of the Act, in Section 2(b), it is stated that the object of the Act is:

*“2(b) generally to give effect to section 24(b) of the Constitution in order to enhance the quality of ambient air for the sake of securing an environment that is not harmful to the health and well-being of people.”*

Its basis lies therefore in the Constitution of South Africa. In support of the Act DEAT formulated a National Framework for Air Quality Management in the Republic of South Africa.

Both the AQA and the National Framework place great emphasis on public participation in the decision-making process.

The Act requires municipalities to adopt AQMP's and is very specific in its definition regarding the goal of an AQMP. Of specific importance are the following:

- The improvement of air quality;
- Reducing negative impacts on human health and the environment;
- Addressing the effects of fossil fuels in residential applications;
- Addressing the effects of emissions from industrial sources and from any point or non-point sources of air pollution;
- Implementing the republic's obligations in respect of international agreements; and,
- Giving effect to best practice in air quality management.

This AQMP will form the basis of a series of strategies and programs to ensure that all the principals of sustainability are adhered to. This will also enable the meeting of current needs as well as the maintenance of our resources for the benefit of future generations.

This Plan is also a commitment to certain principles and action plans needed to ensure sustainable utilization of resources and the management of air quality.

It is important that we all accept responsibility for the consequences of our actions and that we can make choices to reduce the impact. In this regard, local authorities have also an important role to play, representing the interest of the communities they serve.

The protection of the environment and residents constitutional rights to clean air and an environment that is not harmful to their well being has been identified as a priority and can be seen as the driving force behind our effort to compile a comprehensive AQMP.

In addition, the Western Cape Provincial Government and / or Municipalities may change various plans and policies that may impact on the way in which air quality is managed in the Central Karoo District.

Such developments must be taken into account in future reviews of the AQMP.

## **C. LEGAL REQUIREMENTS**



### **1. Air Quality Act**

Section 14 and 15 of the AQA states, inter alia, the following municipal duties:

#### **14. Appointment of air quality officers**

- (3) *Each municipality must designate an air quality officer from its administration to be responsible for co-ordinating matters pertaining to air quality management in the municipality.*
- (4) (a) *An air quality officer must perform the duties or exercise the powers assigned or delegated to that officer in terms of this Act.*  
  
(b) *An air quality officer may delegate a power or assign a duty to an official in the service of that officer's administration, subject to such limitations or conditions as may be prescribed by the Minister.*
- (5) *Air quality officers must co-ordinate their activities in such a manner as may be set out in the national framework or prescribed by the Minister.*

#### **15. Air quality management plans**

- (2) *Each municipality must include in its integrated development plan contemplated in Chapter 5 of the Municipal Systems Act, an air quality management plan.*

In support of the AQA the following Sections of the National framework defines the air quality management responsibilities of municipalities:

### **2. Municipal by-laws**

According to Section 156(2) of the Constitution, a municipality may make and administer by-laws for the effective administration of matters that it has the right to administer.

Air pollution is listed as a matter in which local government has authority and national or provincial government may not compromise or impede a municipality's right to exercise its powers or perform its functions.

Within this context, municipalities may develop by-laws that deal with air pollution.

### **3. Municipalities**

As with DEAT and the Provincial Departments, municipalities have a number of responsibilities within the governance cycle which is described in Chapter 4.

However, each municipality has a number of exclusive air quality management powers as summarised below.

#### ***In this regard, the municipality must:***

- Designate a municipal AQO from its administration;
- Develop an AQMP for inclusion in its IDP in accordance with Chapter 5 of the Municipal Systems Act;
- Prepare an annual report including progress regarding the implementation of the AQMP and compliance with the plan.

#### ***The municipality may also:***

- *Establish local standards for emissions from point, non-point and mobile sources if a municipality, in terms of its by-laws;*
- *Identify a substance or mixture of substances in ambient air which through ambient concentrations, bioaccumulation, deposition or any other way, presents a threat to health or well-being or the environment, or which the municipality reasonably believes presents such a threat;*
- *Require the appointment of an Emission Control Officer in a given company(Section 48 of AQA), thereby extending the powers of the authority by ensuring that the Emission Control Officer is responsible for the company applying the correct measures to minimise emissions.*

Special mention must be made of the following stipulation contained in Section 3.2.3 of the National Framework:

#### ***District Municipalities must:***

- *Implement the atmospheric emission licensing system, and carry out the responsibility for performing the functions of the licensing authority as set out in Chapter 5 of the AQA.*

This paragraph implies that Category B-Municipalities is not entitled to issue atmospheric emissions licenses as this activity fall within the power granted to CKDM.

Nevertheless, Category B-Municipalities in the Central Karoo District are within their rights to provide input into the AEL decision making process.

**Chapter 4:** This Chapter lists some of the following functions as the primary responsibility of a municipality:

- Monitor ambient air quality and point, non-point and mobile source emissions;
- The development of air quality management plans as a component of integrated development plans as required by the MSA;
- The setting of local standards for emissions from point, non-point or mobile sources in the municipality in respect of identified substances or mixtures of substances in ambient air which, through ambient concentrations, bioaccumulation, deposition or in any other way, present a threat to health, well-being or the environment in the municipality;
- Monitoring compliance in respect to reasonable steps to prevent the emission of any offensive odour caused by any activity;
- Monitoring compliance with directives to submit an atmospheric impact report.

Therefore, both the AQA (Section 15) and National Framework (Section 3.2.3) emphasize the fact that a municipality is required to compile an AQMP and to include such a plan in the municipality's IDP.

#### **4. Public Participation**

Various Sections of the Air Quality Act and Section 5.9.1 of the National Framework in particular, place significant importance on the participation of the general public in the air quality decision making process.

To meet the requirements of both the AQA and National Framework extensive steps must be taken to inform the public of the AQMP review process and to solicit comments as widely as possible.

## D. THE CENTRAL KAROO DISTRICT IN A GLANCE



### 1. General info

The Central Karoo District is one of five districts in the Western Cape Province.

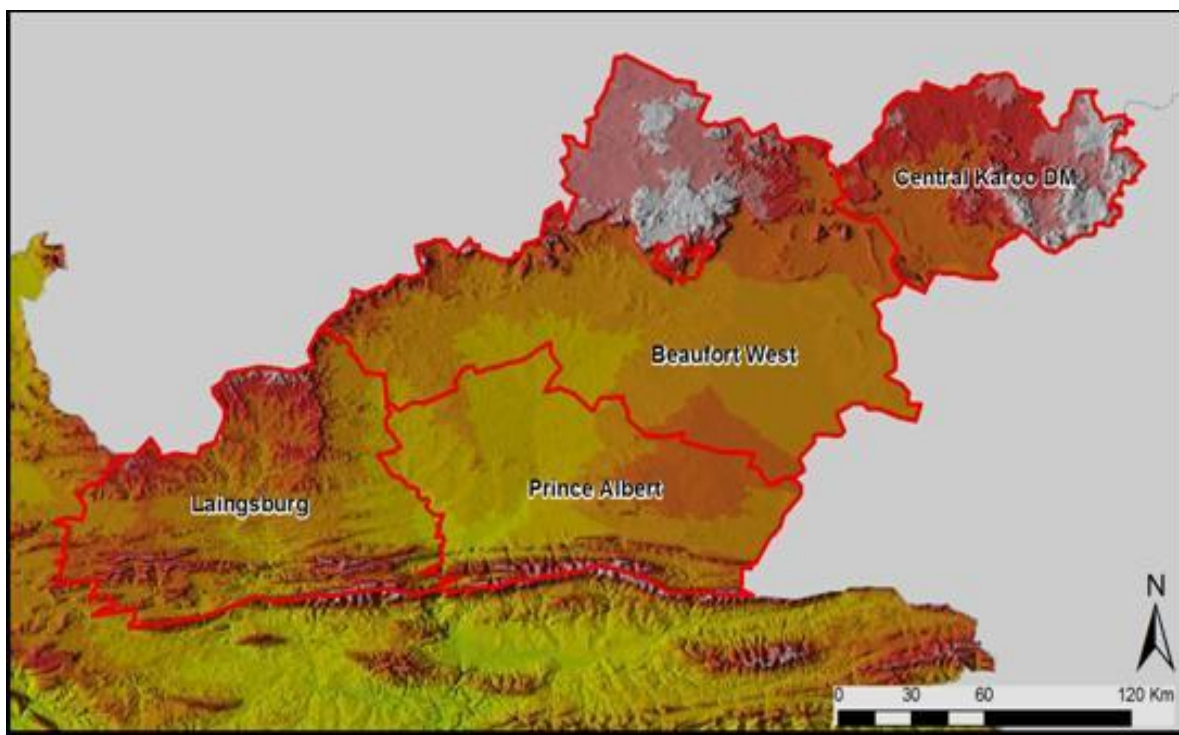
The district comprises of three Local Municipalities, namely Beaufort West, Prince Albert and Laingsburg.

With a population of 71 011, the Central Karoo is the smallest district in the Province. Area wise the district is the largest in the Western Cape province, covering a total of 38,885 square kilometers

The Central Karoo District is bounded by a number of mountain ranges, namely the Swart-and Witteberge in the South, the Sneeuberg in the East, the Nuveldeberge in the North and the Koms- and Witteberge in the West.



**Figure 1: Map of Central Karoo District**



**Figure 2: Schematic of the topography of the Central Karoo District**

## 2. Sosio-Economic Profile

Available information on the sosio-economic profile of the Central Karoo District is as follow:

<b>POPULATION</b>		<b>2001</b>		<b>2011</b>	
Total number		60 483		71 011	
<b>PERCENTAGE SHARE</b>		<b>2001</b>	<b>%</b>	<b>2011</b>	<b>%</b>
African		7261	12.0	9 045	12.7
Coloured		46 497	76.6	54 076	76.2
Indian/Asian		65	0.1	300	0.4
White		6660	11.0	7197	10.1
Others		-	-	393	0.6
<b>HEALTH</b>		<b>June 2010/11</b>		<b>June 2011/12</b>	
Immunisation rate		84.4%		80.3%	
Anti-retroviral patient load (HIV/AIDS)		559		674	
HIV/AIDS Prevalence and Care		3		3	
<b>SAFETY AND SECURITY</b>	<b>2009/10</b>	<b>2010/11</b>		<b>2011/12</b>	
Murder	37	29		38	
Total sexual crimes	134	164		174	
Drug related Crimes	898	1 076		1 093	
<b>POVERTY LEVELS</b>	<b>2001</b>	<b>2007</b>		<b>2010</b>	
Poverty rate (percentage of people living in poverty)	38.7%	34.0%		32.5%	
<b>Indigent households</b>		<b>Household</b>		<b>Indigent Household</b>	
Prince Albert Municipality		2 195		782	



Beaufort West Municipality		10 535	4 938
Laingsburg Municipality		1 221	647
Central Karoo District		13 951	6 367
<b>EDUCATION ATTAINMENT</b>		<b>2001</b>	<b>2011</b>
Number Schooling		5 855	5 265
Some primary		8 115	19 072
Complete Primary		3 117	4 778
Some Secondary		10 611	19 395
Grade 12/Std 10		5 046	9 630
Higher		2 061	3 005
<b>EMPLOYMENT</b>		<b>2001</b>	<b>2011</b>
Employment rate		37.6	30.8%
Labour concentration (2007)	Community; Social and personal services (16.9%)	Agriculture; hunting; forestry and fishing (15.7%)	Wholesale and retail trade (14.0%)
<b>ACCESS TO HOUSING AND MUNICIPAL SERVICES (Percentage share of households with access)</b>		<b>2001</b>	<b>2011</b>
Formal dwellings		94.0%	97.0%
Informal dwellings		2.0%	3.0%
Electricity		83.9%	89.7%
Flush toilets		75.1%	78.4%
Piped water Inside dwelling/yard		93.2%	97.1%
Refuse removal (by local authority at least once a week)		72.0%	79.0%
<b>ECONOMY</b>		<b>2009</b>	<b>2010</b>
GDP-R (R billion)		R1.431	R2.096
Average annual growth, 2000-2010		3.9%	

### 3. Rainfall

The climate of Central Karoo District is arid to semi-arid with approximately 75% of the district receiving less than 200 mm of rain per annum.

The highest rainfall occurs in the Groot Swartberg mountain range south of Prince Albert and in the Sneeuberge southeast of Murraysburg.

Apart from the far western portion which receives mainly winter rain, the highest rainfall probability is during March and April.

### 4. Wind

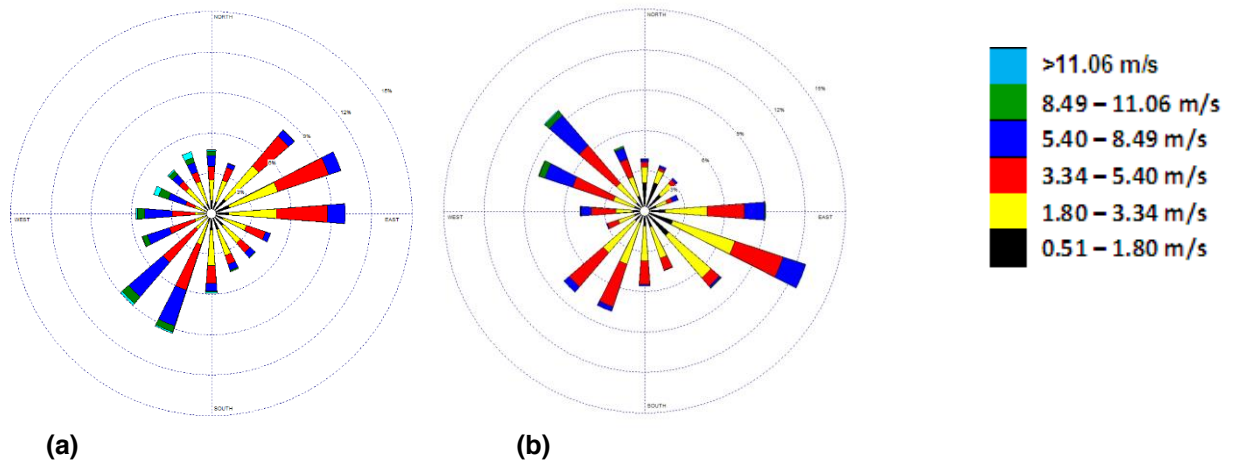
The wind varies across the Central Karoo DM. As an example, the winds at Beaufort West are predominantly from two sectors.

Firstly, winds from the sector northeast to east, with a relatively high frequency of light to moderate winds, and winds from the south-southwest to southwest that are generally stronger.



Winds from all other sectors are infrequent, but the occasional north westerlies are strong. More wind is experienced at Laingsburg, but the winds are generally lighter than at Beaufort West.

The dominant wind sectors are northwest to west-northwest and east to southeast. South-westerly winds also occur.



**Figure 3: Annual wind roses for a) Beaufort West and b) Laingsburg for the 5-year period 2003 to 2007.**

## 5. Temperature

The temperature regime of the Central Karoo District is typically continental, meaning there is a large difference between the mean temperature of the coldest and warmest month (11 – 13°C).

January is generally the warmest month with mean maximum temperatures between 28 and 32°C. Heat wave conditions do occur and could induce temperature in excess of 40°C.

The coldest months are June and July, with early morning temperatures regularly dropping to below 0°C. Frost is therefore common in the entire district, with severe frost at the higher altitudes.

## 6. Roads

Beaufort West is the gateway to the Western Cape as well as the main service and development centre for the area.

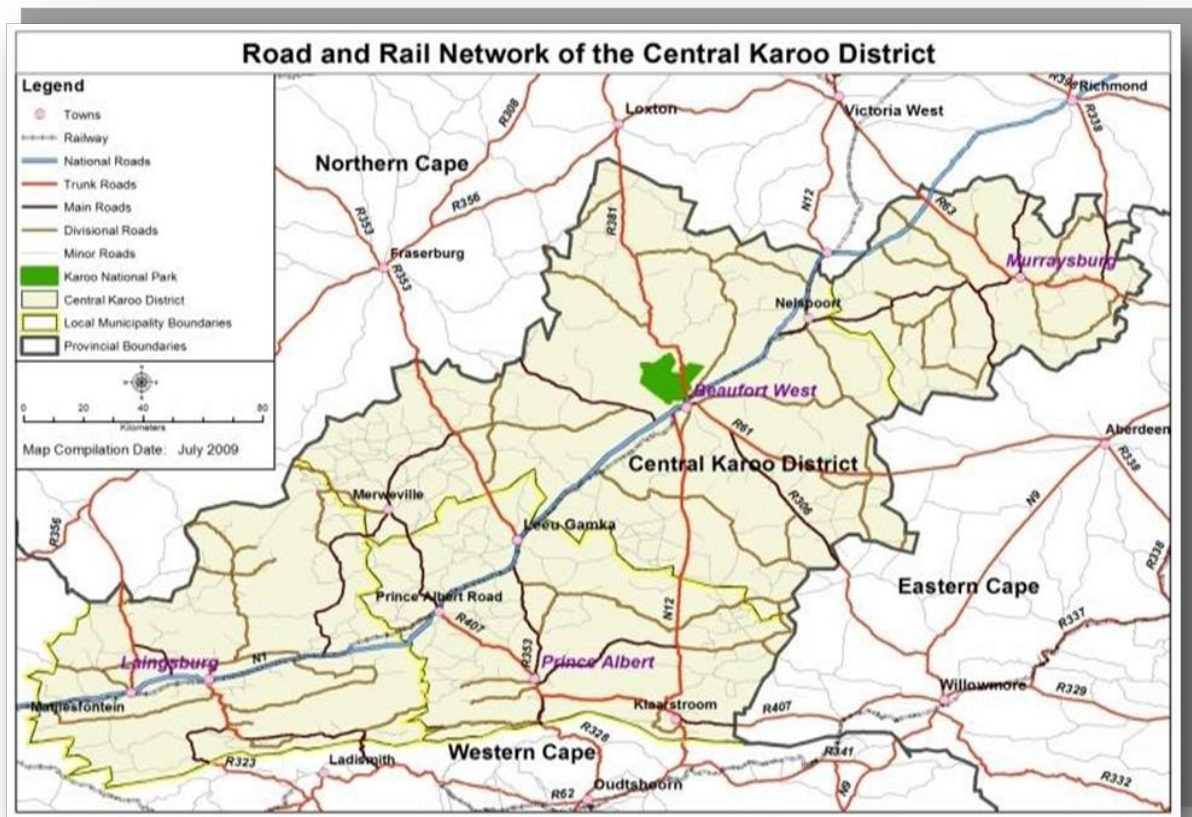
The N1 national road that bisects the Central Karoo is a key transport corridor for road-based freight transport, passenger services and private vehicles.

Running parallel to the N1 through the Central Karoo is the long-distance main railway line connecting Cape Town to Johannesburg/Pretoria and the other main urban centre's of South Africa.

The road route to the Eastern Cape branches off at Beaufort West and goes via Aberdeen or Murraysburg. A second main road transport route, the N12,

connects to the N1 south of Beaufort West, providing a link to Oudtshoorn and George. Map: Figure 2 shows the road and rail networks of the Central Karoo District.

The N1 national road runs through the Central Karoo District. This vital link bisects South Africa on a northeast-southwest axis, providing access to and between Limpopo Province, Gauteng, the Free State and the Western Cape. Within the Central Karoo District it links the towns of Beaufort West, Leeu-Gamka, Laingsburg and Matjiesfontein.



**Figure 4: Road and Rail Networks of the Central Karoo District**

## 7. Mining

The Central Karoo District is highly rich in minerals such as uranium as well as shale gas. There has been increasing interest in mining of these minerals in the area recently, as is evident by the increase in the number of prospecting applications.

This is significant as both prospecting and mining are associated with various environmental impacts. The extraction of shale gas has been a matter of great controversy national and international. This is a result of the potential environmental impact associated with this activity.

The establishment of the extraction / mining sites will also increase the transport activities, which may detract from the aesthetic value of the region which has been long preserved for local communities. During the extraction process, methane and

carbon dioxide are released. It should be noted that methane is a more powerful greenhouse gas than carbon dioxide.

## **8. Climate Change**

According to the Climate Change Strategy for the Western Cape, it is envisaged that the Western Cape will become significantly hotter and dryer.

This has considerable implications for the Central Karoo District as it is already characterized by very high temperatures and a dry climate.

It is estimated that within 50 to 100 years, areas that support succulent Karoo vegetation's may become arid that only the hardiest plants of that biome will be able to survive.

An increased dry hot climate brings about a bigger possibility of fire, which can be devastating to whatever vegetation that is left within this district.

Like some parts of the world, on short term and long-term basis, the municipality needs to look at developing adaptation strategies to climate change and global warming for the sectors that are vulnerable as mentioned above.

## **E.**

## **VISION & MISSION**



The Central Karoo District's greatest assets are its people and natural environment.

This unique environment must be protected from abuse and exploitation if the district is to remain a tourist attraction in years to come.

A key step in this protection is the effective management of the ambient air quality as it is a basic requirement for all living species. It is of sufficient importance to be included in Section 24 of the Constitution of South Africa.

This AQMP is aimed at achieving exactly that, namely the protection of the ambient air quality in the Central Karoo District.

To guide the AQMP the following vision and mission statement has been formulated:

### **Vision**

To maintain air quality to such a standard that economic and social development will flourish without jeopardizing the environment.

### **Mission Statement**

To minimise the impact of air pollutant emissions on the population and the natural environment of the Central Karoo District and to promote the use of renewable energy sources such as wind, sun and water in order to support global initiatives to prevent ozone depletion and global warming

## **F.**

## **GOALS**



Each of the four (4) goals of the AQMP address different aspects of our vision, these are:

- To ensure effective and consistent AQM. This goal aims to address the development and maintenance of the varied requirements for systems, skills and capacity for Air Quality Management, and the establishment of the necessary institutional arrangements;
- To ensure effective and consistent compliance monitoring and enforcement. This goal aims to improve compliance monitoring and enforcement in the district, and to ensure that ambient air quality standards for the protection of health are attained and continually met;

- To support climate change protection programmes, including promoting the reduction of Green House Gas emissions; and,
- To raise awareness with respect to air quality. This goal aims to improve awareness of air pollution issues in the Central Karoo District through awareness raising and education;

## **G. AIR QUALITY MANAGEMENT IN THE CENTRAL KAROO DISTRICT**



### **1. Roles and responsibilities of the Central Karoo District Municipality**

The roles and responsibilities of the District Municipality are outlined in the National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004) (NEM:AQA) as well as the National Framework for air quality management in the republic of South Africa.

These are:

- Monitor ambient air quality and point, non-point and mobile source emissions;
- The development of air quality management plans as a component of integrated development plans as required by the Municipal Systems Act;
- The setting of municipal standards for emissions from point, non-point or mobile sources in the municipality in respect of identified substances or mixtures of substances in ambient air which, through ambient concentrations, bioaccumulation, deposition or in any other way, present a threat to health, well-being or the environment in the municipality;
- Implement the AQA atmospheric emission licensing system referred to and for this purpose perform the functions of licensing authority as set out in Chapter 5 and other provisions of the AQA;
- Monitoring potential illegal listed activities;
- Monitoring compliance with emission standards in respect of the manufacture, sale or use of any appliance or conducting of an activity declared as a controlled emitter;
- Monitoring compliance in respect to reasonable steps to prevent the emission of any offensive odour caused by any activity;
- Monitoring compliance with directives to submit an atmospheric impact report;
- Monitoring compliance with conditions or requirements of an atmospheric emission license;

- Monitoring any application for an atmospheric emission license, or for the transfer, variation or renewal of such a license to ensure that it does not contain false or misleading information; and to,
- Monitoring any information provided to an air quality officer to ensure that it does not contain false or misleading information.

## **2. Institutional Functions**

The District and Local Municipalities within the Central Karoo District currently cannot fully accept their responsibility with the implementation of the NEM: AQA.

Insufficient commitments, acceptance at political and municipal management level and personnel- and financial capacity constraints as well as good ambient air quality in general, with almost no industries, has resulted in inadequate financial and other resource provision.

In terms of Section 14 of the AQA each Municipality must designate an AQO from its administration to be responsible for co-ordinating matters pertaining to air quality management in a municipality.

An AQO has already been designated from the ranks of the Municipal Health Services component of the CKDM.

AQO's have also been appointed within the different Category B–Municipalities in the Central Karoo District.

The AQA and MSA both delegate powers of responsibility for air pollution related issues to municipalities, but to different levels. While the AQA delegates powers to the District Municipality, the MSA delegates responsibilities to individual municipalities within a district.

Should individual municipalities wish not to be directly involved with air quality management, e.g. due to a lack of suitable manpower, minimum of air pollution sources, etc., service-level agreements could be entered into between those municipalities and the CKDM. However, the CKDM currently don't have the capacity to go into service level agreements with Category B-Municipalities.

Air Quality Management Services are rendered in ten (10) communities in the Central Karoo Region, namely Beaufort West, Murraysburg, Nelspoort, Merweville, Prince Albert, Leeu-Gamka, Klaarstroom, Prince Albert Road, Laingsburg and Matjiesfontein, as well as in the rural areas of the Murraysburg, Beaufort West, Prince Albert and Laingsburg districts.

## **3. Potential air pollution sources in the district have been identified as:**

There are relatively few sources of air pollution in the Central Karoo District. As a result ambient air quality is generally good.

- Industrial operations;

- Agricultural activities;
- Biomass burning (veld fires);
- Domestic fuel burning (particularly, wood and paraffin);
- Vehicle tailpipe emissions;
- Waste treatment and disposal (landfills and incineration);
- Vehicle entrainment of dust from paved and unpaved roads;
- Other fugitive dust sources such as wind erosion of exposed areas.

**3.1 Air pollution sources and their associated emissions in the District are as follows:**

Source	PM10 <sup>1</sup>	SO2 <sup>2</sup>	NOx <sup>3</sup>
Agricultural activities	✓		
Biomass burning	✓	✓	✓
Domestic fuel burning	✓	✓	✓
Industries	✓	✓	✓
Landfills	✓	✓	✓
Tyre burning	✓	✓	✓
Vehicle entrainment on unpaved roads	✓		
Vehicle tailpipe emissions	✓	✓	✓
Wind-blown dust	✓		
Trans-boundary transport	✓	✓	✓

<sup>1</sup> **PM10** - Particle pollution (also known as "particulate matter") in the air includes a mixture of solids and liquid droplets. Some particles are emitted directly; others are formed in the atmosphere when other pollutants react.

<sup>2</sup> **SO2** - Combustion of fuel containing sulfur - mostly coal and oil. Also produced during metal smelting and other industrial processes.



<sup>3</sup> **NO<sub>x</sub>** is a generic term for the mono-nitrogen oxides NO and NO<sub>2</sub> (nitric oxide and nitrogen dioxide). They are produced from the reaction of nitrogen and oxygen gases in the air during combustion, especially at high temperatures.

In areas of high motor vehicle traffic, such as in large cities, the amount of nitrogen oxides emitted into the atmosphere as air pollution can be significant. NO<sub>x</sub> gases are formed whenever combustion occurs in the presence of nitrogen – as in an air-breathing engine; they also are produced naturally by lightning. In atmospheric chemistry, the term means the total concentration of NO and NO<sub>2</sub>. NO<sub>x</sub> gases react to form smog and acid rain as well as being central to the formation of tropospheric ozone.

**Health Effects:** High concentrations of sulfur dioxide (SO<sub>2</sub>) can result in breathing problems with asthmatic children and adults who are active outdoors. Short-term exposure has been linked to wheezing, chest tightness and shortness of breath. Other effects associated with longer-term exposure to sulfur dioxide, in conjunction with high levels of particulate soot, include respiratory illness, alterations in the lungs' defenses and aggravation of existing cardiovascular disease.

**Environmental Effects:** Sulfur dioxide and nitrogen oxides are the major precursors of acid rain, which can acidify soil, lakes and streams, accelerate corrosion of buildings and monuments, and reduce visibility. Sulfur dioxide also is a major precursor of fine particulate soot, which poses a significant health threat.

### **3.2 Registered industrial processes and scheduled processes in the Central Karoo District Municipality**

Registered Sources	Scheduled Processes
<ul style="list-style-type: none"><li>• Brick Works;</li><li>• Incinerators (waste);</li><li>• Small Boiler;</li><li>• Vehicle Emissions</li><li>• Landfill Sites</li></ul>	Incinerators - 2

### **3.3 Industrial Pollution**

Pollution from industrial activities in the urban and rural areas of the Central Karoo District is almost non – existent; accept for a few brickworks, waste reduction “incinerators” and vehicle emissions

### **3.4 Residential pollution**

Poor indoor and ambient air quality occurs in low income and informal settlements throughout the Central Karoo Region as a result of domestic fires and fuel burning by the poorest of the poor, refuse burning, dust from unpaved roads and wind blown dust from denuded areas.

The burning of wood and paraffin is a common practice and produces SO<sub>2</sub> and PM<sub>10</sub> as well as VOC's. The relatively high population densities, together with the low release height of the pollutants, imply that there is also a health risk in these areas.



### 3.5 Transport Emissions

Motor vehicles are sources of CO, NO<sub>2</sub>, PM<sub>10</sub> and VOC emissions, particularly during periods of idling and acceleration. Emissions from motor vehicles have been identified as the major air quality problem in Beaufort West, especially during the peak season.

Virtually all of the road traffic, especially heavy diesel-powered vehicles, between the Western Cape and Gauteng pass through the towns of Laingsburg and Beaufort West and the average speeds of the traffic is very low, especially in the town centre.

The control and reduction of vehicle emissions is a challenge that needs to be addressed.

### 3.6 Agriculture

Pesticide use in agriculture results in spray drift, which can distribute chemicals in the vicinity and downwind of the spray area. Burning of general waste and tyres to prevent frost damage on some farms in the Central Karoo District generates smoke, toxic emissions and can contribute to atmospheric particulate loading.

The possible practice of burning waste etc. for various purposes needs to be substituted with more environmentally friendly options.

### 3.7 Waste treatment and waste disposal

#### Landfill

There are eight operational general landfill sites in the Central Karoo DM. No information is available on emissions from the landfills or ambient monitoring.

Local Municipality	Location
Beaufort West	Beaufort West Merweville Nelspoort Murraysburg
Laingsburg	Laingsburg
Prince Albert	Prince Albert Klaarstroom Leeu-Gamka

#### **4. Licensing of listed activities**

The state of preparedness to execute the AEL function remains a challenge.

The problem is further compounded by the lack of both financial and suitably skilled human resources. Further complexities may exist between the licensing function, the EIA and Town Planning authorisation processes which need to be addressed.

The affordability for the acquisition of an AEL for small industries seems a big problem within the region. High costs will mean that industries within the region will have to close. This matter should be discussed with all stakeholders.

#### **5. Ambient air quality data and continuous monitoring**

No air quality monitoring has been conducted in the Central Karoo DM.

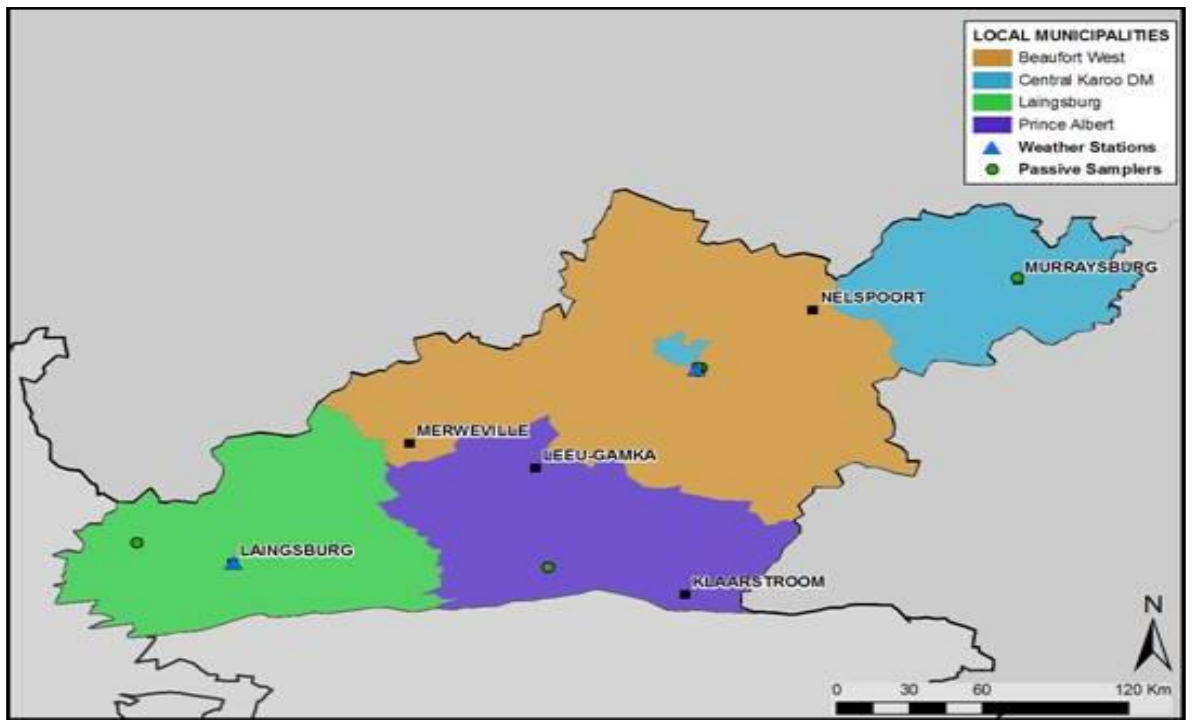
Therefore, as part of the DEA&DP screening study passive samplers were deployed for a one-week period, 25 July to 1 August 2006 at six locations (Figure 5). Average concentrations of SO<sub>2</sub>, NO<sub>2</sub>, O<sub>3</sub> and benzene were measured.

The main findings were:

- The concentrations of all gaseous pollutants were all well below their respective Lower Assessment Threshold (LAT), as may be expected in this vast open non-industrialised area;
- The highest concentration of SO<sub>2</sub> of 2 µg/m<sup>3</sup> was recorded in the Murraysburg residential area;
- The average NO<sub>2</sub> concentration across the District was 5.8 µg/m<sup>3</sup>. The highest NO<sub>2</sub> concentration of 16 µg/m<sup>3</sup> occurred at the Laingsburg site, located in the town about 8 m from the N1. Although this concentration is below the LAT, it is indicative of influence of vehicle emissions;
- An average O<sub>3</sub> concentration of 33 µg/m<sup>3</sup> was recorded across the Central Karoo District Municipality. Concentrations above 40 µg/m<sup>3</sup> were measured in Murraysburg (41 µg/m<sup>3</sup>), at the SA Police Station in Prince Albert (42 µg/m<sup>3</sup>) and in Beaufort West (48 µg/m<sup>3</sup>).

These concentrations are higher than in the City of Cape Town and higher than the background monitoring station at Cape Point. O<sub>3</sub> is a secondary pollutant that forms some distance from the sources of precursor gases. In the case of the Central Karoo, the O<sub>3</sub> concentrations are most likely an indication of relatively high regional concentrations.

- Benzene concentrations of 0.5 µg/m<sup>3</sup> are low compared with the LAT.



**Figure: 5 Positions of the ambient monitoring sites in the Central Karoo DM**

As an extremely limited level of information about the quality of the ambient air in the Central Karoo Region is currently available, it is therefore not possible to make any clear deduction about any potential risk that may exist in the district.

The limited and in-house skills for maintaining and operating monitoring equipment and networks present challenges.

The excessive costs of purchasing, commissioning, operating and maintaining ambient air quality monitoring equipment is problematic when competing with social priorities e.g. housing, education and health in the Central Karoo District.

Reliable ambient air quality data is one of the corner stones of the air quality management system.

If possible, an automated ambient air quality monitoring station aimed at monitoring the impact of the heavy traffic flow on air quality needs to be established in Laingsburg and Beaufort West.

Screening methods are relatively inexpensive and fairly simple to operate, but the resulting data will be subject to substantial levels of uncertainty. The outcome of screening methods cannot be used for regulatory purposes and are, therefore, only suitable for monitoring purposes. An example of a screening method is the use of passive samplers to monitor the concentration of a gas, or group of gases, over a period of time.

Screening methods will provide average results over the sampling period which, in many cases, can be several days. As a result screening methods will not provide short-term data, e.g. hourly or daily averaged concentrations.

Due to their relatively low costs screening methods are used to decide if an air quality problem potentially exists. Should results be significantly higher or significantly lower than ambient air quality standards it can be used to decide whether an air quality problem exists or whether the air quality is acceptable. However, if the results show marginal deviation from air quality standards screening methods do not have sufficient accuracy on which interpretations can be based.

The current absence of air quality monitoring activities is warranted and no such actions are foreseen. Nevertheless, the situation should be monitored and appropriate air quality surveillance should be initiated when deemed necessary.

DEAT should be requested to assist municipalities with the provision of temporary equipment for monitoring air quality in the district.

## **6. Emissions inventory**

The CKDM do have an old inventory of known sources. Emissions from transport or diffuse sources, such as emissions from residential and agricultural areas are not identified or computed.

No measures have been implemented for GHG or to identify sources and report on these emissions.

The lack of information, the absence of reporting procedures and no in-stack monitoring by industry are issues that need to be addressed  
Air pollution emission sources are usually grouped into four major headings.

These are:

- Industrial sources;
- Residential sources;
- Mobile emissions, e.g. vehicle emissions;
- Other sources, not included in those above.

Industrial sources can further be divided into two categories, i.e. point sources (e.g. chimney stacks) and area sources (e.g. stockpiles, disposal sites, tailings dams, etc.). Additional industrial sources, e.g. fugitive emissions, can be classified as one of these two major sources.

Residential sources are usually regarded as grid sources where the whole of a residential area is covered by a rectangular grid and the emissions per grid cell estimated from the population density and socio-economic level of the area.

Mobile sources consist of moving sources along roads, train lines, shipping lanes, etc.

Other sources contain those that do not readily fall into any one of those listed above, e.g. municipal waste disposal sites.

While a preliminary emission inventory has been compiled, it is limited by the fact that very little measured air pollution data exists.

No useful data could be derived for motor vehicle emissions, nor could any be derived for residential emissions. Both of these sources are regarded as of major importance in the Central Karoo District.

Compiling an emissions inventory is an ongoing activity. As it involves other municipal departments, e.g. traffic, housing, etc., it must be commenced with as early as is convenient.

## **7. Town and transport planning**

Town and transport planning is a Category B-Municipality function and currently does not consider the impact of developments on the air quality of an area.

In addition, the potential negative impact of town and transport planning activities on the air quality of an area is not always considered when planning decisions are taken e.g. the siting of housing developments in areas bordering industrial areas and other sources of pollution magnifies the problem.

According to the AQA the AQMP must be included in the CKDM's IDP and it will, therefore, play a role in all future development activities in the District. Therefore AQO's will provide an input into land-use and transport planning activities.

The aim is to ensure that the relevant authorities, policies, strategies and plans take into account the potential impact of land use and transport planning on air quality. This implies that inter-departmental communication channels must be set up to facilitate proper planning activities.

## **8. Capacity Building**

Capacity constraints within the different Municipalities in the district hamper capacity building efforts.

Municipal officials also do not have the necessary skills level to deal with the variety and complexity of modern air pollution monitoring, modeling and control functions.

As a result a training program needs to be established in order for officials can gain the level of expertise demanded by their functions. This will enable them to exercise their duties with more effectiveness, resulting in an improved level of air quality management across the Central Karoo District.

Officials must be capacitated through informal educational programs and Provincial Government will be called upon to assist us in further more formal training efforts.

Industry and private individuals, as well as civil society, must also be capacitated to develop the understanding that air is an important resource.

As and when required, municipalities may appoint specialist consultants to assist air quality officers to solve special problems that may arise in the district. In this process the air quality officers can also gain valuable expertise from the consultants and build up a substantial level of expertise over time.

## **8.1 Training requirements**

### **8.1.1 Training as Environmental Management Inspectors (EMI's)**

It is essential that AQO's receive EMI training, bearing in mind that effective air quality management is a complex and time consuming task.

### **8.1.2 Training in the compilation of emissions inventories**

Limited skills in this regard exist at the moment and must, therefore, be enhanced through a dedicated training program and one official must have prime responsibility for the task of maintaining the emissions inventory.

### **8.1.3 Training in data analysis and risk assessments**

Long-term data interpretation and trend analysis requires a reasonable level of statistics knowledge.

A suitably trained person will, therefore be required to carry out proper analysis of the quantities of data generated by AQM stations, if any in the Central Karoo District. This will however only be required in the medium to long term.

## **8.2 Municipal Air Quality Officers Forum.**

It is important that a local AQOF be established between the Central Karoo District Municipality and Category B-Municipalities in the district.

Air Quality Officers at District and Local Municipalities should at least meet on a bi-annual basis to discuss issues of common interest.

In order to ensure proper application and enforcement of the relevant air quality legislation, it is essential that an efficient and clear communication channel be established between municipalities.

## **8.3 Provincial Air Quality Officer's Forum**

A Provincial-Municipal Air Quality Officer's Forum has been established in the Western Cape of which the overall objective is to ensure that an effective governance framework is developed, maintained and implemented.

Due to personnel capacity and financial constraints this Forum cannot always be attended.

## **9. Spirit of Co-Operation**

The CKDM must try to create a spirit of co-operation between itself, members of the public and industry as such a spirit will provide the shortest route to effective air quality management in the district.

Steps that can be followed are frequent discussion forums, regular dissemination of information through the local media ("The Courier"), etc.

Free and open discussion of all matters relating to air quality will give all interested and affected parties an opportunity to openly communicate their concerns in addition to being informed of the difficulties experienced by others

## **10. Law Enforcement**

The AQA charges the District Municipality with the responsibility to issue AEL's to industries listed in the Act and to enforce emission limits set on those industries by DEAT.

These powers will be used to define emission verification measures that industry will have to employ to prove that their emissions comply with limitations set by DEAT and / or the CKDM.

It will also be used to define any specific air quality monitoring activities that a particular industry must embark on to show that its emissions do not result in an exceedance of ambient air quality limits or cause a nuisance to its neighbours.

### **10.1 By-Laws**

Within the Central Karoo District, no current air quality by-laws have been established at the District and Local levels.

According to the Constitution of the Republic of South Africa a local authority may define and administer by-laws for the effective administration of, inter alia, air quality management. The only criteria for these by-laws are that they should not conflict with national or provincial legislation and thus would need to be more stringent.

Since air pollution is listed as a matter in which local government has authority, national or provincial government may not compromise or impede a municipality's right to exercise its powers or perform its functions.

Concept by-laws were developed by the Department of Environmental Affairs (DEA) in an attempt to assist local authorities in the development of their own by-laws.

The set of by-laws are applicable to local and metropolitan municipalities only, but may require some localized customization. A copy of the draft by-laws is available from DEA's web site at <https://www.environment.gov.za>.

Modifying the generic set of by-laws to meet CKDM's requirements will ensure effective implementation of the AQMP.

#### **11. Dissemination of Information**

Currently the CKDM's web site is not used so that data can be reported on. All members of the public should be able to access data and gain first-hand information about the air quality and related matters.

#### **12. Review of Air Quality Management Plan**

This AQMP is only a plan according to which the CKDM will address air quality management in the municipal district.

The AQMP will operate in an ever-changing environment as infrastructure, legislation, industrial development, tourism trends, etc., vary over time. As a result the plan must be adapted over time to meet the ever-changing air quality management requirements.

This AQMP will be reviewed initially on an annual basis as the CKDM finds its feet in air quality management. Once the function is operating smoothly the review period will be extended, but that decision should be taken when deemed appropriate by Council.



## H.

## OBJECTIVES



As the objectives are met and the AQMP unfolds, it is possible that other objectives will be identified and prioritised. This process will lead to regular review of this Plan.

Time scales have been suggested for meeting the various targets in each objective.

The time scales refer to “short term”, “medium term” and “long term”. A short term time scale implies 1 to 2 years. A medium time scale implies 3 to 5 years and a long term time scale implies more than 5 years.

All activities are currently unfunded.

Objectives	Targets	Activities	Timeframes
Establish Air Quality Forum to promote proper communication between affected parties	A committee/forum at a district level representing all interested and affected parties	CKDM take the leading role in the establishment and management of an Air Quality Officers Committee / Forum	Short
	Clearing up the division of functions between Local and District Municipalities	Discussions on the division of functions between B and C municipalities	Short
Effective Air Quality Management	Build capacity in air quality management within the MHS Section	Provide EHP's with continuous training and development in air quality management	Continuous
	Build capacity in compliance monitoring within the district	Provide EHP's with continuous training and development in compliance monitoring	Continuous
	Build capacity in air emissions licensing	Provide EHP's within the MHS Section with training and development in Air Emissions Licensing	Short
Implement and maintain an Air Quality Management System	Compilation of a comprehensive emissions inventory	Compile an emission inventory of all sources	Medium
Establish a compliance		Design and implement a compliance monitoring system	Short-Medium

monitoring system			
Develop and implement an effective air emissions licensing system	Develop an air emissions licensing administration and management system	Develop forms, procedures, documentation and protocols for the administration of air emissions licensing	Short-Medium
Establish an emission reduction strategy.	Industries	Electronic database of all small industries to be regularly updated	Short-Medium
		Periodic site inspections and the request of emissions data	Short-Medium
		Develop a register for all non-listed activities	Short-Medium
	Domestic Fuel Burning	Create awareness campaigns around the negative health impacts of domestic fuel burning	Continuous
		Promote the integration of energy efficiency measures in low cost houses such as housing insulation, solar panels and stove maintenance and replacement	Continuous
	Transportation	Review vehicle emissions database with updated traffic count data as these become available	Medium-Long
		Promote comprehensive vehicle emissions monitoring and diesel vehicle testing programmes in congested areas	Continuous
	Agriculture	Promote the safe and responsible use of pesticides throughout the district.	Short-Medium
		Promote safe and responsible agricultural burning practises.	Short-Medium
	Biomass Burning	Identify and quantify emissions	Continuous

		from biomass burning	
		Liaise with fire services to assist in air pollution control	Short-Medium
	Waste Treatment and Disposal	Develop an emissions inventory of waste burning sources (incinerators, sewage and waste water treatment works)	Short-Medium
		Ensure all operating incinerators are licensed and are operating within their licensed requirements	Continuous
		Maintain a current database of permitted and non-permitted landfill sites	Continuous
		Introduce awareness programmes and public education of waste minimization and recycling initiatives.	Continuous
		Promote efficient service delivery in residential areas in order to reduce illegal dumping & burning of waste and creation of informal landfills	Continuous
Ensure continuous compliance with Atmospheric Emission Licensing Conditions	Control emissions from listed Processes	Periodic site inspections and retrieval emissions data.	Continuous
		Licensing conditions to ensure compulsory monitoring and reporting by industries to the CKDM	Short-Medium
Establish an annual AQMP review process	Review systems, structures and processes to review progress in relation to the AQMP.	Establish review mechanism, systems, criteria and procedures	Short-Medium
		Establish a comprehensive complaints register.	Short

## I.

## GAPS AND NEEDS



Some of the gaps / needs within the District are as follow:

- The current capability of the CKDM is limited by the shortage of personnel, skills and tools required for effective and coordinated air quality management.

Air quality responsibilities are mainly limited to the investigation of public complaints.

In terms of time allocation, Central Karoo DM, Laingsburg LM and Prince Albert LM spent between 0% and 20% of their time on AQM functions and Beaufort West Local Municipality has indicated between 20% and 40%.

- Air quality management is a complex issue as it involves various scientific disciplines and very few, if any, tertiary education courses adequately prepares a person for the practical work involved.

As a result most, if not all of the expertise required needs to be obtained through in-service training and exposure to the various issues involved.

- Air quality management tools are required in the District Municipality to effectively fulfill their air quality functions. Such tools include emissions inventory software, dispersion modeling software and air quality monitoring hardware.

Air quality monitoring options include continuous ambient air quality monitoring stations or passive sampling methods. A mobile monitoring station is the recommended option for the District as this will allow for 'hotspot' monitoring in identified areas of concern;

- The division of roles and responsibilities between local and district municipalities are not clearly understood or has not been accepted by certain local municipalities and this hampers cooperative governance and the implementation of the function;
- Air Quality management requires cooperation from various disciplines within local government which includes amongst others, traffic, town planning, environmental services, cleansing services, housing, building control, Municipal Health Services, Law enforcement, social and developmental services and political buy in.

The successful implementation of an air quality management plan is thus strongly dependent upon cooperation and communication amongst all the local governments within the district. This has always been an area of concern within the district and is expected to be a major challenge in the implementation of this function throughout the district.

- Inadequate financial provision specifically earmarked for AQM by all local authorities within the district;

- The designation of trained EMI's within the district still remains an issue as these individuals cannot do compliance and enforcement until designation has taken place;
- The personnel complement must, therefore, be assessed and the necessary operational structure developed so that municipalities can fulfil its air quality management duties as defined by the AQA;
- Meeting the objectives described above is not a one-man task. While the Air Quality Act states that the municipalities must appoint an air quality officer, it is clear that these officers will require a substantial support base if they has to carry out the responsibilities of this position effectively.

Support for air quality management should continue to be provided to the District by the Province

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# **ANNEXURE 1**



## **NATIONAL AMBIENT AIR QUALITY STANDARDS**

## NATIONAL AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging period	Limit value	Frequency of exceedence	Compliance date
<b>PM10</b>	24 hour	120(µg/m <sup>3</sup>	4	Immediate
	24 hour	75 (µg/m <sup>3</sup>	4	2015
	1 year	50 (µg/m <sup>3</sup>	0	Immediate
	1 year	40 (µg/m <sup>3</sup>	0	2015
<b>SO<sub>2</sub></b>	10 m	500(µg/m <sup>3</sup>	526	Immediate
	1 hour	350(µg/m <sup>3</sup>	88	Immediate
	24 hours	125(µg/m <sup>3</sup>	4	Immediate
	1 year	5(µg/m <sup>3</sup>	0	Immediate
<b>CO</b>	8 hours (calculated on one hourly averages)	10 000µg/m <sup>3</sup>	11	Immediate
<b>NO<sub>2</sub> (taken as NO<sub>x</sub>)</b>	1 hour	200 µg/m <sup>3</sup> (106 ppb)	88	Immediate
	1 year	40 µg/m <sup>3</sup> (21 ppb)	0	Immediate

# **ANNEXURE 2**



## **AEL ACTIVITIES**



**Industrial and materials processing activities that are likely to result in atmospheric emissions are required to apply for atmospheric emissions licenses (AEL).**

The activities are classified into ten categories (with sub-categories) in the Government Notice No. 248 which was published on 31 March 2010.

- **Category 1:** Combustion Installations;
- **Category 2:** Petroleum Industry (the production of gaseous and liquid fuels as well as petrochemicals from crude oil, gas, coal or biomass);
- **Category 3:** Carbonization and Coal Gasification;
- **Category 4:** Metallurgical Industry;
- **Category 5:** Mineral Processing, Storage and Handling;
- **Category 6:** Organic Chemicals Industry;
- **Category 7:** Inorganic Chemicals Industry;
- **Category 8:** Disposal of Hazardous and General Waste;
- **Category 9:** Pulp and Paper Manufacturing Activities, including by-product recovery;
- **Category 10:** Animal matter processing.

# ANNEXURE 3



## **CRITERIA POLLUTANTS AND ASSOCIATED HEALTH AND ENVIRONMENTAL IMPACTS**

### **CRITERIA POLLUTANTS AND ASSOCIATED HEALTH AND ENVIRONMENTAL IMPACTS**

Deteriorating urban air quality has implications for human health, climate and visibility.

An overview of the criteria pollutants and associated human health and environmental impacts is discussed in the section below.

#### **1. HUMAN HEALTH IMPACTS**

##### **1.1. Particulate Matter**

Particles can be classified by their aerodynamic properties into coarse particles, PM<sub>10</sub> (particulate matter with an aerodynamic diameter of less than 10 µm) and fine particles, PM<sub>2.5</sub> (particulate matter with an aerodynamic diameter of less than 2.5 µm) (Harrison and van Grieken, 1998).

The fine particles contain the secondarily formed aerosols such as sulphates and nitrates, combustion particles and recondensed organic and metal vapours.

The coarse particles contain earth crust materials and fugitive dust from roads and industries (Fenger, 2002).

In terms of health impacts, particulate air pollution is associated with effects of the respiratory system (WHO, 2000). Particle size is important for health because it controls where in the respiratory system a given particle deposits.

Fine particles have been found to be more damaging to human health than coarse particles as larger particles are less reparable in that they do not penetrate deep into the lungs compared to smaller particles (Manahan, 1991). Larger particles are deposited into the extra thoracic part of the respiratory tract while smaller particles are deposited into the smaller airways leading to the respiratory bronchioles (WHO, 2000).

- **Short-term exposure**

Recent studies suggest that short-term exposure to particulate matter leads to adverse health effects, even at low concentrations of exposure (below 100  $\mu\text{g}/\text{m}^3$ ). Morbidity effects associated with short-term exposure to particulates include increases in lower respiratory symptoms, medication use and small reductions in lung function.

- **Long-term exposure**

Long-term exposure to low concentrations ( $\sim 10 \mu\text{g}/\text{m}^3$ ) of particulates is associated with mortality and other chronic effects such as increased rates of bronchitis and reduced lung function (WHO, 2000). Those most at risk include the elderly, individuals with preexisting heart or lung disease, asthmatics and children.

## **1.2. Sulphur dioxide**

$\text{SO}_2$  originates from the combustion of sulphur-containing fuels and is a major air pollutant in many parts of the world. Health effects associated with exposure to  $\text{SO}_2$  are also associated with the respiratory system. Being soluble,  $\text{SO}_2$  is readily absorbed in the mucous membranes of the nose and upper respiratory tract (Maroni et al., 1995).

- **Short-term exposure**

Most information on the acute effects of  $\text{SO}_2$  is derived from short-term exposure in controlled chamber experiments. These experiments have demonstrated a wide range of sensitivity amongst individuals. Acute exposure of  $\text{SO}_2$  concentrations can lead to severe bronchi constriction in some individuals, while others remain completely unaffected. Response to  $\text{SO}_2$  inhalation is rapid with the maximum effect experienced within a few minutes. Continued exposure does not increase the response. Effects of  $\text{SO}_2$  exposure are short-lived with lung function returning to normal within a few minutes to hours (WHO, 2000).

- **Exposure over 24 hours**

The effects of exposure to SO<sub>2</sub>, averaged over a 24 hour period, are derived from epidemiological studies in which the effects of SO<sub>2</sub>, particulates and other associated pollutants are assessed. Studies of the health impact of emissions from the inefficient burning of coal in domestic appliances have shown that when SO<sub>2</sub> concentrations exceed 250 µg/m<sup>3</sup> in the presence of particulate matter (as sulphates), an exacerbation of symptoms is observed in selected sensitive patients.

More recent studies of health impacts in ambient air polluted by industrial and vehicular activities have demonstrated at low levels effects on mortality (total, cardiovascular and respiratory) and increases in hospital admissions. In these studies, no obvious SO<sub>2</sub> threshold level was identified (WHO, 2000).

- **Long-term exposure**

Long-term exposure to SO<sub>2</sub> has been found to be associated with an exacerbation of respiratory symptoms and a small reduction in lung function in children in some cases. In adults, respiratory symptoms such as wheezing and coughing are increased.

### **1.3. Nitrogen dioxide**

Nitric oxide (NO) is a primary pollutant emitted from the combustion of stationary sources (heating, power generation) and from motor vehicles. Nitrogen dioxide (NO<sub>2</sub>) is formed through the oxidation of nitric oxide. Oxidation of NO by O<sub>3</sub> occurs rapidly, even at low levels of reactants present in the atmosphere. Altshuler (1956) calculated that 50% conversion of nitric oxide would take less than 1 minute at a NO concentration of 120 µg/m<sup>3</sup> (0.1 ppm) in the presence of an O<sub>3</sub> concentration of 200 µg/m<sup>3</sup> (0.1 ppm). As a result, this reaction is regarded as the most important route for nitrogen dioxide production in the atmosphere.

Nitrogen dioxide is an important gas, not only because of its health effects, but because it (a) absorbs visible solar radiation and contributes to visibility impairment, (b) could have a potential role in global climate change if concentrations were to increase significantly, (c) is a chief regulator of the oxidizing capacity of the free troposphere by controlling the build-up and fate of radical species, including hydroxyl radicals and (d) plays a critical role in determining ozone concentrations.

- **Short-term exposure**

At concentrations greater than 1880 µg/m<sup>3</sup> (1000 ppb), changes in the pulmonary function of adults is observed. Normal healthy people exposed at rest or with light exercise for less than 2 hours to concentrations above 4700 µg/m<sup>3</sup> (2500 ppb), experience pronounced decreases in pulmonary function.

Asthmatics are potentially the most sensitive subjects although various studies of the health effects on asthmatics have been inconclusive. The

lowest concentration causing effects on pulmonary function was reported from two laboratories that exposed mild asthmatics for 30 – 110 minutes to 565  $\mu\text{g}/\text{m}^3$  (301 ppb) during intermittent exercise (WHO, 2000).

- **Long-term exposure**

Epidemiological studies have been undertaken on the indoor use of gas cooking appliances and health effects. Studies on adults and children under 2 years of age found no association between the use of gas cooking appliances and respiratory effects.

Children aged 5 – 12 years have a 20% increased risk for respiratory symptoms and disease for each increase of 28  $\mu\text{g}/\text{m}^3$  (15 ppb)  $\text{NO}_2$  concentration, where the weekly average concentrations are in the range of 15 – 128  $\mu\text{g}/\text{m}^3$  (8 – 68 ppb) (WHO, 2000).

Outdoor studies consistently indicate that children with long-term ambient  $\text{NO}_2$  exposures exhibit increased respiratory symptoms that are of a longer duration.

However, no evidence is provided for the association of long-term exposures with health effects in adults (WHO, 2000).

#### **1.4. Ozone**

Ozone in the atmosphere is a secondary pollutant formed through a complex series of photochemical reactions between  $\text{NO}_2$  and VOCs in the presence of sunlight. Sources of these precursor pollutants include motor vehicles and industries. Atmospheric background concentrations are derived from both natural and anthropogenic sources.

Natural concentrations of  $\text{O}_3$  vary with altitude and seasonal variations (i.e. summer conditions favour  $\text{O}_3$  formation due to increased insolation). Diurnal patterns of  $\text{O}_3$  vary according to location, depending on the balance of factors affecting its formation, transport and destruction.

From the minimal levels recorded in the early morning, concentrations increase as a result of photochemical processes and peak in the afternoon. During the night,  $\text{O}_3$  is scavenged by nitric oxide.

Seasonal variations in  $\text{O}_3$  concentrations also occur and are caused by changes in meteorological conditions and insolation. Quarterly mean (arithmetic average of daily values for a calendar quarter)  $\text{O}_3$  concentrations are typically highest in summer (WHO, 2000).

Ozone contributes to the formation of significant amounts of organic and inorganic aerosols. Correlations between concentrations of  $\text{O}_3$  and sulphuric acid, nitric acid, sulphates and nitrates have been observed (Grennfelt, 1984).

Ozone is a powerful oxidant and can react with a wide range of cellular components and biological materials. Health effects and the extent of the

damage associated with O<sub>3</sub> exposure is dependent on O<sub>3</sub> concentrations, exposure duration, exposure pattern and ventilation (WHO, 2000).

- **Short-term exposure**

Short-term effects include respiratory symptoms, pulmonary function changes, increased airway responsiveness and inflammation. Field studies in vulnerable persons (children, adolescents, young adults, elderly and asthmatics) have indicated that pulmonary function decrements can occur as a result of short-term exposure to O<sub>3</sub> concentrations in the range 120 – 240 µg/m<sup>3</sup> (61 – 122 ppb) and higher.

Ozone exposure has also been reported to be associated with increased hospital admissions for respiratory causes and exacerbation of asthma (WHO, 2000).

- **Long-term exposure**

There is limited information linking long-term O<sub>3</sub> exposure to chronic health effects, however, there are suggestions that cumulative O<sub>3</sub> exposures may be linked with increasing asthma severity and the possibility of increased risk of becoming asthmatic (Abbey et al.1993).

Evidence provided by studies of health effects related to chronic ambient O<sub>3</sub> exposure is consistent in indicating chronic effects on the lung. Some studies have shown that long term exposure to concentrations of O<sub>3</sub> in the range 240 – 500 µg/m<sup>3</sup> (122 – 255 ppb) causes morphological changes in the region of the lung resulting in a reduction in lung function (WHO, 2000).

## **1.5. Carbon monoxide**

Carbon monoxide (CO) is one of the most common and widely distributed air pollutants.

CO is a tasteless, odorless and colourless gas which has a low solubility in water. In the human body, after reaching the lungs it diffuses rapidly across the alveolar and capillary membranes and binds reversibly with the haem proteins.

Approximately 80 -90% of CO binds to haemoglobin to form carboxy haemoglobin (COHb) which is a specific biomarker of exposure in blood. The affinity of haemoglobin for CO is 200 – 250 times that for oxygen. This causes a reduction in the oxygen-carrying capacity of the blood which leads to hypoxia as the body is starved of oxygen.

Anthropogenic emissions of CO originate from the incomplete combustion of carbonaceous materials. The largest proportion of these emissions is produced from exhausts of internal combustion engines, in particular petrol vehicles. Other sources include industrial processes, coal power plants and waste incinerators. Ambient CO concentrations in urban areas depend on the density of vehicles and are influenced by topography and weather conditions. In the streets, CO concentrations vary according to the distance from the traffic. In

general, the concentration is highest at the leeward side of the 'street canyon' with a sharp decline in concentration from pavement to rooftop level (Rudolf, 1994).

- **Short and Long-term exposure**

The adverse health effects of CO vary depending on the concentration and time of exposure. Clinical symptoms range from headaches, nausea and vomiting, muscular weakness, and shortness of breath at low concentrations (10 ppm) to loss of consciousness and death after prolonged exposure or after acute exposure to high CO concentrations (>500 ppm). Poisoning may cause both reversible, short-lasting neurological deficits and severe, often delayed, neurological damage.

Neuro behavioural effects include impaired co-ordination, tracking, driving ability, vigilance and cognitive ability at COHb levels as low as 1.5 - 8.2% (WHO, 2000).

High risk patients with regards to CO exposure include persons with cardiovascular diseases (especially ischaemic heart disease), pregnant mothers and newborn infants. Epidemiological and clinical studies indicate that CO from smoking and environmental or occupational exposures may contribute to cardiovascular mortality (WHO, 2000).

## **1.6. Volatile Organic Compounds**

Volatile Organic Compounds (VOCs) are organic chemicals that easily vapourise at room temperature and are colourless. VOCs are released from vehicle exhaust gases either as unburned fuels or as combustion products, and are also emitted by the evaporation of solvents and motor fuels.

**Short-term exposure** to VOCs can cause eye and respiratory tract irritation and damage, headaches, dizziness, visual disorders, fatigue, loss of coordination, allergic skin reactions, nausea, and memory impairment, damage the bone marrow and even death.

**Long-term exposure** to high levels of VOCs has been linked to an increase in occurrence of leukaemia. VOCs can also cause damage to the liver, kidneys and central nervous system.

### **1.6.1. Benzene**

Benzene in air exists predominantly in the vapour phase, with residence times varying between a few hours and a few days, depending on the environment, climate and the concentration of other pollutants. The only benzene reaction, which is important in the lower atmosphere, is the reaction with hydroxy radicals.

The products of this reaction are phenols and aldehydes, which react quickly and are removed from air by rain.

Benzene is a natural component of crude oil, and petrol contains 1 – 5% by volume.

Benzene is produced in large quantities from petroleum sources and is used in the chemical synthesis of ethyl benzene, phenol, cyclohexane and other substituted aromatic hydrocarbons.

Benzene is emitted from industrial sources as well as from combustion sources such as motor engines, wood combustion and stationary fossil fuel combustion. The major source is exhaust emissions and evaporation losses from motor vehicles, and evaporation losses during the handling, distribution and storage of petrol.

Information on health effects from short-term exposure to benzene is fairly limited.

The most significant adverse effects from prolonged exposure to benzene are haematotoxicity, genotoxicity and carcinogenicity. Chronic benzene exposure can result in bone marrow depression expressed as leukopenia, anaemia and/or thrombocytopenia, leading to pancytopenia and aplastic anaemia.

Based on this evidence, C<sub>6</sub>H<sub>6</sub> is recognized to be a human and animal carcinogen. An increased mortality from leukemia has been demonstrated in workers occupationally exposed (WHO, 2000).

#### **1.6.2. Toluene**

Toluene is produced from the catalytic conversion of petroleum and aromatization of aliphatic hydrocarbons and as a by-product of the coke oven industry.

The bulk of production is in the form of a benzene-toluene-xylene mixture that is used in the back blending of petrol to enhance octane ratings. Toluene is used as a solvent, carrier or thinner in the paint, rubber, printing, cosmetic, adhesives and resin industries, as a starting material for the synthesis of other chemicals and as a constituent of fuels (WHO, 2000).

Toluene is believed to be the most prevalent hydrocarbon in the atmosphere. Reactions with hydroxy radicals are the main mechanisms by which toluene is removed from the atmosphere. The lifetime of toluene can range from a few days in summer to a few months in winter (WHO, 2000).

**The short-term and long-term effects** of toluene on the Central Nervous System are of great concern. Toluene may also cause developmental decrements and congenital abnormalities in humans.

The potential effects of toluene exposure on reproduction and hormonal imbalances in women are also of concern. Men occupationally exposed to toluene at 5 – 25 ppm have also been shown to exhibit hormonal imbalances.



Limited information suggests an association between occupational toluene exposure and spontaneous abortions at an average concentration 88 ppm.

Toluene has minimal effects on the liver and kidney, except in cases of toluene abuse. Studies have not indicated that toluene is carcinogenic (WHO, 2000).

## **1.2. ENVIRONMENTAL IMPACTS**

Trace gases and aerosols impact climate through their effect on the radiative balance of the earth.

Trace gases such as greenhouse gases absorb and emit infrared radiation which raises the temperature of the earth's surface causing the enhanced greenhouse effect.

Aerosol particles have a direct effect by scattering and absorbing solar radiation and an indirect effect by acting as cloud condensation nuclei.

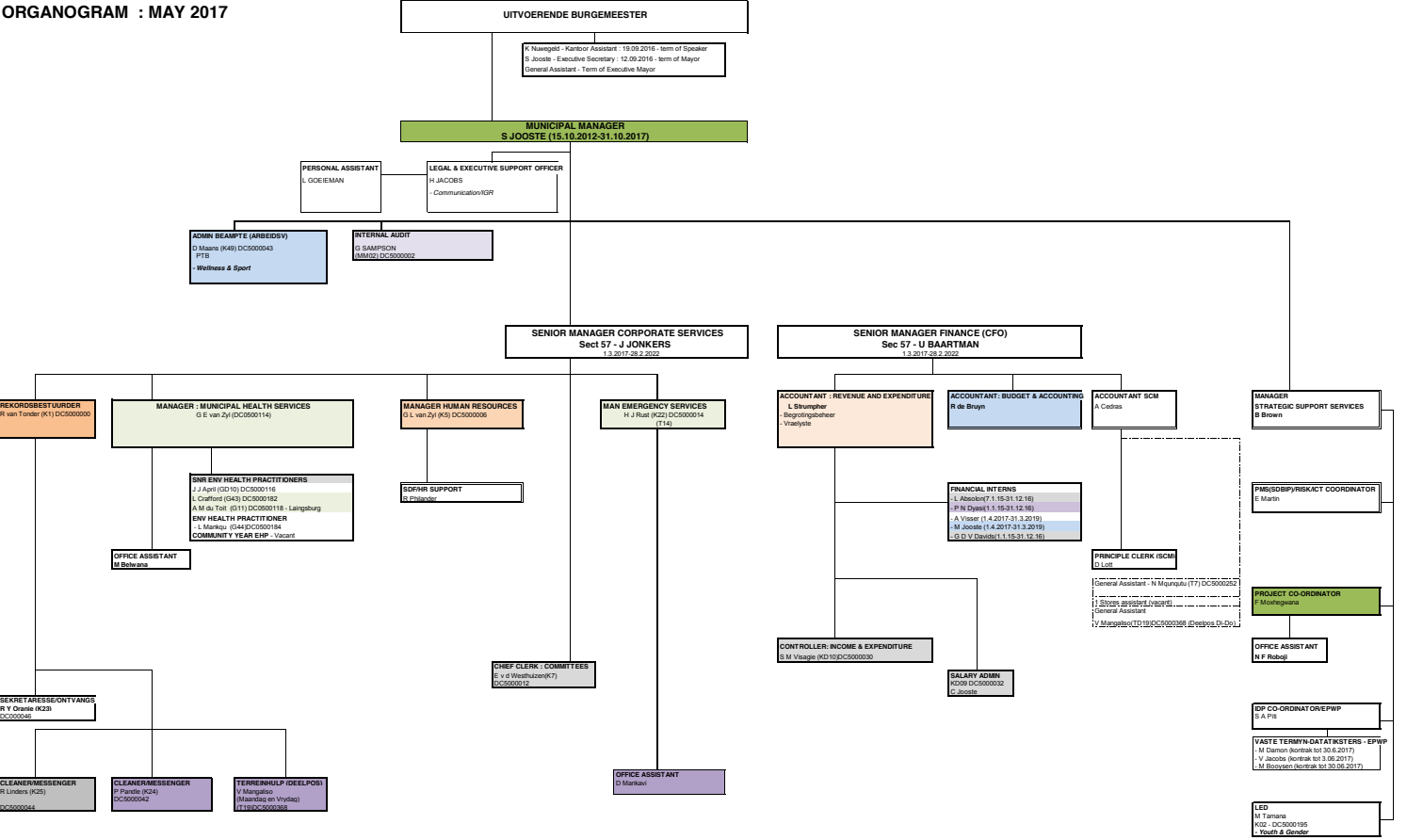
Atmospheric aerosol particles range from dust and smoke to mists, smogs and haze (IPCC, 2001). Smogs and haze are common in regions where certain geographic features, such as mountains, and weather conditions, such as temperature inversions, contribute to the trapping of air pollutants (Kumar and Mohan, 2002). Smogs and haze also contribute to visibility degradation through the absorption and scattering of radiation by gases and particulates (Elsom, 1996).

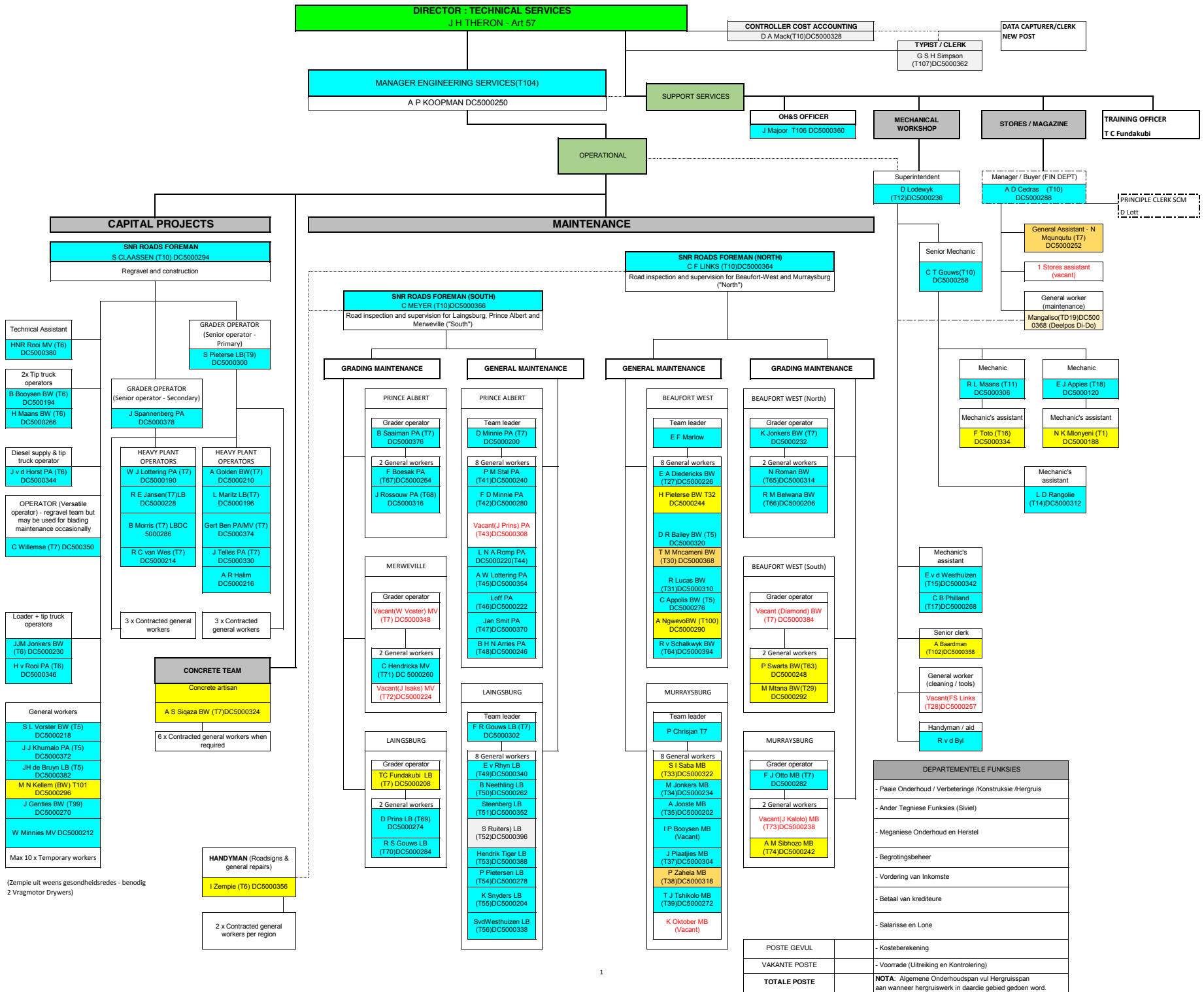
Other environmental impacts associated with air pollution include loss of biodiversity, damage to sensitive environments and acid rain.

Acid rain is a general term referring to a combination of wet and dry deposition from the atmosphere containing elevated amounts of sulphuric and nitric acid. Acid rain occurs when SO<sub>2</sub> and NO<sub>x</sub> are emitted into the atmosphere, undergo chemical transformation and are absorbed by water droplets in clouds. The droplets then fall to earth as rain, snow, mist, dust, hail or sleet. This increases the acidity of soil and affects the chemical balance of dams and rivers.

Acid rain can also cause damage to buildings and infrastructure.

# ANNEXURE D





# ANNEXURE E

***DRAFT***

**COMMUNICATION STRATEGY  
2016/2021**



**CENTRAL KAROO DISTRICT MUNICIPALITY  
DISTRIKSMUNISIPALITEIT  
UMASIPALA WESITHILI**

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ACRONYMS	
ANC	African National Congress
AG	Auditor-General
CAP	Communication Action Plan
CKDM	Central Karoo District Municipality
CO	Communication Objective
CP	Communication Policy
CS	Communication Strategy
DC	District Council
DA	Democratic Alliance
HoD	Head of Department
IDP	Integrated Development Plan
IGR	Inter-Governmental Relations
KDF	Karoo Development Force (KDF)
KGP	Karoo Gemeenskap Party
KPA	Key Performance Area
LED	Local Economic Development
LG TAS	Local Government Turn-Around Strategy
MFIP	Municipal Finance Improvement Programme
NO	National Outcome
RSC	Regional Services Council
SMART	Specific, Measurable, Achievable, Realistic & Time-framed
SLGR	State of Local Government Report
SONA	State Of the Nation Address
SOPA	State Of the Province Address
SO	Strategic Objective
SWOT	Strengths, Weaknesses, Opportunities & Threats





## 1. PURPOSE

The purpose of a Communication Strategy (CS) for the Central Karoo District Municipality would be to set a strategic communication agenda and plan that is aligned and supports the achievement of Council's Strategic Objectives (SOs), as captured in the 3<sup>rd</sup> Generation Integrated Development Plan (IDP) for 2012/16.

The elements of this strategy come together to bring about coordinated and planned communication that strengthens the Municipality's image and credibility. Such planned communication increases confidence in the Municipality's performance and existence. It will further reflect strong leadership and management of the Central Karoo District Municipality.

Sustainable behavioural change is a long-term proposition and involves, in addition to issues of communication, other factors such as the availability, accessibility and quality of services, the socio-cultural and political context, the level of education and the socio-economic circumstances. All of these factors are to be considered in developing a CS for the Central Karoo District Municipality.

The main responsibilities of the communication function are to:

- Manage the Municipality's communication with the public ;
- Coordination of internal communication ;
- Manage the reputation of the Municipality.

## 2. BACKGROUND AND INTRODUCTION

Poor communication and poor accountability relationships with communities from Municipal structures has consistently remained at the forefront of government's development challenges. The 2009 State of Local Government Report (SLGR) represents the outcomes of a country-wide assessment performed to determine the current state of Local Government. The findings of the report, in respect to public participation and communication, indicate that many Municipalities have been unable to provide effective leadership in developing and communicating a common vision amongst communities and stakeholders.

Municipalities were found to practice inadequate community participation and to be ineffective in mediating expectations, mobilising and supporting communities to tap into state and non-state resources. This stems from the trend of Municipalities to make limited investments in public participation strategies, structures, and processes including communication and complaint management systems. In order to improve communication between Government and communities, Municipalities must



institutionalise communication structures, processes and systems for structured, direct and regular communication with local communities.

A Communication Strategy is, therefore, necessary to enable the Central Karoo District Municipality to address the above short-comings. The Communication Strategy provides the framework for communication planning. It allows the Communication Manager / Official to establish a framework against which on-going communication decisions are tested. It also produces a profile that can be used to identify the right problems to solve and to prioritise areas or issues for which communication plans are to be developed. The strategy determines what the Communications Unit should be doing (communicating) in support of the Municipality's overall objectives, and aligned to Provincial and National Government objectives.

The core functions of the CKDM Communication Strategy are to contribute towards the realisation of the following **developmental objectives** as captured in Council's Strategic Objectives (SO's) and underpinned by the principles of transparency, openness, participatory democracy and direct communication with stakeholders:

- To improve and maintain district roads and promote effective and safe public transport for all.
- To deliver sound administrative and financial services, to ensure viability
- To plan to minimize the impact of social ills, disasters and improve public safety in the region.
- To establish an inclusive tourism industry through sustainable development and market which is public sector led, private sector driven and community based.
- To build a well capacitated workforce and skilled employable youth and communities
- To pursue economic growth opportunities that will create descent work.
- To facilitate good governance principles and effective stakeholder participation.
- To promote safe, healthy and socially stable communities in an environment conducive to integrated and sustainable development.

### 3. LEGISLATIVE BACKGROUND

Central Karoo District Municipality's Communication Strategy (CS) is guided by the State of the Nation Address (SONA), the State of the Province Address (SOPA), the National Key Performance Areas (KPA's) and the Back to Basics Approach. It is also guided by legislation such as:

- Promotion of Access to Information Act, 2000 (Act 2 of 2000)
- Municipal Systems Act, 2000 (Act 32 of 2000)
- Intergovernmental Relations Framework Act, 2005 (Act 13 of 2005)
- Constitution of the Republic of South Africa, 1996 (Act 108 of 1996)
- Chapter 2, Bill of Rights



## 4. CENTRAL KAROO DISTRICT MUNICIPALITY PROFILE

### 4.1 Organisational Overview

The Central Karoo District Municipality is classified as a 'Category C' Municipality serving Local Municipalities in the District, including Beaufort West, Laingsburg and Prince Albert, which are classified as 'Category B' Municipalities. The Region in large comprises an area of over 38,854 km<sup>2</sup> with a population of 73 687 and 20 730 households.

After the elections of 03 August 2016 the Democratic Alliance (DA) has six (6) Councillors, the Karoo Development Force (KDF) (1) Councillor, African National Congress (ANC) has four (4) Councillors, and the Karoo Gemeenskap Party (KGP) has two (2) Councillors.

The Executive Mayoral Committee comprises of:

<b>The Executive Mayor:</b>	Cllr N Constable
<b>The Executive Deputy Mayor:</b>	Cllr M Jaftha
<b>Full-time Councillor:</b>	Cllr / Dr A Rabie

### 4.2 Institutional Analysis

The District Municipality boasts a loyal staff with dedicated and committed officials in key positions. Many of these officials have extensive years of history and experience with Council. Hence, it is rich in institutional knowledge and expertise. However, due to various constraints, officials are currently faced with tremendous challenges in terms of rolling out and implementing action plans in order to achieve desired strategic objectives.

These strategic objectives are captured in the District Municipality's 3<sup>rd</sup> Generation Integrated Development Plan (IDP) for 2012/16. This essentially translates into Council embarking on a 5-year plan towards a transformed and developmental District Municipality.

### 4.3 Operational Developments

Central Karoo District Municipality's development and service delivery mandate speaks to the developmental and social needs of communities. The Municipality, therefore, continually strives to successfully render services such as



Disaster Management, Roads, Municipal Health and Regional Planning and Tourism Services throughout the Central Karoo District.

Various District Forums have been established and are facilitated by the District, creating a platform to enhance and further promote interactions amongst relevant stakeholders, for the development and benefit of the entire Central Karoo District. These include the District Coordinating Forum and Technical Forum as well as the District Public Participation and Communication Forum.

The operational part of the strategy would involve developing an implementation plan. This should envisage the elements which are required for successful implementation, including institutional framework, production of communication material, training of human resources, strengthening of institutional capacities, monitoring and evaluation, budget and timetable.

#### 4.4 Vision and Mission Statement

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The Central Karoo District Municipality's stated vision and mission are as follows:

##### **VISION**

**Working Together in development and growth**

##### **MISSION**

- **Ensure that future growth improves the quality of life of all**
- **Being financially sustainable**
- **Maintain rural character and create healthy communities**
- **Facilitate economic growth through improving infrastructure and green energy opportunities**
- **Providing strategic leadership and coordination to local municipalities**
- **Uphold principles of good governance for a range of income levels**

#### 4.5 Batho Pele Principles

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The District understands that the achievement of SOs can only be realised by practicing the following Batho Pele principles in order to enhance service delivery.



1. **Consultation:** Citizens should be consulted about the level and quality of public services they receive and, wherever possible, should be given a choice about the services that are offered.
2. **Service Standards:** Citizens should be informed what level and quality of public services they will receive so that they are aware of what to expect.
3. **Access:** All citizens should have equal access to the services to which they are entitled.
4. **Courtesy:** Citizens should be treated with courtesy and consideration.
5. **Information:** Citizens should be given full, accurate information about the public services they are entitled to receive.
6. **Openness and Transparency:** Citizens should be told how National and Provincial Departments are run, how much they cost, and who is in charge.
7. **Redress:** If the promised standard of service is not delivered, citizens should be offered an apology, a full explanation and a speedy and effective remedy; and when complaints are made, citizens should receive a sympathetic, positive response.
8. **Value for Money:** Public services should be provided economically and efficiently in order to give citizens the best possible value for money.

The CKDM therefore strives to uphold the Batho Pele principles in all activities outlined in this strategy.

## 5. STRATEGIC OBJECTIVES AND STAKEHOLDERS

### 5.1 CKDM's Strategic Objectives

The strategic objectives flow from strategic planning, which involves the process of defining an organisation's strategy, or direction, and making decisions on allocating its resources to pursue this strategy.

A strategy is a well-planned series of actions aimed at achieving certain objectives through the use of communication methods, techniques and approaches. By definition, this implies that before you embark on a clear communication strategy, you need to have developed clear Strategic Objectives.



In formulating Strategic Objectives that would directly speak to the Vision and Mission statements of the Central Karoo District Municipality, discussions centred on how best to respond to the impact it would have on the District and Local Municipalities, as well as communities at large. It is also understood that Strategic Objectives should be aligned with the National Development Plans with the view to finding sustainable solutions to the triple challenges of poverty, unemployment and inequality. The following are the CKDM's strategic objectives:

**SO 1:** To improve and maintain district roads and promote effective and safe public transport for all

**SO 2:** To deliver sound administrative and financial services, to ensure viability

**SO 3:** To reduce the effects of disaster and improve public safety in the region as a whole

**SO 4:** To promote healthy and socially stable communities.

**SO 5:** To build well capacitated workforce and communities

**SO 6:** To pursue economic growth opportunities that will create decent work

**SO 7:** To facilitate good governance principles and effective stakeholder participation

All communication activities emanating from this strategy will be in support of the CKDM's Strategic Objectives as stated above.

## 5.2 Strategic Stakeholders

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In planning communication activities, it is important to identify the most strategic stakeholders of the district. This process allows for careful consideration of who communication activities and resources will be spent on. These considerations require an analysis of stakeholders' linkages to the Municipality and are described as:

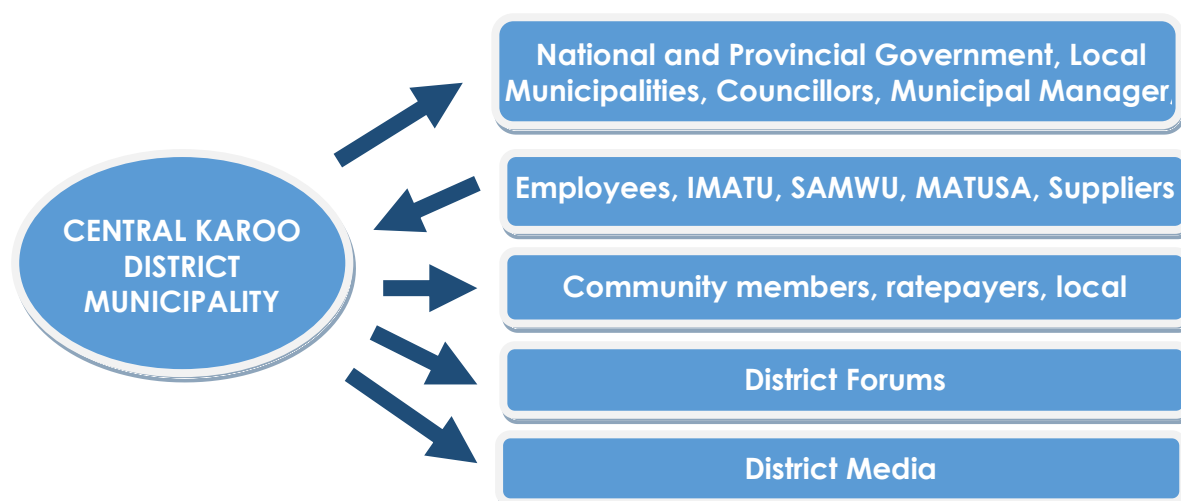
- **Enabling linkages:** groups that provide authority to the Municipality and controls its resources (e.g. Provincial and National Government, Executive Directors, Councillors, Municipal Managers, Heads of Departments, etc.).
- **Functional linkages:** groups that **provide inputs** to the Municipality (e.g. personnel, Unions, Forums, etc.) and **uses its outputs** (e.g. community members, local businesses, commercial farmers, NGOs, etc.)



- **Normative linkages:** links with professional or industry associations. These linkages provide connections to institutions that can assist in solving shared problems (e.g. Forums).
- **Diffused linkages:** connections to groupings of individuals who are not part of any organisation. Minority relations, media relations, ratepayer associations and environmental relations are attempts to manage linkages with diffused groups.

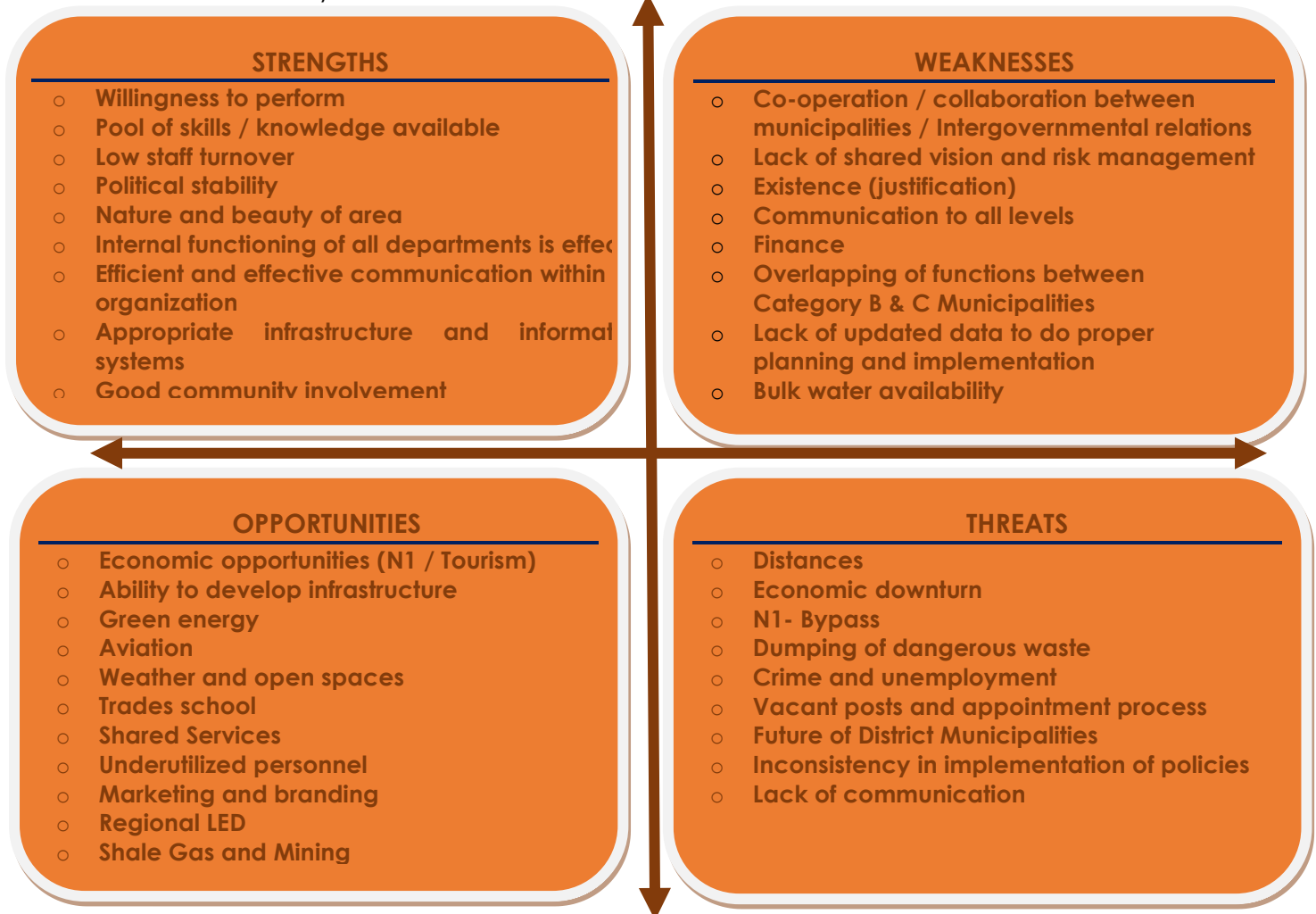
The Central Karoo District Municipality would have to manage **Enabling** and **Functional linkages** first, as they could create consequences for the Municipality. The strategic objectives cannot be pursued without these stakeholders.

It is the function of the Communication Manager / Official to select the most strategic stakeholders relevant to the Central Karoo District Municipality. The study or selection of strategic stakeholders is crucial, since the goal is to facilitate a change in behaviour in order to achieve SOs. A strategic stakeholder map for Central Karoo District could be illustrated as:



### 5.3 SWOT Analysis

Considering the context within which the Central Karoo District Municipality operates, a SWOT analysis was performed to identify the real issues within the internal and external communication environments. An assessment model for a SWOT analysis could be illustrated as:



### 5.4 Communication Challenges/Issues

- Lack of funds for communication activities
- No customer care centres
- Strategic importance of communications overlooked
- Underutilisation of community media
- Lack of funds for translation costs of strategic documents, policies, advertisements, newsletters, No dedicated translation or interpreting services etc.
- Lack of communication infrastructure





## 6. COMMUNICATION STRATEGY

### 6.1 Messages / Themes

Messages and themes will flow from the Municipality's Vision, Mission and Strategic Objectives in accord with the Integrated Development Plan. Messages and themes will also be in line with National and Provincial Government.

<b>National:</b>	<b><i>"Together, moving South Africa Forward"</i></b>
<b>Provincial:</b>	<b><i>"Better Together"</i></b>
<b>CKDM:</b>	<b><i>"Working together in development and growth"</i></b>

### 6.2 Messengers

Messengers are Municipal Representatives authorised to represent the Municipality and/or a particular project. The following Messengers will be used as they relate to respective projects and/or events:

<b>Executive Mayor</b>	<ul style="list-style-type: none"><li>o All aspects of Council policy and programmes.</li><li>o Matters of policy yet to be adopted/enacted.</li><li>o Key person for all public participation, unless delegated otherwise.</li></ul>
<b>Speaker</b>	<ul style="list-style-type: none"><li>o All comment relating to Council Rules of Order must come from the Speaker.</li></ul>
<b>Councillors</b>	<ul style="list-style-type: none"><li>o Any area of the Municipal Administration.</li></ul>
<b>Municipal Manager</b>	<ul style="list-style-type: none"><li>o Comment on all activities of the Municipality, except for matters that are policy still to be adopted/ enacted.</li></ul>
<b>Heads of Departments (HoDs)</b>	<ul style="list-style-type: none"><li>o On all aspects of their service areas.</li><li>o Queries from journalists will be referred to HoDs for comment, clarification or information.</li><li>o Comment will then go out in the name of the Director unless otherwise.</li></ul>
<b>Municipal Spokesperson</b>	<ul style="list-style-type: none"><li>o He/she will be responsible for the co-ordination of media communication, media conferences, media statements and handling media queries.</li></ul>



### 6.3 Communication Objectives

Communication objectives (COs) should be based on the SMART principle, i.e. objectives should be **S**pecific, **M**easurable, **A**chievable, **R**ealistic and **T**ime-framed. These make it easier to clearly define what you are supposed to achieve, hence facilitating the monitoring and evaluation process.

In order to ensure the successful and effective implementation of strategies and objectives, the District would have to utilise various platforms and mechanisms, the most important being communication. In the absence of continuous and effective communication, the District would be challenged in achieving desired outcomes. Communication, therefore, would play a fundamental role in effectively realising the District's Strategic Objectives. Upon annual revision of the Integrated Development Plan (IDP), the Communication Strategy should also be reviewed to ensure communication objectives are aligned to ODM's strategic objectives.

The following table depicts examples of how communication is envisaged to assist the District in achieving desired outcomes.

Strategic Objective		Communication Strategy	Communication Objective
1.	To improve and maintain district roads and promote effective and safe public transport for all	Create an environment, provide support and built systems to accelerate quality service delivery within District.	<ul style="list-style-type: none"><li>Utilise awareness campaigns to ensure communities of Roads services and how to access them.</li><li>Ensure an effective complaints handling system and customer friendly service centre is available to citizens.</li><li>Ensure feedback mechanisms for all stakeholders.</li></ul>
2.	To pursue economic growth opportunities that will create decent work	Ensure that communities and other development partners are mobilised to partner with municipalities in service delivery and development initiatives/	<ul style="list-style-type: none"><li>Ensure informative, professional, and regular communication is directed and sustained with communities, civic structures, business and other relevant organisations.</li><li>Develop communication activities aimed at investors and local business in the area.</li><li>Raise awareness of CKDM</li></ul>



			tourism and LED initiatives; upgrading of resorts and EPWP programmes.
3.	To build well capacitated workforce and communities	Ensure internal communication flows in a structured and traceable process with measurable timelines indicated for feedback.	<ul style="list-style-type: none"> <li>○ Raise awareness and encourage staff and communities to utilise communication platforms.</li> <li>○ Ensure regular internal and external communication regarding projects, programmes and the affairs of the Municipality.</li> <li>○ Promoting Vision, Mission and Batho Pele principles.</li> </ul>
4.	To deliver sound administrative and financial services, to ensure viability	Ensure regular communication regarding the financial affairs of the Municipality to relevant stakeholders.	<ul style="list-style-type: none"> <li>○ Marketing and implementation of Mission statement.</li> <li>○ Ensure communication regarding progress in implementation of MFIP to relevant stakeholders.</li> <li>○ Communicate outcomes of MFMA, CSC and MPAC meetings.</li> </ul>
5.	To facilitate good governance principles and effective stakeholder participation	Create platforms for greater public participation, sharing information and obtaining feedback about ODM's IDP priorities, challenges and remedial actions.	<ul style="list-style-type: none"> <li>○ Communicate the plans and services of ODM.</li> <li>○ Raise awareness of public participation platforms.</li> <li>○ Ensure proactive media relations.</li> <li>○ Enhance and promote IGR and ensure alignment between IDPs of the District and Local Municipalities.</li> <li>○ Support and strengthen communication capacity of all Local Municipalities under ODM's area of jurisdiction.</li> </ul>
6.	To reduce the effects of disaster and improve public safety in the region as a whole	Ensure platforms are available where communities and stakeholders can be informed around disasters as well as preventative measures	<ul style="list-style-type: none"> <li>○ Raise awareness around possible disasters</li> <li>○ Create campaigns around the Disaster services provided and how they can be accessed.</li> <li>○ Share information and news on Disaster Management</li> </ul>



7.	To promote healthy and socially stable communities.	Ensure that communities are made aware of their rights and obligations as citizens of their respective Municipal areas	<ul style="list-style-type: none"> <li>○ Create campaigns around relevant socio-economic and other relevant issues affecting communities</li> <li>○ Provide platforms for interaction and feedback by communities and stakeholders</li> </ul>
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## 6.4 Media Analysis

Research has an essential role to play at each critical step of the process of planning, implementation and evaluation of a Communication Action Plan. During the planning phase, research could provide necessary strategic information. Research could also be used during the implementation phase for developing messages and materials appropriate to the Municipality's target audience, and eventually for resolving unexpected challenges. Research is both useful and essential in monitoring and evaluating an activity.

In conducting a media analysis, one has to research which channels stakeholders prefer to use, e.g. sms, website, newsletters, loud hailing, etc. What is convenient or most cost-effective for the organisation is impractical and should not be an option. Research could be conducted either formally or informally.

**Formal research:** can be conducted by using surveys to test stakeholders' preferences for particular channels.

**Informal research:** can be conducted through general conversations and based on personal experience within the Municipality.

In the absence of formal research, informal research revealed that the Central Karoo District Municipality currently has access to the following communication channels:

- e-Mail - to reach District stakeholders including staff
- Local Radio – Radio Gamka land
- Internal and external meetings - Departmental, Managerial, Steering Committees
- Press releases - as required by the Executive Mayor and/or Municipal Manager
- Municipal website – Newly reviewed and upgraded
- Meetings/talks with community - regarding campaigns or events in the District
- Events/talks in the community around various issues of importance and concern



- o Various fora - District Task Teams, IDP stakeholders, Working Groups, Intergovernmental Fora etc.

A Municipal Newsletter has also been developed and is used to communicate key messages from the Municipality. The above communication channels will be used in the implementation of communication activities emanating from this strategy.

## 6.5 Review of Communication Strategy

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It is intended for the Communication Strategy and Action Plan be reviewed on an annual basis.

## 7. COMMUNICATION POLICY

The Communication Policy (CP) is the communication protocol, guiding institutional arrangements regarding internal and external communication. The CP primarily covers the division of responsibilities and general guidelines for communicating with various target groups. The CP also provides guidelines with regard to who can act as a spokesperson for the Municipality.

It would be the responsibility of the Communication Manager / Officer to identify and guide the spokesperson as to what is to be communicated, how it is to be communicated, and who the target audience would be. Communication platforms and how these are to be informed or guided, are also to be identified.

These responsibilities and guidelines, once captured in a CP for the Central Karoo District Municipality, has to be tabled before Council for consideration and approval. Such CP is also to contain crisis and media management techniques.

## 8. COMMUNICATION ACTION PLAN

A Communication Action Plan (CAP) is the master plan for **how to do it**. The CAP implements the CS. It serves as the framework from which communication programmes and campaigns are developed, i.e. communication projects. Communication is not simply a matter of using the organised (mass-) media, however powerful they may be. Communication makes use of other formal and informal channels of communication, including inter-personal channels.

The CAP should contain objectives that are realistic, precise, measurable, and be expressed in a clear, simple, specific, easy-to-understand timetable. The Municipality is to ensure alignment of such objectives with Council's SOs, as captured in the IDP.



Communication activities outlined in the 2016/2017 Action Plan (attached) will utilise the above existing and functional media platforms/channels. It would be the responsibility of the Communication Manager / Official to decide which channels are appropriate for the intended audience, message and specific communication objective as outlined below:

- Behaviour / objective of communication
  - what change in behaviour is required, what needs to be communicated
- Audience
  - who needs to be reached
- Messages
  - what messages will be appropriate
- Channels
  - which channels of communication will be most effective in reaching the intended audience
- Evaluation
  - how will the success/failure of the Communication Plan be measured

These elements will be outlined in the 2016/2017 Action Plan of this strategy.





# ANNEXURE F



## ***Central karoo District Municipality***

# **STRATEGIC DISASTER MANAGEMENT PLAN FOR CKDM 2015/16**

<b>REVISION 0</b>	<b>FP 1</b>	
Compiled / Reviewed By :-		Approved By MM :-
<b>H. J. Rust (Head of Disaster management/Fire)</b>		<b>S. Jooste (Act Municipal Manager)</b>
		
Date : <b>02/04/2015</b>		Date :

### **DM PLAN DISTRIBUTION**

This Disaster Management Plan is produced by the CKDM Disaster Management Centre (DMC) as part of its responsibility in terms of the Disaster Management Act, Act 57 of 2002 and is distributed to the wider emergency management community and to other government and non-governmental agencies, as applicable. This document is intended for internal use of the Organisations / Entities concerned and should be treated as confidential and not be displayed in whole or in part in any public place or to the media.

The recipient Organisations / Entities will be advised by the DMC when the DM Plan has been amended or updated through the person who has received this Plan. Each Organisation / Entity should then obtain and distribute copies of these amendments to their respective members as required and the replaced pages / copies should be destroyed.



## DM PLAN DISTRIBUTION LIST :

Version Number	Date of Distribution	Copy No.	Name of Organisation / Position
REV 0	10/05/2011	1/3	EXECUTIVE MAYOR
	10/05/2015	2/3	EMS
	10/05/2015	3/3	<b>SAPD</b>

## DM PLAN AMENDMENTS / UPDATES

Proposed changes or updates will be evaluated and then added to the Amendments and Updates Listing below. It is the responsibility of each Stakeholder to regularly check the currency of their Plan copy.

Proposals for amendment or additions to the text of this Plan should be forwarded to :-

## DM PLAN AMENDMENTS AND UPDATES LISTING

[illegible]

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# ***CENTRAL KAROO DISTRICT MUNICIPALITY***

## **STRATEGIC DISASTER MANAGEMENT PLAN**

### **1. SCOPE**

The STRATEGIC DISASTER MANAGEMENT PLAN has been drafted as part of the Public Safety strategy.

This Disaster Management (DM) Plan is the product of a joint initiative by ALL role-players and is co-ordinated by the CKDM Disaster Management Centre in terms of the Disaster Management Act, 57 of 2002.

This Plan applies specifically and exclusively to **disaster-risks** in the Central Karoo region.

**The CKDM Strategic DRM Plan will be integrated with all other strategic, tactical and operational Plans and all other relevant Emergency Plans and Procedures and the IDP.**

Guidelines and strategies by the NDMC, the PDMC and other relevant authorities are incorporated.

### **2. PURPOSE / OBJECTIVES**

The CKDM Strategic Disaster Management Plan aims to follow **AN INTEGRATED ALL-HAZARDS APPROACH, AT THE STRATEGIC (HIGH) LEVEL**, to the preparedness for, and response to, identified hazards which may have disaster-risk implications. **Special (Venue) Disaster Risk Continuing Plans will also be drafted for all the significant incidents that might occur Venue and local PVAs taking place over this period. These DRM Plans will cover the tactical and operational levels** and will thus deal with the specific aspects applicable to the area.

The objective of this document is to define and describe the essential elements and procedures **at the strategic level** and mitigating major incidents or disasters (covering a wide range of hazards and threats, including natural and man-made disasters, service disruptions, domestic terrorist attacks, and other emergencies) and to ensure a rapid and effective response in case of a major incident or disaster occurrence, that will :-

- Save lives,
- Reduce risk exposure,
- Reduce suffering,
- Protect property,
- Protect the environment
- Reduce economic and social losses and
- Provide for the safety and health of all responders.

The **UNIFIED INCIDENT COMMAND SYSTEM** shall integrate risk management into the regular functions of the Role-players. Risk management provides a basis for the following :-

- Standard evaluation of any emergency or disaster or the potential for such a situation,
- Strategic decision making,
- Operational planning,
- Tactical planning,
- Planning evaluation and revision and
- Operational command and control.

#### **Implementation - Unified Command Incident Management Protocol**

The special Venue (local) Disaster Risk Management Plans and associated Safety & Security Plans, guided by this Strategic DRM Plan, must be applied when any significant incident occurs,

even to routine incidents, in order to provide for familiarity with the system, to be prepared for impact escalation and to be aware of present and probable future risks that exist. The special Venue (local) DRM Plans must be applied during exercises, as exercises and simulated incidents often involve artificial and real-time hazards, vulnerabilities, risks, problems and challenges that are similar in nature to those of actual incidents and emergencies.

Role-players and external organizations might amend the plan, but then such amendments would only be allowed to meet specific operational needs.

All Stakeholders and Role-players (*including* those external organisations with which mutual aid or service level agreements have been entered into) must develop their own operational guidelines (Standard Operating Procedures – SOP's) and Plans which must integrate with the DRM and Safety & Security Plans. These would address both routine and unusual incidents based on the hazard and risk assessment, that may occur within or in close vicinity of any venue. They should describe the options available for application according to the needs of each particular incident or emergency situation.

**The specific aims of the CKDM Disaster Management Centre, in its role as the co-ordinator of this Plan, assisted by all the role-players with special responsibilities making up the DM Workstream.**

- The CKDM Disaster Risk Management Centre is empowered by legislation to ensure overall integration and co-ordination of all relevant role-players involved in this plan, so as to identify, reduce, mitigate and effectively respond to any hazards with a disaster risk which may affect the safety of the public.
- To develop and produce a viable and integrated Disaster Risk Management Plan (DRMP) for CKDM to feed into the IDP.
- To ensure that synergy exists between the CKDM and Provincial and National Disaster Risk Management Plans and structures;
- To ensure that all role-players involved have developed and produced Disaster Risk Management Plans for their own spheres of operation which in turn are integrated into the CKDM Disaster Management Plan;
- To ensure that the relevant role-players are identified in all the organisations and that regular advisory forums and committee meetings are held to monitor and calibrate all DRM Plans;
- To ensure that adequate Venue Operations Centres, staffing and relevant reporting structures are established at all the major Venue;
- To ensure that regular simulations are held to refine all DRM Plans;
- To ensure that regular safety audits are undertaken at all Venue and that they are compliant with all fire safety and other applicable by-laws;
- To have secured and marketed an emergency communications call number for CKDM which in turn is linked to other national emergency communications numbers;
- To have implemented a awareness and education campaigns for the community and all visitors i.r.o. safety and disaster-risk issues, as identified in the CKDM DRM Plan;
- To ensure that the CKDM Disaster Management Centre, Fire and Rescue Service, the and ALL other Services dealing with safety are adequately staffed and have the necessary facilities and equipment available to be able to deal with any hazard with a high disaster-risk potential which **may** occur in CKDM.

### **3. SPECIFIC STATUTORY REQUIREMENTS / LEGAL FRAMEWORK**

The following legislation impacts on the integrated Disaster Risk Management planning effort and will provide the basis for operation by the relevant role-players, whether they are Lead or Supporting Disciplines :-

- Disaster Management Act, 57 of 2002
- Fire Brigade Services Act, 99 of 1987
- National Veld and Forest Act, 101 of 1998
- SA Police Service Act, 68 of 1995
- National Health Act, 61 of 2003
- Local Government: Municipal Systems Act, 32 of 2000
- Road Traffic Act, 93 of 1996
- Road Traffic Laws Reconciliation Act, 47 of 1998
- Safety at Sports and Recreational PVAs Act, .. of 2009
- Occupational Health and Safety Act, 85 of 1993
- SANS 10366:2006 – Health and Safety at PVAs – General Requirements
- SANS 10400:1990 – Application of the National Building Regulations
- General Notice No. 28437 – Manual: Joint Management of Incidents involving Chemical or Biological Agents or Radio-Active Materials, 3 Feb. 2006 (Dept. of Provincial and Local Government)

### **4. REFERENCES**

- National Disaster Management Framework, 2005.
- Western Cape Provincial Disaster Management Framework, 2009.
- Central Karoo Draft Disaster Management Framework, 2010.

## 5. ABBREVIATIONS

**CKDM** – Central Karoo District Municipality  
**DOC** – Disaster Operations Centre (of the CKDM DMC)  
**DRM** – Disaster Risk Management  
**DRMC** – Disaster Risk Management Centre (CKDM)  
**DRMP** – Disaster Risk Management Plan  
**DVI** – Disaster Victim Identification  
**EMS** – Emergency Medical Services (PG:WC) – also known as METRO-EMS  
**F&RS** – Fire and Rescue Service (B/WEST)  
**FCP** – Forward Command Post (at Incident Site)  
**FSG** – FIFA Safety Guidelines document  
**GIS** – Geographical Information System  
**GPS** – Global Positioning System  
**HRAVA** - Hazard, Risk and Vulnerability Assessment  
**IMT** – Incident Management Team (On-site)  
**JMC** – Joint Media Centre  
**JOC** – Joint Operations Centre (usually located off-site)  
**LOC** – Local Organising Committee (of the 2010 FIFA World Cup™)  
**NGO** – Non-Governmental Organisation  
**NIA** – National Intelligence Agency  
**PDMC** – Disaster Management Centre (PG:WC)  
**PG:WC** – Provincial Government of the Western Cape  
**ProvJOC** – Safety & Security Joint Operations Committee at Provincial level  
**RVP** – Rendezvous Point  
**SANDF** – South African National Defence Force  
**SAPS** – South African Police Service  
**SCP** – Service Command Post (at the Incident Site)  
**SOP** – Standard Operating Procedure  
**VIP** – Very Important Person  
**VOC** – Venue Operations Centre (located at a particular Venue site)  
**VSA** – Vehicle Staging Area  
**VVIP** – Very, Very Important Person

## 6. DEFINITIONS / GLOSSARY OF TERMS

**ALERT** - An “Alert” is an incident that currently does not affect the local or general population but has the potential to a more serious emergency. The situation is unresolved and should be monitored closely. Some limited protective actions may be implemented and additional assistance requested from the relevant specialist Agencies.

**CAPACITY** – The ability or the resource availability of one or more Services / Organisations to respond to any given Incident, Emergency or Disaster situation.

**CONTROL AREA** - The total area where the Incident has occurred within the outer perimeter, and includes the inner perimeter and danger zone, as well as all hazard occurrence, the triage and any other designated areas, as applicable.

**CO-ORDINATION** - The bringing together of organisations and elements to ensure effective emergency / disaster management response and is primarily concerned with the systematic acquisition and application of resources (organisation, manpower and equipment) in accordance with the requirements imposed by the threat or impact of an emergency or disaster. Co-ordination relates primarily to resources, and operates vertically, within an organisation as a function of the authority to command; and horizontally, across organisations, as a function of the authority to control – refer also to the **UNIFIED COMMAND** definition.

**CROWD BARRIER** – Temporary or permanent structure/s that prPVAs access to demarcated areas as identified by the risk assessment.

**DANGER ZONE (HOT ZONE)** – The cordoned off area immediately around the crash site where emergency operations take place.

**DISASTER** – A progressive or sudden, widespread or localised, natural phenomena or human-caused occurrence which –

- (a) causes or threatens to cause -
  - (i) death, injury or disease;
  - (ii) damage to property, infrastructure or the environment; or
  - (iii) disruption of a community; and
- (b) is of a magnitude that exceeds the ability of those affected by the disaster to cope with its effects using only their own resources

**DISASTER MITIGATION** - Disaster mitigation refers to structural and non-structural measures that are undertaken to limit the adverse impact of natural hazards, environmental degradation and technological hazards on vulnerable areas, communities and households. These efforts can target the hazard or threat itself (for example, the positioning of firebreaks on the urban/wildland interface). This is often referred to as 'structural mitigation', since it requires infrastructure or engineering measures to keep the hazard away from those at risk. Disaster mitigation efforts can also target people who are at risk, by reducing their vulnerability to a specific threat (for instance, promoting community responsibility for controlling fire risk in an informal settlement). This is often called 'non-structural mitigation', as it promotes risk-avoidance behaviours and attitudes.

**DISASTER OPERATIONS CENTRE (DOC)** – Is a fully equipped dedicated facility within the Municipal, Provincial or National Disaster (Risk) Management Centre. Such a facility must be capable of accommodating any combination of emergency and essential services representatives, including all relevant role players and stakeholders identified in response and recovery plans for the purpose of multidisciplinary strategic management of response and recovery operations, when a local, provincial or national disaster occurs or is threatening to occur. This facility will also be linked to all other established safety & security centres.

**DISASTER RECOVERY** - Disaster recovery (including rehabilitation and reconstruction) focuses on the decisions and actions taken after a disaster to restore lives and livelihoods, services, infrastructure and the natural environment. In addition, by developing and applying risk reduction



measures at the same time, the likelihood of a repeated disaster PVA is reduced. Disaster recovery includes:

- \* rehabilitation of the affected areas, communities and households
- \* reconstruction of damaged and destroyed infrastructure
- \* recovery of losses sustained during the disaster PVA, combined with the development of increased resistance to future similar occurrences.

**DISASTER RISK (or RISK)** – The measure of potential harm from a hazard or threat. Risk is usually associated with the human inability to cope with a particular situation. In terms of disaster management it can be defined as the probability of harmful consequences, or expected losses death, injury, damage to property and the environment, jobs, disruption of economic activity or social systems. Hazards will affect communities differently in terms of ability and resources with which to cope. Poorer communities will be more at risk than others.

**DISASTER RISK ASSESSMENT** - Assessment of the threat posed by any identified hazard with a disaster potential

**DISASTER (RISK) MANAGEMENT** - means a continuous and integrated multi-sectoral, multi-disciplinary process of planning and implementation of measures aimed at – (a) prPVAing or reducing the risk of disasters; (b) mitigating the severity or consequences of disasters, (c) emergency preparedness, (d) a rapid and effective response to disasters, and (e) post-disaster recovery and rehabilitation.

**DISASTER RISK MANAGEMENT CENTRE** – A Centre specializing in Disaster (Risk) Management established in a Municipality, Province or at National level in terms of the Disaster Management Act, No. 57 of 2002.

**DISASTER (RISK) MANAGEMENT PLAN** – A document describing the organisational structure, its roles and responsibilities and concept of operation covering all aspects of the Disaster Risk Management Continuum and placing an emphasis on measures that reduce vulnerability, viz. hazard identification, risk and vulnerability assessment, risk reduction and mitigation, planning and preparedness, emergency response, relief and recovery efforts.

**DISASTER RISK REDUCTION** - Disaster risk reduction can be seen as the systematic development and application of policies, strategies and practices to minimize vulnerabilities and disaster risks throughout a society to prPVA and limit negative impacts of hazards, within the broad context of sustainable development. In South Africa, disaster risk reduction is an integral and important part of disaster management.

**EMERGENCY** – A local PVA, actual or imminent, which endangers or threatens to endanger life, property or the environment, and which is beyond the resources of a single organization or community or which requires the co-ordination of a number of significant emergency management activities.

**EMERGENCY EXIT** – Structural means whereby a safe route is provided for people to travel from any point in a building or structure to a place of safety without assistance.

**EMERGENCY RESPONSE PLAN** – The section of a Disaster Risk Management Plan developed to deal specifically with the organisational structure, its roles and responsibilities, concept of operation, means and principles for intervention during an incident or emergency occurring at a specific venue or PVA.

**EMERGENCY PROCEDURES** – A set of documents describing the detailed actions to be taken by response personnel during an emergency.

**EVACUATION** – The controlled, rapid and directed withdrawal of a population, during an emergency, from a place of danger to a place of safety in order to avoid acute exposure to any Incident.

**EVACUATION CONTROL PROCEDURES** – The plans made by the various Services to outline their duties and to ensure the orderly movement of people during the evacuation period.

**EVACUEES, SPONTANEOUS** – Persons who might leave an area in periods of intense crisis in response to a real or feared threat, whether or not they are advised to do so.

**PVA** – Entertainment (including live acts), recreational, educational, cultural, religious, business (including marketing, public relations and promotional), charitable, exhibitional, conferential, organisational and similar activities hosted at a stadium or a venue or along a route or its precinct.

**PVA SAFETY AND SECURITY PLANNING COMMITTEE** – Committee established for each designation of an PVA as contemplated in section 8 of the Safety at Sports and Recreational PVAs Act and any other relevant legislation, including in cases where the provisional risk categorization of an PVA or type of PVA requires the establishment of such a committee.

**EXERCISE** – An evaluation of major portions of emergency response capabilities. An exercise tests the integrated capability of the emergency response organisation, to identify weaknesses that could affect the response to an actual emergency.

**FINAL EXIT** - Termination of an escape route from a venue or structure giving direct access to a place of safety such as a street, passageway, walkway or open space and positioned to ensure that people can disperse safely from the vicinity of the building or structure and from the effects of a hazard.

**FORWARD COMMAND POST (FCP) or INCIDENT COMMAND POST (ICP)** – This is the single point of **joint command** for all on-site operations during the response phase of an emergency incident and it will be located at an appropriate location at or near the scene of the emergency, normally within the **INNER PERIMETER / RESTRICTED ZONE**. Incident Commanders / Managers from key response agencies as the Incident Management Team, will jointly operate under **UNIFIED COMMAND** to co-ordinate incident operations. The FCP may also be referred to as the **ON-SITE JOINT OPERATIONS CENTRE (ON-SITE JOC)**.

**HAZARD** – a potentially damaging physical PVA including human injury or death, social and economic disruption or environmental degradation or some combination of these.

**HAZARD AREA** - Area(s) designated by the Disaster Risk Management services, or locally through a hazard risk and vulnerability analysis, which are relatively more likely to experience the direct effects of natural or man-made disasters.

**HAZARD MITIGATION** – All methods and measures employed during the response phase to eliminate or make less severe / reduce the effects of a major disaster or emergency, or pro-active risk reduction initiatives – refer also to the **DISASTER MITIGATION** and **MITIGATION** definition.

**HAZARDOUS MATERIAL** – Any substance or material in a quantity or form which may be harmful or injurious to humans, animals, economical crops, or property when released into the environment. There are 4 traditional classes :- chemical, biological, radiological and explosive (CBRE).

**HELIPORT** - A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of helicopters.

**HOT ZONE** - refer to **DANGER ZONE**.

**INCIDENT** - An emergency which impacts upon a localized community or geographical area, but not requiring the co-ordination and significant multi-agency emergency management activities at a District or State level.

**INCIDENT COMMAND POST (ICP)** – refer to the **FORWARD COMMAND POST (FCP)** or **ON-SITE JOC** definitions.

**INCIDENT COMMANDER** – the most senior staff member present of a responding Discipline who will manage that Discipline's tactical and operational deployment according to the parameters and specialisation of that Discipline. He / she will liaise with all other Disciplines on scene through the

On-site Incident Management Team so that Unified Command can be achieved. If necessary, the Discipline with the most active role in combating the hazard will assume the role of the Leading Discipline(s).

**INCIDENT MANAGEMENT TEAM (IMT)** – the On-scene Team convened at any Incident site established to ensure that the Unified Command approach is achieved as envisaged by the Multi-disciplinary Incident Management Plan (MIMP).

**INFRASTRUCTURE** – Planned and organised system that is incorporated within everyday management activities, to ensure an acceptable level of emergency incident preparedness.

**INNER PERIMETER (RESTRICTED ZONE)** – A cordoned off area around the DANGER ZONE where restricted access is allowed. Only authorised persons will be allowed in this area.

**JOINT MEDIA CENTRE** – A Centre established to receive first hand and updated information on the situation with input from all the stakeholders and to co-ordinate all liaison with the media.

**JOINT OPERATIONS CENTRE (JOC)** – A fully equipped, dedicated facility which is pro-actively established to enable all relevant role-players / disciplines to jointly manage all safety & security-related aspects of any planned PVA or for Major Incident which has occurred or is threatening to occur, especially in the response and recovery operations phase, at the STRATEGIC and / or TACTICAL LEVEL, using the **UNIFIED COMMAND** system. This facility will also be linked to all other established safety & security centres (see also **DOC** and **VOC** definitions).

**LANDING ZONE (LZ)** - An area demarcated at a scene for landing helicopters for the primary objective of evacuating emergency patients.

**MAJOR INCIDENT** - An emergency which impacts upon a localized community or geographical area requiring the co-ordination and significant multi-agency emergency management activities at a District or State level (see also the **EMERGENCY** and **DISASTER** definitions).

**MASS CARE CENTRE** – A Centre established to provide shelter and other basic needs of a person affected by an emergency or disaster who has no other place of refuge.

**MITIGATION (refer also to DISASTER MITIGATION)** - Activities designed to reduce or eliminate risks to persons or property or to lessen the actual or potential effects or consequences of an incident.

**NATURAL PHENOMENA** - Natural phenomena are extreme weather, water or geological (earth) processes that do not pose a threat to people or properties. When they occur in a deserted place, they are merely natural phenomena and nothing else. However once they affect human beings, due to location or poor planning by the human beings, they are a potential hazard and could become a disaster.

**OCCUPANT CAPACITY** – Maximum number of people who can be safely accommodated at a venue.

**ON-SITE JOINT OPERATIONS CENTRE (ON-SITE JOC)** - This is the single point of **joint command** for all on-site operations during the response phase of an emergency incident and it will be located at an appropriate location at or near the scene of the emergency, normally within the **INNER PERIMETER / RESTRICTED ZONE**. Incident Commanders / Managers from key response agencies will jointly operate under **UNIFIED COMMAND** to co-ordinate incident operations – this function was previously referred to as the **FORWARD COMMAND POST (FCP)** or the **INCIDENT COMMAND POST (ICP)**.

**OUTER PERIMETER (SAFE ZONE)** – The area outside of the Restricted Zone / Inner Perimeter, still with limited public access, to act as a safety (buffer) zone from the public.

**PLACE OF SAFETY** – Place away / outside of danger.

**PREPAREDNESS** -The range of deliberate, critical tasks and activities necessary to build, sustain, and improve the operational capability to prPVA, protect against, respond to, and recover from incidents. Preparedness contributes to **disaster risk reduction** through measures taken in advance to ensure effective response to the impact of hazards, including timely and effective early warnings and the temporary evacuation of people and property from threatened locations. Preparedness enables organs of state and other institutions involved in disaster risk management, the private sector, communities and individuals to mobilise, organise, and provide relief measures to deal with an impending or current disaster, or the effects of a disaster. Preparedness differs from prPVAion and mitigation, as it focuses on activities and measures taken in advance of a specific threat or disaster.

**PRPVAION** - Actions taken to avoid an incident or intervene to stop an incident from occurring.

**PROTECTION** - Actions to mitigate the overall risk to critical infrastructure people, assets, systems, networks and functions and their interconnecting links, from exposure, injury, destruction, incapacitation or exploitation.

**RESILIENCY** - The capability of people, assets and systems to maintain functions during a disaster and to expeditiously recover and reconstitute essential services after the PVA.

**RESPONSE (DISASTER RESPONSE)** – The implementation of measures that are necessary to protect against a hazard. Disaster response refers to the provision of assistance or intervention during or immediately after a disaster to meet the life preservation and basic subsistence needs of those people affected. It can be of an immediate, short-term or protracted duration.

**RISK (or DISASTER RISK)** – The measure of potential harm from a hazard or threat. Risk is usually associated with the human inability to cope with a particular situation. In terms of disaster management it can be defined as the probability of harmful consequences, or expected losses death, injury, damage to property and the environment, jobs, disruption of economic activity or social systems. Hazards will affect communities differently in terms of ability and resources with which to cope. Poorer communities will be more at risk than others.

**RISK ANALYSIS** - The systematic use of information to identify risk sources and to estimate risk.

**RISK ASSESSMENT** - Assessment of the threat posed by any identified hazard

**SAFETY** - The state of being safe, free from danger or risks and the prPVAion of physical harm.

**SAFE ZONE** – refer to **OUTER PERIMETER**.

**SERVICE COMMAND POST (SCP)** – A special facility established on site to exercise operational command of a specific Emergency or other Service responding to an Incident Situation. It will liaise with its own Service's Tactical Management Centre, as well as the FCP / On-site JOC to ensure service integration, co-ordination and communication for response and relief activities (also refer to **UNIFIED COMMAND**).

**STANDARD OPERATING PROCEDURES (SOP's)** - A set of instructions having the force of a directive, covering those features of operations which lend themselves to a definite or standard procedure without loss of effectiveness.

**STEWARD** – An Official, including a marshal, appointed and directed in writing by a controlling body or PVA organizer for the purposes of supervising the following spectator arrangements at an PVA :-

- (a) the marshalling and over-seeing of the safe general flow of spectators;
  - (b) the provision of PVA information, including safety and security information, to spectators;
  - (c) the provision of ushering services;
  - (d) if circumstances dictate, the assistance with emergency evacuation procedures in respect of all persons within a stadium or venue and its precinct,
- but whose function shall specifically exclude the provision of a security service unless such an official is registered as a security officer.

**TEMPORARY STRUCTURE** - Structures usually found at PVAs includes but is not limited to stages, sets, barriers, fencing, tents and marquees, seating, lighting and special effect towers, platforms and masts, video screens, TV platforms and crane jibs, dance platforms, loudspeaker stacks, signage and advertising hoardings which are erected for the PVA and do not form part and do not form part of the permanent structure of the venue.

**THREAT** - The intention and capability of an adversary (i.e. people and nature) to undertake actions that would be detrimental to critical infrastructures – refer also to the **HAZARD** definition.

**TRAFFIC CONTROL POINTS** – Places along access or egress routes to / from the Incident Site and primarily used by emergency vehicles and / or places along evacuation routes that are manned by law enforcement officials to direct and control to and from the area being evacuated

**TRIAGE** – Means the medical sorting of casualties into treatment priority.

**UNIFIED COMMAND** - The system of managing the Incident on site so that joint decision-making and co-ordination is established between the responding Services / Organisations, while retaining that Services' / Organisations' internal command structure. During the 2010 FIFA World Cup PVA this will be achieved mainly through the relevant Venue Operations Centre (VOC), assisted by any FCPs (Forward Command Posts) / On-Site JOCs which may have been established at or closer to the scene, as applicable to the type of Incident occurrence.

**VEHICLE STAGING AREA(S)** – An area demarcated for all primary emergency vehicles of the responding Services' to assemble and deploy their vehicles on an organised basis.

**VENUE** - any area or place where an PVA is to be hosted, which may consist of seating for spectators, attendees and/or an audience and a field of play and/or a permanent or temporary podium or other recreational area, which has a safe seated and/or standing spectator, audience or PVA attendee capacity of at least 2 000 persons at any one time, as certified by a local authority;

**VENUE OPERATIONS CENTRE (VOC)** – The designated structure equipped with the necessary facilities, located in a suitable position at a particular Venue and established pro-actively to enable all relevant role-players / disciplines to jointly manage all safety & security-related aspects of any PVA, using the **UNIFIED COMMAND** system. During the Response Phase of any major incident at an PVA the VOC MAY be supplemented by an FCP (or On-Site JOC / ICP) if the situation so warrants.

**VULNERABILITY** – The degree to which people, property, the environment or social and economic activity - in short, all elements-at-risk - are susceptible to injury, loss of life, damage, disruption, exploitation or incapacitation by all hazards.

## **7. DISASTER RISK REDUCTION & PREPARATIONS**

### **7.1 HAZARD, RISK & VULNERABILITY ASSESSMENTS (HRAVA) FOR THE CKDM**

**NB:** The indicative risk profile is dynamic and can change depending on many variables, e.g. crowd profile, weather conditions, time of day, traffic conditions, spectator behaviour and the safety and security threat analysis.

**THE MAIN HAZARDS WHICH MAY HAVE A POTENTIAL DISASTER-RISK IMPACT ARE :- (List the custodian, funded and whether it is funded or not)**

- Drought
- Extreme Weather
- Floods
- Snowfalls
- Windstorms
- Disruption of Electricity Supply / Power Failure (sustained)
- Hooliganism / Civil Unrest / Rioting / Public Disorder
- Road Traffic Incident, incl. Road Transportation Disruption/Blockades/Traffic Congestion
- Structural Collapse
- Hazmat Incident or Chemical or Biological Agents' or Radio-active Materials' (CBR) Release)
- Fracking
- Uranium Mining
- Bombing / Explosion / Terrorism
- Fire – Structural or Effects of Pyrotechnics
- Aircraft Incident
- Rail Incident
- Disruption of Water Supply
- Disruption of Sanitation & Stormwater Systems
- Disruption of Solid Waste Removal Services
- Epidemic / Major Infectious Disease Outbreak, incl. Food Safety issues
- Environmental Pollution – Ground / Air / Water
- Bomb Threat / Hostage-taking
- Disruption of Commercial or Governmental Activities.

## 8. DISASTER-RISK PROFILE QUANTIFICATION TABLES - ASSESSMENT & VULNERABILITY FOR EACH HAZARD

THE MAIN HAZARDS WHICH MAY HAVE A POTENTIAL DISASTER-RISK IMPACT AREA

**NOTE :** The hazard, risk and vulnerability assessments which have been conducted are generalised and specific / specialised risk assessment are the responsibility of the various Line Function departments for their respective functions, i.e. fire will still be required to conduct an extensive fire plan and fire suppression risk assessment, SAPS will still be required to have continuous access to stakeholders responsible for the PVA and/or aspect-specific threat analysis, etc.

### 8.1

#### **DISASTER-RISK PROFILE QUANTIFICATION REFERENCES USED :-**

<b>RATING ►</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Probability</b>	very unlikely	unlikely	possible	likely	very likely
<b>Potential Impact / Severity *</b>  (* this will also incorporate its <u>manageability</u> using available resources)	minor	appreciable	major	severe	catastrophic

#### **RESULTANT DISASTER-RISK PROFILE RATING (SCORE) ACHIEVED FOR A HAZARD :-**

<b>HIGH</b>	<b>&gt; 10</b>
<b>MODERATE</b>	<b>6 - 9</b>
<b>LOW</b>	<b>&lt; 5</b>

- refer to the HRAVA Tables overleaf .....

## **8.2 COMBINED DISASTER-RISK PROFILE QUANTIFICATION - ASSESSMENT & VULNERABILITY FOR EACH HAZARD**

**- INITIAL HRAVA, CONDUCTED PRIOR TO ANY SPECIAL RISK REDUCTION EFFORTS BEING UNDERTAKEN.**



[illegible]

HAZARD	LEAD DISCIPLINE(S)	Probability Rating	Potential Impact Rating	RISK RATING	VULNERABLE AREA(S) / POPULATION(S)
Disruption of Water Supply	All Mun. Engineering- Water & Sanitation Services	2	3	5	All Towns
Disruption of Sanitation & Stormwater Systems	All Mun. Engineering- Water & Sanitation Services	2	3	5	All Towns
Disruption of Solid Waste Removal Services	All Mun., CKDM Environm Health	2	3	5	All Towns
Epidemic / Major Infectious Disease Outbreak, incl. Food Safety issues	PG:WC Health Dept. + CKDM Environmental Health EMS Health Services, Disaster M	2	3	5	All areas
Environmental Pollution - Ground / Air / Water	All Mun., CKDM Environm Health	1	2	3	All areas
Bomb Threat / Hostage-taking	SAPS	2	3	5	All popular venues and areas
Disruption of Commercial or Governmental Activities, incl. Strike Action by personnel	* Lead Discipline(s) dependant on origin & nature of disruption	2	2	4	All Towns

HAZARD	LEAD DISCIPLINE(S)	Probability Rating	Potential Impact Rating	RISK RATING	VULNERABLE AREA(S) / POPULATION(S)
Floods	All Municipalities; Disaster management; Agriculture; SANRAL; SAPS; EMS; Prov./Mun. Traffic; Dept. Aducation.	3	4	7	Towns (Communities) ; Schools; Transport Systems- N1, N12, R61; Agricultural community.
Snowfalls	All Municipalities; Disaster management; Agriculture; SANRAL; SAPS; EMS; Prov./Mun. Traffic; Dept. Aducation.	3	2	5	Towns (Communities) ; Schools; Transport Systems- N1, N12, R61; Agricultural community.
Windstorms	All Municipalities; Disaster management; Agriculture; SANRAL; SAPS; EMS; Prov./Mun. Traffic; Dept. Aducation.	3	3	6	Towns (Communities) ; Schools; Transport Systems- N1, N12, R61; Agricultural community.

## **9. REDUCING AND THE MITIGATION OF DISASTER RISK**

The main requirements for disaster risk reduction are :-

- Hazard / threat identification and determining levels of disaster risk, vulnerabilities and capacity to cope / manageability, should the hazard occur - refer to Para. 9.
- Promote implementation of appropriate and effective mitigation methodologies.
- Monitor, measure performance and evaluate development plans i.r.o. risk reduction initiatives
- Promote formal and informal initiatives that encourage risk avoidance behaviour.
- Ensure compliance with all relevant Safety and Security Statutory requirements.
- Reviewing current structural protection programmes.
- Increase the capacity of stakeholders / role-players to minimise the risk and impact of emergencies and disasters.
- Promote the requirements of the Municipal Disaster Management Plan.
- Ensure community awareness of the 10177 and any other vital emergency numbers.

### **9.1 HAZARD AND DISASTER-RISK REDUCTION ACTIVITIES TO BE UNDERTAKEN**

#### **GENERAL DISASTER-RISK REDUCTION ACTIVITIES WHICH ARE TO BE UNDERTAKEN IN CENTRAL KAROO AND INVOLVING ALL ROLE-PLAYERS**

- Identification of Lead Disciplines and Supporting Disciplines for each identified hazard which has a level of disaster-risk.
- Risk-reduction methods incorporated into the integrated project planning activities by ALL ROLE-PLAYERS.
- Regular Project reviews i.r.o. of the validity of risk reduction initiatives;
- Staff training to include risk reduction and response requirements;
- Preparedness initiatives to include adequate capacity elements comprising of sufficient and trained staff, that there is an excess of minimum of the required standard of equipment available, that the sourcing of supplementary resources has been identified, contingency planning, etc.;
- Establishment, equipping and staffing at each of the of the necessary Joint Operations Centres (JOCs)(for tactical & strategic co-ordination) at the Regional and Provincial Levels and liaison with the National Level,
- Establishment, equipping and staffing Venue Operations Centres (VOCs) (for pro-active and re-active operational co-ordination) as well as providing for the rapid establishment of any Forward Command Posts (FCPs), where necessary.

- The production of the necessary disaster-risk management plans and related Standard Operating Procedures (SOP's) by each Lead Discipline and Supporting Discipline for all identified hazards and support to the drafting of the specific Venue Safety & Security and DM Plan to ensure continuous communication, integration and co-ordination between all the Disciplines involved at each location;
- Regular exercising of crucial aspects of the various DRM and Safety & Security Plans and Procedures which have been developed;
- Regular inter-disciplinary strategic and tactical planning and communication to ensure overall preparedness and response readiness;
- Awareness & preparedness i.r.o. disaster risks and their roles, both pro-actively and re-actively, of the surrounding communities.

## 10. EMERGENCY RESPONSE STRATEGY

### 10.1 Summary of the emergency response strategy.

- Development of the Strategic Disaster Risk Management Plan and Safety & Security Plans for the whole area of CKDM, as well as the special Venue DRM Plans and other contingency plans, as identified – these Plans will be integrated into the CKDM Municipal Disaster Management Plan to ensure a “seamless” response to all Incidents occurring in CKDM.
- Ensure implementation of all line function Disciplines’ Emergency Response Plans and SOPs;
- Recruitment and training of supplementary staff by all Disciplines, including volunteers for identified functions;
- Testing and training through desktop and physical exercises of the Disaster Response and Relief Plans;
- Installation and testing of adequate inter-agency communications systems and the equipping of Control Centre and staff to allow for tactical and operational communications;
- Activation of the of the CKDM Joint Operations Centre and the Provincial Safety & Security JOC (ProvJOC), with representation of by all Role-players at the strategic level, allowing for continuous monitoring of the prevailing situation and for immediate facilitation of adequate response to any major incident and for resource supplementation as required.

### 10.2 Considering an evacuation requirement of any Incident Area

Emergency responses to many of the hazards which have been identified as having a possible disaster risk, will differ and the respective.

What any response to these hazard occurrences may have in common is the possible requirement for either a partial or full evacuation of the area which has been, or which might still be, affected by hazard (called the Incident Site).

To assist with decision-making i.r.o. emergency evacuation which may be considered will outline the ***Emergency Evacuation Procedure*** to guide the decision-makers and operational personnel in the safe execution of this task.

## **10.3 EMERGENCY EVACUATION OF A DISASTER AREA PROCEDURE**

### **2. DISASTER RISK MANAGEMENT CENTRE STAFF RESPONSIBILITIES**

The Head of Disaster Risk Management Centre is responsible for the provision of an integrated and co-ordinated emergency response to a disaster or a possible threatening disaster within the Municipal area of jurisdiction, irrespective of whether a local state of disaster has been declared or not. He should ensure that all the necessary management structures must be activated so that efficient incident management can take place at the operational, tactical and strategic levels, as contained in the CKDM Municipal Disaster Management Plan

The DMC, through the Disaster Operations Centre (DOC) and the Disaster Co-ordination Team, will support the Incident Commander at an established FCP / On-site JOC and / or the Commander of any VOC that has been established for a Venue, by providing strategic direction, alerting any additional role-players that may be of assistance, initiating the implementation of any contingency plans and procedures that may be applicable according to the prevailing circumstances and any other requirements relating to the specific Incident.

It is the responsibility of the Disaster Risk Management staff who have been assigned duty at any multi-disciplinary incident response site or at the special VOC, to promote an integrated and co-ordinated approach to the management of the Incident, with special emphasis on mitigating the impact or consequences of the hazard by further loss of life, injury, trauma on individuals and the saving of community assets.

### **3. THE FORWARD COMMAND POST (FCP) / ON-SITE JOINT OPERATIONS CENTRE (ON-SITE JOC)**

Once a major Incident has occurred and for co-ordination and incident management to be affective, especially where an evacuation of the local area is imminent or if the threat is of such a nature that an evacuation will or must take place in the short-term, a fully manned FCP / On-site JOC) must be activated with representation of all responding disciplines and an Incident Management Team established under the leadership of the Incident Commander (chosen from the Lead Discipline on the scene) and a system of Unified Command needs to be followed. The FCP / On-site JOC will function from either a vehicle designed for the purpose or a suitable fixed structure on-site or near to the scene of the Incident, located in a safe area. Communication channels must be established with all relevant structures established to assist in the overall management of the Incident, i.e representation of these Disciplines at the tactical and strategic management levels = service control centres and any VOCs and JOCs which have jurisdiction over the area.

Standard Operating Procedures (SOPs), stipulating the individual responsibilities of the Disciplines which will have an input to any evacuation decisions, either on-site or off-site, must be developed. These Disciplines are :-

- Beauf Mun Fire Services
- SAPS
- Mun Traffic Services
- Prov. Traffic
- Disaster Management
- Agriculture Dept./Org.
- SANRAL
- PG:WC Emergency Medical Services (EMS)

- Contracted Private Security Services
- Other Essential Services, as applicable - Electricity, Water & Sanitation, Roads & Stormwater, Solid Waste Management, Building Control; etc.
- Other Support Services involved, i.e. Trauma Services, Animal Protection Services, Venue Operators, Organisers, etc.

#### 4. PUBLIC NOTIFICATION

- 4.1 The Incident Commander and the Incident Management Team must ensure that the **appropriate announcement is made. The warning and / or evacuation announcement message must be short and to the point and emphasising the danger without causing undue panic.** The appropriate Service(s) which have the necessary capability and authority, i.e. the Fire and Rescue Service, SAPS, Traffic Services Units should be used. Mobile public address systems, sirens, house to house notification, telephones or even radio/TV can be used, bearing in mind the possible panic which might ensue immediately after the notification. Emergency Medical Services (EMS) should be available to assist throughout the evacuation operation, as medical emergencies may occur.
- 4.2 The safest and most effective **evacuation routes** must be determined, i.e. **those which are the shortest and quickest out of the area without affecting the routes being utilised by the emergency/essential services into and out of the area.**
- 4.3 In a Disaster or Major Emergency, the **activation of the Disaster Co-ordination Team (DCT) in the Disaster Operations Centre (DOC)**, so that high-level and strategic direction can be provided, **may** be considered. Regular feedback would then be required to the DCT in order to effect adequate management of the Situation as envisaged by Disaster Management Legislation, i.e. the declaration of a Local State of Disaster, authorisation for the obtaining of additional emergency resources (including commandeering), the establishment of Mass Care Centres / Emergency Shelters, etc., as required by the severity and extent of the Incident.

#### 5. IMPLEMENTATION OF EVACUATION

##### 5.1 RESIDENTS / LOCAL POPULATION WITH OWN TRANSPORTATION

- a) All residents / local population who are able, should evacuate themselves to the identified assembly areas or to the location of their own choice safely outside the Incident area. Evacuees should be requested to assist other residents if they have the means to do so. Evacuees should be continuously informed of the locations of the assembly areas / emergency shelters and any pertinent details of the ongoing emergency situation.
- b) Family members whose homes are in an evacuation area and who are not at home at the time of the evacuation should proceed to the assembly areas without going home to their families.
- c) Family members who insist on going into an evacuation area to assist their families may be allowed to do so if this can be done safely. However, this is to be discouraged because of the out-flux of evacuation traffic.
- d) If the emergency is fast developing, children who are in local schools



should be taken to the assembly areas by the school authorities on the school buses or on other transport provided. If the emergency is not fast developing, parents will be instructed, over the public address system to pick up their children from the schools and then evacuate the area as soon as possible. Teachers will maintain control of children until parents arrive. Children should not be allowed to proceed home without adult supervision.

## **6. MONITORING OF THE EVACUATION PROCESS**

- 6.1 After the initial notification of the evacuation, the SAPS, Traffic Services, Fire & Rescue Service, or any other designated officials should patrol the affected areas (in protective clothing, adequate vehicles, etc.) if this is safe and feasible to do so. Physical inspection of all premises should be undertaken, if possible. Any adult who refuses to evacuate will be allowed to remain at his / her own risk.
- 6.2 The SAPS, Traffic Services, Fire & Rescue Service, SANDF or any other Disciplines involved with the Incident are to provide regular reports to the FCP / On-site JOC or VOC or to their own Service Control Centres so that actions can be co-ordinated. The FCP / On-site JOC and applicable VOC will liaise with the ProvJOC and the Disaster Co-ordination Team in the DOC / CKDM JOC, if the DCT has been activated for this particular Emergency or Disaster situation.

## **7. SECURITY OF EVACUATED AREA**

The SAPS, Traffic Services, if required, will ensure that the Incident Area is cordoned off effectively and that security of the premises of the evacuees is assured until the notice is given for the return of the evacuees.

# 11.

## DISASTER RESPONSE ACTIONS SUMMARY

### DMP 1

### ROAD/RAIL/AVIATION TRAFFIC INCIDENT

ACTIONS	Role-Players	OTHER ORGANISATIONS
Initial Report of Road Traffic Incident to all Role-players	SAPS, EMS + Rescue. Prov.Traffic;	Mun.Fire ; Disaster M, SANRAL (if Incident is on a National Road);
Fire-Fighting / Search / Rescues/ Triage / Treatment of injured, as applicable	SAPS, EMS + Rescue. Prov.Traffic;	Mun.Fire ; Disaster M, SANRAL (if Incident is on a National Road);
Evacuation / Transportation of injured / Access / Egress route selection, incl. Helicopter usage - as required	SAPS, EMS + Rescue. Prov.Traffic;	Mun.Fire ; Disaster M, SANRAL (if Incident is on a National Road);
Establishment of On-site JOC (FCP) with Cordons set-up & appropriate Traffic / Crowd control in place a.s.a.p.	SAPS, EMS + Rescue. Prov.Traffic;	Mun.Fire ; Disaster M, SANRAL (if Incident is on a National Road);
Activation of Disaster Co- ordinating Team (DCT) in the DOC, as required by the Situation	Head DRMC; DOC; DRMC Support Staff; Fire & Rescue; Other CKDM Services, as required	SAPS; EMS; PG:WC Traffic; SANRAL; Others, as required
Clearance of debris / Removal of wrecked vehicles, etc.	SANRAL, SAPS, EMS + Rescue. Prov.Traffic;	Towing & other Private Contractors, as required
Control of Toxic leaks – as applicable (Refer also DMP 2 = HAZMAT Plan)	DRM, Fire & Rescue; HAZMAT Team; Health; SANRAL	SAPS; Private Contractors, as required
Isolation of any affected Electricity supply / Emergency lighting, as required by the Incident	Electricity; DRMC Staff.	ESKOM; Private Contractors, as req.
Public Information / Media liaison, incl. alternative commuter transport requirements	Head DRMC; DRMC Staff; Traffic; Communications	SAPS; PG:WC Traffic; SANRAL; SABC / Media
Emergency Shelter & Survivors' Welfare, as required by the Situation	DOC; DRMC Staff; Housing; Sport & Recreation; MPD; Law Enf. & Security; Health	SAPS; Dis. Relief NGO's; Trauma Centre; PG:WC & Govt. Depts;
Repairing of other damage – Roads / Bridges / Structures / Cabling, etc.	SANRAL, Others, as required	PG:WC; Private Contractors, as applicable

## **DMP 2 INCIDENT AT STADIUMS AND OTHER VENUES**

<b>ACTIONS</b>	<b>Role-Players</b>	<b>OTHER ORGANISATIONS</b>
Notification of Incident, i.e. Fire, Bomb Explosion, Crowd Surge, Hazmat, etc. by the Responsible Authority or VOC to the relevant Emergency Service(s) as per Stadium / PVA Emergency Plan	SAPS; Fire; EMS-Rescue; Traffic; Law Enf. & Security (for CKDM asset); DRMC-DOC; DRMC Staff; Sport & Recreation; Communications; Others, as required.	Own Emergency Organisation as per Emergency Plan; PG:WC EMS; Others, as required
Fire Fighting / Search / Rescues / Triage / Treatment and Evacuation of Casualties from affected areas	Fire; EMS Rescue; Traffic; Law Enf. & Security.	Own Emergency Organisation as per Emergency Plan; PG:WC EMS; Others, as required Hospitals; EMS & First Aid Soc; Helicopters, as applicable
Evacuation of affected persons - public notification, as required	EMS; DRMC Staff; Fire & Rescue; Traffic; VOC Reps; Sport & Recreation; Others, as required	Own Emergency Organisation as per Emergency Plan; PG:WC EMS; Others, as required Hospitals; EMS & First Aid Soc; Helicopters, as applicable
Est. of On-site JOC or full activation of already established VOC, as applicable	SAPS; Fire; EMS Rescue; DRMC Traffic; Law Enforcement & Security; Sport & Rec.; plus ALL other CKDM Services involved	Own Emergency Organisation as per Emergency Plan; PG:WC EMS; Others, as required Hospitals; EMS & First Aid Soc; Helicopters, as applicable
Cordons / Road Blocks / Access & Egress Routes	SAPS; Traffic; Law Enforcement & Security (for CKDM asset), as required	SAPS to order others, as required
Safety of building structure	Building Dev. Mgt; Fire & Rescue	Private Orgs, as required
Clean-up of Debris	B/West Mun.- Roads & Stormwater; Building Dev. Sport & Recreation	Private Orgs, as required
Repair damage to roads / sidewalks, etc, as required	Mun. -Roads & Stormwater; Water & Sanitation; Electricity; Others, as required	Private Orgs, as required

## DISASTER RESPONSE ACTIONS SUMMARY

### **DMP 3**

### **HOOLIGANISM / CIVIL UNREST / RIOTING / PUBLIC DISORDER / XENOPHOBIA**

<b>ACTIONS</b>	<b>Role-Players</b>	<b>OTHER ORGS</b>
Initial report of Civil Unrest / Rioting (SAPS & MPD are the lead Disciplines)	SAPS; Event Manager.	Others, as required by SAPS
Alerting / Mobilisation of various Police & Security Response Services (All Key Personnel involved)	SAPS, Event M.; DRMC-DOC; Mgr: DRMC & DRMC	SAPS; SANDF; PG:WC EMS; Hospitals;
Est. of on-site JOC, if possible or practical by SAPS	SAPS, Event M.; DRMC-DOC; Mgr: DRMC & DRMC	SAPS; PG:WC EMS; Others, as required
Public Notification and the immediate evacuation of the area	MPD; Traffic; DRMC staff	SAPS; PG:WC EMS; Others, as required
Activation of Disaster Co-ordinating Team (DCT) in the DOC, as required by the Situation	Event Manager; DRMC; DOC; DRMC Support Staff; Fire & Rescue; MPD; Traffic; Communications; 107 PECC; plus others, as required	SAPS; PG:WC EMS; Others, as required
Cordons / Road Blocks / Access & Egress Routes	SAPS; Event Manager; Traffic; Law Enf. & Security, as required	SAPS; Others, as required
If rioting / unrest is not contained, strive to minimize looting, damage, injuries & fatalities as much as possible	SAPS; Event Manager. Traffic; Law Enforcement & Security (for CKDM assets), as required	SAPS; PG:WC EMS; Others, as required
Obtain damage / casualty assessments and treat accordingly	Event Manager; Mun. B/W; Traffic; Law Enf. & Security; DRMC staff	SAPS; PG:WC EMS; SANDF; Others, as required
Safety of building structure	Mun. Building Dev. Mgt; Fire & Rescue	Private Orgs, as required
Clean-up of Debris	Mun. Solid Waste; Roads & Stormwater; Buildings & Maint.; Sport & Recreation	Private Orgs, as required
Repair damage to roads / sidewalks, Buildings, Infrastructure, etc, as required	Mun. Roads & Stormwater; Water & Sanitation; Electricity; Others, as required	Private Orgs, as required

## DISASTER RESPONSE ACTIONS SUMMARY

### **DMP 4**

### **DISRUPTION OF ELECTRICITY SUPPLY**

<b>ACTIONS</b>	<b>Role-Players</b>	<b>OTHER ORGS</b>
Notification to all relevant Role-players, as applicable (CKDM Electricity, with ESKOM, are the lead Disciplines)	Mun. Communications; Water & Sanitation; Roads & Stormwater; Fire & Rescue; Health; plus others, as required	ESKOM; SAPS; DRM; PG:WC DMC; Others, as required
Activation of Disaster Co-ordinating Team (DCT) in the DOC, as required by the Situation	DMC; DOC; DRMC Support Staff; Electricity; Fire & Rescue; Traffic; Law Enf. & Security; Communications; plus others, as required	ESKOM; SAPS; PG:WC EMS; PG:WC DMC; Others, as required
Arrangements for repairs / alternative power supplies a.s.a.p.	Mun. Electricity; plus other affected Disciplines, as required by Situation	ESKOM; DMC; SAPS; Private Contractors; Others, as required by Situation
Public Information i.r.o. estimated duration of outage / alternative arrangements / Road & Rail Traffic situation reports, etc. (Refer to detailed Plan for full procedure description)	Mun. Electricity; DRMC & DRMC Staff; Communications; Traffic; MPD; Law Enf. & Security; Mun. Water & Sanitation;; Roads & Stormwater: Fire & Rescue; Health; plus others, as required	ESKOM; DMC; SABC / Media; Others, as required

## DISASTER RESPONSE ACTIONS SUMMARY

### DMP 5

### DISRUPTION OF WATER SUPPLY

ACTIONS	Role-Players	OTHER ORGS
Notification to all relevant Role-players, as applicable (CKDM Water & Sanitation Directorate, together with DWAF, are the lead Disciplines)	Mun. Water & Sanitation; TOC; DRMC-DOC; DRMC & DRMC Staff; Fire & Rescue; Communications; Electricity; Roads & Stormwater; Health; plus others, as required by the Situation	DWAF; ESKOM; SAPS; PG:WC EMS; PG:WC DMC; Others, as required
Activation of Disaster Co-ordinating Team (DCT) in the DOC, as required by the Situation	Event M; DRMC; DOC; DRMC Support Staff; Fire & Rescue; Mun Traffic; Water & Sanitation; Communications; plus others, as required by the Situation	SAPS; PG:WC EMS; PG:WC DMC; Others, as required
Arrangements for repairs / alternative water supplies a.s.a.p.	Mun. Water & Sanitation; Electricity; Roads & Stormwater: plus other affected Disciplines, as required by the Situation	DWAF; CKDM DMC; SAPS; Private Contractors; Others, as required by Situation
Public Information i.r.o. estimated duration of outage, alternative arrangements, effect on Fire & Rescue services, etc. (Refer to detailed Plan for full procedure description)	Mun. Water & Sanitation; DRMC & DRMC Staff; Communications; Fire & Rescue; Roads & Stormwater: Electricity; Health; plus others, as required by the Situation	ESKOM; DMC; SABC / Media; Others, as required
Monitoring of potential health hazards caused by a prolonged water supply failure until restoration of normal Supply, i.e. sewerage & other sanitation systems may be inoperative, business implications, food hygiene issues, etc. <b>&amp; possible other major CONSEQUENTIAL Hazards that may result</b>	Health; Mun. Electricity; Traffic; MPD; Water & Sanitation; Transport, Roads & Stormwater; Solid Waste Mgt; Fire & Rescue; Plus others, as required by the Situation	Dept of Health; DEAT; Others, as required

## DISASTER RESPONSE ACTIONS SUMMARY

### DMP 6

### DROUGHT

ACTIONS	Role-Players	OTHER ORGANISATIONS
Initial Report by role-players around the drought situation through the Drought Committee as part of the Advisory Forum.	Agri, Disaster Management, Municipalities; Social Development	Environmental health; Tourism. Others, as required.
Implementation of water restrictions by water delivering authority.	Municipal Town Engineer & Officials, Disaster Management, Environmental Health;	Taxpayers associations
Financial and fodder support to farmers.	Agri Western Cape, Farmers Associations, Disaster Management	Social Development;
Monitoring of situation by Drought Committee.	DWA, Prov. and District Disaster Management.	Dept of Health; DEAT; Mun. Electricity, Water & Sanitation; Stormwater; Solid Waste, Environmental health; Tourism. Others, as required

## DISASTER RESPONSE ACTIONS SUMMARY

### DMP 7

### Extreme Weather/Floods/Snowfalls/Windstorms

ACTIONS	Role-Players	OTHER ORGANISATIONS
Initial Report of Incident by any Role-players	SAPS, EMS + Rescue. Prov. Traffic; Agri, Disaster Management, Municipalities;	Mun. Fire; SANRAL (if Incident is on a National Road);
Activation of Disaster Co-ordinating Team (DCT) in the DOC, as required by the Situation	SAPS, EMS + Rescue. Prov. Traffic; Agri, Disaster Management, Municipalities; SANRAL	Mun. Fire
Evacuation / Transportation of injured / Access / Egress route selection, incl. Helicopter usage - as required	SAPS, EMS + Rescue. Prov. Traffic; Agri, Disaster Management, Municipalities;	Mun. Fire
Establishment of On-site JOC (FCP) with Cordons set-up & appropriate Traffic / Crowd control in place a.s.a.p.	SAPS, EMS + Rescue. Prov. Traffic;	Mun. Fire ; Disaster M, SANRAL (if Incident is on a National Road);
Public Information / Media liaison, incl. alternative commuter transport requirements	Head DRMC; DRMC Staff; Traffic; Communications	SAPS; PG:WC Traffic; SANRAL; SABC / Media
Emergency Shelter & Survivors' Welfare, as required by the Situation	DOC; DRMC Staff; Housing; Sport & Recreation; MPD; Law Enf. & Security; Health	SAPS; Dis. Relief NGO's; Trauma Centre; PG:WC & Govt. Depts;
Repairing of other damage – Roads / Bridges / Structures / Cabling, etc.	SANRAL, Others, as required	PG:WC; Private Contractors, as applicable

## **12. (AFTER DISASTER) RELIEF AND REHABILITATION MEASURES**

### **POST DISASTER RECOVERY**

- Assessment of extent of situation and planning for recovery;
- Financial provision (emergency relief funding identified);
- Declaration of local state of disaster through the Disaster Management Act, 57 of 2002, as required, for access to additional Provincial and National Funding and other resources needed;
- Application of the necessary resources to restore the situation and / or venue as soon as possible so that the PVA may resume.



# ANNEXURE G

## **2<sup>nd</sup> Generation**

# **Integrated Waste Management Plan (IWMP)**

**Prepared for**



## **CENTRAL KAROO DISTRICT MUNICIPALITY**

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By

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**March 2015**

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## **1. INTRODUCTION AND GENERAL DESCRIPTION**

### **1.1 INTRODUCTION**

The Central Karoo District Municipality (CKDM) is not responsible for the provision of a refuse removal service but provides assistance to Local Municipalities with respect to capacity building, monitoring and general support as required in terms of Section 84 (1) of the Municipal Structures Amendment Act (Act No. 33 of 2000). The District can take over the function of providing integrated waste management services in cases where Local Municipalities are unable to. In cases where a Regional Waste Management Facility (Regional WMF) is constructed the District should be responsible for the management of the Regional WMF.

The District is rendering an effective and equitable Municipal Health Service (MHS) since July 2004, as contemplated in Section 32(1) of the National Health Act (Act 61 of 2003). The MHS is responsible for the identification, evaluation, control and prevention of those factors that can be detrimental to people's health and well-being. The National Health Act defines "waste management and monitoring" as one of the key performance areas for the MHS section. This function is being rendered, within MHS's scope of practice, throughout the District.

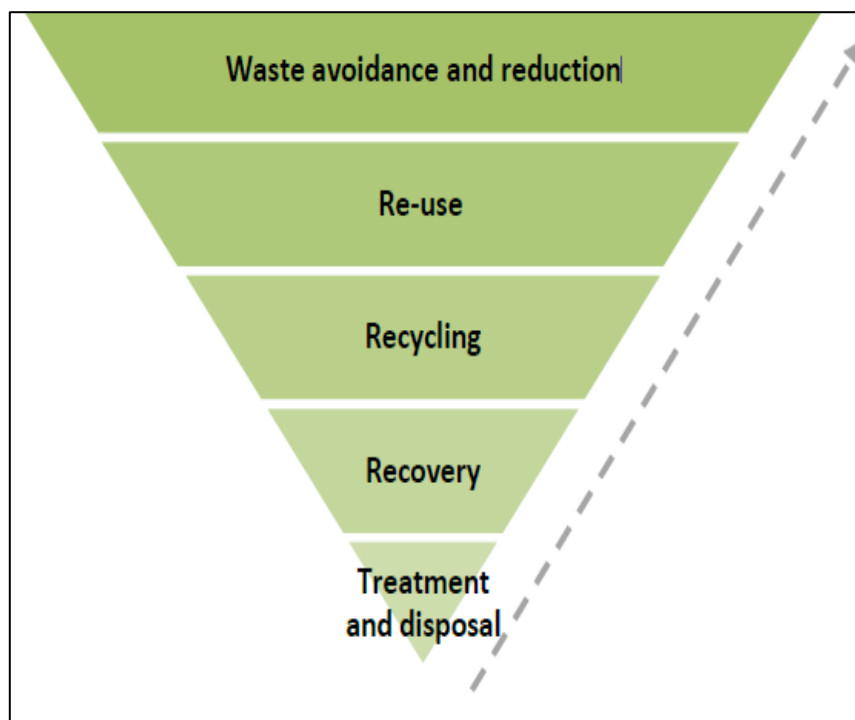
The CKDM drafted the first generation Integrated Waste Management Plan (IWMP) in 2005 and the Department of Environmental Affairs and Development Planning (DEADP) assessed the IWMP and provided recommendations which were dealt with in the following manner –

- The District Municipality was recommended to compile a generic set of By-laws, however DEADP will draft a model Integrated Waste Management By-law which Local Municipalities can adopt or adjust accordingly to suit their specific waste management needs.
- The District Municipality was also recommended to chair quarterly waste management information-sharing workshops with Local Municipalities. However, the District Municipality has decided to chair quarterly Environmental Management Forum meetings which will include, amongst other environmental issues, the sharing of waste-related information between the Local Municipalities.
- A formal mechanism will be developed to monitor the implementation of IWMPs by Local Municipalities.
- The implications of the Draft Spatial Development Framework (Draft SDF, June 2013) will be used as a guideline towards steering sustainable growth and development within the District.

- The MHS section of the CKDM educates communities on issues regarding waste management and pollution control. The section's awareness campaigns aim to encourage people to adopt more responsible attitudes towards waste and to deal with it in a more sustainable manner.
- Local Municipalities within the CKDM have limited resources to ensure that all areas prone to illegal dumping are kept clean at all times. The District will have to come up with innovative ways to involve other stakeholders (schools and businesses) to assist with the clean-up of the communities.
- Environmental Health Practitioners (EHPs) from the MHS section conduct inspections on a monthly basis at landfill sites and medical institutions. Compliance notices are issued when necessary in cases of non-compliance and follow up inspections are conducted in order to rectify matters relating to waste management.
- Bi-annual Evaluation Reports are sent to Local Municipalities within the District and these aim to -
  - serve as a source of information to the relevant Municipality;
  - eliminate any conditions harmful or injurious to human health; and
  - promote effective solid waste management.

The CKDM will facilitate record-keeping of quantities of waste generated, diverted and disposed of within the District.

Municipalities are required in terms of Section 11(4) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) ("Waste Act") to submit IWMPs to the Member of the Executive Council (MEC). The promulgation of the Waste Act on 1 July 2009 was a key milestone in the transformation of waste legislation and in improving waste management practices to include all aspects of the waste management hierarchical approach which is addressed further in the National Waste Management Strategy (NWMS, 2011) (**Figure 1**). This approach focuses mostly on the prevention and minimisation of waste generation through sustainable practices as well as ensuring the minimal disposal of waste on landfills.

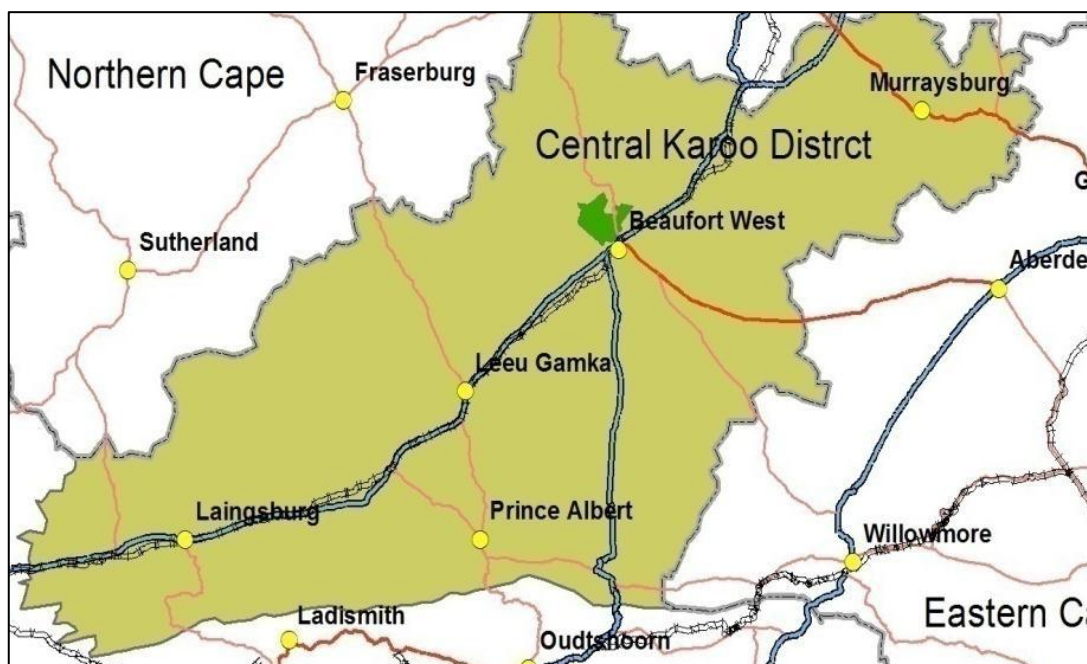


**Figure1: The Waste Management Hierarchy, NWMS (2011)**

## **1.2 GENERAL DESCRIPTION**

The CKDM is situated in the North Eastern part of the Western Cape province, bordering the Northern Cape on the west and the Eastern Cape on the east (**Figure 2**). CKDM comprises the Local Municipalities of Beaufort West, Prince Albert and Laingsburg (**Table 1**). The area is mainly characterised by residential and agricultural land. There are no major industrial land uses within its boundaries. The residential areas vary from the larger towns of Beaufort West and Laingsburg to rural towns, smallholdings and farms. Two major National Roads in the form of the N1 and the N12 traverses the Municipality.

<b>Table 1: Local Municipalities within the Central Karoo District Municipality</b>	
Local Municipality	Towns
Beaufort West	Beaufort West; Merweville; Murraysburg and Nelspoort
Laingsburg	Laingsburg; Matjiesfontein and Vleiland
Prince Albert	Prince Albert; Leeu Gamka and Klaarstroom



**Figure 2: Central Karoo District Municipality (CKDM IDP, 2013-14)**

**Table 2** below depicts the population size of the five districts within the Western Cape Province and provides an indication of the demand for service delivery. According to Census 2011 results, the population of the province grew at 28.7% since the 2001 Census. The highest population growth was recorded in the West Coast District Municipality at 38.6% and the lowest population growth was recorded in the CKDM at 17.4%.

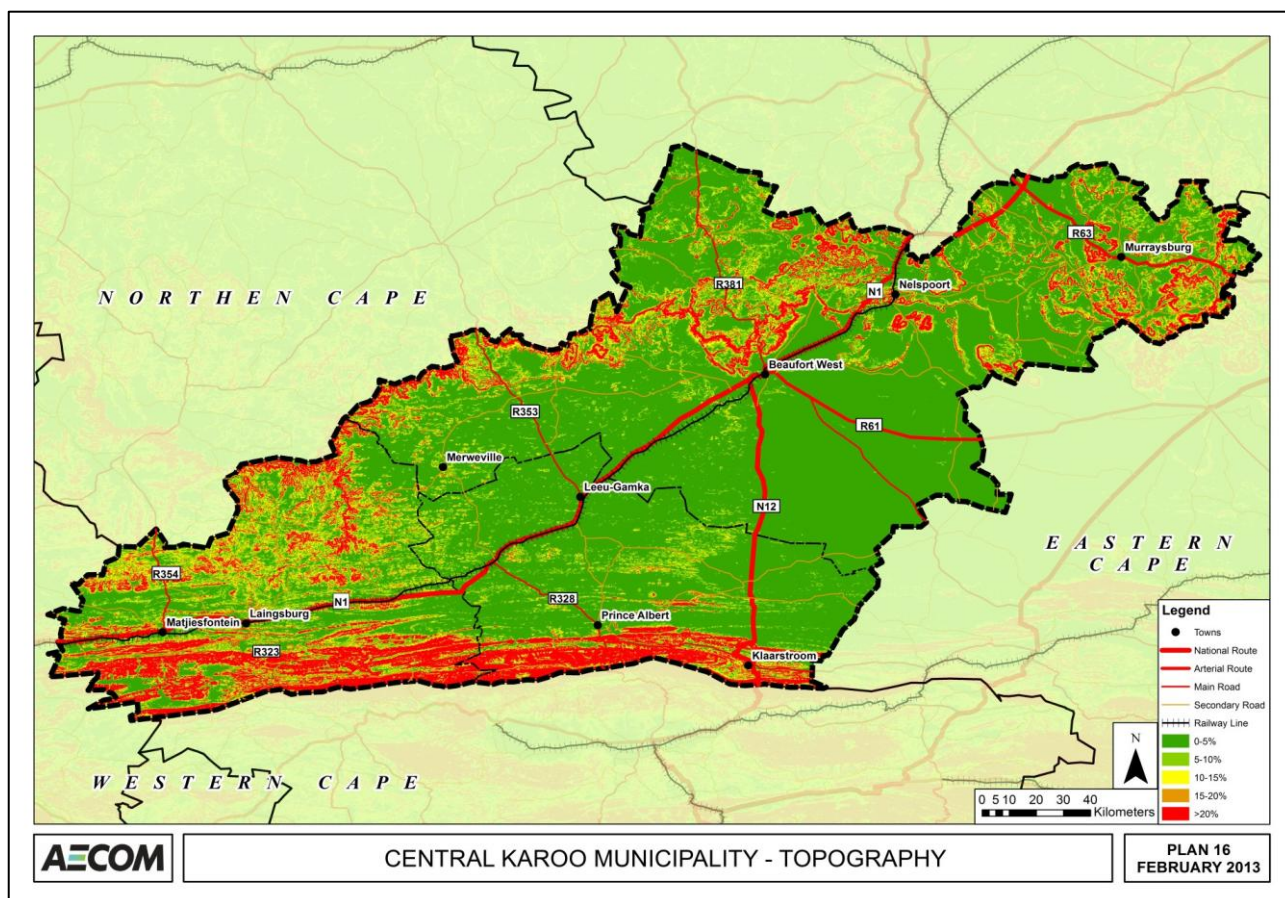
<b>Table 2: Western Cape Province Population numbers and projections</b>				
<b>District Municipality</b>	<b>Stats SA 2001 Census</b>	<b>Stats SA 2011 Census</b>	<b>Percentage population growth</b>	<b>Average annual growth rate</b>
<b>City of Cape Town</b>	2 893 247	3 740 026	29.3%	2.6%
<b>West Coast</b>	282 673	391 766	38.6%	3.3%
<b>Cape Winelands</b>	629 490	787 490	25.1%	2.3%
<b>Overberg</b>	203 520	258 176	26.9%	2.4%
<b>Eden</b>	454 919	547 265	26.2%	2.4%
<b>Central Karoo</b>	60 482	71 011	17.4%	1.6%
<b>Western Cape</b>	<b>4 524 331</b>	<b>5 822 734</b>	<b>28.7%</b>	<b>2.6%</b>

The CKDM has a population of 71 011 (Census 2011) and is the smallest of the five districts within the Western Cape province. However, geographically it is the largest District in the province with a land area of approximately 38 853km<sup>2</sup>. The distance between Laingsburg and Beaufort West is approximately 200km. The distance between Beaufort West and Prince Albert is approximately

170km. **Table 1** below depicts the major towns and their surrounding settlements within the municipality.

### **Topography and Slopes**

The majority of the District consists of gently undulating plains with several mountain ranges that provide a dramatic contrast to the plains. The Swartberg mountain range is located in the south of the District and provides a natural barrier between the interior and the Southern Cape coast. This range is one of the longest in South Africa and spans some 230km from Laingsburg in the west to Willowmore and Uniondale in the east. The highest peak within the range is the Seweweekspoort at 2,325m above annual mean sea level (MSL). This range of mountains comprises predominantly of the Table Mountain group with sand stone strata and rock formations. The Swartberg pass was built between 1881 and 1888 and subsequently two other passes have been constructed, namely the Meiringspoort and Seweweekspoort. The Nuweveld mountain range to the north of Beaufort West ranges between 825 to 1,911m. The Toorberg mountain range to the south of Murraysburg forms part of the Sneeuberg range which divides Central Karoo and the Eastern Cape. The peak is 2,400 metres above annual MSL. The Toorberg mountain range is known for its many watercourses, fed from annual winter snowfalls. **Figure 3** below depicts the topography of the CKDM (Draft SDF, June 2013).



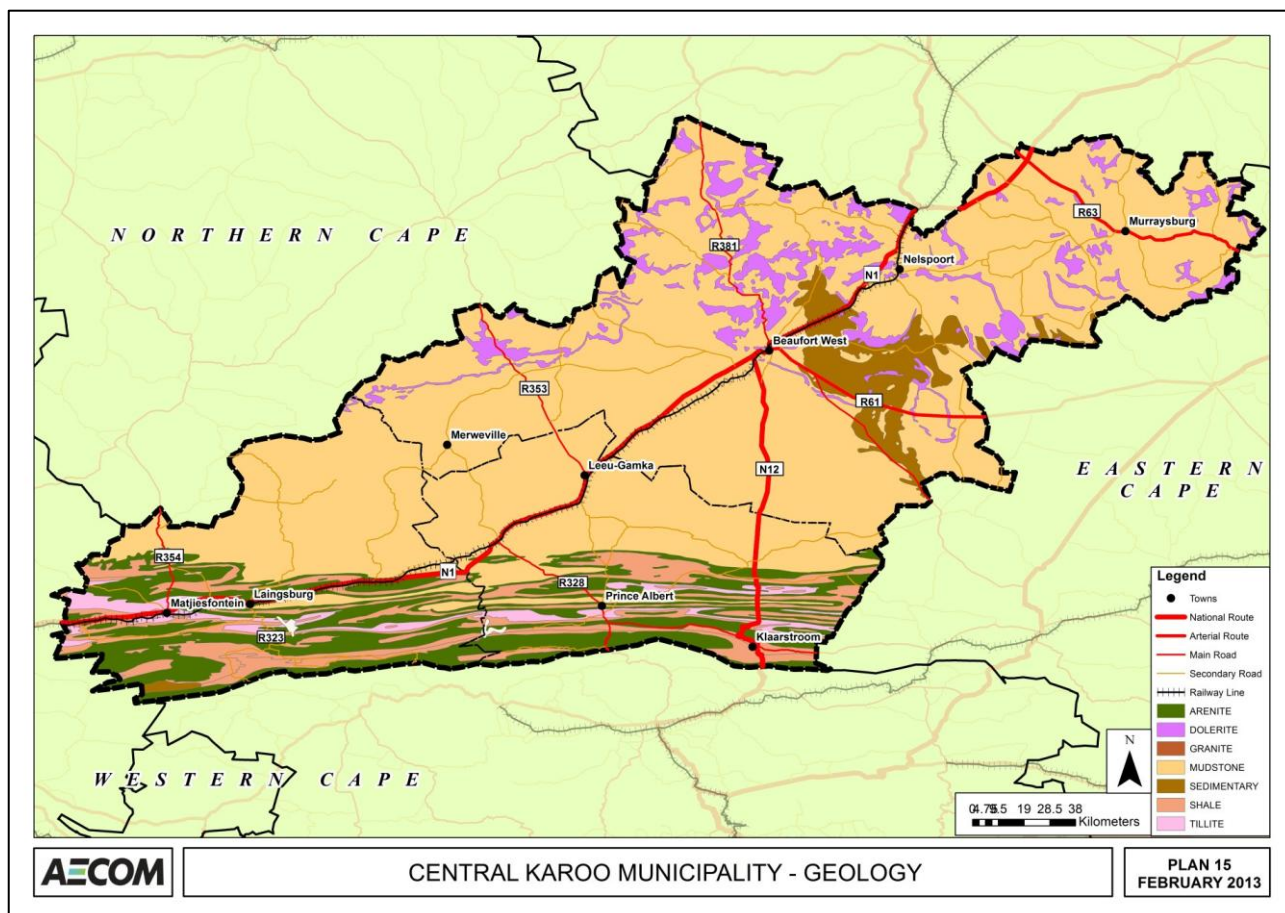
**Figure 3: Topography of the Central Karoo (Draft SDF, June 2013) Climate**



Temperatures and wind velocities are expected to increase with lower rainfall as a result of climate change and these conditions will result in a reduction in Karoo vegetation and a potential increase in fire outbreaks. This will in turn negatively impact agriculture resulting in a decline in productivity and yield as well as a potential economic downturn in the region. The mean annual temperature of the District ranges between 0°C in winter (June and July) and 37°C in summer (January). The mean annual rainfall for the District is 260mm per annum. The highest rainfall occurs to the south with the Groot Swartberg mountain range receiving 500mm to 700mm and approximately 75% of the rest of the region receives less than 200mm annually. The majority of the rain falls during the summer months of November to May, however it is not uncommon for rain to fall throughout the year, particularly the far western part of the District which experiences almost exclusively winter rainfall.

### **Geology and Soils**

**Figure 4** below depicts the District's geology which comprises of the Beaufort, Bokkeveld, Dwyka, Ecca, Table Mountain and Witteberg groups, resulting in shallow sandy soils of low fertility. Higher lying areas usually comprise of hard or weathering rock and alluvial soils are found predominantly in the valley bottoms.



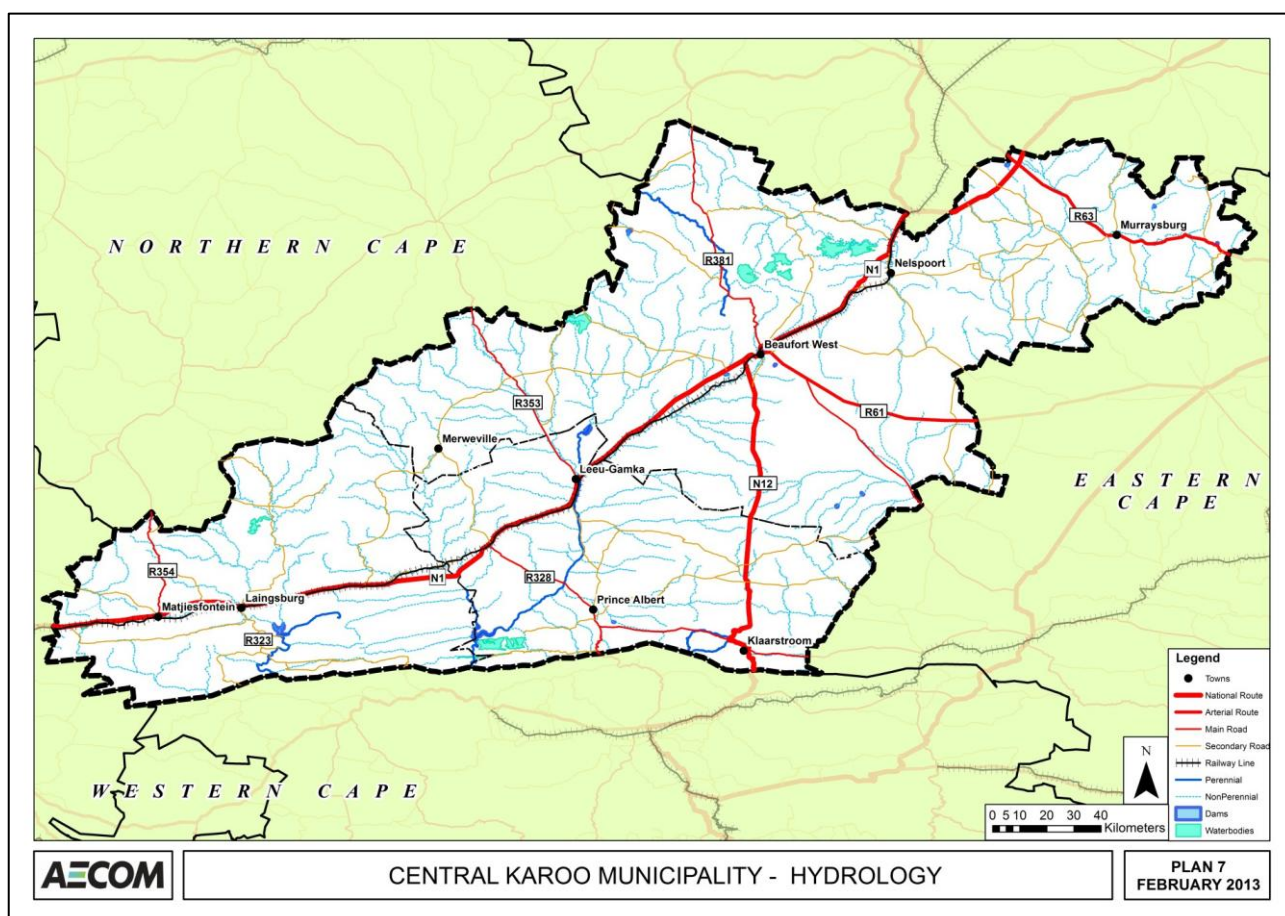
**Figure 4: Geology of the CKDM (Draft SDF, June 2013)**

## Hydrology

**Figure 5** below depicts the four Water Catchment Areas found in the District, namely Berg River, Fish River to Tsitsikamma, Gouritz and Lower Orange Water Management Areas. Riparian ecosystems have largely been transformed for agricultural related activities due to their proximity to water. The National Protected Areas Expansion Strategy (NPAES) which focusses on freshwater priorities, indicates that the District has 6399km of major river reach, of which 1748km can be considered critically endangered (27%) with 201km endangered (3%). There are 249 sensitive wetlands that have been identified and 107 are vlei-type wetlands, 85 are pans and 55 are dam wetlands. Due to the arid climate of the region as well as the soils inability to hold water, the only important dams within the District are:

- Floriskraal Dam situated near Laingsburg and serving the needs of the Little Karoo;
- Gamkapoort Dam situated near Prince Albert and serving local agricultural needs;
- Leeu-Gamka Dam situated between Beaufort West and Laingsburg and serving local agricultural needs; and
- Oukloof Dam situated near Prince Albert and serving local agricultural needs.

The dry climate and erratic rainfall leads to surface run-off in the form of flash floods which fill up the usually empty dams. Due to the scarce precipitation and subsequent surface run-off, ground water sources are primarily used for the supply of potable water.



**Figure 5: Water resources within the CKDM (Draft SDF, June 2013)**

## **Agriculture**

The District's economy largely depends on agriculture, which is the largest employer with an estimated employment rate of 21%. Agricultural land (93.2%) is predominantly used for sheep farming with favoured breeds that include Angora, Boer, Dorper and Merino. However, small scale cattle and ostrich farming also occur in the District. The vegetation of the District provides good grazing for livestock farming and sufficient groundwater is accessed via wind pumps. Farms however have to be large to provide sufficient carrying capacity for viable livestock practices. Cultivated crops, where irrigation is available, include lucerne, olives, peaches, vegetables and wine grapes in the Prince Albert Municipality. The agricultural sector's share of the District economy showed a decline between 1999 and 2009 from 15.4% to 9% (Draft SDF, June 2013). This may be as a result of a move from agricultural to tourist and leisure activities as well as deteriorating economic and market-related conditions for agricultural products.

## **Building Materials and Mining**

The District is rich in mineral deposits with uranium mining and shale gas extraction being the most significant potential economic drivers. Currently there is an increase in Environmental Impact Assessments (EIAs) and applications for the mining of uranium and shale gas extraction. Shale extraction involves the propagation of fractures within rock layers by means of pressured liquids. This results in the *in situ* gas being forced to migrate from the *source rocks* to *reservoir rocks*, from where the gas is extracted. The extraction methods have the potential to negatively impact the environment in that it is estimated that shale gas extraction has the potential to use between 6-25 million litres of water for each well drilled. In addition to this, the ground water is expected to be contaminated with estimated 3,000 - 25,000 litres of chemicals added to water being released during the extraction process.

Rich uranium deposits have been found within the Beaufort West region, of which seven deposits contain resources between 530 and 2434 t U at an average grade of 0.76 kg U/t (Draft SDF, June 2013). The largest deposit thus far discovered is at Ryst Kuil, approximately 45km southeast of Beaufort West and has resources of 6791 t U and 7420 t Mo. Due to the Non-Nuclear Proliferation Treaty that South Africa joined after renouncing its weapons program in 1991, uranium mining and beneficiation remains a controversial issue and thus these deposits have not yet been exploited. However with an increase in uranium prices, several exploration companies have shown great interest.

## 2. STRATEGIC LINKAGES

Linkages with the Western Cape Integrated Waste Management Plan (WCIWMP) and the NWMS are shown in **Table 3** below as well as how these align with the municipal objectives.

<b>Table 3: COMPARISON AND ALIGNMENT OF NATIONAL, PROVINCIAL AND MUNICIPAL GOALS, OBJECTIVES&amp; KPAs</b>									
<b>NDP</b>	<b>NWMS (2011)</b>	<b>WCIWMP</b>	<b>Municipal IWMP goals</b>	<b>IDP (Strategic Objectives, SO)</b>	<b>PSDF</b>	<b>District SDF</b>	<b>Beaufort West SDF</b>	<b>Laingsburg SDF</b>	<b>Prince Albert SDF</b>
	<b>Goal 4:</b> Ensure that people are aware of the impact of waste on their health, well-being and the environment	<b>Goal 1:</b> Educate, strengthen capacity and raise awareness in Integrated Waste Management	<b>Goal 1:</b> Promote, educate and raise awareness with respect to integrated waste management	<b>SO3:</b> To effectively plan to minimise the impact of disasters on the community, visitors, infrastructure and environment.	Sustainable use of Provincial Assets – Resource Consumption and Disposal	A waste management plan drafted in terms of an environmental management plan should also address waste minimisation and the impact of waste on water resources (including minimisation, containment, modification and removal of waste from water	Development of a MRF  Promote separation at source and building design aimed at minimising waste generation		Avoiding waste through recycling and safe disposal
	<b>Goal 5:</b> Achieve integrated waste management planning	<b>Goal 2:</b> Improve waste information management	<b>Goal 2:</b> Improve waste information management	<b>SO4:</b> To promote a safe, healthy environment and social viability of residents					

<p><b>Strategic objective:</b> Environmental Sustainability and Resilience</p> <p><b>Objective:</b> Absolute reductions in the total volume of waste disposed to landfill each year</p> <p><b>Action:</b> Municipal regulations to achieve scale in stimulating waste recycling</p>	<p><b>Goal 2:</b> Ensure the effective and efficient delivery of waste services</p>	<p><b>Goal 3:</b> Promote sound, adequate and equitable waste management practices</p>	<p><b>Goal 3:</b>Ensure the effective and efficient delivery of IWM services</p>	<p>through the delivery of a responsible environmental health service.</p> <p><b>SO6:</b> To ensure a united integrated development path in a safe and sustainable environment.</p>		resources)				
	<p><b>Goal 5:</b> Achieve integrated waste management planning</p>	<p><b>Goal 4:</b> Mainstream Integrated Waste Management (IWM)</p>	<p><b>Goal 3:</b>Ensure the effective and efficient delivery of IWM services</p>	<p><b>SO8:</b> To facilitate effective stakeholder participation.</p>				<p><b>Conceptual Spatial goal:</b> Where appropriate include new bulk infrastructure and the relevant services</p>		
	<p><b>Goal 1:</b> Promote waste minimisation, re-use, recycling and recovery of waste</p>	<p><b>Goal 5:</b> Mainstream sustainable waste management practices</p>	<p><b>Goal 4:</b> Promote waste minimisation through the re-use, recycling and recovery of waste</p>			<p><b>Spatial goal:</b> Strengthened resilience and sustainability of natural and built environments</p>		<p><b>Conceptual Spatial goal:</b> Environmental conservation and sensitive areas</p>		
	<p><b>Goal 3:</b> Grow the contribution of the waste sector to the green economy</p>	<p><b>Goal 5:</b> Mainstream sustainable waste management practices</p>	<p><b>Goal 7:</b> Ensure the sound budgeting and financial management for IWM service</p>	<p><b>SO7:</b> To pursue economic growth opportunities that will create descent work.</p>	<p><b>Spatial policy for waste:</b> To promote recycling and the recovery of waste which will result in landfill space savings.</p>	<p>Proper and suitable waste management guidelines should be developed to assist the Local Municipalities in achieving optimal levels of service and</p>	<p>The shortage of landfill airspace and the need for a new landfill is included in the Beaufort West IDP document</p>	<p><b>Municipal Strategic objective:</b> Developing a safe, clean, healthy and sustainable</p>	<p>The burning of waste at landfill sites in Prince Albert, Leeu-Gamka and Klaarstroom emits toxic gasses.</p> <p>Upgrading</p>	

						to ensure compliance with legislation;		environment for communities	of the current waste disposal site in Prince Albert. Close down the illegal waste disposal site in Leeu Gamka, provision of a temporary Waste Transfer Station, an EIA and the development of a new waste disposal site.
	<b>Goal 8:</b> Establish effective compliance with and enforcement of the Waste	<b>Goal 6:</b> Strengthen the waste regulatory system/framework	<b>Goal 5:</b> Improve regulatory compliance					<b>SDF proposals:</b> To promote separation at source, composting and waste recycling	
	<b>Goal 7:</b> Provide measures to remediate contaminated land	<b>Goal 7:</b> Ensure the safe and integrated management of hazardous waste	<b>Goal 6:</b> Ensure the safe and integrated management of hazardous waste						
	<b>Goal 6:</b> Ensure sound budgeting and financial management for waste services	<b>Goal 8:</b> Facilitate access to funds to implement Integrated Waste Management in the province	<b>Goal 7:</b> Ensure the sound budgeting and financial management for IWM service	<b>SO2:</b> To deliver sound administrative and financial services, to ensure good governance and viability		To deliver sound administrative and financial services, to ensure good governance and viability		<b>Municipal Strategic objective:</b> To achieve financial viability in order to render affordable services to residents	

### **3. PUBLIC PARTICIPATION**

The CKDM will provide the public and other stakeholders an opportunity to comment on the draft IWMP document by making it available at libraries, municipal offices, and community centres. The public and stakeholders will be informed of the draft document through ward meetings, media, municipal notice boards and accounts, and will be given a 30 day commenting period. The IWMP will be included in the 2015/16 IDP annual review.

### **4. IWMP STATUS QUO/ SITUATIONAL ANALYSIS**

#### **4.1 LEGISLATION**

The most important and relevant legislative requirements in terms of waste management are contained in the following statutes and national policies.

##### **National Government Legislation**

##### **4.1.1 The Hazardous Substances Act, 1973 (Act No. 15 of 1973) & Regulations**

The Act provides for the control and management of substances which may be hazardous to human health.

##### **4.1.2 The National Health Act (Act No. 63 of 1977)**

This Act provides for the promotion of the health of South Africans.

##### **4.1.3 The Road Traffic Act, 1989 (Act No. 29 of 1989)**

This Act provides for road traffic matters including the control of transportation of dangerous goods.

##### **4.1.4 The Environment Conservation Act, 1989 (Act No. 73 of 1989) (ECA)**

Some of the provisions of this Act are still in force as they were not repealed. The Waste Tyre Regulations (2008), which came into effect on 30 June 2009 in terms of section 24B of the ECA and make provision for effective and integrated management of waste tyres.

##### **4.1.5 The Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and Regulations**

The Act provides for the protection of the health and safety of persons in the work place against hazards arising out of or in connection with the Activities of persons at work.

##### **4.1.6 Constitution of the Republic of South Africa Act, 1996 (Act No. 108 of 1996)**

The Constitution's Bill of Rights (section 24) states that everyone in the republic has a right to live in a safe and healthy environment that should be protected for all generations through

legislation and other measures. A more relevant part of the Constitution is Schedule 5B, which requires municipalities to provide cleansing, refuse removal and disposal services.

**4.1.7 The National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA)**

This Act provides the legislative framework for environmental management and contains environmental management principles that ensure that the environment is protected from degradation by taking a preventive approach before it takes place or a precautionary approach when scientific knowledge is lacking and holding any person who causes environmental degradation responsible for paying for the damage.

**4.1.8 The National Water Act, 1998 (Act No. 36 of 1998) (NWA)**

The purpose of this Act is to ensure that water resources are protected, used equitably, and conserved in consideration of the protection of aquatic ecosystems; to meet basic human needs and to ensure the reduction and prevention of pollution.

**4.1.9 White Paper on Integrated Pollution and Waste Management for South Africa (Government Gazette 20978), 17 March 2000**

The White Paper introduced an integrated approach to be adopted by the government in order to deal with the issues relating to waste management and pollution.

**4.1.10 National Environmental Management: Waste Management Act, 2008 (Act No. 59 of 2008) (NEMWA)**

The Waste Act came into effect on 1 July 2009 to reform the fragmented legislation governing waste management in South Africa in order to protect the environment. The Waste Act also repealed Section 20 of the Environment Conservation Act, 1989 (Act No. 73 of 1989) ("ECA") as well as introduced new provisions regarding the licensing of waste management activities.

**4.1.11 Consumer Protection Act (CPA), 2008 (Act No. 68 of 2008)**

Section 59 of this Act provides for producers, suppliers or distributors of goods (designated products or their components) that may not be disposed of into a common waste collection system to be recovered and safely disposed.

**4.1.12 Environment Conservation Act, 1989 (Act No. 73 of 1989): Waste Tyre Regulations, 2008 (Government Gazette No. 31901, 13 February 2009)**

The Waste Tyre Regulations were published on 13 February 2009 and came into effect on 30 June 2009 in terms of section 24B of the ECA and make provision for effective and integrated management of waste tyres.



**4.1.13 National Environmental Management: Waste Act (Act No. 59 of 2008): List of Waste Management Activities that have, or are likely to have a detrimental effect on the environment (Government Gazette No. 32368), 3 July 2009**

This notice lists the activities that trigger a waste license requirement and no person may commence, undertake or conduct a waste management activity listed in this schedule unless a licence is issued in respect of that activity.

**4.1.14 National Environmental Management Act, 1998 (Act No. 107 of 1998): Environmental Impact Assessment ("EIA") Regulations (Government Gazette No. 33306, 18 June 2010)**

These Regulations standardise the procedure and criteria as contemplated in Chapter 5 of the NEMA relating to the submission, processing and consideration of, and decision on, applications for environmental authorisations for the commencement of activities in order to avoid detrimental impacts on the environment, or where it cannot be avoided, ensure mitigation and management of impacts to acceptable levels, and to optimise positive environmental impacts, and for matters pertaining thereto.

**4.1.15 National Environmental Management: Waste Act (Act No. 59 of 2008): National Waste Management Strategy (NWMS) (14 November 2011) (Government Gazette No. 35306, 4 May 2012)**

The purpose of the NWMS is to give effect to the objects of the Waste Act as required in terms of section 6(1). The NWMS is structured against a framework of eight goals, with an action plan that sets out how these goals and the associated targets will be met. The actions include roles and responsibilities for different spheres of government, industry and the civil society. The eight goals are:

- Promote waste minimisation, re-use, recycling and recovery of waste,
- Ensure effective and efficient delivery of waste services,
- Grow the contribution of the waste sector to the green economy,
- Ensure that people are aware of the impact of waste on their health, well-being and the environment,
- Achieve integrated waste management planning,
- Ensure sound budgeting and financial management for waste services,
- Provide measures to remediate contaminated land, and
- Establish effective compliance with and enforcement of the Waste Act.

**4.1.16 National Environmental Management: Waste Act (Act No. 59 of 2008): National Waste Information Regulations (Government Gazette No. 35583, 13 August 2012), 1 January 2013**

These Regulations instruct waste generators and holders to register and report to the National and Provincial waste information systems. The waste generators and holders in the Western Cape Province must register on the Integrated Pollutant and Waste Information System (IPWIS).

**4.1.17 National Organic Waste Composting Strategy: Draft Strategy Report and Guideline (February 2013)**

The Draft Strategy has been developed to promote composting as one method to beneficiate organic waste and to divert organics from landfill disposal. The Guideline Document aims to provide a practical conceptual-level information tool to assist authorities and other interested parties to identify viable and sustainable composting opportunities.

**4.1.18 National Environmental Management: Waste Act (Act No. 59 of 2008): Draft National Norms and Standards for Organic Waste Composting (Government Gazette No. 37300, 7 February 2014)**

The Norms and Standards aim to control composting of organic waste at facilities that fall within a specific threshold in order to prevent or minimise potential negative impacts on the bio-physical and socio-economic environment. These apply to facilities with a capacity to process in excess of 10 tonnes but less than 100 tonnes of compostable organic waste per day.

**4.1.19 The National Environmental Management: Waste Act (Act No. 59 of 2008): Waste Classification & Management Regulations (Government Gazette No. 36784, 23 August 2013)**

The Regulations serve to regulate the classification and management of waste in a manner which supports and implements the provisions of the Waste Act and provide for safe and appropriate handling, storage, recovery, reuse, recycling, treatment and disposal of waste and will also enable accurate and relevant reporting on waste generation and management.

**4.1.20 National Environmental Management: Waste Act (Act No. 59 of 2008): Norms and Standards for Disposal of Waste to Landfill (Government Gazette No. 36784, 23 August 2013)**

These Norms and Standards determine the requirements for the disposal of waste to landfill as contemplated in Regulation 8(1) (b) and (c).

**4.1.21 National Environmental Management: Waste Act (Act No. 59 of 2008): Norms and Standards for Assessment of Waste to Landfill (Government Gazette No. 36784, 23 August 2013)**

These Norms and Standards prescribe the requirements for the assessment of waste prior to disposal to landfill in terms of Regulation 8(1) (a).

**Provincial Government Legislation**

**4.1.22 Western Cape Health Care Waste Management Act, 2007 (Act 7 of 2007), Amendment Act, 2010 (No. 6 of 2010), Regulations, 2013**

The Act, Amendment Act and Regulations provides for the effective management (handling, storage, collection, transportation, treatment and disposal) of health care waste by all persons in the Western Cape.

**Local Government Legislation**

**4.1.23 The Local Government: Municipal Structures Act, 1998 (Act No. 117 of 1998)**

This Act provides for the establishment of municipalities in accordance with the requirements relating to categories and types of municipality. It establishes criteria for determining the category of municipality to be established in an area and defines the types of municipality that may be established within each category. Chapter 5 of the Act furthermore provides for the division of functions and powers between district and local municipalities and regulates the internal systems, structures and office-bearers of the municipalities. The Act also provides for appropriate electoral systems for matters in connection therewith.

**4.1.24 The Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000)**

This Act provides for the core principles, mechanisms and processes that are necessary to enable municipalities to move progressively towards the social and economic upliftment of local communities. It ensures the access to essential services that are affordable to all and defines the legal nature of a municipality as including the local community within the municipal area, working in partnership with the municipality's political and administrative structures.

**4.1.25 The Local Government: Municipal Finance Management Act, 2003 (Act No. 56 of 2003)**

This Act provides for the secure and sustainable management of the financial affairs of municipalities and other institutions in the local sphere of government.

**4.1.26 CKDM By-laws relating to Integrated Waste Management**

The Constitution provides municipalities with the legislative authority to draft their own By-laws relating to refuse removal.

**4.1.26.1 Prince Albert Municipality: By-law relating to Refuse Removal and Disposal, 19 June 2009 (Provincial Gazette No. 6637)**

The purpose of the Refuse Removal and Disposal By-law dated 19 June 2009, is as follows:-

- To promote the achievement of a safe and healthy environment for the benefit of the residents in the area of jurisdiction of the municipality.
- To provide for procedures, methods and practices to regulate the dumping of refuse and the removal thereof.

**4.1.26.2 Beaufort West Municipality: By-law relating to Refuse Removal, Notice no. 146/2005**

The Municipality has a By-law pertaining to waste management but is not aligned with NEMWA objectives.

**4.1.26.3 Laingsburg Municipality: By-law relating to Integrated Waste Management**

The Municipality currently does not have an integrated waste management By-law in place.

**International Conventions**

**4.1.27 Basel Convention**

This convention is an international treaty that controls the transboundary movements and disposal of hazardous waste (excluding the movement of radioactive waste) between nations and in particular to prevent the transfer of hazardous waste from developed to less developed countries.

**4.1.28 Montreal Protocol**

This protocol is an international agreement to the Vienna Convention for the Protection of the Ozone Layer and is centred on groups of halogenated carbons, which have been shown to play a role in ozone depletion. It provides a timetable on which the production of these substances must be phased out and eventually eliminated.

**4.1.29 Rotterdam Convention**

This convention is a treaty aimed at promoting shared responsibilities in relation to importation of hazardous chemicals. The responsibilities include the open exchange of information and calls on exporters of hazardous chemicals to use proper labelling, include directions on safe handling, and inform purchasers of any known restrictions or bans. Signatory nations can decide whether to allow or ban the importation of chemicals listed in

the treaty, and exporting countries are obliged make sure that producers within their jurisdiction comply.

#### **4.1.30 Stockholm Convention**

This convention is an international environmental treaty on Persistent Organic Pollutants (POPs) that aims to eliminate or restrict the production and use of POPs.

Persistent Organic Pollutants (POPs) are organic chemical substances that possess a particular combination of physical and chemical properties such that, once released into the environment, they:

- remain intact for exceptionally long periods of time (many years);
- become widely distributed throughout the environment as a result of natural processes involving soil, water and, most notably, air;
- accumulate in the fatty tissue of living organisms including humans, and are found at higher concentrations at higher levels in the food chain; and
- are toxic to both humans and wildlife.

As a result of releases to the environment over the past several decades due especially to human activities, POPs are now widely distributed over large regions. This extensive contamination of environmental media and living organisms includes many foodstuffs and has resulted in the sustained exposure of many species, including humans, for periods of time that span generations, resulting in both acute and chronic toxic effects. Parties must take measures to eliminate and/ or restrict the production and use of the chemicals listed under Stockholm Convention.

## **4.2 DEMOGRAPHIC PROFILE**

This section provides the socio-economic characteristics of the population within the District based on statistical data on age, gender, economic status, level of education, income level and employment, among others.

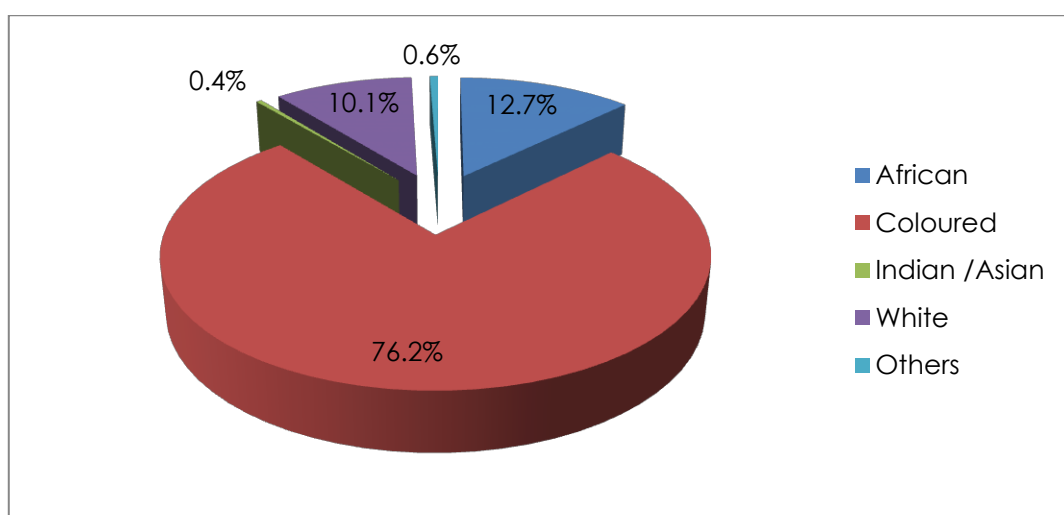
### **Population**

The total population of the CKDM is 71 011 and the majority of the population resides within the Beaufort West municipal area. According to the 2011 Census Western Cape Municipal Report, the Municipality's growth rate from 2001 to 2011 was 1.6% and this was used to estimate the population for 2013 and 2020 as shown in **Table 4** below.

<b>Table 4: Population growth of Local Municipalities in the CKDM</b>						
<b>Municipalities</b>	<b>2001</b>	<b>2011</b>	<b>2001-2011</b>	<b>Average annual growth rate (%)</b>	<b>2013</b>	<b>2020</b>
Central Karoo	60,482	71,011	10,529	1.6	73,301	81,916
Beaufort West	43,290	49,589	6,299	1.4	50 984	56 195
Laingsburg	6,680	8,288	1,608	2.2	8 657	10 082
Prince Albert	10,512	13,134	2,622	2.2	13 720	15 977
The projected population for 2013 and 2020 was calculated using a population calculator from the following Website - <a href="http://www.metamorphosisalpha.com/ias/population.php">http://www.metamorphosisalpha.com/ias/population.php</a>						

The statistics show a growing population rate (albeit at a slower pace) in the District rather than a contracting one, as suggested by recent statistical releases published prior to the Census 2011 statistics release.

**Figure 6** below illustrate that the bulk of the District's population at 76.2% is within the Coloured population group followed by 12.7%, 10.1%, 0.6% and 0.4% from the Black African, White; Other and Indian/ Asian population groups respectively (IDP Final Review, 2013/14). The population classified as other is considered to be a result of the slow in-migration of other African nationalities into the District (IDP Annual Review, 2013/14).



**Figure 6: Distribution of the Central Karoo District by population group**

**Table 5** below depicts that the CKDM has a gender distribution of 48.96% males and 51.04% females.

<b>Table 5: Gender distribution of the Central Karoo District Municipality</b>			
<b>Municipality</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
	<b>2011</b>	<b>2011</b>	<b>2011</b>
Beaufort West	24 137	25 449	49 586
Laingsburg	4 134	4 155	8 289
Prince Albert	6 496	6 640	13 136
Central Karoo	<b>34 767</b>	<b>36 244</b>	<b>71 011</b>

The labour force, between the ages of 15 and 64 (the middle age), is where the population is mostly distributed (**Table 6**). However, out of 44 953 people within the economically active population only 17 332 are employed (**Table 8**).

<b>Table 6: Distribution of the CKDM population by age group (Census 2011)</b>			
<b>Age group</b>	<b>Age</b>	<b>2011</b>	<b>Total Population</b>
<b>Youth</b>	0 - 14	30.5%	21 683
<b>Middle</b>	15 - 64	63.3%	44 953
<b>Old</b>	64 +	6.2%	4 375
<b>Total</b>		<b>100</b>	<b>71 011</b>

## **Households**

According to the Integrated Development Plan Final Review (IDP, 2013/14), Central Karoo had the highest proportion of households living in formal dwellings in the Western Cape at 96.7% and 3.3% of households living in informal dwellings. The majority of the formal housing is in the Beaufort West Municipality at 97.9%, followed by the Laingsburg (96.6%) and Prince Albert Municipalities (93.9%) respectively. The Prince Albert Municipality has the highest proportion of informal dwellings at 5.6% within the District (IDP Final Review, 2013/14).

**Table 7** below depicts that the majority (79.2%) of households within the District fall within the low income group level, which is where efforts with respect to job creation in the waste sector should be focussed, particularly for the youth.

<b>Table 7: Annual Income levels of households within the Central Karoo District Municipality</b>				
<b>Municipality</b>	<b>Low income (No income – R76 400)</b>	<b>Middle income (R76 401 – R614 400)</b>	<b>High income (R614 001 – R2 457 601/ more)</b>	<b>Total</b>
Beaufort West	2 827	716	36	3 579
Laingsburg	1 883	494	31	2 408
Prince Albert	10 396	2 551	141	13 088
<b>Central Karoo</b>	<b>15 106</b>	<b>3 761</b>	<b>208</b>	<b>19 075</b>
<b>%</b>	<b>79.2</b>	<b>19.7</b>	<b>1.1</b>	<b>100</b>

## **Employment**

The unemployment rate is highest for the Beaufort West Municipality at 25.4%, followed by Laingsburg and Prince Albert Municipalities (22.4% & 19.4%) respectively (**Table 8**).

<b>Table 8: Employment status of the Central Karoo District Municipality</b>			
<b>Municipality</b>	<b>Employed</b>	<b>Unemployed</b>	<b>Unemployment rate</b>
	<b>2011</b>	<b>2011</b>	<b>2011</b>
Beaufort West	10 932	3 731	25.4%
Laingsburg	2 935	849	22.4%
Prince Albert	3 488	841	19.4%
<b>Central Karoo</b>	<b>17 332</b>	<b>5 210</b>	<b>23.1%</b>



### 4.3 WASTE MANAGEMENT COST AND FINANCING

The MHS section is responsible for monitoring waste management within the CKDM but has no specific financial allocation / budget for waste management as this forms part of a different budget. District Municipalities do not receive an allocation from the Municipal Infrastructure Grant (MIG) as they are generally not responsible for infrastructure.

#### Projects identified in the 2014/15 IDP

**Table 9** and **Table 10** below, provides the District's estimated budget with respect to waste management as indicated in the 2014/15 IDP Review document.

Table 9: Central Karoo District Municipality Masikhule Sonke Mayor's Community Works Programme									
Sector	Focus Area	Project Name	Project Number	Date of approval of project by Municipal Council or Head of Provincial Department	Name of project used to complement funding if used as complementary funding	Physical address of project site	Short description of project	Project budget	Number of Work opportunities to be created
Environment & Culture	Waste Management	Fencing	MMCW:04	31-May-12	EPWP	Leeu Gamka	Fencing of Landfill Site	R150 000	15
Environmental sector	Promoting the effective management of solid waste & landfill sites in the Central Karoo Region	District Wide	MMCW:09	31-May-12	Funding to be sourced	District Wide	Promoting the effective management of solid waste & landfill sites in the Central Karoo Region	R7 590 000	

Table 10: Funded Municipal Capital Projects								
Municipality	Vote nr	Project Name	KPA	Ward Capital	Amount			Funding Source
					2014/15	2015/16	2016/17	
Beaufort West	TBC	Refuse Transfer Station Phase II	-				R1 500 000	MIG
Beaufort West	TBC	New Refuse Transfer Station	-			R228 259		MIG
Prince Albert	TBC	Rehabilitation solid waste disposal site	-	2,3,4	R500 000			MIG

**Table 11** below provides the MIG project allocations for the current financial year as well as outer years.

Table 11: MIG Project Allocations				
Municipality	2013/14	2014/15	2015/16	2016/17
Beaufort West	R20 353 000	R16 745 000	R13 957 000	R14 158 000
Laingsburg	R7 780 000	R6 524 000	R6 618 000	
Prince Albert	R8 125 000	R7 379 000	R7 554 000	
Central Karoo District				

## **MHS Projects Proposals identified in the 2014/15 IDP Review Document**

The following projects have been identified by the MHS section in the 2014/15 IDP Review document for prioritisation:

### **1. Environmental Awareness: Cleaning & Greening Youth Project**

The CKDM recognises the fact that the youth has an important role to play in decision making and community actions.

#### **Objective Summary:**

This project is modelled on sustainability and will amongst others focus on cleaning, greening and waste management. It also aims to increase awareness in communities for a safe and clean environment using members of the youth through the planned actions.

#### **Key issues to be addressed:**

- Public awareness with regard to a clean, safe and healthy environment as well as the maintenance thereof;
- Environmental health survey with regard to aspects that are detrimental to the environment and/ or people's health and welfare; and
- Cleaning and greening of the environment.

**Project duration:** Two (2) years

**Estimated cost:** R375, 000.00

### **2. Promoting Safe & Effective Waste Management Services & Recycling Activities**

#### **Objective Summary:**

Municipalities within the Central Karoo District face a number of challenges with regards to the delivery of an effective and sustainable waste management service, including insufficient budgets, low skilled capacity and a lack of appropriate equipment.

#### **Key issues to be addressed:**

- There is a need for training of personnel and the allocation of funds that will contribute to the effective management of landfill sites within the District;
- Access to water and sanitation facilities are necessary for the general hygiene of the workers on landfill sites;
- Eliminate the co-disposal of household hazardous waste (batteries, used car oil & old paint, e-waste such as TVs, computers and fridges) with domestic waste.

Funds will be utilised for public awareness campaigns as well as the purchasing of suitable containers for placement at strategic points for the disposal of e-waste, batteries, fluorescent bulbs and the transport thereof to relevant facilities.

**Project duration:** Three (3) years

**Estimated cost:** R1 150,000.00

### 3. Swop Shops

This initiative allows for the exchange of recyclable material for goods that are a basic need for children 12 years and younger. The recyclable material is valued through a points system which can be redeemed for goods. The children are encouraged to clean up the community and are capacitated with regard to environmental issues.

#### Objectives:

- To inform and encourage children from local communities to understand, appreciate and support the programme;
- To ensure that all stakeholders, volunteers, sponsors and local communities are adequately informed, knowledgeable and involved in the programme.

**Project duration:** Continuous

**Estimated cost:** R 70 000.00

### Waste Management Tariffs within CKDM

Section 74(1) of the Municipal Systems Act (Act No. 32 of 2000) requires municipal councils to adopt and implement a tariff policy on the levying of fees for municipal services provided by the municipality or through service delivery agreements.

Table 12: Depicts the ranges in tariff structure within the CKDM		
Municipality	Service: Refuse Removal	Cost range
Prince Albert	Residential, Businesses and Garden refuse	R47.45 - R128.66
Beaufort West	Residential, Businesses, Garden refuse and National Park general waste	R15.75 - R273.00
Laingsburg	Residential, Businesses, Garden refuse, Compost containers, Black bags and extra removal	R1.98 - R336.30

**Table 12** above depicts the ranges in tariff structure within the District and these are based on income levels and dwelling types as they are catered for each town within the Local Municipalities. The tariffs are either measured on the Rands per load (in the case of garden refuse), Rands per bag (in the case of black bags), on a monthly or annual basis for 85 litre bins (see Prince Albert, Beaufort West & Laingsburg IWMPs for specific tariffs).

### **Indigent Households**

Section 74(2) (i) of the Municipal Systems Act, 2000 (Act No. 32 of 2000) indicates that in adopting a tariff policy, the municipal council must at least take into consideration the extent of subsidisation of tariffs for poor households.

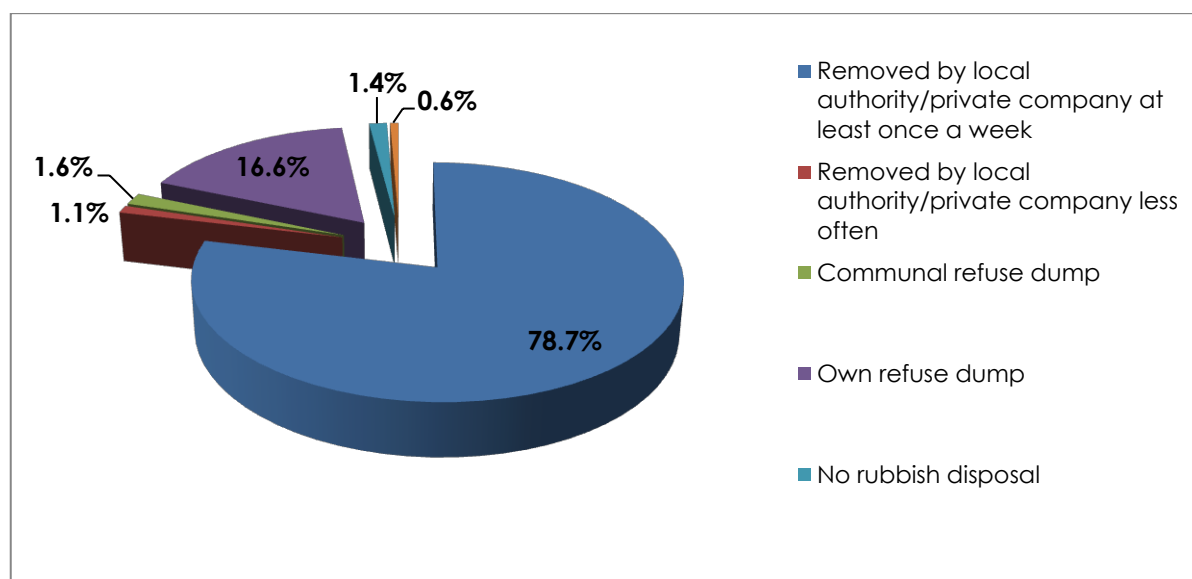
## **4.4 SERVICES AND SERVICE DELIVERY**

Section 84(1) (e) of the Municipal Structures Act, 1998 (Act No. 117 of 1998) states that District Municipalities are responsible for solid waste disposal sites serving the area of the district municipality as a whole.

### **Refuse Removal Service**

**Table 13** below depicts that the majority of households within the CKDM (15,017) of the District's 19,077 households are provided a refuse removal service by the local authority or a private company at least once a week. **Figure 7** also depicts that 16.6% of the households utilise their own refuse dump (in the case of farms), 1.6% have a communal refuse dump (this is usually in informal dwellings), 1.4% have no rubbish disposal, 1.1% of the households are provided a refuse removal service less frequently by the local authority or a private company and 0.6% utilise other means.

<b>Table 13: Number of households with a refuse removal service (Census 2011)</b>				
Waste service	Prince Albert	Beaufort West	Laingsburg	CKDM
Removed by local authority/private company at least once a week	2625	10959	1433	15017
Removed by local authority/private company less often	16	36	149	201
Communal refuse dump	51	148	114	313
Own refuse dump	722	1776	665	3163
No rubbish disposal	113	111	38	262
Other	52	59	10	121
<b>Total</b>	<b>3579</b>	<b>13089</b>	<b>2409</b>	<b>19077</b>



**Figure 7: Distribution of the Central Karoo District refuse removal service**

All communities within the District have access to a minimum standard of refuse removal service delivery. The current basic services and free basic services statistics from Local Government (February 2015) indicate that as at December 2014, the total number of households within the District is approximately 24 283 and of these 17 638 are formal households with 15 220 receiving a basic refuse removal service. The total indigent households (approximately 6 607) registered with the District all receive a free basic refuse removal service (Access to basic services statistics from Local Government, February 2015).

Table 14: Access to a Basic and a Free Basic Refuse Removal Service within the CKDM							
	Laingsburg		Prince Albert		Beaufort West		CKDM
	Jun-14	Sep-14	Sep-14	Dec-14	Sep-14	Dec-14	Dec-14
<b>Total No of HH</b>	1 238	1233	0	5 475	18 888	17 575	<b>24 283</b>
<b>Total No of Formal HH</b>	1 238	586	0	4 829	13 798	12 223	<b>17 638</b>
<b>Total No of Informal HH</b>	0	0	0	0	44	38	<b>38</b>
<b>Total No of Indigent HH</b>	457	647	0	646	5 046	5 314	<b>6 607</b>
<b>Access to Basic Services</b>	1 238	586	0	2 411	13 898	12 223	<b>15 220</b>
<b>Access to Free Basic Services</b>	457	647	583	646	2 492	2 145	<b>3 438</b>
Data is from the current basic services and free basic services statistics from Local Government (February 2015)							

According to the Provincial Treasury: Regional Development Profile document (Central Karoo District), the number of indigent households decreased in 2013 to 6 105 from 6 367 in 2012, however is

currently at approximately 6 607 and only about 3 438 households have access to a free basic refuse removal service (**Table 14**). This implies that the Municipalities within the District generate a low income from services rendered due to the high numbers of the indigent and cannot provide an efficient waste service as a result of the insufficient funds.

### **Waste Management Fleet & WDFs**

Aging waste management fleet is one of the challenges experienced within the District and although funding is a major resource constraint. The District needs to assist in sourcing new waste removal vehicles as well as second hand vehicles still in a good condition that can be donated by Municipalities. WDFs within the District do not comply with legislation and the CKDM will have to ensure that Municipalities adhere to legislative requirements through auditing of WDFs.

### **Health Care Risk Waste Management**

The Municipalities within the District are not responsible for the collection and disposal of medical waste. The Health Care Facilities use a service provider, Solid Waste Technology (SWT), to manage their Health Care Risk Waste (HCRW). SWT ensures that the HCRW is treated through incineration and disposed of in a safe and proper manner at the Vissershok WDF.

**Table 15** below depicts the 24 Health Care Facilities within the Central Karoo District area (Provincial Treasury: Regional Development Profile (Central Karoo District), 2013).

<b>Table 15: Health Care Facilities within the Central Karoo District Municipality</b>								
<b>Municipality</b>	<b>Community Health Centres</b>	<b>Community Day Centres</b>	<b>PHC Clinics</b>	<b>Satellite Clinics</b>	<b>Mobile Clinics</b>	<b>District Hospitals</b>	<b>Regional Hospitals</b>	<b>Total</b>
<b>Beaufort West</b>	0	1	1	1	5	2	0	10
<b>Laingsburg</b>	0	0	5	1	1	1	0	8
<b>Prince Albert</b>	0	0	2	1	2	1	0	6
<b>Central Karoo</b>	<b>0</b>	<b>1</b>	<b>8</b>	<b>3</b>	<b>8</b>	<b>4</b>	<b>0</b>	<b>24</b>

The District needs to ensure that all the Health Care Facilities within the area are registered and reporting HCRW quantities onto the Integrated Pollutant and Waste Information System (IPWIS). The quantities must be sourced from SWT on a monthly basis and good record keeping mechanisms implemented to facilitate reporting onto IPWIS.

**Table 16** below depicts the Health Care Facilities that are currently registered on IPWIS including HCRW pick-up points. The HCRW is transported from the various clinics within each sub-District to central points which are the District hospitals where SWT then collects the waste for treatment and disposal.

Table 16: Health Care Facilities within the Central Karoo District		
Facility	HCRW Main Pick-Up Point	Registered on IPWIS
Beaufort West Sub-District		
Beaufort West CDC	Beaufort West Hospital	Yes
Beaufort West Constitution Str. Clinic		Yes
Beaufort West Mobile 1		Yes
Kwa Mandlenkosi Clinic		Yes
Merweville Satellite		Yes
Merweville Mobile		Yes
Nelspoort Clinic		Yes
Nieveldpark Clinic		Yes
Nelspoort Hospital		Yes
Leeu Gamka PHC Clinic		Yes
Leeu Gamka PHC Mobile Unit		Yes
Nelspoort Mobile		Yes
Murraysburg Clinic	Murraysburg Hospital	Yes
Murraysburg Mobile		Yes
Laingsburg Sub-District		
Laingsburg Mobile	Laingsburg Hospital	Yes
Matjiesfontein Satellite		Yes
Laingsburg Clinic		Yes
Prince Albert Sub-District		
Klaarstroom Satellite	Prince Albert Hospital	Yes
Prince Albert Clinic		Yes
Prince Albert Mobile Clinic		Yes

### **Illegal Dumping**

The District area experiences challenges with illegal dumping due to the lack of awareness and education and often the Local Municipalities do not have the financial resources to remove illegally



dumped waste. The District and Local Municipalities will have to use the Environmental Management Forum to come up with solutions to deal with illegal dumping.

#### 4.5 COMPLIANCE AND ENFORCEMENT

##### **Status Quo of Waste Disposal Facilities: Waste recycling, treatment and disposal**

There are five waste management facilities within the Prince Albert municipal area, four waste management facilities within Beaufort west municipal area and only two within the Laingsburg municipal area (**Table 17**).

<b>Table 17: Waste Management Facilities within the Central Karoo District</b>							
<b>TOWN</b>	<b>FACILITY NAME</b>	<b>FACILITY TYPE</b>	<b>CLASSIFICATION TYPE</b>	<b>OPERATIONAL</b>	<b>LICENCED/ PERMITTED</b>	<b>LICENCE/ PERMIT NO &amp; DATE OF ISSUE</b>	<b>LEGAL STATUS/ COMMENT</b>
<b>Prince Albert Local Municipality</b>							
Klaarstroom	Klaarstroom WDF	WDF	GCB (water balance)	Yes	No		Licence application in process
Leeu-Gamka	Leeu-Gamka WDF	WDF	GCB (water balance)	Yes	No		Licence application in process
Prince Albert	Prince Albert WDF	WDF	GCB-	Yes	Yes	16/2/7/C222/D3/Z5/P384 issued in August 2000	Operational, has a permit; requires variation of permit
Prince Albert	Prince Albert MRF	MRF		Yes	No		Requires licence
Prince Albert Road	Prince Albert Road Drop-off	Drop-off facility		Yes	No		No licence required
<b>Beaufort West Local Municipality</b>							
Beaufort West	Vaalkoppies	WDF	GCB-	Yes	Yes	16/2/7/F400/C12/Z1/P442 issued on 5 November 2011	Operational, has a permit
Merweville	Merweville	WDF	GCB-	Yes	No	N/A	In the process of obtaining a license

Nelspoort	Nelspoort	WDF	GCB-	Yes	No	N/A	In the process of obtaining a license
Murraysburg	Murraysburg	WDF	GCB-	Yes	No	The current site will be closed and rehabilitated and a new site has been identified.	R17 million has been secured for the construction of a new landfill site.
<b>Laingsburg Local Municipality</b>							
Laingsburg	Laingsburg WDF	WDF	GCB (water balance)	Yes	Yes	16/2/7/F4 00/Z2/P28 6 issued on 4 March 1998	Permit exists
Laingsburg	Matjiesfontein drop-off	Drop-off facility		No	No		No licence required

## **PRINCE ALBERT LOCAL MUNICIPALITY**

### **PRINCE ALBERT WASTE DISPOSAL FACILITY**

The Prince Albert WDF is the only facility that operates with a permit and it will reach its maximum capacity by 2015. This WDF also receives green waste disposed by the public in the five (5) mini transfer stations. Waste is burned on a daily basis and household, garden waste and builder's rubble are co-disposed in a haphazard manner. Currently the waste disposal facilities are inadequately managed and the municipality needs to prioritise solid waste management and redress the situation. It should be noted that the dump in Prince Albert is adjacent to a tributary of the Dorpsriver and there is no lining or seal to prevent contamination by seepage from the dump.

<b>TABLE 18: The status of the Prince Albert Waste Disposal Facility</b>	
<b>Position of site:</b>	The site is located approximately 1.0 km north of Prince Albert next to the Prince Albert Waste Water Treatment Works.
<b>Year issued:</b>	2000
<b>Classification of site:</b>	GCB-
<b>Type of Operation (end – tip, trench, cell):</b>	End tip, waste is burned on a regular basis.
<b>Estimated size of site:</b>	Approximately 3 ha.
<b>Estimated remaining life of site:</b>	The site will reach maximum capacity by 2015.
<b>Separation of fresh and contaminated</b>	Yes

<b>water:</b>	
<b>Groundwater monitoring:</b>	No groundwater monitoring is done.
<b>Volumes per day, week or month:</b>	Estimated at 3.8 tonnes per day
<b>Is cover material available?</b>	Yes
<b>Is the drainage sufficient?</b>	No, the site is relatively flat and dumping practices would facilitate ponding.
<b>Is there access control?</b>	Yes, but the person in control allows illegal pickers to enter the site. There is no recording of who enters the facility or waste volumes being disposed. This will be addressed through the Youth Jobs in Waste Programme of the Department of Environmental Affairs (DEA).
<b>Is the site fenced?</b>	Yes, the recycling area is fenced, but a mere one-meter high fence that is broken in places demarcates the disposal area.
<b>Does the site have a sufficient buffer zone?</b>	Yes, there are no houses within 500 meters of the site.
<b>Type of equipment utilised on site:</b>	Tractor and open-trailer is used to collect garden waste and a tractor and closed-trailer collects household wastes.
<b>Operating hours:</b>	Dumping is limited to working hours, five days a week.
<b>Site facilities, i.e. ablutions, guard house:</b>	No, the ablution facilities of the Waste Water Treatment works are utilised. The Youth Jobs in Waste Programme of the DEA will erect site offices with ablution facilities.
<b>Estimating cost for closure:</b>	R 926,278.70
<b>Saving plan for closure:</b>	No provision has been made.

## RECYCLING

The Prince Albert WDF has an on-site recycling area adjacent to the waste disposal area. Recyclables are collected on a weekly basis in Prince Albert South, separately to household waste, and sorted at the recycling area. Furthermore a buy-back project exists in Prince Albert North which allows residents to sell their recyclables. Unfortunately, the buy-back project is currently on hold due to unavailability funds. The solid waste management cost estimate report recommends that Prince Albert Local Municipality subsidise the project. The "Retain, Reuse and Recycle" (RRR) company located in Oudtshoorn removes the recyclables on a weekly basis.

## KLAARSTROOM WASTE DISPOSAL FACILITY

The Prince Albert Municipality is in the process of applying for a permit for the Klaarstroom WDF and the facility will reach its maximum capacity in 2025. All general waste types produced in Klaarstroom are collected on a weekly basis using a tractor and an open-trailer.

<b>Table 19: The status of the Klaarstroom Waste Disposal Facility</b>	
<b>Position of site:</b>	Opposite the Klaarstroom residential area, approximately 500m off the N12.
<b>Permit:</b>	In the process of licensing.

<b>Year issued:</b>	N/A
<b>Classification of site:</b>	GCB (water balance)
<b>Type of Operation (end – tip, trench, cell):</b>	Burning waste, no trenches.
<b>Estimated size of site:</b>	6680 m <sup>2</sup>
<b>Estimated remaining life of site:</b>	The site will reach maximum capacity by 2025.
<b>Separation of fresh and contaminated water:</b>	Uncertain
<b>Groundwater monitoring:</b>	No monitoring of ground water takes place.
<b>Volumes per day, week or month:</b>	Approximately 0.4 tonnes/day
<b>Is cover material available?</b>	Yes, waste is however not covered on a regular basis
<b>Is the drainage sufficient?</b>	No
<b>Is there access control?</b>	No
<b>Is the site fenced?</b>	Yes
<b>Does the site have a sufficient buffer zone?</b>	Yes, there are no houses within 500m of the site.
<b>Type of equipment utilised on site:</b>	A tractor and trailer are utilised for collection and offloading purposes.
<b>Operating hours:</b>	Dumping is limited to working hours, five days a week.
<b>Site facilities, i.e. ablutions, guard house:</b>	None
<b>Estimating cost for closure:</b>	R2,133,695.28
<b>Saving plan for closure:</b>	No provision has been made.

## RECYCLING

There are no formal recycling programs in place at the Klaarstroom WDF at present.

## LEEU GAMKA WASTE DISPOSAL FACILITY

The Prince Albert Municipality is in the process of applying for a permit for the Leeu Gamka WDF and the facility was estimated to reach its maximum capacity by 2013. Household, builder's rubble and garden waste is removed at weekly intervals with a tractor-trailer and is co-disposed at the facility.

Table 20: The status of the Leeu Gamka Waste Disposal Facility	
<b>Position of site:</b>	The site is 750 m from the N1 on the Frazerburg turn-off.
<b>Permit:</b>	In the process of licensing.
<b>Year issued:</b>	N/A
<b>Classification of site:</b>	GCB (water balance)
<b>Type of Operation (end – tip, trench, cell):</b>	Burning of Waste

<b>Estimated size of site:</b>	9500 m <sup>2</sup>
<b>Estimated remaining life of site:</b>	The site reached maximum capacity by 2013.
<b>Separation of fresh and contaminated water:</b>	None in place
<b>Groundwater monitoring:</b>	No monitoring of ground water takes place.
<b>Volumes per day, week or month:</b>	Approximately 1.49 tons per day
<b>Is cover material available?</b>	No
<b>Is the drainage sufficient?</b>	No
<b>Is there access control?</b>	Yes
<b>Is the site fenced?</b>	Yes
<b>Does the site have a sufficient buffer zone?</b>	Yes, there are no houses within 500m from the site.
<b>Type of equipment utilised on site:</b>	Tractor and trailer
<b>Operating hours:</b>	Operating during office hours, five days a week.
<b>Site facilities, i.e. ablutions, guard house:</b>	None
<b>Estimating cost for closure:</b>	R578,177.75
<b>Saving plan for closure:</b>	No provision has been made.

## RECYCLING

There are currently no formalised recycling initiatives in place at the Leeu Gamka WDF.

## PRINCE ALBERT ROAD DROP-OFF FACILITY

Transnet currently operates the Drop-off facility at Prince Albert Road.

## BEAUFORT WEST LOCAL MUNICIPALITY

### MERWEVILLE WASTE DISPOSAL FACILITY

The Merweville WDF is situated along the R354. The facility is non-compliant with the legislative requirements e.g. personnel, equipment. The WDF is fenced, accepts general waste but has no access control. There is only one person responsible for both the operation of the landfill and collection of the waste. The landfill is not covered on a daily basis, but windblown litter does seem to be a problem. All waste is burnt in order to extend the lifetime of the waste disposal facility, prevent littering and limit required landfill operations.

Table 21: The status of the Merweville Landfill	
<b>Position of site:</b>	The site is situated approximately 3 km outside the village of Merweville towards the N1

<b>Year issued:</b>	N/A
<b>Classification of site:</b>	GCB-
<b>Type of Operation (end – tip, trench, cell):</b>	End - tip
<b>Estimated size of site:</b>	Approximately 2 ha.
<b>Estimated remaining life of site:</b>	Approximately 10 years
<b>Separation of fresh and contaminated water:</b>	None in place.
<b>Groundwater monitoring:</b>	No groundwater monitoring is done.
<b>Volumes per day, week or month:</b>	Estimated at 0.7 tonnes per day
<b>Is cover material available?</b>	No. Waste are burned and not covered
<b>Is the drainage sufficient?</b>	Yes
<b>Is there access control?</b>	No
<b>Is the site fenced?</b>	Yes
<b>Does the site have a sufficient buffer zone?</b>	Yes. There are no houses within 500m of the site.
<b>Type of equipment utilised on site:</b>	A tractor and trailer are utilised for collection and offloading purposes.
<b>Operating hours:</b>	The public can enter the site at any desired time. The operator is only on site when offloading and burning waste.
<b>Site facilities, i.e. ablutions, guard house:</b>	None
<b>Estimating cost for closure:</b>	No estimate regarding closure exists. There is currently no savings plan in place for the closure of the site
<b>Saving plan for closure:</b>	No provision has been made.

## NELSPOORT WASTE DISPOSAL FACILITY

The Nelspoort WDF is only utilised for servicing the village of Nelspoort. There is only one person in charge for both the waste collection and disposal facilities. Therefore there is no responsible person permanently on site and access is not controlled. The fact that there is no access control does not seem to be a major problem as the site serves a small area and is not frequented by many people.

Table 22: The status of the Nelspoort Landfill	
<b>Position of site:</b>	The site is situated in Nelspoort approximately 40 km north of Beaufort West
<b>Permit:</b>	No
<b>Year issued:</b>	N/A
<b>Classification of site:</b>	GCB-
<b>Type of Operation (end – tip, trench,</b>	trench 0715856996

<b>cell):</b>	
<b>Estimated size of site:</b>	Approximately 2 ha
<b>Estimated remaining life of site:</b>	The remaining life of the site is estimated at ±30 years
<b>Separation of fresh and contaminated water:</b>	Not currently adequate.
<b>Groundwater monitoring:</b>	No monitoring of ground water takes place.
<b>Volumes per day, week or month:</b>	Approximately 0.4 tonnes/day
<b>Is cover material available?</b>	Yes. Waste is however not covered on a regular basis
<b>Is the drainage sufficient?</b>	No
<b>Is there access control?</b>	No
<b>Is the site fenced?</b>	Yes
<b>Does the site have a sufficient buffer zone?</b>	Yes. There are no houses within 500m of the site.
<b>Type of equipment utilised on site:</b>	A tractor and trailer are utilised for collection and offloading purposes.
<b>Operating hours:</b>	There are no official operating hours. The site is accessible by anyone at any time.
<b>Site facilities, i.e. ablutions, guard house:</b>	None
<b>Estimating cost for closure:</b>	No estimate regarding closure exists. There is currently no savings plan in place for the closure of the site.
<b>Saving plan for closure:</b>	No provision has been made.

## VAALKOPPIES WASTE DISPOSAL FACILITY

The Vaalkoppies WDF is situated east of the residential area within Beaufort West. The site is fenced but the gates are not locked. There is a front end loader operator permanently on site to shape the landfill and act as supervisor. The facility is non-compliant with the legislative requirements e.g. personnel, equipment. The site is not in a good condition, waste is not covered on a daily basis and windblown litter is a major problem.

Table 23: The status of the Vaalkoppies Landfill	
<b>Position of site:</b>	The site is located in Beaufort West, east of the residential area.
<b>Permit:</b>	Yes
<b>Year issued:</b>	16/2/7/F400/C12/Z1/P442 issued on 5 November 2011
<b>Classification of site:</b>	GCB-
<b>Type of Operation (end – tip, trench, cell):</b>	Cell method

<b>Estimated size of site:</b>	Approximately 35 ha.
<b>Estimated remaining life of site:</b>	The site has approximately 10 years left
<b>Separation of fresh and contaminated water:</b>	Yes
<b>Groundwater monitoring:</b>	No monitoring of ground water takes place.
<b>Volumes per day, week or month:</b>	Approximately 22.5 tons per day
<b>Is cover material available?</b>	Yes
<b>Is the drainage sufficient?</b>	Yes
<b>Is there access control?</b>	Yes
<b>Is the site fenced?</b>	Yes
<b>Does the site have a sufficient buffer zone?</b>	Yes. There are no houses within 500m from the site.
<b>Type of equipment utilised on site:</b>	One Front-End Loader
<b>Operating hours:</b>	The site is operated during business hours from 09:00 to 17:45, Monday to Friday.
<b>Site facilities, i.e. ablutions, guard house:</b>	The site has ablution and guard house facilities
<b>Estimating cost for closure:</b>	No estimate regarding closure exists.
<b>Saving plan for closure:</b>	No provision has been made.

## MURRAYSBURG WASTE DISPOSAL FACILITY

The Murraysburg WDF is situated west (ERF 249/Graaff-Reinet Route) of the residential area within Murraysburg. The WDF is fenced but there are no appropriate security measures in place with regard to access control. The facility is used for disposal of household and garden waste. The municipality has a decommissioning waste management license for the Murraysburg waste disposal facility.

<b>Table 24: The status of the Murraysburg Landfill</b>	
<b>Position of site:</b>	The site is located in Murraysburg, west of the residential area
<b>Permit:</b>	Yes
<b>Year issued:</b>	19/2/5/1/C3/13/WL0021/14 issued on 18 July 2014
<b>Classification of site:</b>	GCB-
<b>Type of Operation (end – tip, trench, cell):</b>	Cell method
<b>Estimated size of site:</b>	17870 M <sup>2</sup>
<b>Estimated remaining life of site:</b>	
<b>Separation of fresh and contaminated water:</b>	



<b>Groundwater monitoring:</b>	No monitoring of ground water takes place.
<b>Volumes per day, week or month:</b>	
<b>Is cover material available?</b>	Yes
<b>Is the drainage sufficient?</b>	
<b>Is there access control?</b>	Yes
<b>Is the site fenced?</b>	Yes
<b>Does the site have a sufficient buffer zone?</b>	Yes. There are no houses within 500m from the site.
<b>Type of equipment utilised on site:</b>	One Front-End Loader
<b>Operating hours:</b>	The site is operated during business hours from 09:00 to 17:00, Monday to Friday.
<b>Site facilities, i.e. ablutions, guard house:</b>	The site has ablution and guard house facilities
<b>Estimating cost for closure:</b>	No estimate regarding closure exists
<b>Saving plan for closure:</b>	No provision has been made.

## TRANSFER STATIONS

There are no official transfer station facilities within the Beaufort West municipal area.

## WASTE RECYCLING

Table 25: Beaufort West recycling	
<b>Ownership</b>	Municipality
<b>Status</b>	Unlicensed
<b>Type/ stream of waste recycled per month (in Ton/kg)</b>	Paper, box , and glass
<b>Volume of recycled waste per month (in Ton or kg)</b>	30
<b>Total capacity</b>	0

## LAINGSBURG LOCAL MUNICIPALITY

### LAINGSBURG WASTE DISPOSAL FACILITY

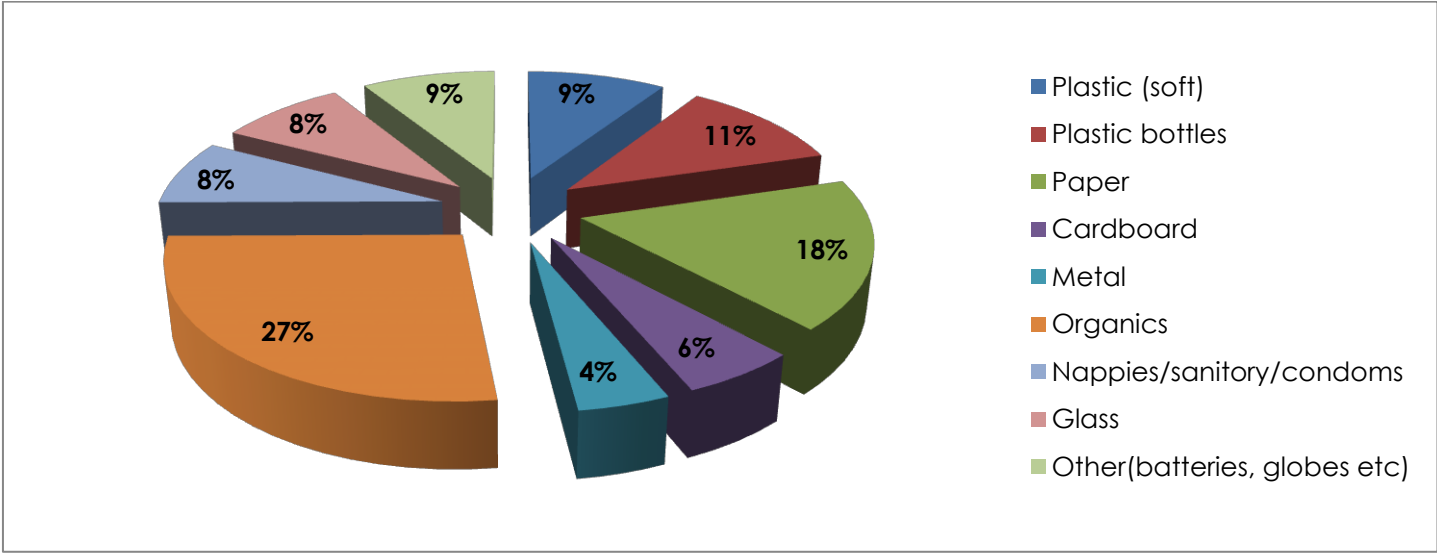
Garden refuse, building rubble and general domestic waste is disposed of in a controlled manner into trenches at the Laingsburg landfill site. The landfill site is fenced and access is controlled but incoming waste is not recorded as there is no weighbridge on site. The waste is not covered on a regular basis however the waste body is shaped once every two months. Burning of waste takes place at the facility although recycling activities is taking place at the WDF.

Table 26: The status of the Laingsburg landfill site	
<b>Position of site</b>	The site is approximately 500 m south of the low cost housing units in Laingsburg.

<b>Permit:</b>	Yes
<b>Year issued:</b>	1997
<b>Classification of site:</b>	GCB (water balance)
<b>Type of Operation (end – tip, trench, cell):</b>	Trench
<b>Estimated size of site:</b>	Approximately 5 ha
<b>Estimated remaining life of site:</b>	The remaining life of the site is expected to be approximately 10 years
<b>Separation of fresh and contaminated water:</b>	Yes
<b>Groundwater monitoring:</b>	No monitoring of groundwater takes place
<b>Volumes per day, week or month:</b>	Approximately 20.4 tonnes per week during peak season and 16.9 tonnes per week during off peak season
<b>Is there access control?</b>	Yes
<b>Is the site fenced?</b>	Yes
<b>Does the site have a sufficient buffer zone?</b>	Yes, the nearest residential area is approximately 500 m away.
<b>Type of equipment utilised on site:</b>	Front-End Loader on occasion
<b>Operating hours:</b>	Operating during office hours
<b>Site facilities, i.e. ablutions, guard house:</b>	Site facilities include ablutions and recycling building.
<b>Estimating cost for closure:</b>	No estimate regarding closure exists.
<b>Saving plan for closure:</b>	No provision has been made.

4.6 WASTE CHARACTERISATION

A waste characterisation study was conducted within the District by DEADP as well as EPWP municipal workers from each of the three Local Municipalities in the 2013/14 financial year. The characterisation was conducted during three separate periods for each Local Municipality. A representative sample was selected from each of the Local Municipality and black bags (mixed waste) as well as clear bags (recyclables) were collected. The waste was then separated and weighed according to the following domestic waste streams i.e. soft plastic, plastic bottles, paper, cardboard (packaging material), metal, organics (food and greens), nappies/ sanitary/ condoms (medical), clothing, glass and other (including batteries, gloves, etc.) as shown in **Figure 8 & Table 27** below.



**Figure 8: Percentage of the different waste streams from the sample size collected within the CKDM**

Table 27: Waste Types collected during the CKDM Waste Characterisation Study (kg) (2013/14)										
Area	Plastic (soft)	Plastic bottles	Paper	Cardboard	Metal	Organics	Nappies /sanitary /condoms	Glass	Other (batteries, globes etc.)	Total
Prince Albert	208.2	185.7	198.0	161.4	92.7	629.6	135.5	325.0	178.2	2114.2
Beaufort West	242.6	284.1	448.1	118.4	38.1	496.2	174.6	98.0	238.5	2138.6
Laingsburg	147.7	253.9	499.2	80.0	149.7	616.0	193.8	123.5	159.9	2223.7
Total	599	724	1145	360	280	1742	504	546	577	6476
Percentage (%)	9	11	18	6	4	27	8	8	9	100

**Table 28** below depicts estimated calculations of the quantity of the waste streams in tons that could be collected annually. This is based on the assumption that the total sample size of 1 663 bags was generated by the different income groups from 1 201 households within the three Local Municipalities. The total mass generated (6 471.34kg) by these households was then extrapolated for the total number of households (19 074) within the District to determine an estimate of the total mass generated (103 233.60kg) by the Local Municipalities within the District (**Table 29**). These quantities for the different waste streams can be used as a baseline to determine which waste streams have a feasible recycling potential to prioritise or extend the District's existing waste minimisation initiatives. The bulk of the waste collected were the organics at 857.0kg, 178.7kg & 312.4kg for Beaufort West, Laingsburg and Prince Albert respectively as shown in **Table 27** & **Figure 8** above as well as **Table 28** below.

Table 28: Central Karoo District Municipality Waste Characterisation Study												
Beaufort West												
Measurement	# Bags Sampled	Number of Households (HH)	Plastic Film	Dense Plastics	Paper	Packaging Material	Medical	Organics	Plastic Bottles	Glass	Metal	Other
	639	394	242.6	281.2	448.1	118.4	174.6	496.2	2.9	98.0	38.1	225.2
		1	0.62	0.71	1.14	0.30	0.44	1.26	0.01	0.25	0.10	0.57
kg/w		13088	8060.3	9340.4	14884.8	3932.2	5799.9	16481.4	96.0	3254.3	1265.9	7479.3
kg/annum	52		419135.4	485701.7	774010.9	204476.1	301594.0	857033.0	4992.0	169222.0	65825.9	388921.9
tons/annum	1000		419.1	485.7	774.0	204.5	301.6	857.0	5.0	169.2	65.8	388.9
It is assumed that the sample size was collected from 394 HH based on the number of bags generated by each income group												
<b>ASSUMPTIONS:</b> (1) Low income households generate 1 bag per week (2) Middle income households generate 2 bags per week (3) High income households generate 3 bags per week												
<b>CALCULATIONS:</b> 394HH - generate - 2125.2kg/w - 1HH - generates - 5.4kg - 13088HH - generate - 70 675.2kg/w - Per annum: 70 675.2kg/w * 52 weeks - 3 675 110.4kg/annum - 3 675 tons/annum												
Laingsburg												
	# Bags Sampled	Number of Households (HH)	Plastic Film	Dense Plastics	Paper	Packaging Material	Medical	Organics	Plastic Bottles	Glass	Metal	Other
	517	432	147.7	124.6	499.2	80.0	193.8	616.0	129.4	123.5	149.7	159.9
		1	0.34	0.29	1.16	0.19	0.45	1.43	0.30	0.29	0.35	0.37
kg/w		2408	824.3	695.2	2785.9	446.6	1081.7	3437.4	721.9	689.0	835.2	892.1
kg/annum	52		42861.8	36148.2	144868.0	23222.3	56247.4	178745.9	37536.2	35830.0	43431.1	46389.4
tons/annum	1000		42.9	36.1	144.9	23.2	56.2	178.7	37.5	35.8	43.4	46.4
It is assumed that the sample size was collected from 432 HH based on the number of bags generated by each income group												
<b>ASSUMPTIONS:</b> (1) Low income households generate 1 bag per week (2) Middle income households generate 2 bags per week												

(3) High income households generate 3 bags per week												
<b>CALCULATIONS:</b> 432HH - generate - 2231.88kg/w - 1HH - generates - 5.2kg - 2408HH - generate - 12 521.6kg/w - Per annum: 12 521.6kg/w * 52 weeks - 651 123.2kg/annum - 651.123 tons/annum												
<b>Prince Albert</b>												
	<b># Bags Sampled</b>	<b>Number of Households (HH)</b>	<b>Plastic (soft)</b>	<b>Plastic bottles</b>	<b>Paper</b>	<b>Cardboard</b>	<b>Metal</b>	<b>Organics</b>	<b>Nappies/ sanitary/ condoms</b>	<b>Clothing</b>	<b>Glass</b>	<b>Other (batteries, globes etc.)</b>
	507	375	208.2	185.7	198.0	161.4	92.7	629.6	135.5	123.4	325.0	54.8
		1	0.56	0.50	0.53	0.43	0.25	1.68	0.36	0.33	0.87	0.15
<b>kg/w</b>		3578	1986.4	1771.5	1889.0	1539.6	884.7	6006.8	1292.9	1177.6	3101.4	523.0
<b>kg/annum</b>	52		103293.3	92120.0	98225.7	80058.7	46003.0	312351.6	67233.2	61234.8	161272.3	27193.9
<b>tons/annum</b>	1000		<b>103.3</b>	<b>92.1</b>	<b>98.2</b>	<b>80.1</b>	<b>46.0</b>	<b>312.4</b>	<b>67.2</b>	<b>61.2</b>	<b>161.3</b>	<b>27.2</b>
It is assumed that the sample size was collected from 375 HH based on the number of bags generated by each income group												
<b>ASSUMPTIONS:</b> (1) Low income households generate 1 bag per week (2) Middle income households generate 2 bags per week (3) High income households generate 3 bags per week												
<b>CALCULATIONS:</b> 375HH - generate - 2114.26kg/w - 1HH - generates - 5.6kg - 3578HH - generate - 20 036.8kg/w - Per annum: 20 036.8kg/w * 52 weeks - 1 041 913.6kg/annum - 1 041.9 tons/annum												

**Table 29** below depicts the total mass generated by the Local Municipalities within the District annually, calculated at 5 368 146.6kg (5 368 tons). The assumptions made to calculate this mass were done so because the total number of bags generated by each household within the sample sizes was not recorded during the waste characterisation study.

<b>Table 29: Central Karoo District Municipality Waste Characterisation Study</b>							
<b>Local Municipality</b>	<b>Bags Sampled</b>	<b>Number of Sampled Households (HH)</b>	<b>Mass of Sample (kg/week)</b>	<b>Total Number of Households</b>	<b>Total Mass (kg/week)</b>	<b>Total Mass (kg/annum)</b>	<b>Total Mass (tons/annum)</b>
Beaufort West	639	394	2125.2	13088	70 675.20	3 675 110.4	3 675
Laingsburg	517	432	2231.88	2408	12 521.60	651 123.2	651
Prince Albert	507	375	2114.26	3578	20 036.80	1 041 913.0	1 042
<b>Total</b>	<b>1663</b>	<b>1201</b>	<b>6471.34</b>	<b>19074</b>	<b>103233.60</b>	<b>5368146.6</b>	<b>5368</b>

**Table 30** below depicts a different method which was used to determine the quantity of waste generated by the Local Municipalities within the District using the Census 2011 population figures. The waste generated in tons/person/year in **Table 30**, was calculated using the generation rates per income category, which were obtained from the Department of Environmental Affairs (DEA) IWMP Portal. The population figure was not divided among the income group categories, however, the total number of households was divided and this was used to provide the percentage of households per income group category. The assumption was then made that the same percentages would apply for the population figure.

The population per income group category was then calculated based on this assumption and this calculation was also done for the projected 2013 and 2020 population figures. Using the DEA waste generation rate per income group, the total waste generated/person/year was calculated for the lower, middle and higher income group categories for the 2011 population from the Census data as well as the projected population for 2013 and 2020.

<b>Table 30: Calculations for waste generated per person per year for the CKDM population</b>					
<b>Annual Income levels (2011)</b>			Low income (R0 – R76 400)	Middle income (R76 401 – R614 400)	High income (R614 001 – R2 457 601 or more)
<b>Total Households</b>			<b>15 106</b>	<b>3 761</b>	<b>208</b>
<b>% Households</b>			<b>79.2</b>	<b>19.7</b>	<b>1.1</b>
<b>Total Population</b>	<b>2011</b>	71 011	56 240.7	13989.2	781.1
	<b>2013</b>	73 301	58054.4	14440.3	806.3
	<b>2020</b>	81 916	64877.5	16137.5	901.1
<b>DEA waste generation rate per income group (kg/person/year)</b>			<b>149.65</b>	<b>270.10</b>	<b>470.85</b>
<b>Waste generated/person/year (kg)</b>		<b>2011</b>	8 416 422.6	3778474	367791
		<b>2013</b>	8687839.8	3900324	379652
		<b>2020</b>	9708913.7	4358726	424272
<b>Waste generated/person/year (tons)</b>		<b>2011</b>	8416	3778	368
		<b>2013</b>	8688	3900	380
		<b>2020</b>	9709	4359	424
Estimations on the amount of waste generated can be calculated per week, per month or per year. The 2006 State of the Environment Report (SOER) indicated that South Africa generated 42 million m <sup>3</sup> of solid waste per year. This amounted to 0,7kg's per person per day. The generation rates were further broken down into generation rates per income category and the results were as follows:					



Low income= 0.41kg/per person/day or (0.41kgx365 days)=149.65kg/person/year
Middle income=0.74kg/per person/day or (0.74kgx 365days) = 270.1kg/person/year
High income= 1.29kg/person/day or (1.29kgx365days) = 470.85kg/person/year

## **4.7 WASTE MINIMISATION**

### **Beaufort West Local Municipality**

The Municipality has a waste minimisation strategy in place since June 2002, in partnership with Southern Cape Recycling and the strategy is made possible through the Youth in Waste Programme, an initiative of the DEA. Higher income residential areas within the Beaufort West receive a blue plastic bag that is utilised for all reclaimable refuse such as cardboard, cans, plastic, paper and newspapers. Currently one vehicle is available for the collection of the blue bags as a result the number of residential units provided with blue plastic bags is limited. The bags are collected on regular collection days using a Light Delivery Vehicle (LDV) with a trailer and taken to the reclamation depot (Southern Cape Recycling) where they are sorted, baled and transported to Cape Town; the cardboard is transported to Piet Retief and plastic bottles to Oudtshoorn.

Informal reclaiming takes place at the Vaalkoppies landfill site where the municipality collects the recyclables from the reclaimers on a regular basis and transports them to the reclamation depot. The reclaimers are reimbursed for the recyclables by Southern Cape Recycling. The residents may transport their own recyclable material to the depot and receive payment according to the mass quantity of the respective type of recyclable material. Some farmers also bring their recyclable materials to the reclamation depot. No waste minimisation takes place within the Nelspoort and Merweville area but considering the small amount of waste produced within these areas and travelling distances, such a strategy would not be financially sustainable.

### **Laingsburg Local Municipality**

Currently there is no formal waste recovery taking place in Laingsburg however the Municipality is in the process of appointing a contractor to implement recycling at the landfill site.

### **Prince Albert Local Municipality**

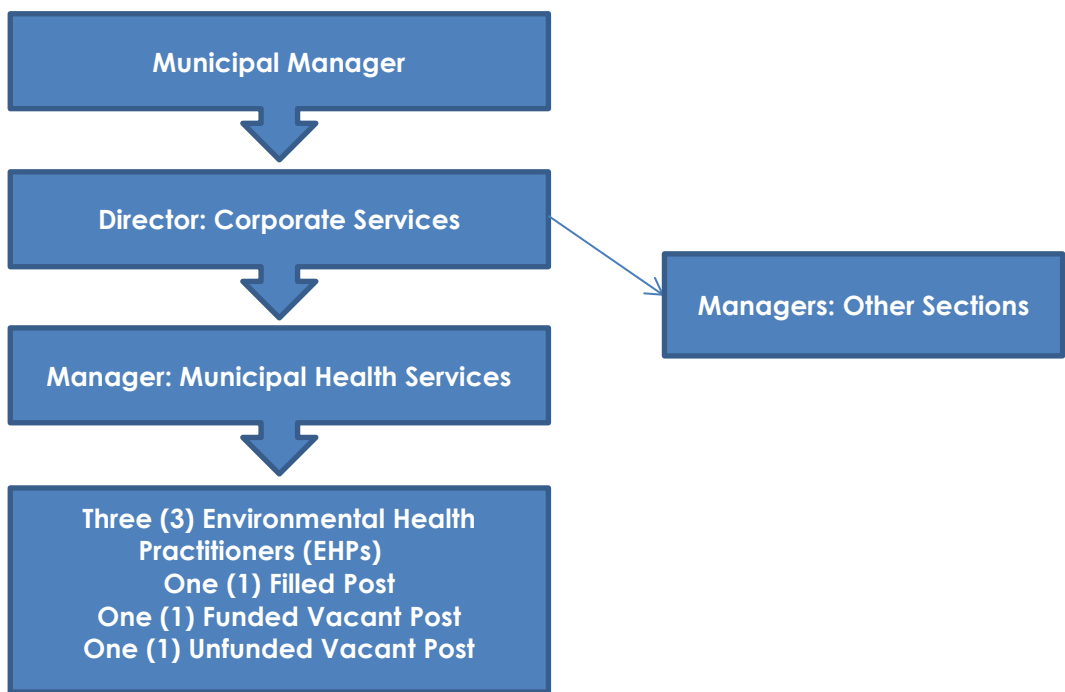
The Municipality has two minimisation initiatives, namely, the Recycling and Pick-a-Piece projects. In the recycling project, the recyclables are collected and are then transported to the Prince Albert WDF for sorting. The sorted material is then collected by a company, Retain Reuse Recycle, based in Oudtshoorn for recycling.

The Pick-a-Piece project is based on the example of the Recycle Swop Shop in Hermanus championed by the Overstrand Municipality. The Prince Albert Municipality's Pick-a-Piece project is an innovative structure where children between the ages of 7 and 16 are awarded points in exchange for recyclables and/or street rubbish that they collect and bring to a central point. The children can then redeem the points for basic need items from the Swop Shop. The Swop Shop stocks basic need items such as soap, toilet paper, toothpaste, towels, second hand clothes, basic school requirements as well as toys and these are "priced" in points. This empowers children who, as a result of poverty, illness or other social problems of addiction, and/or neglect, cannot otherwise find a way to buy these items. It also creates an incentive for cleaning the town, teaches the value of effort for reward and creates awareness about basic waste management and hygiene.

**Central Karoo District Municipality**

The District supports and promotes the development of an integrated waste management strategy that includes waste minimisation and prevention as well as encouraging job creation in the waste sector through recovery, recycling and other minimisation initiatives. The CKDM aims to encourage the community to adopt more responsible attitudes towards sustainable waste management.

**4.8 ORGANISATIONAL STRUCTURE AND STAFF CAPACITY**



**Figure 9: CKDM Organogram**

The staff component for MHS consists of four (4) Environmental Health Practitioners (EHPs), which are based at the Head Office in Beaufort West and at an office in Laingsburg. The waste management function falls under the MHS section.

## **4.9 WASTE AWARENESS AND EDUCATION**

### **Beaufort West Local Municipality**

Waste awareness and education are currently done through the distribution of pamphlets on a quarterly basis. Ad hoc education and awareness are done at schools and in the communities with assistance from the Department of Environmental Affairs (DEA) and other stakeholders such as SanParks.

### **Laingsburg Local Municipality**

The Municipality uses EPWP workers to inform the public regarding source separation.

### **Prince Albert Local Municipality**

The Youth Jobs in Waste Management, Environmental Awareness and Education Group conduct education and awareness programmes in the Municipality as well as the Pick a Piece Project does awareness and education.

### **Central Karoo District Municipality**

The MHS section of the CKDM educates communities on issues of waste management and pollution control. Awareness campaigns aim to encourage communities to adopt more responsible attitudes towards waste and to deal with it in ways that are more sustainable. These campaigns focus on the problem of litter, promoting the avoidance and minimisation of waste and pollution, greening the environment of communities to enhance the aesthetic beauty of local areas and to build a culture of cleanliness in their communities. The campaigns also promote recovery and recycling at source. The MHS section has drafted a project proposal which was submitted in December 2014 to the DEA and the Department of Health (DOH). This project is called the Cleaning and Greening Project and aims to increase awareness in communities with regards to maintaining a safe and clean environment using the youth. MHS utilises the following to create awareness with regard to environmental health through:

- National Weeks/ Days for sharing of information using the local newspaper, "The Courier" and other community education programmes,
- Newsletter to Local Municipalities, which aims to create awareness regarding the activities of the MHS section.

Local Municipalities should also ensure that there are staff members who are dedicated to the awareness creation task. Such officials should be properly trained to ensure that their planned programmes are effective and have the envisaged impact.

#### **4.10 WASTE INFORMATION MANAGEMENT**

The CKDM, Laingsburg and Prince Albert Municipalities have not designated a Waste Management Officer (WMO) as required by Section 10(3) of the National Environmental Management: Waste Act, 2008 (Act 59 of 2008). The Beaufort West is the only Municipality within the District that has designated a WMO.

The WMFs within the District have been registered on the Integrated Pollutant and Waste Information System (IPWIS); however none of the WMFs have a waste quantification system in place. The DEADP IPWIS team has provided training to officials within the waste management department of the Municipalities to use the IPWIS Waste Calculator. The Municipalities will use this as a waste quantification system in the absence of a weighbridge at their WDFs. The Municipalities will also use weigh pads that will be issued by the DEA under the Youth in Waste programme.

### **5. GAP AND NEEDS ANALYSIS**

The District has very specific problem areas that need to be addressed in order to deliver an effective waste management service. These include the following:

- MHS has a vital role to play in ensuring a safe and healthy environment for the residents within the District. However, MHS does not receive the necessary support on all levels of government, in particular from local government level. MHS is service delivery orientated, and is therefore mainly dependent on human resources for effective delivery.
- Financial constraints are one of the most important problems experienced, which leads to constraints in the delivery of effective municipal health services to the communities and a lack of personnel also contributes to this problem.
- Local Municipalities within the Central Karoo District face a number of challenges with regards to the delivery of an effective and sustainable waste management service, including insufficient budgets, low skilled capacity and a lack of appropriate equipment.
- Where waste management is not carried out to sufficiently high standards, it has the potential to have an adverse impact on the environment, such as flies, odours,

unsightliness and windblown litter on the short term and possible pollution of water sources in the long term.

- The most common observation is that littering and illegal dumping occur throughout the urban areas of the District with a prominent occurrence of illegal dumping in Beaufort West. The illegal dumping of refuse as well as the insufficient and irregular removal of refuse at collection points within the residential areas are one of the biggest nuisances within communities. Municipalities in the Central Karoo have limited resources to ensure that all areas prone to illegal dumping are cleaned up at all times. Innovative ways to get other stakeholders such as schools and businesses involved is necessary to help Municipalities to clean up their communities.
- The operational WDFs in the District are not all licenced and they need to be licenced to provide a means of effective control and a set of conditions which will ensure that licence holders will operate, monitor and close WDFs according to the legislative requirements.
- The dumping of abattoir waste on unlicensed, poorly managed WDFs in Beaufort West is a huge concern and health threat that needs urgent attention of all relevant role-players.
- Poor or insufficient fencing at WDFs resulting in significant amounts of windblown refuse littering surrounding areas in the communities. WDFs must be properly fenced off to keep people and animals out. Scavengers, children and domestic animals should not be allowed onto any WDFs for health and safety reasons.
- A huge concern is that there are people living on and around WDFs, some of which are permanent residents. This is undesirable based on health and safety risks.
- The lack of Personal Protective Equipment (PPE) for employees and formal waste reclaimers.
- The lack of access control to monitor the types and volumes of waste being dumped at the WDF. Sign posts at gates should indicate the types of waste that are allowed on the WDF.
- There is a definite need for training of personnel that will contribute to the effective management of landfill sites in the District. Operating an efficient, effective, environmentally sound municipal solid waste management program requires building administrative capacity.
- Training that builds human resources and institutional capacity at appropriate levels is essential and should include everyone, from waste reclaimers to senior municipal officials.

- Training in the principles of sanitary land filling, methods of land filling, the control of nuisances, drainage, leachate and gas management, recordkeeping, the monitoring of various aspects as required and the rehabilitation of sites are also considered important in the effective management of landfill sites.
- Waste is burned from time to time on landfill sites due to lack of cover material and this is not in line with the legislative requirements.
- The lack of access to water and sanitation facilities for the employees at landfill sites, which is necessary for the general hygiene of the workers.
- Some domestic waste contains harmful chemicals that damage the environment for example, household batteries, used car oil, old paint, fluorescent tubes, household cleaning chemicals, etc. need to be disposed of in a proper and safe manner.
- E-waste from households, which includes electrical items such as televisions (TVs), computers and fridges should not be placed into the domestic waste bin, therefore Local Municipalities need to provide e-waste containers at drop-off facilities.
- The implementation of good waste management practices, procedures and processes needs to increase the job creation potential within the waste sector. Job creation need not only be through recovery and recycling processes, but can also be implemented within other elements of the waste hierarchy, such as waste minimisation, waste avoidance and waste collection.
- Personnel shortages, the World Health Organization (WHO) norm for the amount of EHPs to the total number of residents is 1: 10 000 and currently there is a deficit of three (3) EHPs in the Central Karoo District for the delivery of a more effective service.
- Streamlining communication between Local and District Municipalities as there is a lot of red tape to acquire information.
- The lack of or insufficient service provision to rural communities in the District as well as the lack of baseline information, particularly for the rural areas (farms); and
- The need for the establishment of a District Environmental Management Forum that will focus on waste management issues as well as other environmental issues.

## **6. OBJECTIVES AND TARGETS**

The objectives of the MHS section with regards to waste management as well as the support and monitoring function are as follows:

- Capacitate EHPs on compliance monitoring of HCRW.
- Promote nuisance free & well managed landfill sites.
- Change negative behavioural patterns towards health and the environment amongst residents through awareness and education campaigns.
- Publish the Municipal Health Newsletter across the District
- Promote cooperative governance between the National, Provincial, District and Local government to ensure effective delivery of municipal health services; and
- Provide support to Local Municipalities within the District with regards to the delivery of an effective and sustainable waste management service by
  - creating an enabling environment for efficient budgeting,
  - sourcing donor funding for integrated waste management, and
  - ensuring that skilled staff is appointed.
- Prioritise illegal dumping clean up campaigns for the urban areas in the District and find innovative ways to involve other stakeholders such as school and businesses to assist Municipalities keep their communities clean.
- All operational WDFs need to be licenced and the licence conditions should be used by the District to monitor compliance and to ensure adherence to the conditions.
- Encourage Local Municipalities to ensure that all communities within the District have access to an integrated waste management service that focuses on recycling as a means to minimise waste.
- Promote and facilitate training of municipal personnel with respect to integrated waste management.
- Provide support to Local Municipalities with respect to the provision of containers for e-waste and household hazardous waste at drop-off facilities.
- Facilitate the implementation of good waste management practices, procedures and processes in order to increase the job creation potential within the waste sector.
- Ensure Local Municipalities improve service provision to rural communities in the District.
- Establish a District Environmental Management Forum that will focus on waste management issues as well as other environmental issues.
- Ensure that monitoring mechanisms are in place to provide adequate support to Local Municipalities.

- Encourage the Local Municipalities to implement good record-keeping mechanisms.



## 7. IWMP IMPLEMENTATION

IWMP GOAL 1: PROMOTE, EDUCATE, AND RAISE AWARENESS WRT INTEGRATED WASTE MANAGEMENT							
OBJECTIVES	TARGETS	ACTIVITIES	TIME FRAMES			RESPONSIBLE ENTITY	SOURCE OF FUNDING
			2014 to 2019	2019 to 2024	2024 Onward		
<b>1.1 OBJECTIVE: Promote Health &amp; Environmental Awareness (including Integrated Waste Management (IWM)) within communities, schools, businesses and other institutions within the municipality</b>	1.1.1 Achieve education and awareness wrt IWM within schools	1.1.1.1 Facilitate waste education and awareness through the DEADP Waste Management in Education (WAME) programme at schools	X	X	X	DEADP/ CKDM	DEADP/ CKDM
		1.1.1.2 Facilitate awareness sessions in collaboration with different stakeholders through public private partnerships (e.g. Nestle, Tiger brands, Woolworths, etc.) for the sponsoring of the Waste Minimisation initiatives within the District for primary school children	X	X	X	CKDM/ DEADP	Nestle, Tiger Brands, Woolworths, etc.
	1.1.2 Achieve education and awareness wrt IWM within communities	1.1.2.1 Develop awareness raising materials e.g. pamphlets, use rates accounts, community newspapers for dissemination of information to communities and civic associations	X	X	X	CKDM/ BWM/ PAM/ LM	DEA (youth jobs in waste programme) Manager: MHS
	1.1.3 Achieve education and awareness wrt IWM within businesses	1.1.3.1 Engage with businesses through local media & workshops wrt the development of awareness and education raising material wrt IWM	X	X	X	CKDM/ BWM/ PAM/ LM/ Industry	CKDM/ BWM/ PAM/ LM/ Industry

IWMP GOAL 1: PROMOTE, EDUCATE, AND RAISE AWARENESS WRT INTEGRATED WASTE MANAGEMENT							
OBJECTIVES	TARGETS	ACTIVITIES	TIME FRAMES			RESPONSIBLE ENTITY	SOURCE OF FUNDING
			2014 to 2019	2019 to 2024	2024 Onward		
	1.1.4 Achieve education and awareness wrt IWM within other institutions e.g. health care facilities	1.1.4.1 Engage with Health Care Facilities (HCFs) & other institutions through workshops wrt the development of awareness and education raising material regarding IWM	X	X	X	CKDM/ BWM/ PAM/ LM/ HCFs/ Sector Departments (DOH, Correctional Services)	CKDM/ BWM/ PAM/ LM/ HCFs/ Sector Departments (DOH, Correctional Services)
	1.1.5 Draft the Municipal Health Newsletter to Category B- Municipalities	1.1.5.1 Compile and distribute the Municipal Health Newsletter	X	X	X	Manager: MHS	Manager: MHS

IWMP GOAL 2: IMPROVE WASTE INFORMATION MANAGEMENT							
OBJECTIVES	TARGETS	ACTIVITIES	TIME FRAMES			RESPONSIBLE ENTITY	SOURCE OF FUNDING
			2014 to 2019	2019 to 2024	2024 Onward		
<b>2.1 OBJECTIVE:</b> Facilitate the establishment and implementation of accurate waste quantification systems	2.1.1 All waste management facilities within the District to have a waste quantification system in place	2.1.1.1 Ensure that Local Municipalities implement the waste calculator at their Waste Management Facilities (WMFs)	X			DEADP/ CKDM/ BWM/ PAM/ LM	N/A
		2.1.1.2 Assist Local Municipalities with the calibration of weigh pads that will be issued by DEA for WDFs	X	X		DEADP/ CKDM/ BWM/ PAM/ LM	N/A
		2.1.1.3 Assist Local Municipalities to source donor funding to install weighbridges at all WDFs	X	X	X	DEADP/ CKDM/ BWM/ PAM/ LM	N/A
	2.1.2 Monitor the management of Hazardous Waste within the District	2.1.2.1 Facilitate the identification of sources of hazardous waste within the District and assist with the compilation of a hazardous waste database	X	X		DEADP/ CKDM/ BWM/ PAM/ LM	DEADP/ CKDM/ BWM/ PAM/ LM

IWMP GOAL 3: ENSURE THE EFFECTIVE AND EFFICIENT DELIVERY OF INTEGRATED WASTE MANAGEMENT SERVICES							
OBJECTIVES	TARGETS	ACTIVITIES	TIME FRAMES			RESPONSIBLE ENTITY	SOURCE OF FUNDING
			2014 to 2019	2019 to 2020	2021 Onward		
<b>3.1 OBJECTIVE:</b> Capacitate officials within the District wrt the basic principles of sound waste management	3.1.1 All vacant posts in waste management are filled with properly qualified staff	3.1.1.1 Appointment of EHP in vacant funded post	X			District Council	District Council
		3.1.1.2 Ensure that Local Municipalities recruit properly qualified staff	X	X	X	CKDM/ BWM/ PAM/ LM	CKDM/ BWM/ PAM/ LM
		3.1.1.3 Assist Local Municipalities to source and secure funding for the filling of posts	X	X	X	CKDM/ BWM/ PAM/ LM	CKDM/ BWM/ PAM/ LM
	3.1.2 Ensure proper training of municipal officials in integrated waste management principles	3.1.2.1 Municipal officials to attend IWM training sessions/courses	X	X	X	DEADP/ CKDM/ BWM/ PAM/ LM	DEADP/ CKDM/ BWM/ PAM/ LM
<b>3.2 OBJECTIVE:</b> Ensure that IWM functions are executed in an environmentally and socially acceptable manner	3.2.1 Ensure that the basic service levels are standardised within the District	3.2.1.1 Conduct an analysis of current waste management services and compare with best practices	X	X	X	CKDM/ BWM/ PAM/ LM	CKDM/ BWM/ PAM/ LM
	3.2.2 Ensure the upgrade and improvement of service levels in municipal areas that have been identified as sub standard	3.2.2.1 Facilitate the implementation of IWM services aligned to best practices	X	X	X	CKDM/ BWM/ PAM/ LM	CKDM/ BWM/ PAM/ LM

IWMP GOAL 3: ENSURE THE EFFECTIVE AND EFFICIENT DELIVERY OF INTEGRATED WASTE MANAGEMENT SERVICES							
OBJECTIVES	TARGETS	ACTIVITIES	TIME FRAMES			RESPONSIBLE ENTITY	SOURCE OF FUNDING
			2014 to 2019	2019 to 2020	2021 Onward		
	3.2.3 Ensure the provision of adequate and reliable vehicles, equipment and machinery for IWM	3.2.3.1 Assist with the sourcing of funds to upgrade and maintain vehicles, equipment and machinery for IWM	X	X	X	CKDM/ BWM/ PAM/ LM	CKDM/ BWM/ PAM/ LM

IWMP GOAL 4: PROMOTE WASTE MINIMISATION THROUGH THE RE-USE, RECYCLING AND RECOVERY OF WASTE							
OBJECTIVES	TARGETS	ACTIVITIES	TIME FRAMES			RESPONSIBLE ENTITY	SOURCE OF FUNDING
			2014 to 2019	2019 to 2024	2024 Onward		
<b>4.1 OBJECTIVE:</b> Facilitate the mainstreaming of source separation of waste within the District	4.1.1 Promote the implementation and assist with the improvement of waste minimisation initiatives within the District	4.1.1.1 Identify means to incentivise households that willingly participate in source separation in order to promote and improve participation within the District	X	X	X	CKDM/ BWM/ PAM/ LM	CKDM/ BWM/ PAM/ LM
<b>4.2 OBJECTIVE:</b> Facilitate the formalisation of the recovery of recyclables, organics and builder's rubble	4.2.1 Assist with the establishment of a formalised programme for the recovery of recyclables, organics & builder's rubble from waste disposal facilities	4.2.1.1 Facilitate the creation of jobs opportunities in recovery and recycling for salvagers, away from the landfill, e.g. Expanded Public Works Programme (EPWP)	X	X	X	CKDM/ BWM/ PAM/ LM/ DEA	CKDM/ BWM/ PAM/ LM/ DEA
		4.2.1.2 Assist Local Municipalities to conduct feasibility studies in order to explore different options for the recycling and/or reuse of organics and builder's rubble.	X	X	X	CKDM/ BWM/ PAM/ LM/ DEA	CKDM/ BWM/ PAM/ LM/ DEA
		4.2.1.3 Facilitate the investigation of appropriate technologies for the recycling and/or reuse of organics and builders rubble.	X	X	X	CKDM/ BWM/ PAM/ LM/ DEA/ Industry	CKDM/ BWM/ PAM/ LM/ DEA/ Industry

IWMP GOAL 5: IMPROVE REGULATORY COMPLIANCE							
OBJECTIVES	TARGETS	ACTIVITIES	TIME FRAMES			RESPONSIBLE ENTITY	SOURCE OF FUNDING
			2014 to 2019	2019 to 2020	2021 Onward		
<b>5.1 OBJECTIVE:</b> Promote the licensing of all unlicensed operational or closed Waste Disposal Facilities (WDFs)	5.1.1 Ensure that all unlicensed WDFs are licensed	5.1.1.1 Ensure the appointment of a qualified EAP to assist with the authorisation process to license unlicensed WDFs	X			DEADP/ CKDM/ BWM/ PAM/ LM/ DEA	DEA
<b>5.2 OBJECTIVE:</b> Ensure compliance of all WDFs with license conditions	5.2.1 Improve compliance monitoring, auditing and enforcement at WDFs	5.2.1.1 Capacitate EHPs wrt compliance monitoring of HCRW& WDFs 5.2.1.2 Conduct compliance audits as determined by licence conditions 5.2.1.3 Monitor progress of audit actions implemented 5.2.1.4 Monitor contraventions of the Waste Act and Municipal By-Laws	X	X	X	DEADP/ CKDM	DEADP/ CKDM

IWMP GOAL 5: IMPROVE REGULATORY COMPLIANCE							
OBJECTIVES	TARGETS	ACTIVITIES	TIME FRAMES			RESPONSIBLE ENTITY	SOURCE OF FUNDING
			2014 to 2019	2019 to 2020	2021 Onward		
<b>5.3 OBJECTIVE:</b> Facilitate the establishment of IWM facilities (drop-off sites, MRFs, Transfer stations, composting, buy-back centres, swop shops etc.)	5.3.1 Ensure the development of IWM facilities within the District	5.3.1.1 Assist with the identification of IWM facilities that need to be established within the District	X	X	X	DEADP/ CKDM/ BWM/ PAM/ LM/ DEA	DEADP/ CKDM/ BWM/ PAM/ LM/ DEA
<b>5.4 OBJECTIVE:</b> Ensure the development of IWM By-laws within the District	5.4.1 Facilitate the adaptation of the DEADP IWM By-law Model	5.4.1.1 Ensure Local Municipalities revoke existing By-laws	X	X		DEADP/ CKDM/ BWM/ PAM/ LM	CKDM/ BWM/ PAM/ LM



**IWMP GOAL 6: ENSURE THE SAFE AND INTEGRATED MANAGEMENT OF HAZARDOUS WASTE**

OBJECTIVES	TARGETS	ACTIVITIES	TIME FRAMES			RESPONSIBLE ENTITY	SOURCE OF FUNDING
			2014 to 2019	2019 to 2024	2024 Onward		
<b>6.1 OBJECTIVE: Promote safe handling, storage, transportation and disposal of hazardous waste</b>	6.1.1 Facilitate awareness and training on the safe management of chemical and hazardous waste within the District	6.1.1.1 Promote compliance with emergency incident management and reporting (section 30 of NEMA)	X	X	X	CKDM/ BWM/ PAM/ LM/ DEADP	CKDM/ BWM/ PAM/ LM
		6.1.1.2 Facilitate training on emergency spill response to municipalities	X	X	X	CKDM/ BWM/ PAM/ LM/ DEADP	CKDM/ BWM/ PAM/ LM
		6.1.1.3 Ensure municipal officials are trained on the Waste Classification and Management Regulations, the Standards for assessment of waste for landfill disposal, the Standards for disposal of waste to landfill and other relevant legislation	X	X	X	CKDM/ BWM/ PAM/ LM/ DEADP	CKDM/ BWM/ PAM/ LM
	6.1.2 Facilitate the removal of Household Hazardous Waste (HHW) from the general waste stream	6.1.2.1 Promote the source separation and diversion of HHW from the general waste stream	X	X	X	CKDM/ BWM/ PAM/ LM/ DEADP	CKDM/ BWM/ PAM/ LM/ DEADP/ DEA
	6.1.3 Facilitate the management of Health Care Risk Waste (HCRW) in	6.1.3.1 Ensure compliance to Health Care Risk Waste legislative requirements	X	X	X	CKDM/ BWM/ PAM/ LM/ DEADP/ DEA/ DOH	CKDM/ BWM/ PAM/ LM/ DEADP/ DEA/ DOH

IWMP GOAL 6: ENSURE THE SAFE AND INTEGRATED MANAGEMENT OF HAZARDOUS WASTE							
OBJECTIVES	TARGETS	ACTIVITIES	TIME FRAMES			RESPONSIBLE ENTITY	SOURCE OF FUNDING
			2014 to 2019	2019 to 2024	2024 Onward		
	accordance with legislative requirements	6.1.3.2 Designate EHPs as Health Care Waste Inspectors ito Section (9) of the Health Care Waste Management Act	X			Council	Council
		6.1.3.3 Revise Municipal Health By-law	X			Manager: MHS/ Council	Manager: MHS/ Council
		6.1.3.4 Facilitate health care risk waste awareness amongst home-based care givers (safe disposal of HCRW generated at home) as well as other health-care facilities	X			PAM / CKDM	PAM
	6.1.4 Improve hazardous waste management	6.1.4.1 Engage the Departments of Agriculture and Education regarding the management of hazardous waste at their respective experimental farms and schools, respectively	X	X		CKDM/ BWM/ PAM/ LM/ DEADP& relevant authorities	CKDM/ BWM/ PAM/ LM& relevant authorities

IWMP GOAL 6: ENSURE THE SAFE AND INTEGRATED MANAGEMENT OF HAZARDOUS WASTE							
OBJECTIVES	TARGETS	ACTIVITIES	TIME FRAMES			RESPONSIBLE ENTITY	SOURCE OF FUNDING
			2014 to 2019	2019 to 2024	2024 Onward		
6.2 <u>OBJECTIVE:</u> Promote compliance monitoring and enforcement	6.2.1 Coordinate compliance monitoring and enforcement	6.2.1.1 Conduct joint compliance monitoring inspections	X	X	X	CKDM/ BWM/ PAM/ LM/ DEADP/ DEA/ DOH	CKDM/ BWM/ PAM/ LM/ DEADP/ DEA/ DOH

IWMP GOAL 7: ENSURE THE SOUND BUDGETING AND FINANCIAL MANAGEMENT FOR IWM SERVICE							
OBJECTIVES	TARGETS	ACTIVITIES	TIME FRAMES			RESPONSIBLE ENTITY	SOURCE OF FUNDING
			2014 to 2019	2019 to 2024	2024 Onward		
<b>7.1 OBJECTIVE:</b> Address funding constraints of waste management authorities within the District	7.1.1 Identify different sources of funding	7.1.1.1 Explore and facilitate access to alternative funding sources	X	X	X	CKDM/ BWM/ PAM/ LM/	CKDM/ BWM/ PAM/ LM
<b>7.2 OBJECTIVE:</b> Capacitate waste authorities on financial aspects with regard to improving waste management services	7.2.1 Train officials within the waste management department within the District on financial management	7.2.1.1 Identify financial management courses or other training opportunities for inclusion in the performance agreements of officials	X	X	X	CKDM/ BWM/ PAM/ LM/ DEADP	CKDM/ BWM/ PAM/ LM
<b>7.3 OBJECTIVE:</b> Improve funding for waste management services	7.3.1 Ensure Local Municipalities have a sustainable funding stream for IWM	7.3.1.1 Ensure Municipalities implement a revised tariff system based on full-cost accounting	X			CKDM/ BWM/ PAM/ LM/	CKDM/ BWM/ PAM/ LM
		7.3.1.2 Engage financial institutions to finance waste infrastructure and technologies	X	X	X	CKDM/ BWM/ PAM/ LM/ DEADP	CKDM/ BWM/ PAM/ LM
		7.3.1.3 Engage the departments of Cooperative Governance and Traditional Affairs (COGTA) and Local Government on reviewing and increasing the allocation of Municipal Infrastructure Grant (MIG) for waste management infrastructure	X	X	X	CKDM/ BWM/ PAM/ LM/ DEADP	CKDM/ BWM/ PAM/ LM

## 8. MONITORING AND REVIEW

The Municipal Health Services section is only responsible for the implementation and monitoring of its own projects. Mechanisms for monitoring the implementation of waste related projects within the District office as well as Local Municipality projects involving the District will be the responsibility of a Waste Management Officer that will be appointed by the municipality. Once the final IWMP second generation document is approved by Council the resolution with the plan will be submitted to the Member of the Executive Council (MEC) for endorsement. This approval date will serve as the base for the implementation of the plan, although some base work on certain activities may have been started by the municipality. The municipality will also provide an annual report on the implementation of the plan to the DEADP. **Table 31** and **Table 32** below will be used to monitor and review the implementation of projects respectively in order to ensure that they are on schedule and to determine if any changes to the objectives need to be made.

**Table 31: Monitoring of IWMP Implementation Plan**

Monitoring of Activities	On Schedule	If Not, Reasons?	Action To Rectify	Responsible Person/s

**Table 32: Review of IWMP Implementation Plan**

Objectives	Are These Still Relevant	Amendment Required	Review Date	Responsible Person/s

# ANNEXURE H

# Central Karoo Climate Change Response Framework

**Final Draft**

**March 2016**



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## List of Acronyms

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CBOs	Community Based Organisations
CC	Climate Change
CCRF	Climate Change Response Framework
CKDM	Central Karoo District Municipality
CSAG	Climate Systems Analysis Group
DEA	Department of Environmental Affairs
DEADP	Department of Environmental Affairs and Development Planning
DM	District Municipality
DMAA 2015	Disaster Management Amendment Act No 16 of 2015
DoA	Western Cape Department of Agriculture
EPIP	Environmental Protection and Infrastructure Programmes
GDP	Gross Domestic Product
HDI	Human Development Index
IDP	Integrated Development Plan
LED	Local Economic Development
LM	Local Municipality
MIG	Municipal Infrastructure Grant
NCCRWP	National Climate Change Response White Paper
NGO	Non-governmental Organisation
RDP	Reconstruction and Development Programme
SA	South Africa
SANParks	South African National Parks
SAWS	South African Weather Service
SDF	Spatial Development Framework
UCT	University of Cape Town
WCG	Western Cape Government

# INTRODUCTION

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## Introduction and Background

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Climate change is already a measurable reality in South Africa and considered to be one of the greatest economic and environmental challenges of our time. Climate change is undermining development gains, and will continue to place pressure on critical resources throughout South Africa. The percentage of global government's Gross Domestic Product (GDP) that is likely to be lost or redirected to recovering from climate related disasters is likely to increase to 5% - 20% of GDP by 2100<sup>1</sup>.

The only way to effectively respond to this threat is to include climate change into all our activities at all levels of government to ensure that we continue to provide safe communities with access to services and opportunities that are appropriate in a new climate regime and that will increase our social and economic resilience. Our past approaches to engineering, planning, social and economic development are fast becoming outdated, and there is decreasing suitability to the new climate within which our communities find themselves. A lack of resilience and inability to adapt will contribute to the increased susceptibility of human and natural systems to the adverse effects of climate change and impact our economic potential negatively in many regions. However, with rapid and early action we can decrease vulnerability and improve the longer term outlook.

The Central Karoo is inherently a resource scarce region and has historically always had a harsh climate to which our communities and sectors of the region have been able to adapt. However, the economy of the Central Karoo relies predominantly on the ecosystems of the region to provide functional ecosystem services such as productive soils, adequate water, pollinators etc. Central Karoo's contribution towards climate change in terms of Greenhouse Gas emissions has also been relatively low in comparison to other regions, yet because of the already marginal environment it is an area that will likely be impacted early by climate change. Whilst the Central Karoo can to some extent contribute to a decrease in emissions<sup>2</sup> they can contribute most by providing opportunities to other parts of the country through ample wind and solar potential, and by undertaking urgent and proactive long term adaptation that will increase their own resilience. The values and vision of the Central Karoo District are critical in the context of a changing climate, and it is critical to assess whether these are compatible with a new climate norm.

This document constitutes the first draft Climate Change Response Framework for the Central Karoo District Municipality (CKDM). It was developed in partnership by the CKDM and the Climate Change Directorate of the Western Cape Department: Environmental Affairs and Development Planning (DEADP). This framework is a first step that aims to create an enabling environment for our district to increase support, focus and prioritisation of coordinated key climate change responses across all sectors, and to develop partnerships, funding approaches and mechanisms for a whole of society response to the challenge of climate change.

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<sup>1</sup> Stern Review The Economics of Climate Change (2006) – a leading international assessment of the effects of climate change.

<sup>2</sup> The Central Karoo District contributes 1% to the total CO<sub>2</sub> emissions (from the energy sector) in the Western Cape.

This Climate Change Response Framework (CCRF) for the Central Karoo is targeted at decision makers and technical personnel in order to guide the inception and development of climate change responses within the Central Karoo District. The document presents the Central Karoo District Municipality's vision for an effective approach to climate change response, improving the district's social, economic and environmental resilience and climate change response capacity. It aims to draw on the momentum and the work that has already been undertaken through the district and to provide a structure through which existing interventions can be further strengthened and supported. It further aims to identify appropriate coordination platforms, encourage collaboration amongst stakeholders, and attempts to outline the various roles and responsibilities that can enhance a smarter approach towards reducing climate vulnerability in the Central Karoo District.

When it comes to municipal management, our decision-makers will have to make challenging choices that may require trade-offs between sectors. With the appropriate understanding of potential climate change responses across these sectors and how they may interact with each other, policy decisions with unintended negative impacts on communities can be reduced and avoided. For example, water availability in the Karoo (particularly the potential future decrease in water availability due to climate change) should be taken into account when making decisions about all potential economic development, including shale gas. Incorporating knowledge about climate change threats and opportunities should enhance decision making in the District. The CCRF will also assist our officials in educating local citizens about climate change and how we must take its impacts into account when planning for the future.

### **The Western Cape Climate Change Municipal Support Programme**

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The effective implementation of the National Climate Change Response White Paper (NCCRWP) and the Disaster Management Amendment Act No 16 of 2015 (DMAA 2015) is dependent on the efforts of provincial and local governments. In fulfilment of this, the Western Cape Government reviewed and revised its original Climate Change Response Strategy (2008) in 2014 to be in line with the NCCRWP<sup>3</sup>. As part of this, and as the result of an expressed need from municipalities in the Western Cape for support on climate change, the Climate Change Municipal Support Programme was initiated in 2012 to support municipalities with the development of Climate Change Response Plans /Frameworks. Initially there was a call for interest to all municipalities, and WCG worked with the municipalities who answered the call in developing first generation Sustainable Energy Plans (in 4 municipalities) and Adaptation Plans (2 local municipalities and 1 district municipality). In 2013/14, the approach was modified to focus on developing high level responses at a District level, to subsequently then be rolled out to the local level. The approach has also shifted to an integrated climate change response (combining mitigation and adaptation) – which is now international best practice particularly at the local level. West Coast District was the first to follow this integrated climate change response approach, and this Central Karoo District framework follows suite.

These strategies, plans or frameworks should be adopted by the municipal Council with all elements mainstreamed and fully integrated into municipal master plans [Integrated Development Plan (IDP), Spatial Development Framework (SDF)], the Disaster Management Plans (as per DMAA 2015) and sector plans, as well as into cooperative government sector plans and implementation budgets [e.g.

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<sup>3</sup> Changes in accordance with the DMAA 2015 will take place in the next review.

Municipal Infrastructure Grants (MIGs), Environmental Protection and Infrastructure Programmes (EPIPs) etc]. The intention is that this framework is the initial phase of much more ongoing work to be undertaken, and should be seen as an enabling launching platform of more comprehensive climate change engagements for the district, in collaboration between different tiers of government and by including all stakeholders in the region (farming communities, NGOs, CBOs, etc.) to provide landscape wide climate change responses.

Climate change response is about reducing vulnerability to climate change, developing adaptive capacity to cope with what can't be avoided, and reducing GHG emissions. Climate risk is relatively high in the Central Karoo as it is an arid area that has always been prone to drought situations. Climate related disasters have substantial financial implications, and climate change in general could have far reaching long term economic consequences for the viability of the region. Climate-related impacts such as drought, flooding, snowfall, wind, fires and extreme heat are not new to the Central Karoo District but they are likely to be exacerbated, as well as increasing in frequency and severity. Importantly, long term incremental changes and shifts in trends in climatic variables will impact on the thresholds of tolerance of infrastructure and critical services provided by government.

## **CENTRAL KAROO DISTRICT MUNICIPAL CONTEXT**

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The total area of the Central Karoo District Municipality (CKDM) is 38 853 km<sup>2</sup> with a population of 71,000 people in 19,000 households. The vast, sparsely populated area covers approximately 30% of the total area of the Western Cape. The district is comprised of three Local Municipalities: Beaufort West Municipality, Prince Albert Municipality, and Laingsburg Municipality. Distances between settlements in the district are vast.

Even though the level of development within the district has improved over the past decade<sup>4</sup>, CKDM still has the lowest Human Development Index (HDI), and the highest number of people living in poverty (32.5%) of all the Districts in the Western Cape. This poses a huge challenge to the district to create more employment opportunities to improve the standard of living in the area. There is a significantly higher unemployment rate for females compared with males (38.3% compared with 24%), and as such women have higher vulnerability.

The overwhelming majority of employment in the Central Karoo is within the agriculture sector. Agricultural activities other than sheep farming can only be sustained in the semi-arid southern area of the district. The region is one of the drier, low horticultural potential areas of the Western Cape, and relies heavily on extensive agriculture and agro-processing as the main economic activity. Consequently 30% of the employed population works in the agricultural sector; 18% in community, social and personal services; and 15% in wholesale and retail trade. The District has seen immense out-migration given limited opportunities to earn a living, which leads to towns in the district becoming stagnant or declining. The agriculture sector is very dependent on exports markets, and due to the economic troubles facing the Euro area the agriculture sector has seen a decline in exports and consequently job losses within the sector.

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<sup>4</sup> The HDI for the Central Karoo has increased from 0.57 in 2001 to 0.60 in 2010. Prince Albert Municipality has the lowest HDI in the district followed by Laingsburg Municipality.

Non-rural development in rural areas in the Central Karoo can be found in the towns of Beaufort West, Laingsburg and Prince Albert. These areas are changing from pure agricultural areas to eco-tourism and game farming areas. Urban-related development applications are therefore likely to increase (resort developments, guest houses, road and farm stalls, etc). These developments are clearly in line with the objectives in the district IDP and LED documents. Areas zoned as Ecological Corridors should be assessed for potential to establish formal Public/Private Conservation Areas, which could be used to boost tourism.

The main activities of the region as related to agriculture and tourism are highly dependent on the rural nature of the district and reliance on the scarce water resources which are largely groundwater based. However, large parts of the Central Karoo are already under groundwater extraction stress. Over-abstraction of groundwater has been identified in 37 of the 132 quaternary catchments in this Water Management Area, of which most occurs in the area between Beaufort West, Merweville and Laingsburg. During the 2010 drought in Beaufort West, many boreholes ceased water production and water levels decreased in boreholes by three meters in a two month period<sup>5</sup>. This indicates that whilst there is some groundwater supply in the region it should be treated sparingly as an absolute last resort resource in order to prevent it becoming depleted. Inland dry regions like the Central Karoo have little opportunity for water supply augmentation and need fundamentally different approaches than that of coastal regions. The drought of 2010 illustrates this point, and such recurring events should be considered to be the new norm.

### Establishment and Constitutional Mandate

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The Municipal Structures Act 1998 (Act 117 of 1998) outlines the roles and responsibilities and functions of district municipalities. Related to climate change the act provides roles and responsibilities for Central Karoo District Municipality in the following broad areas: i) master planning such as development of a framework through which local municipalities can develop their IDPs, including SDFs and disaster management plans (which now include climate change adaptation); ii) solid waste management; iii) health services; and iv) fire and disaster management services.

This Framework is guided by the principles set out in the Constitution of The Republic of South Africa (Act No. 108 of 1996), the Bill of Rights (Chapter 2 of the Constitution), the National Environmental Act (Act No. 107 of 1998), the National Climate Change Response White Paper (2011; NCCRWP) as well as the Western Cape Climate Change Response Strategy (2014). In addition, the Framework is in accordance with the new Disaster Management Amendment Act (Act No 16 of 2015; DMAA – due to be enacted in 2016), which stipulates that *“Each municipality must... prepare a disaster management plan setting out the way in which the concept and principles of disaster management are to be applied in its municipal area, including expected climate change impacts and risks for the municipality...(and) provide measures and indicate how it will invest in disaster risk reduction and climate change adaptation, including ecosystem and community-based adaptation approaches”* [(S.21(1)(c)(i); S.21(e))]

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<sup>5</sup> Disaster Management Plan for Central Karoo DM.

## CENTRAL KAROO CLIMATE OVERVIEW

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### Observed Climate (rainfall, temperature)

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The Central Karoo is characterised by summer rainfall and a dry winter. Annual rainfall is very low across the region, although slightly higher in the Nelspoort area to the north-east. Summers are hot, particularly in the Koup area around Laingsburg, and winter nights are cold. The distinct climate, soils and mountains give rise to a particular agricultural production potential. The area is primarily suited to extensive production of sheep, goats and beef cattle, as well as some game, ostrich and rabbits<sup>6</sup>. The Central Karoo has an average annual rainfall of 200mm although this varies across the district, and is periodically affected by droughts and localised floods. Water scarcity, whilst not a new factor to consider, is one that is becoming more severe as the climate changes and is impacting on economic sectors and on households. Many sectors and communities are on the threshold of their climate tolerance in the region – for example, parts of the Prince Albert municipality only receive an average rainfall of 41mm per year.

Already climate data shows that warming has occurred across the province, primarily in the mid- to late summer. In particular in the Central Karoo, a trend analysis from the Institute of Soil, Climate and Water shows significant warming trends over the past 30-40 years in minimum temperatures during December to March and July to September, and for maximum temperatures during January, May and August. In summary, very warm days have become warmer or have recurred more regularly during the last decade<sup>7</sup>. Rainfall has increased in October as well as the summer months (Dec – Feb) in the period 1960-2012, and the number of rain days in these months has also increased. As yet there are no specifically detectable trends in total annual rainfall in the Central Karoo. This is a common challenge in Southern Africa, as rainfall is typically variable and it takes long term monitoring to detect overall changes.

Drought can occur during El Niño events, as has been seen in previous such events, and the 2015/16 El Niño currently being experienced is no exception. The most recent severe droughts occurred in 2007 and 2010 causing substantial financial loss to farmers that took years to recover. In May 2010 the Beaufort West area was declared a disaster area due to water scarcity and drought.

The Western Cape also experiences regular flooding events, including in the Central Karoo, particularly during ‘cut-off low pressure weather systems’. An increase in extreme rainfall events is likely which could increase the risk of flooding. This could have an impact on erosion, sedimentation of dams and flood damage, which are already risks in this area.

The Great Karoo area can experience floods in late summer and between March and May, although flash floods can also occur in winter. Cut off low pressure systems are often the cause of flooding events in the Southern Karoo, such as around the Laingsburg area. This was the cause of the ‘great flood’ in Laingsburg in 1981, whereby the rainfall in the Buffelsriver and Baviaans river catchments, which have their confluence in Laingsburg, led to the flood. Various specific areas in the Central Karoo District are highly susceptible to flooding events, such as the Moordenaarskaroos in the Laingsburg LM, the Buffelsrivier train bridge, Laingsburg and the Vleiland areas in Beaufort West LM,

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<sup>6</sup> Information in this paragraph from the SmartAgri Project summary for Farmers in Central Karoo.

<sup>7</sup> Disaster Management Plan for Central Karoo DM.

as well as Murraysburg. Other high risk areas include the Groot Swartberg (south of Prince Albert) and the Sneeuberge (south east of Murraysburg).

During a hailstorm in December 2012 the Rustdene community in the Beaufort West Local Municipality was particularly vulnerable to hailstorm damage – with 15 houses receiving damage estimated at R500,000.00. Furthermore, the town of Nelspoort was exposed to damage to windows and low pressure water solar panels - the cost to these RDP houses in damage was R260,000.00.

## Climate Change in the Central Karoo

### Future Changes in the Western Cape

While the Western Cape climate is classed as Mediterranean (predominated largely by a winter rainfall region), the Central Karoo is a diverse region that spans both this Mediterranean influence, and that of the summer rainfall regions of the Northern part of the country. A study by the Climate Systems Analysis Group (CSAG) at the University of Cape Town (UCT 2008) modelled the impact of the expected climate change for the Western Cape for the 2030 - 2045 period<sup>8</sup>. The following climate changes are projected (relevant to CKDM which does not have a coastline):

**Table 1: Climate Change projects for the Western Cape 2030 - 2045**

Projection	Example of Possible Impacts
Higher mean annual temperature	<ul style="list-style-type: none"> <li>Increased evaporation and decreased water balance (i.e. even in wetter years, the evaporation rate will be much higher than in the past contributing to the overall drying effect);</li> <li>Increase wild fire danger (frequency and intensity).</li> </ul>
Higher maximum temperatures, more hot days and more heat waves	<ul style="list-style-type: none"> <li>Heat stress on humans and livestock;</li> <li>Increased incidence of heat-related illnesses;</li> <li>Increased incidence of death and serious illness, particularly in older age groups;</li> <li>Increased heat stress in livestock and wildlife;</li> <li>Decreased crop yields and rangeland productivity;</li> <li>Extended range and activity of some pests and disease vectors;</li> <li>Increased threat to infrastructure exceeding design specifications relating to temperature (e.g. traffic lights, road surfaces, electrical equipment, etc.);</li> <li>Increased electric cooling demand increasing pressure on already stretched energy supply reliability;</li> <li>Exacerbation of urban heat island effect.</li> </ul>
Higher minimum temperatures, fewer cold days and frost days	<ul style="list-style-type: none"> <li>Decreased risk of damage to some crops and increased risk to others such as deciduous fruits that rely on cooling period in autumn;</li> <li>Reduced heating energy demand (although extremes may still occur);</li> <li>Extended range and activity of some pests and disease vectors;</li> </ul>

<sup>8</sup> The timeline parameter for the response strategy is the 2030 – 2045 period. 2030 is the earliest anchor year to which climate change projections can realistically be scaled back from global climate models, which look at 2045 and beyond. 2030 is also a time horizon within which policy, economic and business decisions can realistically be made.



	<ul style="list-style-type: none"> <li>• Reduced risk of cold-related deaths and illnesses.</li> </ul>
General drying trend in western part of the country	<ul style="list-style-type: none"> <li>• Decreased average runoff, stream flow;</li> <li>• Decreased water resources and potential increases in cost of water resources;</li> <li>• Decreased water quality;</li> <li>• Decrease in shoulder season length threatening the Western Cape fruit crops;</li> <li>• Increased fire danger (drying factor);</li> <li>• Impacts on rivers and wetland ecosystems.</li> </ul>
Shifts in Seasonality	<ul style="list-style-type: none"> <li>• Shift in onset of the rainy season, causing planning challenges for agriculture.</li> </ul>
Intensification of rainfall events	<ul style="list-style-type: none"> <li>• Increased flooding;</li> <li>• Increased challenge to storm water systems in urban settlements;</li> <li>• Increased soil erosion;</li> <li>• Increased river bank erosion and demands for protection structures;</li> <li>• Increased pressure of disaster relief systems;</li> <li>• Increased risk to human lives and health;</li> <li>• Negative impact on agriculture such as lower productivity levels and loss of harvest.</li> </ul>

As is evident in a number of the above listed projections, there is a risk of drier conditions across the province as a whole in the 40 year time horizon. In contrast, however, historical trends and some downscaled projections suggest that western and southern mountain ranges could experience wetter conditions. This apparent contradiction serves to highlight the complexity of climate drivers and responses, which in turn illustrates the inherent difficulties faced by decision makers when required to plan for climate resilience into the future. The complexity highlights the need for adaptive and flexible responses to climate variability and change that are not focused on fixed timescales or unidirectional change.

### Future Climate Changes in the Central Karoo

Summer rainfall processes are likely to change under a warmer climate. It is expected that higher temperatures and humidity will drive more intense summer convective (thunderstorm) rainfall events in the future. However, it is not yet clear whether the large scale circulation patterns that are also required for thunderstorm activity will become more or less frequent over the Western Cape in the future. Hence there remains some uncertainty around changes in mean annual rainfall in the summer rainfall regions. Both an increase and a decrease in rainfall should be considered in planning and development.

The Central Karoo with its erratic, low rainfall and low runoff, has only a moderate water storage capacity and there is a high reliance on groundwater. This region is expected to be quite responsive to either drying or wetting and shifting rainfall patterns when compared to many other parts of the province. The low water storage capacity and heat stress (and evaporation) renders it vulnerable to periods of low rainfall.

Future temperature increases are a certainty. The greatest increases will occur inland in regions like the Central Karoo. Expected increase in mean annual temperature across the province for mid-century (35 years away) are between 1.5°C and 3°C, with the Central Karoo likely tending towards this upper part of this range. Both maximum and minimum temperatures will increase.

**Table 2: Summary table of climate change impacts and agriculture for each agro-climatic zone in Central Karoo (from Smart Agri Status Quo Assessment report)**

Agro-climatic zone	Main physical features	Main water resource features	Main climatic features	Climate change temperature projections	Main commodities	Socio-economic features	Future agricultural potential <sup>5</sup>
Koup	Mostly flat plain rising gently to escarpment	Few episodic rivers, medium storage capacity, use of groundwater	Very dry, very hot, cold winter minimum temperature	High range warming	Olives, vegetables and vegetable seed, Sheep, cattle, goats, game	Very low population density	Slowly declining productivity, constrained by heat
Little Karoo	Flat but surrounded by mountain ranges	Farm dams, few seasonal rivers, large storage capacity	Hot summers, cold winter minimum temperature	Medium to high range warming	Wheat, vegetables, wine grapes, stone fruit, olives  Dairy, ostriches, sheep, cattle, goats, pigs	Unemployment and poverty	Remains moderately high as long as dams fill up
Nelspoort	Flat with isolated hills, on escarpment	Few episodic rivers, low storage capacity, use of groundwater	Hot summers, cold winter minimum temperatures, low rainfall in summer	High range warming	Cattle, sheep, goats, ostrich	Very low population density	Depends on rangeland changes, constrained by heat and water
Tankwa-vanWyksdorp	Mostly flat plain, bordered by mountains with escarpment to the north, split by the Klein Swartberge and with Langeberge to the south	Medium storage capacity, use of groundwater	Very hot and very dry; cold winter minimum temperature	Medium to high range warming	Wheat, stone fruit, wine grapes  Sheep, goats, pigs, cattle, game, ostrich, dairy	Very low population density	Slowly declining productivity, constrained by heat and water availability

## CENTRAL KAROO CLIMATE CHANGE IMPACTS, RISKS AND RESPONSES

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During the first stakeholder workshop undertaken in the development of this framework the CKDM and local municipal officials identified sectors and local government line functions that would be affected by climate change. The District officials identified the following sectors as those that are likely to be vulnerable to climate related impacts and require responses:

- Economic development
- Social Development
- Political sphere
- Planning
- Public safety
- Disaster management
- Water management
- Health
- Agriculture
- Tourism
- Housing and infrastructure
- Transport
- Energy / electricity
- Biodiversity conservation
- Future mining
- Waste management

Essentially all sectors and spheres of government are either vulnerable or at risk to climate change or can contribute towards reducing energy use and greenhouse gas emissions, reinforcing that climate change response is a strategic level challenge that cannot be left to environmental staff to deal with, but one that should be coordinated from the Mayor's office, or that of the Municipal Manager.

In terms of vulnerable communities, those who are most vulnerable must be identified and prioritised within the response framework and highlighted as key groups for our prioritised support. Many of these will overlap with priority vulnerable groups of the District. In general any communities or sectors that are already under economic stress as a result of land degradation, loss of biodiversity, failure of systems and services and those at (or close to) the threshold of their climate tolerance are at risk from climate change. Some examples include:

- Farmers (both smallholder and commercial, and particularly emerging farmers) especially in the Leeu Gamka, Laingsburg, West of Murraysburg and Beaufort West areas;
- Moordenaarskaro and Witteberg in the Laingsburg LM are also vulnerable to drought;
- Casual farm labourers could potentially face longer periods of unemployment;
- Agri-business that are dependent on farmers' success, and particularly those dependent on the export market (i.e. as prices increase this makes SA products less competitive). E.g. Abattoirs dependent on farmers can lose business in droughts; tanneries dependent on water can close down; etc.;
- Urban poor's vulnerability will increase due to increasing food, water and energy cost inflation;
- The elderly, very young as well are very vulnerable to specific climate impacts;

- Woman, who are already vulnerable as a result of lower employment rates and other factors; and
- Uninsured communities and groups.

The following climate related hazards for the Central Karoo were discussed as those that have had a profound impact on the region in the past, and are likely to be exacerbated in future.

- |                    |  |
|--------------------|--|
| • Fire             | • Storm events (including lightening and wind) |
| • Drought          | • Increased number and extent of heat days     |
| • Floods           |  |
| • Snow             |  |
| • Shift in Seasons |  |

Based on the above identified areas of vulnerability and climate risks, various sectoral themes were discussed in terms of what impacts have been observed in the past. These have been detailed in the below table. Along with identified impacts, and additional plausible future impacts, the CKDM stakeholder groups also identified various climate change responses to each of these impacts and risks.

**Table 3: Climate related issues and challenges experienced in the past, future perceived challenges and potential responses**

Theme / Focus Area	Key Issues (Mixture of climate risks and impacts and underlying vulnerabilities)	Potential Responses
Energy	<ul style="list-style-type: none"> <li>• <u>Energy access</u> in poorer communities is a challenge in the Central Karoo.</li> <li>• Increased energy use is occurring in the Central Karoo due to <u>high temperatures</u> (cooling needs).</li> <li>• Due to <u>water scarcity</u> energy is required to pump underground water which can increase costs of water, impacting on the local economy and on disposable income.</li> <li>• There are both opportunities and constraints to a renewable energy economy in the Central Karoo. E.g. some areas are not suitable for wind energy as wind speeds can be too high.</li> <li>• <u>Severe Temperatures</u> can impact on the viability of certain types of renewable energy systems, as can the frequency of wind and dust storms.</li> </ul>	<ul style="list-style-type: none"> <li>• Increase access to renewable energy sources and leapfrog outdated energy solutions. Ensure these are resilient to climate change impacts (e.g. wind, sand storms, snow, etc.). These energy sources also need to address issues of energy poverty and energy security.</li> <li>• Need to address the red tape associated with renewable energy developments in the Central Karoo District.</li> <li>• Promote the use of renewable energy for water pumping as well as large scale cooling operations.</li> <li>• Building control by-laws / policies need to promote renewable energy and tariff systems developed to allow for small-scale embedded generation (rooftop PV feeding back into the grid).</li> <li>• Ensure appropriate fit-for climate solutions are installed and maintained.</li> <li>• Development energy efficiency campaigns for municipal staff and communities to encourage the efficient use of electricity.</li> <li>• Implement lighting retrofits for building lights, street lights and traffic lights.</li> <li>• Develop an internal energy efficiency programme for municipal buildings to lead by example.</li> </ul>
Transport	<ul style="list-style-type: none"> <li>• Extreme events, particularly <u>floods</u> impact on transport infrastructure, such as the Meiringspoort pass<sup>9</sup>, which connects the Karoo to George.</li> </ul>	<ul style="list-style-type: none"> <li>• Disaster relief funding is being directed into road maintenance and rebuild in South Africa. However the direct causes of such impacts are not budgeted for or addressed. Future risks must be reduced in rebuilds and where required infrastructure must be relocated or</li> </ul>

<sup>9</sup> This pass has always been vulnerable to flooding since the 1880s, however, the frequency of events is likely to increase under a changing climate.

Theme / Focus Area	Key Issues (Mixture of climate risks and impacts and underlying vulnerabilities)	Potential Responses
	<ul style="list-style-type: none"> <li>• Access to the N1 due to <u>extreme events</u> (including flooding, and snowfall events) can have significant impacts not only on the Central Karoo local economy and economic sectors but also with knock-on impacts to the whole Western Cape region as a key transport arterial route.</li> <li>• Under severe <u>heat</u> vehicle tyres and melt and burn.</li> <li>• Non-motorised transport, walking, cycling and other, will be used as forms of transport within the towns. The infrastructure may not be appropriate for dealing with the extreme weather events such as severe <u>heat</u>.</li> </ul>	<p>redesigned. Having a situation where ‘infrastructure at risk, remains at risk’ is not a resilient response to a changing climate (specifications for roads are already changing to include proved specifications to take flooding and other extreme events into account – no longer replacing like with like if it is not appropriate).</p> <ul style="list-style-type: none"> <li>• Advocate for access to disaster risk reduction funding for proactive and pre-emptive works required to address ‘known disasters in waiting’.</li> <li>• For low water crossings, consider the materials utilised (e.g. concrete can withstand floods more often than asphalt, as observed in Eden).</li> <li>• Determine appropriate and, where necessary, new design standards and specifications for the Karoo for roads, rail and other infrastructure.</li> <li>• Non-motorised transport infrastructure, such as walking paths, need to be developed in such a way as to protect the user from extreme weather events for at least part of the journey – this is particularly the case with high temperatures.</li> </ul>
The Built Environment : Critical Infrastructure	<ul style="list-style-type: none"> <li>• <u>Flooding</u> damages the storm water system as well as other infrastructure. Current storm water infrastructure can’t cope with flash floods and gets easily damaged. A lot of this infrastructure is old and needs upgrading.</li> <li>• The water pipeline for Laingsburg in the river is damaged every time there is a <u>flood</u>. Generally infrastructure is repaired in the same place and back to the same standard.</li> <li>• Large <u>snowfall</u> events can cause burst water pipes and degrade infrastructure as occurred previously.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure climate change considerations are taken into account in new or revised Infrastructure Plans.</li> <li>• Determine the appropriateness of the plans and designs for a more flood-prone future when updating storm water plans and upgrading or building new infrastructure.</li> <li>• There is a need to review by-laws and policies for climate-appropriate water management.</li> <li>• Increase the cleaning and maintenance of storm water drainage in towns where these exists.</li> </ul>

Theme / Focus Area	Key Issues (Mixture of climate risks and impacts and underlying vulnerabilities)	Potential Responses
		<ul style="list-style-type: none"> <li>Rehabilitate degraded ecosystems and soils to ensure maximum filtration into soils and reduce run-off which causes flooding.</li> </ul>
The Built Environment : Waste Minimisation and Management	<ul style="list-style-type: none"> <li><u>Burning of waste</u> may be an issue in terms of air quality and greenhouse gas emissions. The air quality impacts could potentially be exacerbated under certain weather conditions.</li> <li>There is a tendency for the public to discard <u>waste in storm water drains</u>, which then blocks the system and exacerbates the effects of flooding.</li> <li>Sustainability of recycling programmes – the scale of and logistics associated with a waste collection and recycling programme can be difficult in towns in the Central Karoo due to small population size and the small amount of waste that is produced.</li> </ul>	<ul style="list-style-type: none"> <li>The implications of waste burning needs to be investigated and the appropriate channels followed to obtain the necessary permissions and implement air quality mitigation measures.</li> <li>Public awareness needs to be raised around the purpose of storm water infrastructure and the effect that illegal dumping has on it.</li> <li>Look at the feasibility of swap shops or similar interventions to encourage community engagement in waste minimisation and recycling programmes.</li> <li>Identify opportunities for the recycling of waste, both in terms of logistics and scale of recyclable materials.</li> </ul>
The Built Environment : Human Settlements	<ul style="list-style-type: none"> <li>Many poorer communities are not insured against events such as flooding and fires.</li> <li>Backyard structures are often built in low lying areas, increasing risk of <u>flood</u> to communities.</li> <li><u>Hail storms</u> have caused significant damage to properties and infrastructure, particularly RDP housing. It's likely that hail storms could increase in frequency as has been noted in the Western Cape due to increased convection.</li> <li>Severe cold fronts and <u>snow</u> events require an increase in heating and have caused power outages, which in turn result in an increased incidence of fires. This links to both safe access to energy during such extreme events, and</li> </ul>	<ul style="list-style-type: none"> <li>Shifts in design philosophy as well as design standards and specifications of human settlements will likely be required to ensure resilient and healthy communities in a new climate. These include location of settlements (proximity to flood lines, risk zones, etc.) use of alternative building materials that reduce risk to fires; and strategies to deal with heat and cold.</li> <li>For any new or planned upcoming housing developments in the region (for all income groups) more climate-resilient and energy-efficient housing should be considered.</li> <li>Adapt building regulations and specifications to include climate change – need to look at legislation to improve enforcement.</li> <li>Ensure new settlements factor climate change considerations into</li> </ul>



Theme / Focus Area	Key Issues (Mixture of climate risks and impacts and underlying vulnerabilities)	Potential Responses
	<p>the quality of human settlements and buildings.</p>	<p>their plans and standards to increase resilience of communities.</p> <ul style="list-style-type: none"> <li>• Encourage re-visitation of flood lines especially in new towns and infrastructure (e.g. Laingsburg).</li> <li>• Ensure that storm water systems and drainage are adequate for increase in flood potential, and are maintained (however, funding restricts this maintenance in CKDM).</li> <li>• Ensure all new settlements are in compliance with SANS 10400 XA energy use in buildings (e.g. orientation of buildings etc.).</li> <li>• Clearing of trees, particularly alien trees in river courses can also assist in reducing flooding (as they can fall into river courses blocking them).</li> <li>• Continue and enhance structures such as the 'flood working group' for Laingsburg.</li> <li>• Ensure aerial infrastructure such as phone and electric lines are not in the path of falling trees (i.e. keep trees well pruned in relevant areas).</li> <li>• Include analysis of water flow direction into building and settlement design to ensure limited flood impacts.</li> </ul>
Disaster Management	<ul style="list-style-type: none"> <li>• In general disaster management requires increased capacity, particularly in dealing with the extensive nature of the district and long distances for response.</li> <li>• <u>Fires</u> in general have been on the increase, and the capacity to fight fires is low. These are occurring on farms and in conservation areas. In addition, some fires occurring in human settlements (particularly where backyard dwelling occurs) are caused by heating and lighting challenges (linked to basic underlying vulnerabilities) which may increase in frequency under</li> </ul>	<ul style="list-style-type: none"> <li>• Further increase the integration of climate change impacts into the Disaster Management Framework for CKDM and its operationalisation.</li> <li>• All disaster management plans for specific events such as fire, flood, drought and heatwaves need additional impetus and resources provided to them.</li> <li>• Include new requirements and bolster existing information in disaster management plans according to the new requirements given in the National Disaster Management Amendment Act.</li> <li>• During the drought of 2010 communications were undertaken via</li> </ul>

Theme / Focus Area	Key Issues (Mixture of climate risks and impacts and underlying vulnerabilities)	Potential Responses
	<p>severe temperatures (either cold or heat).</p> <ul style="list-style-type: none"> <li>Wherever transport routes are affected, emergency services are negatively impacted.</li> </ul>	<p>newspapers, radio and religious groups utilised as drop points and collections.</p>
Water Security and Efficiency	<ul style="list-style-type: none"> <li>The area has still not returned to pre-drought (from 2010) water availability (the water reclamation plant has been in operation since the drought in Beaufort West) and water resources are scarcer than in the past. More <u>energy</u> is required to pump water particularly for the reclamation plant. Whilst the reclamation plant is a lifeline for this town, such measures are expensive and drive up the costs of water.</li> <li>During <u>water restrictions</u> there are impacts on water quality;</li> <li>During water restrictions sanitation piping and services can become blocked.</li> <li><u>Water scarcity</u> has increased the water prices in the region, placing additional burden on indigent and low incomes communities, but also driving up input costs into all businesses.</li> <li>Boreholes are approved with limited strategic oversight in Prince Albert. Many people have boreholes, and some people drink the untreated water (Leeu-Gamka) even though it is of poor quality and not potable, which impacts on health.</li> <li><u>Flooding</u> also increases leachate form landfill sites into groundwater aquifer's which is a key critical long term resource for the area due to the water scarcity of the</li> </ul>	<ul style="list-style-type: none"> <li>Continue focussed efforts to achieve blue drop and green drop status. Consider introducing the "no-drop" status which has been considered in the Eden District (this measures water losses and attempts to minimise total network losses, which can result in financial losses).</li> <li>Investigations into water losses – understanding what causes the leaks.</li> <li>Continue reduced urban water demand measures and drought measures (e.g. grey water reuse, emergency tariffs, water leak detection and reporting, ensure working equipment for water measurement, groundwater monitoring, etc.)</li> <li>Assess potential for implementation of smart meters for water (to protect water sources).</li> <li>Consider reverse osmosis water reclamation plants in other parts of Central Karoo – and share best practice with other local municipalities.</li> <li>Consider and assess alternative mechanisms for water capture (rooftop rainwater harvesting &amp; landscape harvesting into underground tanks). Increased evapotranspiration means that all water bodies need to be protected further from much more rapid evaporation as the region warms.</li> <li>Consider mechanisms to increase water recharge, for example, crescent shaped earthen dams across the landscape help to capture water in one place and lets this then percolate into the groundwater</li> </ul>

Theme / Focus Area	Key Issues (Mixture of climate risks and impacts and underlying vulnerabilities)	Potential Responses
	<p>region.</p> <ul style="list-style-type: none"> <li>• <u>Heavy rainfall</u> events that can lead to flooding in areas can also fill up dams if the rainfall occurs in the right places. Water tables can also be replenished provided that water is able to percolate into soils; in flooding events rainfall can be too rapid and if soils are not permeable the water can just wash away.</li> <li>• There seems to be anecdotal evidence of a <u>decrease in snowfall</u> in the Central Karoo region, this could potentially impact on groundwater recharge which is a critical water lifeline for the region. Certainly as the number of cold nights and days in winter may decrease in a warming climate this could become a trend to analyse.</li> </ul>	<p>aquifers.</p> <ul style="list-style-type: none"> <li>• Increase ground water monitoring and record keeping.</li> <li>• Flooding is an issue which impacts most of the sectors, and a holistic approach to flooding should be advocated. This includes land-use planning, maintenance of ecological features that reduce flooding, no-go development and infrastructure in high risk zones in flood prone rivers and depressions. Ensure extreme flooding risk under climate change scenarios has been included in design capacity and specifications of engineering and built infrastructure. Increase early warning capabilities. Reduce flood risk through smart urban design. Map flood risks to ensure planning is based on sound knowledge.</li> <li>• Increase financial investment into ecological buffering, and include climate related disaster information into current property valuations and insurance schemes.</li> <li>• Continue with alien invasive clearing.</li> <li>• Continue with LandCare programmes and improved land management.</li> </ul>
Food Security / Agriculture	<ul style="list-style-type: none"> <li>• <u>Drought</u> has a severe impact on all types of agriculture. For example, production of milk and eggs will decrease prior to and during a drought. Furthermore, rangeland quality will be further negatively impacted.</li> <li>• Increasing water <u>scarcity</u> has a significant impact on livestock (goats and sheep) prices and the services associated with this sector (e.g. abattoirs did not operate during the drought), driving up the costs for the end consumer.</li> <li>• Droughts further impacts on agri-processing, e.g. the</li> </ul>	<ul style="list-style-type: none"> <li>• Degraded and dysfunctional ecosystems also increase the risk profile of climate related disasters, i.e. the healthier the surrounding ecosystems the less harsh the impacts are likely to be. This particularly relates to soil quality in the Central Karoo, whereby soils must be nurtured and maintained particularly so that water can percolate into underground aquifers when rainfall does occur. This requires well maintained ecological function of the Karoo ecosystems in conservation areas, in farming areas (through rangeland management), as well as in towns, who often rely on boreholes close to their own vicinity.</li> </ul>

Theme / Focus Area	Key Issues (Mixture of climate risks and impacts and underlying vulnerabilities)	Potential Responses
	<p>meat industry supply chain as abattoirs require water for their business; these have closed for periods of time during severe droughts.</p> <ul style="list-style-type: none"> <li>• <u>Drought</u> can also lead to increase in <u>dust and sand storms</u> as the region becomes drier.</li> <li>• <u>Drought</u> is likely to result in impacts on human health and increase stress to farm labourers in this region, and could result in a loss of farm labour, leading to increased movement into towns, and resulting in increased needs for service delivery.</li> <li>• Problems with increased predator movement as a result of <u>drought</u> and food and water scarcity can cause human wildlife conflict to increase.</li> <li>• Increased periods of <u>heat</u>, and increase in number of high heat days: Require more water for livestock; negatively impacts on chicken and bee farmers affected by the heat, etc.</li> <li>• <u>Shifts in season</u> may affect grazing for animals and the quality of the veld, along with key agricultural seasons – e.g. the removal of goats' wool too early can lead to death of livestock. This could be coinciding with the later arrival of winter in the Western Cape in general, e.g. the late onset of potential snow in years when it does snow can negatively impact livestock farmers.</li> <li>• <u>Changes in wind</u> patterns can impact agriculture, e.g. no wind means that water can't be pumped for the livestock. Furthermore it can cause an increase in erosion</li> </ul>	<ul style="list-style-type: none"> <li>• Continuation and upscaling of 'Working for' type programmes are encouraged, particularly with a focus on rejuvenating soil profiles to increase soil moisture and recharge of aquifers.</li> <li>• Encourage low/no water use agri-processing techniques, water demand management, increase in water re-use technologies, and possible 'water from air' technologies.</li> <li>• Develop heat management strategies for farm workers and other economic sectors that require extensive outdoor exposure.</li> <li>• Increase research into impact of climate variability and climate change on predator-prey dynamics through the 'Predation management Forum'.</li> <li>• Continued support for Drought schemes by DoA and farmers, and motivation for annual drought financial budget from national treasury.</li> <li>• Investigate and support the development of guidelines for human heat management on farms.</li> <li>• Consider a shift in shearing season, and/or in alternative mechanisms for keeping animals sheltered in late onset snow events.</li> <li>• Overall for farmers in the Central Karoo, choices of species and breed for both livestock and crops will be critical. There are numerous other response options for agriculture, such as novel feeds, destocking, diversifying, altering timing of operations, altering grazing approaches, and improving water management. Many of these are dealt with in greater detail for this sector through the Western Cape 'Smart Agriculture for Climate Resilience' (SmartAgri) Project.</li> <li>• Central Karoo needs to plan for increasing food prices, and to have relief plans in place for food price shock events. Bolstering resilience</li> </ul>

Theme / Focus Area	Key Issues (Mixture of climate risks and impacts and underlying vulnerabilities)	Potential Responses
	<p>and land degradation depending on how land is managed. It is currently unknown how climate change will impact wind in the Central Karoo.</p> <ul style="list-style-type: none"> <li>• <u>Hail storms</u> can cause significant but localised damage to crops, and even vegetable gardens. The trend of hail storms is unknown but it is likely that they might increase in future as convection within storms might be increasing. Some other parts of the Western Cape seem to be experiencing an increased occurrence of unusual hail storm activity.</li> <li>• Importantly, food security is globally becoming constrained, particularly as multiple disaster impact key food growing regions globally and simultaneously. This leads to food inflation and an increasing number in food price shocks.</li> </ul>	<p>through innovative local food production (community / school as well as individual food gardens etc.) and storage might increase resilience as well.</p> <ul style="list-style-type: none"> <li>• Further develop the sector response by deepening the outcomes and plans from the SmartAgri programme.</li> </ul>
Biodiversity and Ecosystem Goods and Services	<ul style="list-style-type: none"> <li>• Biodiversity will come under increasing pressure in the Karoo as this arid region is likely to become more <u>dry</u> and arid, which will likely negatively impact on soils and on grazing potential. More frequent droughts can also be expected.</li> <li>• Although fuel loads are low in the Karoo, the Karoo National Park burns every year or two. When there's a <u>fire</u> in the mountains it is left to burn unless it threatens houses due to difficult access to these areas.</li> <li>• Fencing for both national parks areas and for agriculture can get damaged in flash <u>floods</u> (this has occurred in the Karoo National Park resulting in an escaped lion which</li> </ul>	<ul style="list-style-type: none"> <li>• Continue with alien removal where it still exists, particularly in riverine catchments and wetlands – particular problem species include Prickly Pear (<i>Opuntia aurantiaca</i>), and Mesquite (<i>Prosopis glandulosa</i>).</li> <li>• Improved land management and LandCare on rangelands and farming lands.</li> <li>• Some Spekboom projects are already underway, and should be upscaled where feasible. In some parts of the south west areas of the region , Spekboom replanting in degraded ecosystems that used to contain this species can potentially take place in order to restore lands and to achieve some potential carbon credits.</li> <li>• Energy access for all communities is one solution to decrease overharvesting of trees.</li> </ul>

Theme / Focus Area	Key Issues (Mixture of climate risks and impacts and underlying vulnerabilities)	Potential Responses
	<p>cost R800,000 from disaster management to capture).</p> <ul style="list-style-type: none"> <li>• <u>Shift in seasons</u> are most notable by people working closely with nature, both in conservation areas and by farmers. For example, conservationists are seeing flowering at abnormal times –e.g. in the middle of winter in June. The early indicators of change in ecosystems are most worrying as this will not only impact on biodiversity and ecosystems, but also on veld quality for grazing of sheep and goats.</li> <li>• Poor people tend to burn more fuelwood than charcoal, and protecting commonage is hard, as it is very hard to prevent people from collecting firewood from these areas. The species most affected is Karoo Acacia, which grows in river beds and helps slow down floodwaters – removal of this species results in more flooding.</li> <li>• Fire poses a risk to biodiversity (this is not limited to the National Park – also on farms). There is very little capacity to fight fires in CKDM, and if there are multiple fires municipalities can't lend each other assistance, as their capacity is already engaged. An agreement is in place with Eden DM for them to lend CKDM assistance in fighting fires, but due to the long distances in the Karoo this isn't always very effective. There are no Working on Fire projects in CKDM.</li> <li>• Flooding causes erosion, which impacts on biodiversity.</li> <li>• Overgrazing damages biodiversity.</li> </ul>	
Healthy	<ul style="list-style-type: none"> <li>• Charcoal burning in indigent and lower income</li> </ul>	<ul style="list-style-type: none"> <li>• Integrate climate change issues and responses into district health</li> </ul>

Theme / Focus Area	Key Issues (Mixture of climate risks and impacts and underlying vulnerabilities)	Potential Responses
Communities (including air quality)	<p>communities has a detrimental effect on air quality, particularly as temperatures increase. Energy access is a linked challenge here.</p> <ul style="list-style-type: none"> <li>• With longer periods of high heat there may be increased incidences and a longer season of diarrhoea. This coupled with decreased access to expensive quality water could also severely increase impacts on health.</li> <li>• During prolonged times of high heat, and for those without access to refrigeration, food can spoil faster, linking to both access to food, and energy and health challenges.</li> <li>• Prolonged periods of <u>heat</u> will impact on worker productivity whether in towns or in agricultural contexts.</li> <li>• Changes in wind and extreme wind speeds can impact on human health through increase in airborne particulates.</li> </ul>	<p>policies.</p> <ul style="list-style-type: none"> <li>• Advocate to sister provincial and national departments for increase disease and vector monitoring for early warnings and to detect changing trends.</li> <li>• Ensure safe water and improved sanitation for communities.</li> <li>• Early response to heatwave warnings from the South African Weather Service (SAWS) and publication of heat response actions to be taken by communities.</li> <li>• Increase the number of air quality monitoring stations to provide accurate information on the air quality in the area.</li> <li>• Incorporate climate change considerations into the District and Local Air Quality Management Plans.</li> </ul>
Local Economic Development (LED)	<ul style="list-style-type: none"> <li>• Risks to economic sectors of the Karoo occur to varying degrees for all economic sectors. These need to be further analysed in detail to determine responses and alternatives (Agriculture is dealt with in some detail through the SmartAgri project).</li> </ul>	<ul style="list-style-type: none"> <li>• General responses for LED managers and business forums for the region need to focus on identifying the various risks to each sector: increased occurrence of drought, floods, fires, increased heat, higher number of high heat days, likely increase in minimum temperatures.</li> <li>• Additionally the economic environment must favour zero water using industries and businesses, and renewable energies for energy sources. To further attract those economic activities that will not negatively impact on groundwater supplies, as this is the emergency resource of water for the whole Karoo. Diversify livelihoods by focusing on the assets of the Karoo that do not require resource extraction (e.g. big sky country and tourism opportunities).</li> </ul>
Institutional	<ul style="list-style-type: none"> <li>• Municipalities don't always have the capacity to respond</li> </ul>	<ul style="list-style-type: none"> <li>• CKDM needs to increase and enhance support to local municipalities</li> </ul>

Theme / Focus Area	Key Issues (Mixture of climate risks and impacts and underlying vulnerabilities)	Potential Responses
Governance / Capacity	to emergency situations.	<p>to help them to integrate climate change into their activities and planning processes, as well as advocating sister departments in province and nationally to also provide support through all interactions across sectors on climate change.</p> <ul style="list-style-type: none"> <li>• Ensure climate change is clearly identified as a strategic and organisational risk to CKDM and B municipalities within IDPs, organisational overviews, etc.</li> </ul>
Planning	<ul style="list-style-type: none"> <li>• Some town planning was changed due to the big flood of Laingsburg.</li> <li>• Land use planning and town planning are critical in long term climate change resilience for all sectors.</li> </ul>	<ul style="list-style-type: none"> <li>• .</li> <li>• Planning will need to take new climate extremes into account, including new or revised SDFs.</li> <li>• Development and implementation of Sustainable Procurement Policy or guidelines – the incorporation of sustainable criteria into the procurement process, including efficient vehicles, energy efficiency in maintenance contracts, green paper requirement, etc.</li> <li>• Identification of and getting access to funding opportunities that support the implementation of climate change responses.</li> </ul>
Education, public awareness and knowledge Management	<ul style="list-style-type: none"> <li>• The public needs to be aware of climate change risks, how it will affect them and how they can prepare themselves.</li> </ul>	<ul style="list-style-type: none"> <li>• Once the CKDM has a climate change strategy framework it needs to be communicated to the community – e.g. through news articles in local newspapers/newsletters. Municipal officials also need to communicate the framework through the course of their work, where appropriate.</li> <li>• Municipality may need to have awareness campaigns to prepare the public for seasonal disasters – e.g. fires, flooding.</li> </ul>



## CONCLUSION

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While this framework attempts to develop a process that will be applicable to all local municipalities in the Central Karoo District, municipal planning remains a complex process involving challenging decisions. The lengthy timeframes associated with climate change will also complicate matters, since they contradict the time frames attached to development planning, budgetary cycles and political office. That being said, climate change impacts are occurring much more rapidly than anticipated and the impacts are already being observed in the Western Cape, decisions around climate change are thus urgent and no longer a future problem.

Local government is often caught in a continuous struggle to cope with day to day service delivery problems. Limited institutional capacity and financial resources requires municipalities to align their climate change objectives with their current everyday commitments rather than developing a separate approach.

The climate change impacts experienced across the Central Karoo District vary greatly among the district's communities and will be influenced by various factors. The lack of uniformity regarding the experience of climate change impacts emphasises the need for the inclusion of multiple perspectives into the municipal planning process.

Climate change poses a real current and imminent threat to the Central Karoo District and the local municipalities situated within the district and needs to be addressed through effective policy, planning and most importantly mainstreamed implementation into all line functions.

The Central Karoo District and the local municipalities situated within the district should actively utilise this policy framework and endeavour to implement the policy and implementation recommendations contained herein. A crucial first step in this regard would be to get political buy-in and approval of the framework and to identify key programmes, projects or activities to be implemented. It is then important assign responsibility for the coordination of this framework and its policy recommendations to a specific position within the district at a strategic coordination level.

The successful implementation of the Policy Framework for Climate Change Response in Central Karoo District will reinforce sustainable economic and social development goals and make a real contribution to the resilience of the district and its people against climate variability.

## **ANNEX 1: STRATEGY DEVELOPMENT METHODOLOGY**

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### **Pre-workshop interviews (July 2015)**

Initial one-on-one interviews were held with municipal officials in the District to get a general overview what's happening in the district and what general issues are being experienced. The interviews also investigated the status of CC awareness, whether particular CC issues were being experienced, any existing work already done to respond to CC, as well as local issues that may be affected by changes in climate. The interviews were broadly guided by a questionnaire covering all of the above.

### **First workshop (October 2015)**

The information gathered during the interviews were used to identify which sectors in the District may be vulnerable to CC; these were then used to design a workshop agenda and materials based on case studies and best practices from similar regions. Workshop invitations were sent out to officials from the District and Local Municipalities, as well as municipal councillors, the local DEA representative and SANParks.

The focus of the workshop was to introduce participants to the critical aspects of CC relevant to the Central Karoo, to discuss the observed historical climate related impacts and hazards in the district, and to identify additional long term related climate change impacts. Based on this, sectors that are likely to be vulnerable to climate related impacts and require responses in the CKDM were also identified. Participants were asked to identify where each of the identified climate related hazards had created impacts (or opportunities) in the past in order to provide insights into CC impact in the district and how these will be exacerbated in the future. Finally, a prioritisation exercise was done to identify which risks were considered more hazardous / important / urgent than others.

### **Second Workshop (January 2016)**

The information gathered in the first workshop was used to draw up a list of CC-related vulnerabilities in the relevant sectors, and possible management responses were developed by the DEADP CC team. These responses were then presented at a second workshop. Attendees were urged to use their local knowledge to tailor the CC responses to be optimal for the CKDM. Gaps were identified as well as what management actions and projects were already taking place in the District that responded to the identified issues. Once the responses had been fully fleshed out, a discussion of roles and responsibilities around the identified management actions took place.

### **Draft CC Response Plan**

After the second workshop the information generated by the two workshops was used to draft a CC Response Strategy for the District. This draft was then circulated for comment to the relevant stakeholders, including the attendees of the two workshops. Responses were incorporated to produce a final CC Response Strategy.

### **Way forward**

The next step is to present the finalised version of the CKDM CC Response Strategy to the stakeholders; after this the document must be taken to the District Council for approval and

endorsement. Implementation will mostly consist of mainstreaming the identified management actions into the appropriate management tools; include the IDP, SDF and other key sector plans.

# ANNEXURE I



# Central Karoo District Municipality

## Integrated Transport Plan 2015 – 2020

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## Acronyms

<b>AADT</b>	Average Annual Daily Traffic
<b>ASOD</b>	Average Speed Over Distance
<b>CBD</b>	Central Business District
<b>CPTR</b>	Current Public Transport Record
<b>DITP</b>	District Integrated Transport Plan
<b>GDPR</b>	Gross Domestic Product per Region
<b>GVA</b>	Gross-Value Added
<b>IPTN</b>	Integrated Public Transport Network
<b>LITP</b>	Local Integrated Transport Plan
<b>NHTS</b>	National Household Travel Survey
<b>NLTA</b>	National Land Transport Act, No. 5 of 2009
<b>NMT</b>	Non-Motorised Transport
<b>OLS</b>	Operating Licence Strategy
<b>PLTF</b>	Provincial Land Transport Framework
<b>PPTIF</b>	Provincial Public Transport Institutional Framework
<b>PRASA</b>	Passenger Rail Agency of South Africa
<b>PRE</b>	Provincial Regulating Entity
<b>SACAA</b>	South African Civil Aviation Authority
<b>SANRAL</b>	South African National Roads Agency
<b>SDF</b>	Spatial Development Framework

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# **1. Introduction**

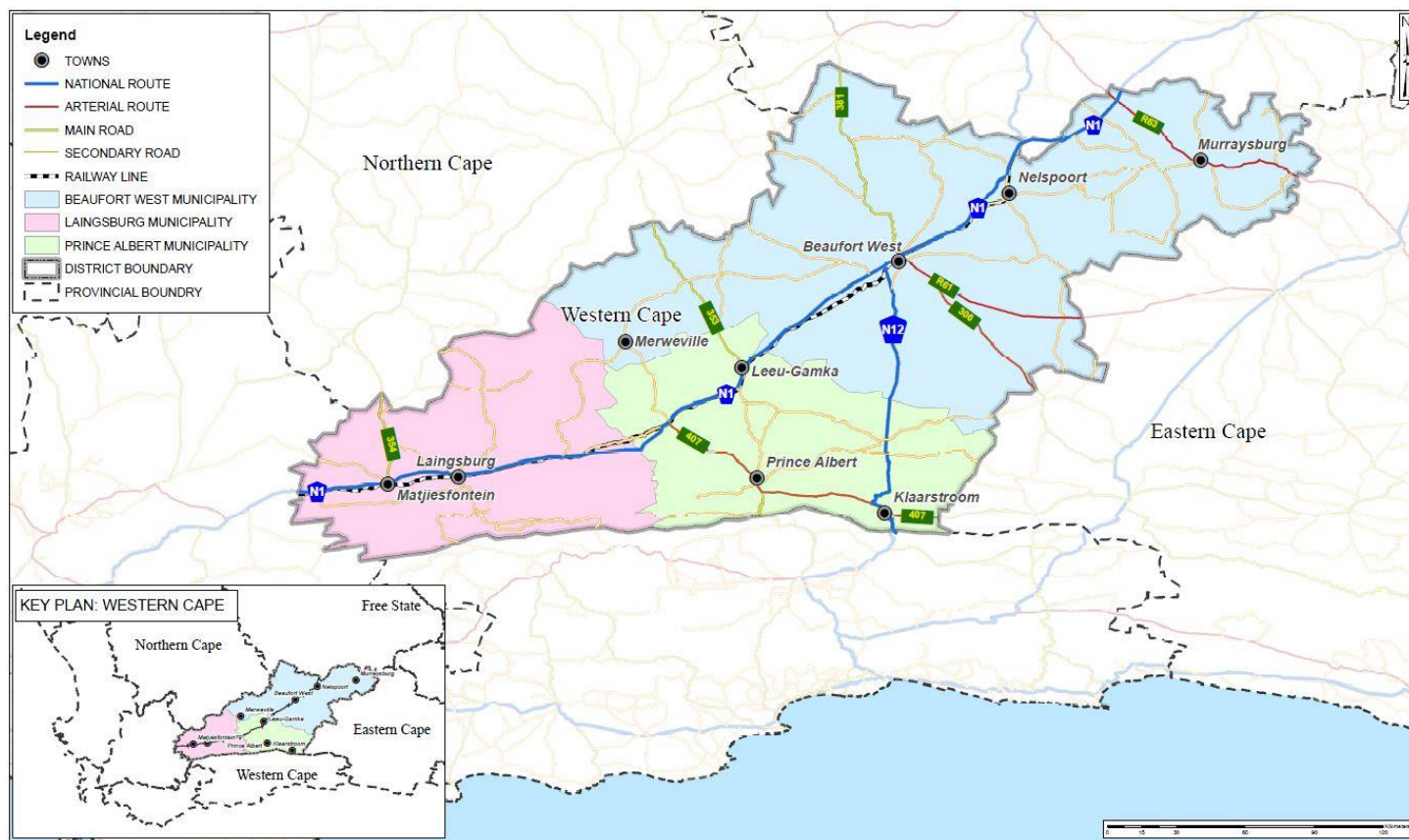
## **1.1 Background**

This report is a review of the Central Karoo District Municipality Integrated Transport Plan; the District Municipality is the responsible planning authority. AECOM undertook this review on behalf of the Central Karoo District Municipality and was commissioned and funded by the Western Cape Department of Transport and Public Works.

This update of the District Integrated Transport Plan (DITP) is done in accordance with the draft minimum requirements for the preparation of integrated transport plans as published in the National Land Transport Act (NLTA) regulations, Government Gazette No 38256 of 29 November 2014. In addition the format of this DITP has been guided by the Technical Transport Planning Guidelines for District Integrated Transport Plans as published in February 2009.

## **1.2 Study Area**

The preparation of the Central Karoo District Municipality Integrated Transport Plan is for the jurisdiction of the entire District Municipality, and includes the jurisdictional areas of Beaufort West, Laingsburg, and Prince Albert Local Municipalities. The District Municipality is sparsely populated with vast distances between settlements making it the smallest in terms of population whilst, on the other hand, accounting for more than 30% of the province's land area. The region is located on the arid Great Karoo plain sandwiched between the Swartberg and Nuweveld Mountains. Its economy is service-based although the region has long been a centre for sheep farming.

**Figure 1-1: Locality of Central Karoo District Municipality**

### 1.3 Responsibility for the Plan

The preparation of the Central Karoo District Municipality Integrated Transport Plan (DITP) is the responsibility of the District Municipality; the planning costs for the preparation of the DITP are covered by the Western Cape Provincial Government's Department of Transport and Public Works.

### 1.4 Status of the Plan

Integrated Transport Plans are prepared for five-year period and updates of selected aspects of the plan should be undertaken on an annual basis with a specific focus on programmes and budgets. The previous review of the Central Karoo DITP was undertaken for the 2009 to 2013 period with updates made in 2013 on the transport register, transport needs assessment, transport improvement proposals, and implementation budget and programs; a further update undertaken in 2014 comprised updates to the transport budgets and programmes and established the linkage with PSO3 outcomes; additionally, a revision of the categorisation of planning authorities; and determining institutional capacity was also included. An update of the Current Public Transport Record (CPTR) and the Operating Licence Strategy (OLS) was completed during the previous review period in December 2011.



**Table 1-1: Minimum Frequency of Plan Preparation and Update**

Plan	Frequency		Comments
	Preparation	Update	
<b>1. Comprehensive ITP and District ITP</b>	Total overhaul every 5 <sup>th</sup> year	Annual Update of selected aspects, in synchronisation with IDP	Update to focus on action programme and budget. Prerogative of planning authority to do more comprehensive update
<b>2. Local Integrated Transport Plan (LITP)</b>	Prepare every five years, as input to new DITP in the case of local authorities that fall within a District Council	Update the budget and programme for the following year annually, in synchronisation with IDP	
<b>3. Transport Register</b> (forms part of ITP)	Total overhaul every 5 <sup>th</sup> year	Update the transport register if any significant new data collection occurs. GIS, databases and information systems to be updated on an ongoing basis as and when new information is collected.	Update to concentrate on gaps and information of poor quality.
<b>4. Public Transport Plan</b> (forms part of the ITP – where applicable)	Total overhaul every 5 <sup>th</sup> year	Report annually on contracts that have been awarded or which have expired and any changes or additions to the proposed contracted services network. Database of operating licences should be updated on an ongoing basis as OL's are awarded, lapse or are renewed.	

The current review of the Central Karoo District Municipality Integrated Transport Plan is for the 2014/15 to 2018/19 financial periods.

### 1.5 Report Layout

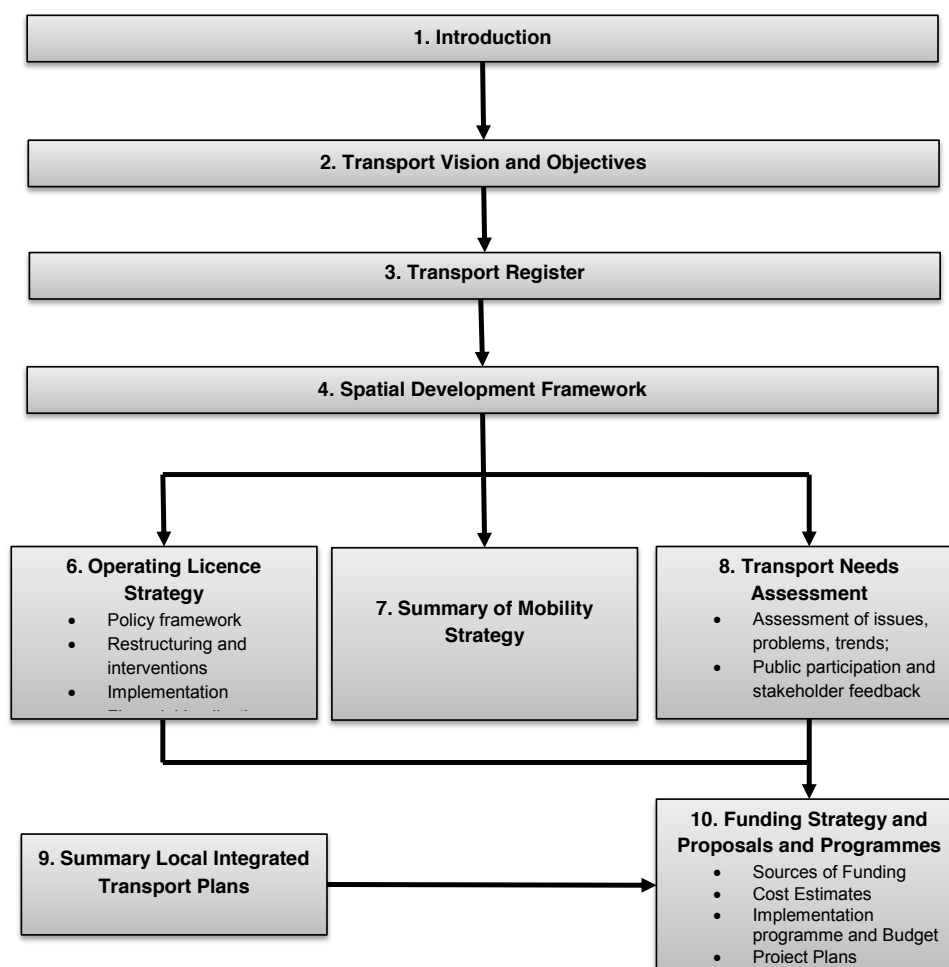
The scope of and approach to the review of District Integrated Transport Plan for the Central Karoo District Municipality are based on the requirements set out in the National Land Transport Act (Act 5 of 2009). The scope of the work should cover the whole area of jurisdiction of the District Municipality.

Based on the Technical Transport Planning Guidelines for District Integrated Transport Plans as published in February 2009 (Guidelines) as well as the draft Minimum Requirements for the Preparation of Integrated Transport Plans published in 2014, the Central Karoo District Municipality ITP shall contain the following areas or topics:

- i. Chapter 1: Introduction
- ii. Chapter 2: Transport Vision and Objectives
- iii. Chapter 3: Transport Register
- iv. Chapter 4: Spatial Development Framework
- v. Chapter 5: Operating Licence Strategy
- vi. Chapter 6: Summary of Mobility Strategy

- vii. Chapter 7: Transport Needs Assessment
- viii. Chapter 8: Summary of Local Integrated Transport Plans
- ix. Chapter 9: Funding Strategy and Summary of Proposals and Programmes

**Figure 1-2: Minimum Content of a District Integrated Transport Plan**



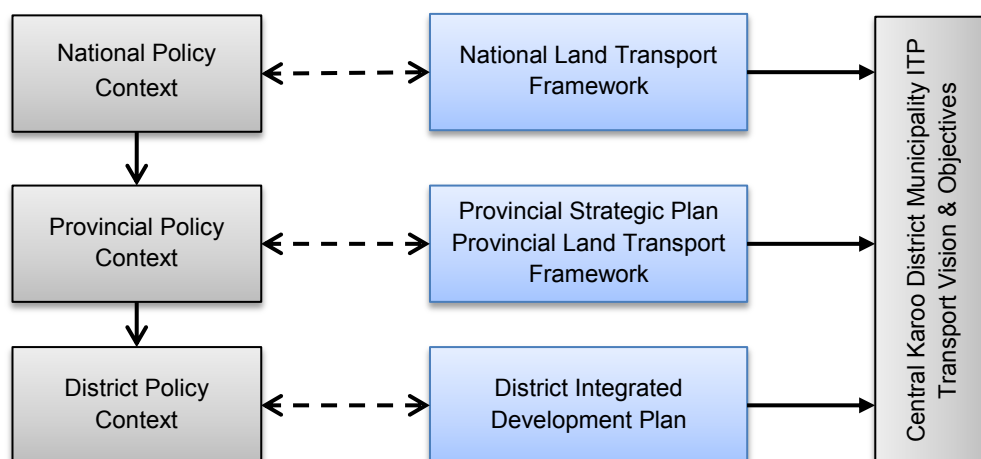
## 2. Transport Vision and Objectives

The following section of the report highlights the informants to and the formulation of the vision for transport in the Central Karoo District Municipality. The section sets out planning objectives and strategies that will ultimately inform the proposals and programmes.

### 2.1 Review of Policies and Documents

The review of policy documents highlights the most important strategic documents that inform the vision and objectives for transport in the Central Karoo District Municipality. Figure 2-1 below diagrammatically represents the process followed in the formulation of a vision for transport for the Central Karoo District Municipality.

**Figure 2-1: Policy Context for District Integrated Transport Plan**



#### 2.1.1 National Land Transport Strategic Framework

The National Land Transport Strategic Framework (NLTSF) is prepared every five years and is but only one plan in a set of plans required to achieve proper land transport planning and implementation in terms of the National Land Transport Act, (Act No 5 of 2009) and its regulations. The NLTSF guides land transport planning countrywide and focus on strategies and actions which forms part of the Department of Transport budgeting and planning processes as it is required in terms of the Public Finance Management Act.

The NLTSF stipulates several important policies statements for land transport and below is a summary of policy of particular relevance to Central Karoo District Municipality, namely:

- Public transport will be promoted over private transport;
- Transport plans will be developed in all three spheres of Government;
- Public transport services will become safer for passengers;
- Selected public transport infrastructure will be upgraded;
- The delivery of the road network will be made more efficient;
- A strong, diverse, efficient and competitive transport industry, within the limits of sustainable transport infrastructure, will be promoted;
- An appropriate shift of freight movement from road to rail will be promoted;
- Non-motorised transport infrastructure will be planned, built, expanded and maintained;
- Walking and cycling will be promoted as the preferred modes for appropriate distances;
- Land transport service levels for domestic and international tourists will be improved and maintained.

These broad policy principles were further expanded in terms of specific strategies and actions to achieve in its objectives, as indicated in the table below.

**Table 2-1: National Land Transport Strategic Framework Policy and Strategies**

POLICY STATEMENT	STRATEGY OR ACTION
Public transport will be promoted over private transport.	Improved levels of services, comfort, affordability, safety and sustainability will be striven for in public transport services.
Transport plans will be developed in all three (3) spheres of Government.	Transport plans will be prepared incrementally in the municipal sphere of government.
Public transport services will become safer for passengers.	Public transport law enforcement will be improved.
Selected public transport infrastructure will be upgraded.	Selected public transport will be upgraded.
	Facilities that give priority to public transport on existing roads will be promoted.
	The management and maintenance of public transport infrastructure will be improved.
The delivery of the road network will be made more	The development of the network will include the development of SMME's and the enhancement of skills

POLICY STATEMENT	STRATEGY OR ACTION
efficient.	and capacity.
	Design must achieve the optimum balance between cost and utility.
<b>A strong, diverse, efficient and competitive transport industry, within the limits of sustainable transport infrastructure, will be promoted</b>	The environmental impact of road freight transport will be managed.
<b>An appropriate shift of freight movement from road to rail will be promoted</b>	More efficient law enforcement of overloading and prosecution of offenders will be carried out.
<b>Non-motorised transport infrastructure will be planned, built, expanded and maintained</b>	Planning authorities will ensure that, over time, contiguous networks of NMT infrastructure are designed and built, where they are absent, along lines of high demand.
	Transport plans should assess the status quo and the needs for NMT infrastructure and plan for its design, implementation and maintenance.
	In rural areas, animal-drawn carts and other intermediate means of transport will also be supported in transport plans where appropriate.
<b>Walking and Cycling will be promoted as the preferred modes for their appropriate distances.</b>	Walking and cycling will be actively promoted in conjunction with the expanded provision of NMT infrastructure, as the preferred mode of transport over the appropriate distance ranges for these modes.
	Where people are walking excessively long distances on their routine journeys, transport plans will assess the scope for measures to support cycling, particularly for scholars. Both infrastructural measures and supporting services such as bicycle repair services will be considered.
<b>Land transport service levels for domestic and</b>	Transport plans should address tourist transport

POLICY STATEMENT	STRATEGY OR ACTION
international tourists will be improved and maintained	requirements.

The NLTsf are then further lead into the Provincial Land Transport Framework of each province.

#### 2.1.2 Western Cape Provincial Strategic Plan

The Western Cape Provincial Strategic Plan sets out the Western Cape Governments (WCG) vision and strategic priorities. The Western Cape Province remains committed the vision of building an “Open, Opportunity Society for All”, which is also the corner stone of the South African Constitution.

The Provincial Strategic Plan is set in the background of the National Development Plan, the new Medium Term Strategic Framework (MTSF) in 2014 for the term 2014- 2019 as part of the national implementation of the National Development Plan. The MTSF outlines the strategic objectives and targets of the provincial government for the next 5 years and focus on the priorities over the term. Further the OneCape 2040 Vision which attempt to stimulate a transition towards a more inclusive and resilient economic future for the WC region.

**Figure 2-2: Western Cape Provincial Strategic Goals**

### Our Provincial Strategic Goals



The Western Cape Government has identified five (5) strategic goals in its aim to contribute to the realisation of the objectives and aims of the NDP over a five (5) year term as shown in Figure 2-2.

Goals one (1), four (4) and five (5) specifically focus on the transportation-linked game changers as summarised in the table below:

**Table 2-2: Western Cape Provincial Strategic Plan 2014-2015 Goals related to Transportation**

<b>Strategic Goal 1: Create opportunities for growth and jobs</b>	Tourism: Improve air access between Cape Town and key strategic business tourism destinations.
	Logistics and infrastructure – Agri- processing: Transport and export infrastructure (e.g. congestion in the Cape Town port and slowness of rail).
	Infrastructure – Oil and Gas: Constraints include insufficient port infrastructure in Saldanha Bay such as roads, bridges and water and in Cape Town port strengthened infrastructure required.
<b>Strategic Goal 4: Enable a resilient, sustainable, quality and inclusive living environment</b>	Sustainable and integrated urban and rural settlement development: Transport services are inefficient, inaccessible, unsafe, and unaffordable and fragmented in poor located areas.
	Infrastructure: Improving the living conditions in urban and rural areas by having infrastructure programmes and by implementing the integrated better living model.
<b>Strategic Goal 5: Embed good governance and integrated service delivery through partnerships and spatial alignment</b>	Integrated Management: Policy alignment, integrated planning, budgeting and implementation to ensure quality and consistency.
	Joint Planning Initiatives (JPI's): Priorities identified from "Bottom- up".
	Province- wide M&E System (with intergovernmental reporting: one system.
	Spatial governance targeting and performance: to promote spatial alignment and interaction as part of successful service delivery planning. Ongoing monitoring of spatial

	performance.
	Develop and implement the Provincial Strategic Plan: Monitoring and control of the PSP development and implementation.

Furthermore the Western Cape Government explored various ways of fostering intergovernmental planning, co-ordination and implementation through the IDP processes and it led to the introduction of enhanced joint planning initiatives between the provincial government and local governments of the Western Cape.

The following Joint Planning Initiatives (JPI's) can be highlighted to relate to transportation:

**Table 2-3: Western Cape Joint Planning Initiatives related to Transportation**

<b>JPI's linked to Goal 4:</b> Enable a resilient, sustainable, quality and inclusive living environment.	<ul style="list-style-type: none"> <li>• Develop an integrated approach to planning and implementing human settlements development, infrastructure development (including transport (road) and bulk infrastructure) and budgetary processes.</li> <li>• Support maintenance of ageing infrastructure and reducing backlogs.</li> <li>• Attend to regional air quality management.</li> </ul>
<b>JPI's linked to Goal 5:</b> Embed good governance and integrated service delivery through partnerships and spatial alignment.	<ul style="list-style-type: none"> <li>• Improve regional planning for and coordination of bulk infrastructure development.</li> </ul>

### 2.1.3 Western Cape Provincial Land Transport Framework

The Department of Transport & Public Works produced its first PLTF in 2004, which was drafted under the previous National Land Transport Transition Act (Act 22 of 2000). The promulgated National Land Transport Act (Act 5 of 2009), has necessitated several legislative changes in the transport sector, some of which include:

- The devolution of the public transport planning and operations function to the lowest competent sphere of government, to prevent fragmentation and promote consolidation of function;
- The move away from Transport Authorities towards Planning Authorities; and



- To provide for the establishment of Integrated Rapid Public Transport Networks (IRPTN's) in major South African cities (including the Cape Town city-region), as well as the establishment of Integrated Public Transport Networks (IPTN's) in the other areas of South Africa.

The 2013 update of the Western Cape PLTF has a long-term vision rooted in the Western Cape Government's Strategic Plan of 2010 which has the objective of "increasing access to safe and efficient integrated transport" with a focus on the following elements:

- Improving public transport services in both the urban and rural areas of the Western Cape;
- Promoting the use of appropriate modes for the movement of freight;
- Increasing investment in transport infrastructure and reducing maintenance backlogs;
- Improving transport safety; and
- Developing the required institutional capacity in the appropriate sphere of government to deliver the various transport mandates, while creating and strengthening partnerships with all stakeholders and role-players.

The Western Cape Department of Transport and Public Works' mission is to develop and maintain "*appropriate infrastructure and related services for sustainable economic development which generates growth in jobs and facilitates empowerment and opportunity*". It is envisaged that by 2050, the transport system of the Western Cape will be developed along and defined by the following pillars, namely (i) Sustainability, (ii) Equity, (iii) Access to opportunity in an economically efficient manner, and (iv) Safety.

The PLTF has six (6) objectives in respect of transportation for the Province. Table 2-4 below lists each objective and describes indicators relevant to the Central Karoo District Municipality context:

**Table 2-4: Western Cape Transport Objectives in terms of the 2013 PLTF**

OBJECTIVE	INDICATOR
<b>An efficient, accessible and integrated multimodal public transport system managed by capacitated and equipped municipal authorities</b>	Develop implementable safe and accessible mobility strategies and IPTN's in District Municipalities by 2014.
	Increase user satisfaction of public transport facilities by 25% by 2014.
	Organise courses and seminars dealing with infrastructure management, transport planning and land-use planning for District Municipalities by 2014.
<b>Non-motorised Transport as pivotal part of all forms of</b>	Dedicated NMT Expanded Public Works Program projects

OBJECTIVE	INDICATOR
<b>transport planning in urban and rural areas</b>	by 2014.
	Every provincial road project in the province must include a NMT component.
	NMT Plans will be developed and implemented for each Municipality of the Province, as part of the mobility strategy and IPTN roll-out.
	Dedicated cycle lanes in the Western Cape must be doubled by 2014.
<b>A well maintained and preserved transport system</b>	Reduce the road transport infrastructure backlog by 16% by 2014.
<b>A sustainable transport system</b>	Influencing parties in order to achieve shift in contestable freight haulage from road to rail freight by 10% by 2014.
<b>A safe transport system</b>	Reduction of the number of fatalities on the Western Cape roads by 50% by 2014.
	Implementation of an integrated transport safety management system by 2014.
<b>A transport system that supports the province as leading tourist destination</b>	Introduce economic decisions support tools to facilitate decision-making with regard to road investment by 2014.

It must be noted that the current PLTF (2013) was prepared prior to the current Provincial Strategic Plan (2014) and that the former is due for an update in order to align with current provincial policy.

#### 2.1.4 Other Policy Informants

The Cabinet of the President of the Republic adopted the White Paper on National Disability Rights Policy on 9 December 2015 which has the purpose of providing a framework for fostering the rights of people with disabilities. Its purpose, more specifically as it relates to the provision of transport, is:

- Provide a mainstreaming trajectory for realising the rights of persons with disabilities through the development of targeted interventions that remove barriers and apply the principles of universal design;
- Stipulate norms and standards for the removal of discriminatory barriers that perpetuate the exclusion and segregation of persons with disabilities;
- Broadly outline the responsibilities and accountabilities of the various stakeholders involved in providing barrier free, appropriate, effective, efficient and coordinated service delivery to persons with disabilities;
- Provide the framework for a uniform and coordinated approach by all government departments and institutions in the mainstreaming of disability across all planning, design, budgeting, implementation and monitoring of services and development programmes;
- Provide a framework against which the delivery of services to persons with disabilities can be monitored and evaluated.

An important aspect to the disability rights policy is the concept of 'accessibility' which advocates the idea that people with disabilities should be able to move, function or live independently and be able to enjoy all aspects of life. As a result, access to transport is a key focus area highlighted in the White Paper and recognises that inaccessible public and private transport systems are a major barrier to the right to equality for persons with disabilities.

The implications for the Central Karoo District Integrated Transport Plan, as specified in terms of a White Paper directive, is that universal design and access should be incorporated as part of transport operator licences and permit requirements. A further directive is the appeal for transport access audits for all transport operators to determine whether there is compliance with legislated minimum norms and standards with resultant obligations to implement any audit findings.

The White Paper however is out for discussion to test public opinion and is one of the first steps to formulating national policy and possibly legislation on the rights of people with disabilities.

## 2.2 Overarching Vision for Central Karoo

The Central Karoo District Municipalities IDP 2014/15 vision is “*Working Together in Development and Growth*” and is underpinned with a mission to implement its mandate through:

- Ensuring that future growth improves the quality of life of all;
- Being financially sustainable;
- Maintain its rural character and create healthy communities;
- Facilitating economic growth through improving infrastructure and green energy opportunities;
- Providing strategic leadership and coordination to local municipalities; and
- Upholding principles of good governance for a range of income levels.

The Central Karoo District Municipality also developed **8 Strategic Objectives** which are aligned with the national key performance areas and the core functions of the municipality. They strive towards working together to ensure effective and sustainable service delivery and will therefore pursue the following objectives:

- To improve and maintain district roads and promote effective and safe public transport for all;
- To deliver sound administrative and financial services, to ensure viability;
- To reduce the effects of disasters and improve public safety in the region as a whole;
- To promote healthy and socially stable communities;
- To establish an inclusive tourism industry through sustainable development and marketing which is public sector led, private sector driven and community based;
- To build well capacitated workforce and communities;
- To pursue economic growth opportunities that will create descent work; and
- To facilitate good governance principles and effective stakeholder participation.

## 2.3 A Vision for Transport for the Central Karoo District Municipality

The vision for transportation in Central Karoo District Municipality is formulated within the framework of national and provincial transport policy and informed by local policy objectives as discussed in the preceding sections of this chapter. The District Municipality’s vision for transport should reflect the goals of the community it serves and be endorsed by all stakeholders in the development of the Integrated Transport Plan. The following section therefore provides a proposition on the vision for transport in Central Karoo for discussion purposes through the consultation process in terms of this Plan. It is envisaged the final District Integrated Transport Plan endorsed by the Municipality’s Council shall contain a stakeholder supported vision statement.

### 2.3.1 Vision Statement for Central Karoo District Municipality

The following vision statement for transport seeks to uphold the principles of sustainability, the fostering of economic growth, and improved infrastructure development and maintenance, as introduced by the preceding national, provincial and district policy.

The **vision for transport** in Central Karoo District Municipality is:

*To ensure an equitable, accessible, safe and affordable transport system that is embedded in good governance and administered for the current and future social, economic, and environmental well-being of all people in the Central Karoo District.*

Based on the above vision, the **mission statement** for transport in the Central Karoo District Municipality expands on the ideas contained therein:

**Improving access and mobility** of all people in Central Karoo District within equitable, affordable, and sustainable means; **providing and maintaining an effective transport system** comprising transport infrastructure and services; **ensuring safety, enforcement** and control in transport; embedding **good governance** in administration; and to **support economic growth** and development by way of investments in transport infrastructure and operations.

The vision and mission statement highlight the following goals for transport in the Municipality:

- i. The provision and maintenance of transport infrastructure;
- ii. The implementation of an integrated public transport system;
- iii. The provision of Non-motorised Transport infrastructure;
- iv. Promotion and improvement of safety in transportation;
- v. Improving human resource capacity in transport; and
- vi. Applying transport as a tool for economic growth.

### 2.3.2 Transport Objectives for Central Karoo District Municipality

The transport objectives for the District Municipality are an immediate outflow from the above vision and mission statements, and goals. It provides more detail on how the vision will be achieved and intends to be more measurable and understandable. The following objectives are proposed in terms of the ITP:

Goals	Transport Objectives	Central Karoo District Municipality Strategic Objective
<b>The provision and maintenance of transport</b>	<ul style="list-style-type: none"> <li>To provide and maintain roads to an acceptable standard and quality;</li> </ul>	<i>To improve and maintain district roads and promote effective and</i>

Goals	Transport Objectives	Central Karoo District Municipality Strategic Objective
<b>infrastructure</b>	<ul style="list-style-type: none"> <li>To provide non-motorised transport infrastructure and facilities across the District municipal area.</li> </ul>	<i>safe public transport for all.</i>
<b>The implementation of an integrated public transport system</b>	<ul style="list-style-type: none"> <li>To support the implementation of a mobility strategy and integrated public transport system.</li> </ul>	<i>To improve and maintain district roads and promote effective and safe public transport for all.</i>
<b>The provision of Non-Motorised Transport infrastructure</b>	<ul style="list-style-type: none"> <li>To provide for NMT infrastructure in terms of a network plan;</li> <li>To determine the role of all forms of non-motorised transport.</li> </ul>	<i>To promote healthy and socially stable communities.</i>
<b>Promotion and improvement of safety in transportation</b>	<ul style="list-style-type: none"> <li>To ensure the safety of all public transport users;</li> <li>To systematically and ultimately eliminate fatal and serious injury accidents and to significantly reduce all transport or road accidents.</li> </ul>	<i>To improve and maintain district roads and promote effective and safe public transport for all;</i>  <i>To reduce the effects of disasters and improve public safety in the region as a whole.</i>
<b>Improving human resource capacity in transport</b>	<ul style="list-style-type: none"> <li>To implement alternative means to harness and improve human resource capacity in transport at the District and Local Municipalities.</li> </ul>	<i>To build well capacitated workforce and communities.</i>
<b>Applying transport as a tool for economic growth</b>	<ul style="list-style-type: none"> <li>To maximise the use of small, medium, and micro enterprises in the implementation and maintenance of infrastructure projects;</li> <li>To support the use of rail for freight use and to manage road based freight vehicles;</li> <li>To enable a transport system that supports the tourism industry;</li> <li>To support catalytic transport-related</li> </ul>	<i>To pursue economic growth opportunities that will create descent work.</i>  <i>To establish an inclusive tourism industry through sustainable development and marketing which is public sector led, private sector driven and community based.</i>

Goals	Transport Objectives	Central Karoo District Municipality Strategic Objective
	development projects of regional significance and impact.	

### 3. Transport Register

The transport register provides a description of transport services and infrastructure in the Central Karoo District Municipality area, and includes the demographic and socio-economic overview of the District, an overview of the transport system, status of non-motorised transport, freight transport, and an assessment of the road network and traffic flows.

#### 3.1 Demographic Overview and Economic Activity

The demographic and economic overview provides pertinent information that impact on transport provision for the District. The analysis suggests that population and economic growth will be minimal in the short to medium term and is likely to remain below the national and provincial average growth rates. The District Municipality has a high poverty rate which may suggest that the provision of public transport will require operational subsidies to improve affordability and ultimately accessibility.

##### 3.1.1 Demography

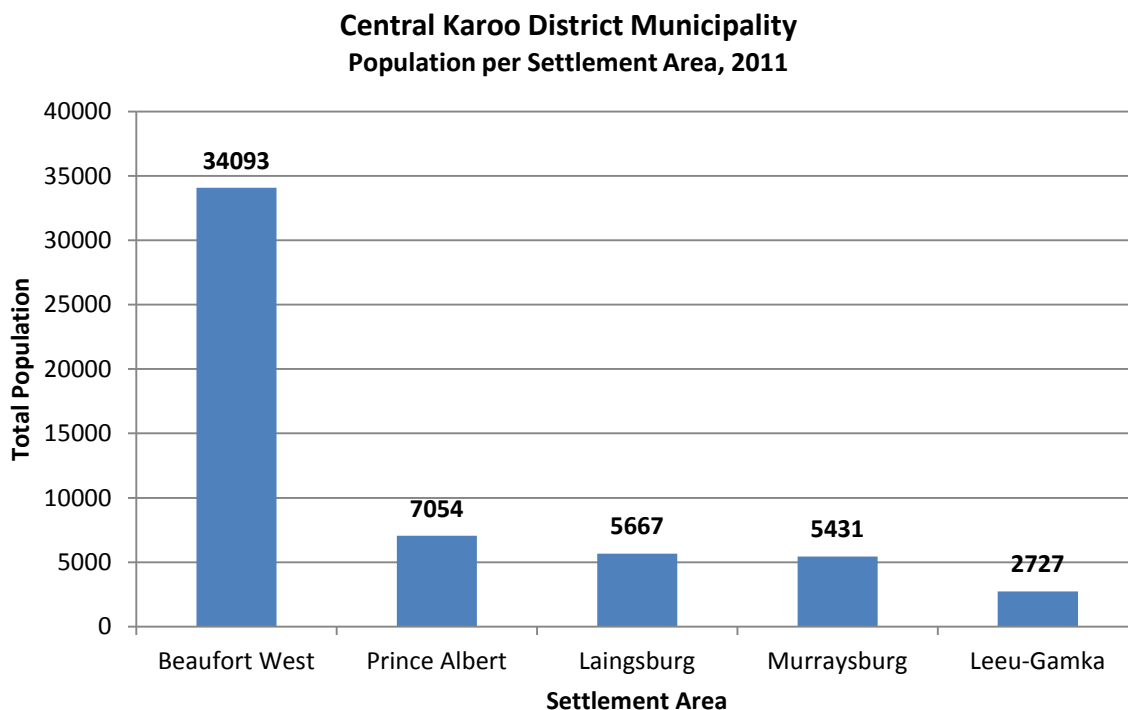
The Central Karoo District Municipality is the smallest of the Western Cape's district municipalities in terms of population, accounting for a little more than 1% of the Province's population. The District had a 1.6% population growth rate from 2001 to 2011, the lowest in the Western Cape Province, and well below the provincial and national average. The census statistics confirm that the District has a slow-growing population which may be a result of the region's limited economic potential and out-migration. There are further indications of a declining fertility rate as seen in the decline of the children's proportion of the population. The elderly group's proportion of the population has seen an increase and may point to improvements in quality of life and life expectancy within the District.

According to population forecasts by the Department of Social Development, the District Municipality population will continue to grow at the annual average rate of 0.7% from 2013 to 2017, reaching 75,022 adding 4,000 residents from 2011. In other demographic data, the working age population (15 – 64 years of age) accounts for 64% of the total population whilst the dependency ratio amounts to 58% in 2011.

The population of Central Karoo District Municipality is highly urbanised with around 17% of the population residing on farms and small rural settlements. Half of the District's residents reside in the town of Beaufort West which also sees the highest concentration of transport operations and facilities in the District.



Figure 3-1: Central Karoo District Municipality Population per Settlement Area, 2011

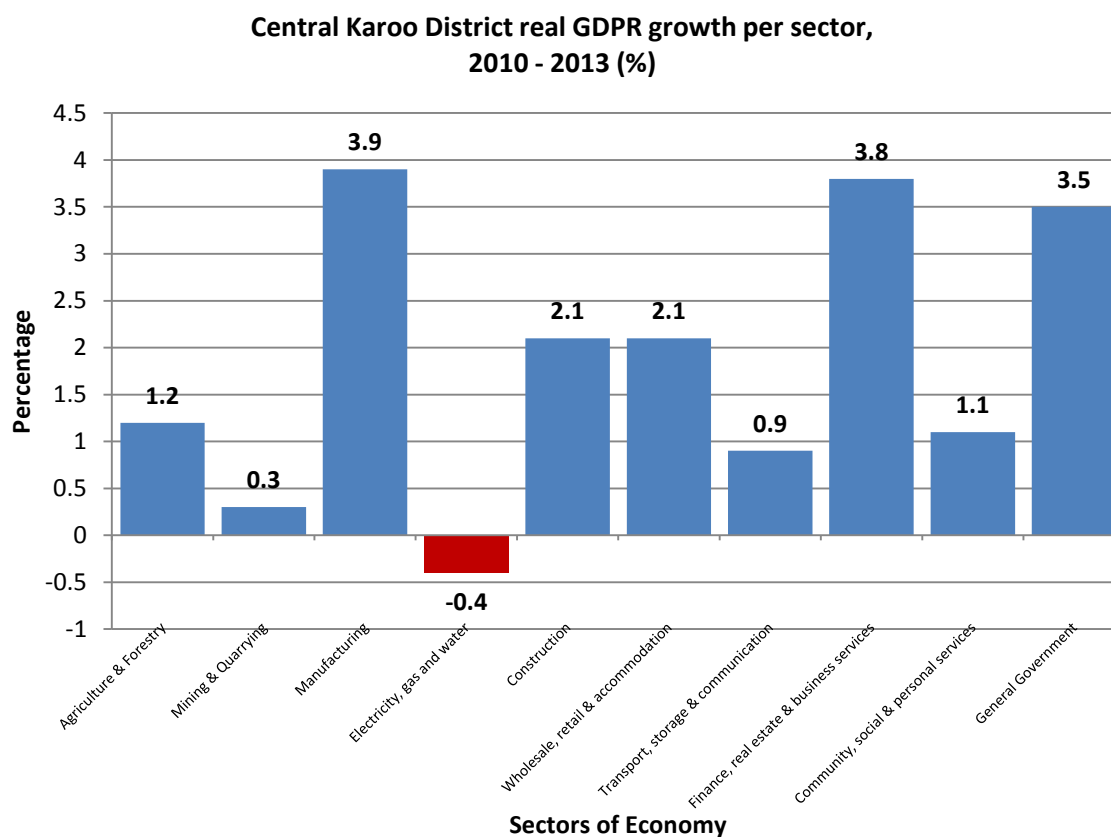


### 3.1.2 Economy

The Central Karoo District Municipality contributes a marginal percentage to the Western Cape's gross domestic product per region (GDPR) amounting to R2,7 billion in 2013. The District economy grew by 3.7 percent per annum from 2000 to 2013 while the Prince Albert Municipality grew faster at 4 percent followed by Beaufort West Municipality at 3.8 percent per annum. Beaufort West Municipality accounts for almost 70% of the District's GDPR and accounts for the highest contribution to the real GDPR growth in the Province of all the District's local municipalities at 1.4 percent.

The District's high-growth economic sectors for the 2010 to 2013 period are the manufacturing (3.9%), financial and business services (3.8%), and the government services sectors (3.5%). The electricity and energy sectors saw a decline with significantly slower growth in the transportation sector at 0.9%. The slower growth in the transportation sector may be partly attributed to the decline in the District's agricultural sector which resulted in less agricultural products being transported and stored for distribution.

Figure 3-2: Central Karoo District Municipality real GDP growth per sector, 2010 – 2013 in percentage<sup>1</sup>



The Central Karoo District has the highest unemployment rate amongst all district municipalities in the Western Cape, estimated at 23% during 2011. The youth unemployment rate is greater at 27% having shown a significant decline from 44% in 2001. This may be due to the youth's lack of experience and skills which is exacerbated by the unavailability or lack of tertiary or post-school education in the District. There have been significant job losses in the agricultural sector of around 2,410 jobs from 2000 to 2013, while a positive net employment of 1,590 was accumulated in the manufacturing and finance and business services sectors for the same period.

What is important to note from the Municipal Economic Review and Outlook (2014) as described in the Western Cape Provincial Treasury Socio-Economic Profile of the District (2014) is that labour demand for unskilled and semi-skilled workers has declined with a higher demand for skilled labour. This can be considered as a response to the significant growth of the financial sector of the District since 2000.

<sup>1</sup> Adapted from the Western Cape Government Provincial Treasury (2014) as sourced from the Municipal Economic Review and Outlook, 2014

The District has the highest poverty rate in the Western Cape Province with around 33% of households classified as earning an income below the Minimum Living Level. Beaufort West Municipality has the lowest rate at 29% whilst Prince Albert Municipality has a poverty rate estimated at 43%. The importance of this is that the high overall poverty rate does not support a public transportation system free of operational subsidy.

**Table 3-1: Central Karoo Demographic and Socio-Economic Information**

<b>Demographic and Socio-Economic Profile of Central Karoo District Municipality<sup>23</sup></b>	
Population (2013)	<b>72,348</b>
Central Karoo District Municipality Average Population Growth (2001 – 2011)	<b>1.6%</b>
Population Distribution by group (2011):	
• Black	<b>13%</b>
• Coloured	<b>77%</b>
• Indian	<b>0.4%</b>
• White	<b>10%</b>
Population Density (people per hectare)	<b>0.01 people/ha (1.86 people/km<sup>2</sup>)</b>
Number of Households, 2011	<b>19,076</b>
Average Household Size, 2011	<b>3.6 persons</b>
Unemployment, 2011 (narrow definition)	<b>23%</b>
Youth Unemployment, 2011	<b>27%</b>
Percentage of Jobs – Highly Skilled	<b>23%</b>
Percentage of Jobs – Low Skilled	<b>28%</b>
Gross Domestic Product per Region (GDPR), 2013	<b>R2,7 billion</b>
Average Annual Economic Growth Rate, 2002 – 2013	<b>3.7%</b>
Average Annual Household Income, 2011	<b>R77,979</b>
Poverty Rate, 2010	<b>33%</b>
Percentage of Female headed Households	<b>38%</b>

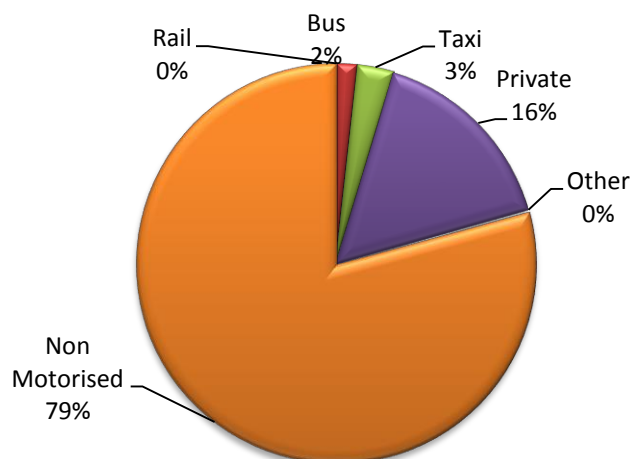
<sup>2</sup> Western Cape Government Provincial Treasury, 2014: Socio-Economic Profile: Central Karoo District, Working Paper. Cape Town.

<sup>3</sup> Statistics South Africa, 2012: Western Cape Municipal Report. Pretoria.

### 3.2 Overview of Transport System

The transport sector in the Central Karoo District contributes around 12% towards the Gross Domestic Product per Region which amounts to approximately R324 million in 2013.<sup>4</sup> This sector has been adversely impacted by contraction in the agricultural sector and had the lowest sectoral growth rate following the mining industry for the 2010 to 2013 period. It is recognised that the local transport sector is primarily supported by passing traffic which ranges from freight vehicles, private cars, mini-bus taxi's, buses, etc. On the other hand, local transport movement is dominated by walking which accounts for 79% of all trips.<sup>5</sup>

**Figure 3-3: Central Karoo District Municipality Modal Split, 2013**



Walking is the primary means of mobility for intra-town or local trips while motorised transport is essential for inter-town trips as a result of the vast distances between settlements. These vast distances also influences affordability of motorised transport and as a result inhibits inter-town travel due to the limiting effect of the region's overall economic environment.

<sup>4</sup> Western Cape Government Provincial Treasury, 2014: Socio-Economic Profile: Central Karoo District, Working Paper. Cape Town.

<sup>5</sup> Statistics South Africa, 2013: National Household Travel Survey 2013, Pretoria

### 3.3 Public Transport System

#### 3.3.1 Public Transport Infrastructure

Public transport infrastructure provision is limited in the Central Karoo District Municipality and is primarily geared towards inter-town or long distance travel. The largest public transport facility is the taxi rank at Beaufort West that provides for local trips with two (2) other smaller taxi ranks and six (6) railway stations spread across the district municipal area for long distance travel. The well-used facilities are in a reasonable condition whilst the smaller underutilised facilities are often vandalised and lack basic passenger facilities such as ablution facilities, shelter, and lighting. Long distance bus services make use of fuel filling stations as stops.

**Table 3-2: Central Karoo District Municipality Public Transport Facilities and Infrastructure**

Facility Type	Street Location	Coordinates	Size	Condition	Improvement Priorities
<b>Beaufort West Station</b>	Church Street	32°21'5.48"S 22°34'35.44"E	<i>2 platforms 400m long</i>	Paved platform. Passenger shelters. Ticket Offices & Toilets	None
<b>Beaufort West On-Street Bus Stop</b>	Donkin Street	32°21'11.20"S 22°34'59.04"E	<i>Single Bus Lay-By</i>	Paved Surface. No pedestrian or passenger furniture or shelter	Bus Shelter
<b>Beaufort West Taxi Rank</b>	Voortrekker & Donkin Streets	32°21'14.18"S 22°34'57.16"E	<i>9 mini-bus taxi's</i>	Paved surfaced. Seats, toilets and shelter available.	None
<b>Nelspoort Railway Station</b>	Nelspoort Access Rd	32° 6'51.11"S 23° 0'9.88"E	<i>1 platform of 250m</i>	Gravel parking area. Lighting is vandalised; No toilets or shelter available.	Shelter; Ticket office; Toilets
<b>Murraysburg Taxi Rank</b>	Beaufort Street	31°57'45.74"S 23°45'51.00"E	<i>2 bays</i>	Paved Surface. No lighting and toilets.	Lighting; Toilets
<b>Klaarstroom Taxi Rank</b>	Klaarstroom	33°19'32.14"S 22°31'47.10"E	<i>12 metres in length</i>	On-street. Paved and Concrete surface	Lighting
<b>Leeu-Gamka Station</b>	Leeu-Gamka	32°46'30.90"S 21°58'39.17"E	<i>Single Platform</i>	Gravel Parking Areas; Gravel platform surface; Vandalism	Upgrade to Ticket Offices, Ablutions
<b>Prince Albert Road Station</b>	Prince Albert Road	32°59'6.57"S 21°41'11.11"E	<i>Single Platform</i>	Gravel Parking Areas; Gravel Platform Surface; Vandalised facilities	Upgrade to Ticket Offices, Ablutions
<b>Laingsburg Railway Station</b>	Station Street	33°11'52.44"S 20°51'36.84"E	<i>Single Platform – 280 metres</i>	Paved Platform; Surface Parking	None

Facility Type	Street Location	Coordinates	Size	Condition	Improvement Priorities
<b>Matjiesfontein Railway Station</b>	Matjiesfontein	33°13'52.98"S 20°34'51.27"E	<i>Single Platform</i>	Paved Platform; Gravel Parking Area	Ablution facilities

**Photo 3-1: Beaufort West Taxi Rank, Voortrekker Road**



### 3.3.2 Road-based Public Transport Operations

Local road-based public transport services are focused on the town of Beaufort West while long distance passenger transport occurs primarily on the N1 corridor and to a lesser extent on the N12 between Beaufort West and the Garden Route; and the R61 towards the Eastern Cape. Demand for travel largely reflects the socio-economic linkages between towns as captured in the SDF of the District Municipality; communities are compelled to leave the District to access higher level health and education services, and for shopping purposes.

- Residents of Murraysburg and surrounding rural areas have a socio-economic linkage with nearby Graaff-Reinet in Sarah Baartman District Municipality in the Eastern Cape for shopping, business, and financial services;
- Merweville, Nelspoort and surrounding rural settlements maintain socio-economic linkages with the town of Beaufort West;
- Prince Albert, Klaarstroom, surrounding rural settlements, and agricultural areas maintain socio-economic linkages with Oudtshoorn in Eden District Municipality;
- Laingsburg and Matjiesfontein maintain socio-economic linkages with neighbouring Worcester in Cape Winelands District Municipality and to a lesser extent the town of Beaufort West.

### (a) Mini-Bus & Sedan Taxi Services

#### *Beaufort West Local Services*

Regular mini-bus or taxi services in the District Municipality for local trips are primarily found in Beaufort West and operated mostly by means of sedan taxis. These services operate a flexible route model with trips largely from the rank in the town of Beaufort West to passenger drop-off at their homes in residential areas. The sedan taxi service's competitive edge to the local bus service is that a doorstep drop-off can be made particularly in the case of bulk or large parcels and purchases and it does not operate on a fixed time schedule.

The month-end weekend (Friday and Saturday) is the peak for local taxi operations with vehicles comprising primarily of sedans with an occasional mini-bus taxi deployed to meet increased demand. As expected, this period sees an increase in the number of trips made and passenger vehicles used, with a corresponding increase in passenger load factors. However, there remains significant spare capacity based on load factors observed from trips departing the rank; it must be noted that the spare capacity is more a result of vehicles departing the rank empty for pick-ups in the residential areas and not necessarily a direct result of low demand.

**Table 3-3: Beaufort West Taxi Rank Observed Utilisation**

Survey Date	Time Period	Number of Trips Observed	Number of Vehicles Observed	Observed Load Factor
<i>Month-End Weekend</i>				
<b>Friday, 31 October 2014</b>	<i>16:00 – 18:00</i>	18	9	<b>0.90</b>
<b>Saturday, 01 November 2014</b>	<i>07:30 – 14:00</i>	25	13	<b>0.76</b>
<i>Regular Weekend</i>				
<b>Friday, 07 November 2014</b>	<i>16:00 – 18:00</i>	12	8	<b>0.69</b>
<b>Saturday, 08 November 2014</b>	<i>07:30 – 14:00</i>	14	8	<b>0.59</b>

The Beaufort West Taxi Organisation chaired by Mr A Appies has indicated that around 19 taxi operators are registered with the organisation. The table below lists those operators as at March 2016 with the operating licence of 8 operators confirmed on the Operating Licence database. The remainder are those awaiting decision:

**Table 3-4: List of Taxi Operators at Beaufort West**

Operator Name	Operating Licence
<i>Mini-Bus Taxi's</i>	
<b>AA Appies</b>	Yes
<b>PJ Appies</b>	Yes

Operator Name	Operating Licence
D Fortuin	Yes
B Johnson	Yes
W Mayekiso	Yes
N Molewitz	Not Known
A Wana	Yes
H Van Der Ross	Not Known
J Van Wyk	Not Known
A Nieuwenhuis	Not Known
<i>Sedan Taxi's</i>	
J Molewitz	Not Known
GB Mathison	Not Known
GJ Mathison	Yes
T Heynes	Not Known
BA Douglas	Not Known
MM Salie	Not Known
A Davids	Not Known
H Bosman	Yes
F Jacobs	Not Known

#### *Long-distance Services*

Long distance mini-bus taxi services have through-flows along the N1 between Cape Town to Bloemfontein and Gauteng, as well as on the R61 between Cape Town and various destinations in the Eastern Cape. These mini-bus taxi services peak at month ends, Easter and December holidays from Thursday evenings to Monday mornings. There are no ranking facilities and stops are made at two filling stations along Donkin Street for refueling and for passengers to alight. There are instances of severe overcrowding at these filling stations particularly during Easter and December holiday periods. The refuelling of vehicles and spend of passengers on food and beverages brings important revenue generated from outside the District. Table 3-5 below describes the number of observed mini-bus taxis at Beaufort West in the direction of Cape Town.

Long distance mini-bus taxi services originating in the District operate on routes to Cape Town, Oudtshoorn and George.

**Table 3-5: Observed long-distance mini-bus taxi trip data at Beaufort West**

Survey Date	Direction	Time of Survey	Total No. of Taxis	Estimated Passenger Count
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Survey Date	Direction	Time of Survey	Total No. of Taxis	Estimated Passenger Count
<b>Intersection of Donkin &amp; Voortrekker Streets</b>				
<b>Thursday, 30 October 2014</b>	Towards Cape Town	18:00 – 00:00	42	<b>672</b>
<b>Sunday, 02 November 2014</b>	Towards Cape Town	18:00 – 00:00	53	<b>848</b>
<b>Intersection of Donkin &amp; Danie Theron Street</b>				
<b>Thursday, 30 October 2014</b>	Towards Cape Town	18:00 – 00:00	38	<b>608</b>
<b>Sunday, 02 November 2014</b>	Towards Cape Town	18:00 – 00:00	270	<b>4,320</b>

#### *Beaufort West Municipality*

In other areas of the municipal area, mini-bus taxi services focuses on inter-town transport to surrounding towns and villages; the towns of Nelspoort, Murraysburg, and Merweville are relatively compact and most locations are accessible by foot. As described in Table 3-6 below:

- There is an infrequent mini-bus taxi service between Nelspoort and Beaufort West that operates on specific days or when there is ample demand for a trip. Private cars are also used for paid passenger trips to surrounding towns;
- Regular demand-based mini-bus taxi services operate from Murraysburg to Graaff-Reinet for shopping trips, whilst trips to Beaufort West, Hutchinson, and Cape Town are pre-booked and are usually made once the operator has enough fare-paying passengers to undertake a profitable trip; and
- Mini-bus taxi trips from Merweville operate on certain days or when demand necessitates from other towns. However, residents mostly approach private car owners with requests for paid passenger trips to Prince Albert and Beaufort West.

**Table 3-6: Mini-bus Taxi Operations in Beaufort West Municipality**

Town	OLS Route Number(s)	Route Destination
<b>Nelspoort</b>	M61	Beaufort West
<b>Murraysburg</b>	A37, D91	Graaff-Reinet, Beaufort West, Cape Town, Hutchinson
<b>Merweville</b>	J29	Prince Albert Road, Prince Albert, Beaufort West

#### *Prince Albert Municipality*

According to the Provincial Regulating Entity (MRE) information, there are four mini-bus taxi operators in the Prince Albert Municipality; local mini-bus taxi services are limited to the town of Prince Albert. Infrequent mini-bus taxi services run from Prince Albert to Oudtshoorn and George. Private transport use for ferrying paid passengers is common to locations not served by mini-bus taxi services.

#### *Laingsburg Municipality*

Mini-bus taxi operations are limited in the Laingsburg Municipality with local trips mostly on social grant pay-out days. Infrequent trips are made to Worcester for medical and shopping purposes.

#### **(b) Bus Services**

Beaufort West has the only regular local public bus service which is operated on a commercial basis without subsidy. The service is for commuting between the town and the residential areas of Beaufort West and starts with three (3) trips in the morning to town after which the bus returns to the depot; the service starts again at 11:00 with trips every hour on the hour from town up to 17:00. The number of trips remains invariable even on peak days such as social payout days and a single 60-seater bus is used.

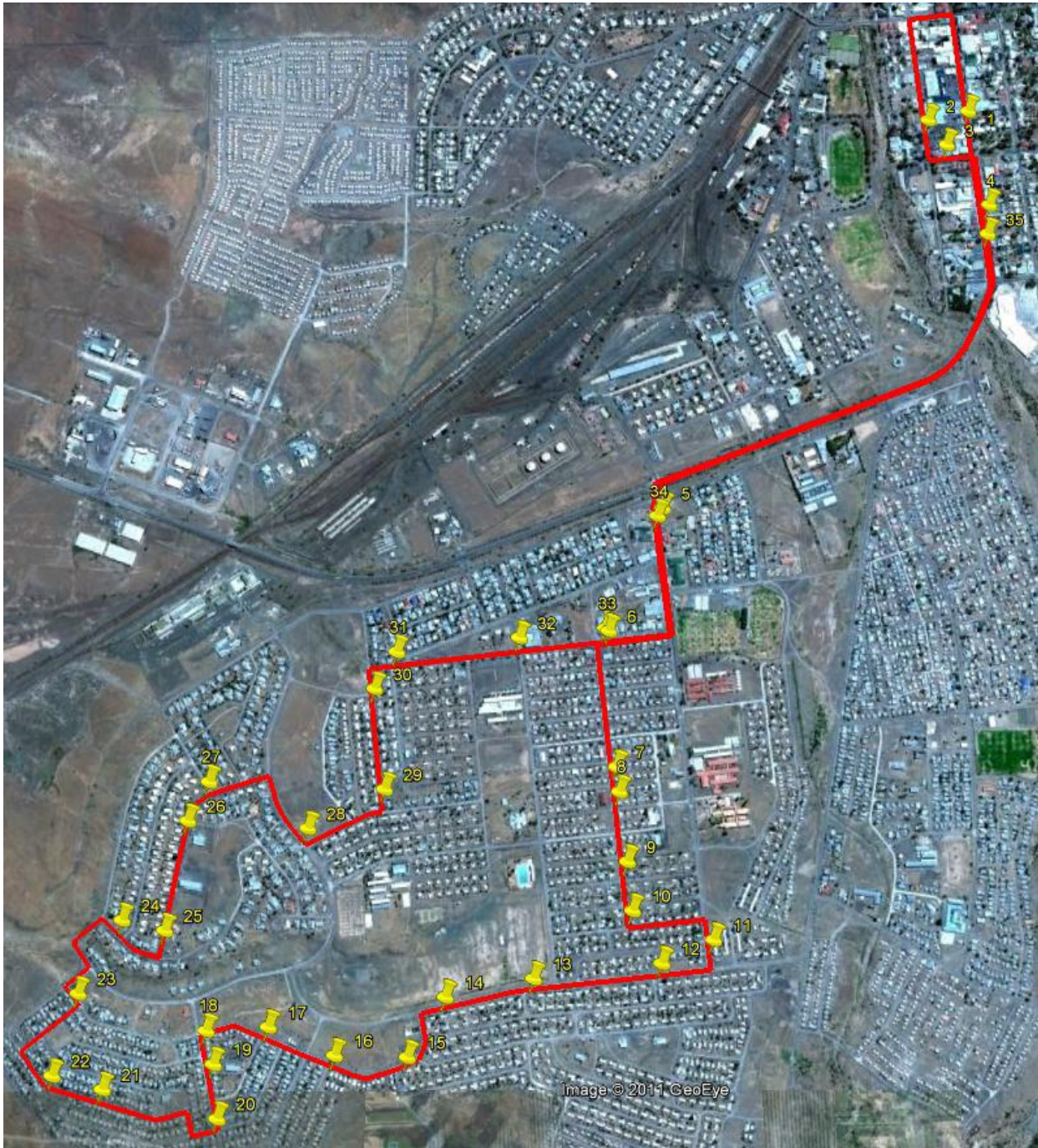
**Table 3-7: Number of Weekday Bus Trips and Capacity in Beaufort West (peak and off-peak)**

Peak		Off-Peak		TOTAL	
Number of Trips	Estimated Capacity	Number of Trips	Estimated Capacity	Total Trips	Total Estimated Capacity
6	180	10	600	16	780

The bus route has not changed since the Current Public Transport Record update undertaken in 2011; most of the residential streets are gravel and the bus follows one of the few surfaced roads as a way to avoid dust clouds and nuisance to local residents. Based on 2011 census statistics at sub-place level, an estimated 16,000 residents (or 48% of the town's population) stay within 500 metres of a bus stop. Bus stops along the route are not marked and residents rely on familiar knowledge on where bus stops are.

**Figure 3-4: Local bus route in Beaufort West<sup>6</sup>**

<sup>6</sup> Central Karoo District Municipality, 2011: Current Public Transport Record, p18



Four national long distance bus operators operates through the District Municipality; i.e. Translux (including City to City), Intercape, Greyhound (including Citiliner), and SA Roadlink, have scheduled stops in Beaufort West and Laingsburg. Approximately 196 buses operate on the N1 on a regular week; this number may increase during year-end and Easter holidays.

**Table 3-8: Long Distance Bus Arrivals at Beaufort West**

Operator	Route	Arrive	Depart	Frequency
Translux	Cape Town to Pretoria (via Kimberley)	00:15	00:20	Daily
Translux	Pretoria to Cape Town (via Kimberley)	03:20	03:25	Daily
	Cape Town to Pretoria (via Bloemfontein)	22:00	22:05	Daily
	Pretoria to Cape Town (via Bloemfontein)	05:30	05:35	Daily
	Cape Town to Pretoria (via Bloemfontein)	15:45	15:50	Sun, Wed, Fri
	Pretoria to Cape Town (via Bloemfontein)	01:05	01:10	Sun, Wed, Fri
Translux (City to City)	Cape Town to Pretoria (via Kimberley)	17:05	17:10	Daily
	Pretoria to Cape Town (via Kimberley)	00:50	00:55	Daily
Translux	Cape Town to East London (via Queenstown)	23:55	00:00	Daily
	East London to Cape Town (via Queenstown)	00:45	00:50	Daily
Translux (City to City)	Mossel Bay to Pretoria (via Kimberley)	19:55	20:00	Daily
	Pretoria to Mossel Bay (via Kimberley)	04:35	04:40	Daily
Intercape	Cape Town to Pretoria (via Bloemfontein)	00:35	00:40	Daily
	Pretoria to Cape Town (via Bloemfontein)	06:00	06:05	Daily
	Cape Town to Pretoria (via Bloemfontein)	17:10	17:15	Wed, Thu. Fri. Sun
	Pretoria to Cape Town (via Bloemfontein)	00:55	01:00	Tue, Fri, Sat, Sun, Mon
Greyhound	Cape Town to Durban	17:25	17:30	Daily
	Durban to Cape Town	03:00	03:05	Daily
	Cape Town to Pretoria (via Bloemfontein)	00:00	00:05	Daily
	Pretoria to Cape Town (via Bloemfontein)	06:15	06:20	Daily
	Cape Town to Pretoria (via Kimberley)	18:55	19:00	Daily
	Pretoria to Cape Town (via Kimberley)	01:35	02:05	Daily

Operator	Route	Arrive	Depart	Frequency
	Mossel Bay to Pretoria (via Bloemfontein)	19:15	19:45	Fri, Sat, Sun, Mon
	Pretoria to Mossel Bay (via Bloemfontein)	04:05	04:30	Fri, Sat, Sun, Mon

**Table 3-9: Long Distance Bus Arrivals at Laingsburg**

Operator	Route	Arrive	Depart	Frequency
Translux	Cape Town to Pretoria (via Kimberley)	21:45	22:10	Daily
	Pretoria to Cape Town (via Kimberley)	05:35	05:55	Daily
	Cape Town to Pretoria (via Bloemfontein)	19:30	19:55	Daily
	Pretoria to Cape Town (via Bloemfontein)	07:30	07:40	Daily
	Cape Town to Pretoria (via Bloemfontein)	13:20	13:45	Sun, Wed, Fri
	Pretoria to Cape Town (via Bloemfontein)	03:15	03:40	Sun, Wed, Fri
Translux (City to City)	Cape Town to Pretoria (via Kimberley)	14:35	15:00	Daily
	Pretoria to Cape Town (via Kimberley)	03:05	03:20	Daily
Translux	Cape Town to East London (via Queenstown)	21:20	21:45	Daily
	East London to Cape Town (via Queenstown)	03:05	03:25	Daily
Intercape	Cape Town to Pretoria (via Bloemfontein)	21:50	22:10	Daily
	Pretoria to Cape Town (via Bloemfontein)	08:30	08:50	Daily
	Cape Town to Pretoria (via Bloemfontein)	14:25	14:45	Wed, Thu, Fri, Sun
	Pretoria to Cape Town (via Bloemfontein)	02:45	03:00	Tue, Fri, Sat, Sun, Mon
Greyhound	Cape Town to Durban	15:00	15:05	Daily
	Durban to Cape Town	05:10	05:15	Daily
	Cape Town to Pretoria (via Bloemfontein)	21:55	22:00	Daily
	Pretoria to Cape Town (via Bloemfontein)	08:45	08:50	Daily
	Cape Town to Pretoria (via Kimberley)	16:15	16:45	Daily
	Pretoria to Cape Town (via Kimberley)	04:05	04:10	Daily

### 3.3.3 Passenger Rail Operations

Passenger rail services have been dramatically reduced with several routes such as the Cape Town to Durban service having been discontinued. There are now two passenger rail services through the Central Karoo District

Municipality; the first is between Cape Town and Johannesburg and the second an irregular weekly service between Cape Town and Queenstown. Train stops are made at Matjiesfontien, Laingsburg, Prince Albert Road, Leeu-Gamka, Beaufort West, and Nelspoort stations. Trains towards Cape Town arrive in the early hours of the morning and northbound trains run through the District in the late afternoon or early evening.

**Table 3-10: Central Karoo Rail Passenger Services**

Route	Service Type	Weekly Frequency	Days
Cape Town to Johannesburg	Economy	3	Wed, Fri & Sun
	Tourist	1	Thu
Johannesburg to Cape Town	Economy	3	Thu, Sat & Mon
	Tourist	1	Wed
Cape Town to Queenstown	Economy	1	Thu
Queenstown to Cape Town	Economy	1	Sat

Passenger rail services remain the most affordable mode for long distance travel followed by mini-bus taxi services. The former has seen a marked increase in cost with marginal increases in mini-bus taxi fares as shown in Table 3-11 below; costs for these two modes are below R200 which may point to a threshold for affordability of transport over longer distances.

**Table 3-11: Price of One-Way Adult Trip: Beaufort West to Cape Town (in Rand)**

Mode	Service Name	Price (R)			Percentage Change 2011 - 15
		Apr '09	Sept '11	Feb '15	
Train	Shosholoza Meyl	90	100	160	60%
Bus	Translux	250	250	280	12%
	City to City	170	170	240	41%
	Intercape: Sleepliner	225	342	356	4%
	Intercape: Mainliner	239	315	477	51%
	Greyhound	-	300	420	29%
	Citiliner	260	-	350	-
Taxi	Various Operators	180	184	200	

### 3.4 Non-Motorised Transportation

The Provincial Land Transport Framework document (2013) defines non-motorised transport as “*all forms of movement that are not propelled by battery and/or fuel combustion driven mechanisms*”, and may include walking, cycling, animal-drawn carts and wheelchairs. In the Central Karoo District, the transport problem is



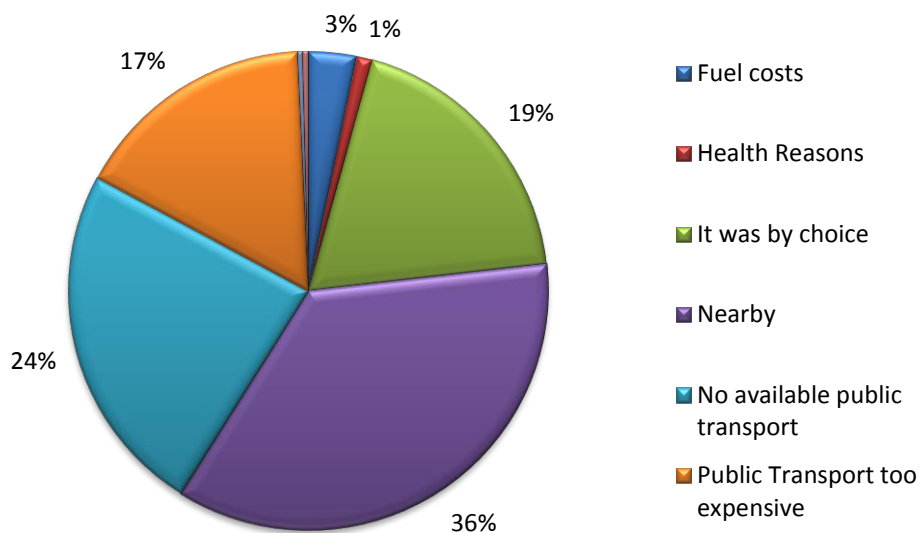
linked to poverty and isolation from economic and social opportunities, as well as a lack of viable and affordable public transport. The benefits of non-motorised transport for the District can therefore be found in:

- Public savings in urban road infrastructure as a result of lower levels of motorisation;
- Increased labour share as NMT infrastructure is more labour intensive;
- Decreased environmental pollution; and
- Improvement in general health as a result of increased cycling and walking.

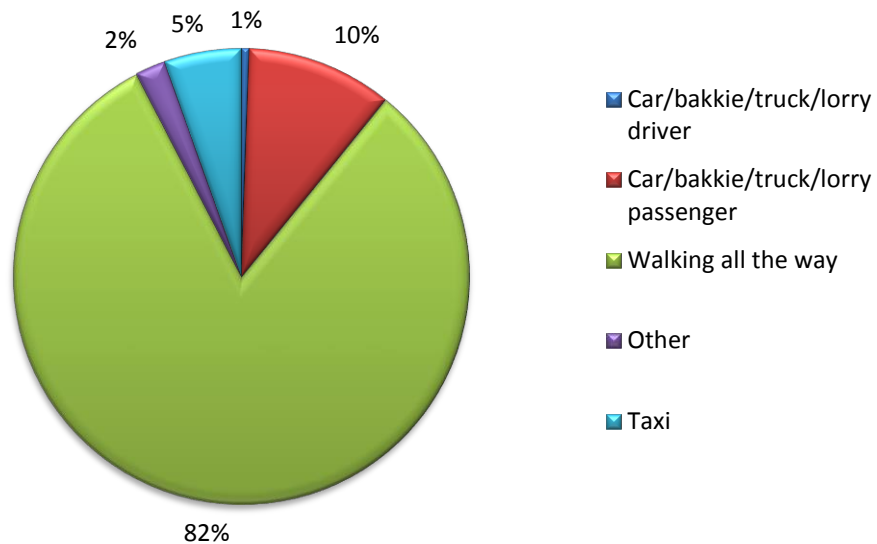
Of importance is that NMT infrastructure planning and design should take cognisance of trip origins and destinations or desire lines and that infrastructure meet the needs of users in terms of pavement, width, lighting, etc.

Walking is the preferred mode of transport to access services and facilities in the Central Karoo District Municipality area due to the relative proximity of these activities and convenience as indicated in Figure 3-5 below. Furthermore, more than 80% of learners walk to school all the way as shown in Figure 3-6. It therefore provides a strong policy impetus to improve non-motorised transport infrastructure provision across the District. Pedestrian walkways and cycling lanes provide dedicated space for pedestrians and cyclists, adds to road safety, and improves urban quality and the general quality of life.

**Figure 3-5: Reasons for Walking in the Central Karoo District Municipality, 2013**



**Figure 3-6: Mode of Travel to Education Institution for Central Karoo District, 2013**



All major towns and settlements in the Central Karoo District Municipality has rolled out the implementation of pedestrian pathways and cycling lanes. An estimated 12 kilometres of surfaced or paved pathways have been provided by 2014.



### 3.5 Roads and Traffic

#### 3.5.1 Road Network

The primary road system in the District Municipality comprises national, provincial, and municipal roads of which 14% in the total road length is surfaced. The N1 runs on a northeast-southwest axis with a total extent of 354 kilometres; the N12 shares much of this road length. The N1 carries an average of 2,496 vehicles per day of which 52% are heavy vehicles.

The road is a single carriage way with paved shoulders. Major intersections on the N1 are at Beaufort West with the N12 for connectivity towards Oudtshoorn, the R61 (Voortrekker Road) in Beaufort West with connectivity towards Aberdeen, the R353 north of Beaufort West for connectivity towards Loxton, and the R63 towards Murraysburg and Victoria West. The N1 is maintained by the South African National Roads Agency (SANRAL). The above traffic volumes were obtained from the Western Cape Department of Transport and Public Works.

**Table 3-12: Total Road Network Lengths in Central Karoo District Municipality**

Road Category	Surfaced (km)	Gravel (km)	Total Length (km)	Designation	Authority
National Roads	364	0	364	N1	SANRAL
Trunk Roads	554	68	622	N12, R61, R353, R63	PGWC
Main Roads	52	629	681	-	PGWC/CKDM
Divisional Roads	15	1,679	1,694	-	
Minor Roads	1	3,890	3,891	-	
<b>TOTAL</b>	<b>986</b>	<b>6,266</b>	<b>7,252</b>		

The N12 runs on a north-south axis from Beaufort West to Oudtshoorn on the eastern extremity of the municipal area. The road has a total extent of 128 kilometres within the borders of the municipality and connects with the R407 (TR034) at Klaarstroom which provides access to the town of Prince Albert. Most sections of the road are either in poor or very poor condition. Although designated as an N-road, the N12 is a 'Class 2' trunk road (TR033) which is maintained by the Western Cape Provincial Government.

Other important roads significant to the District Municipality are:

- R61 (TR035) which runs in an easterly direction from Beaufort West to Aberdeen with a length of 74 kilometres up to the Eastern Cape Boundary. An Average Speed Over Distance (ASOD) speed enforcement system has been implemented on 71 kilometres of this road;
- The R63 (TR016) runs from the N1 towards Murraysburg and Graaff-Reinet with a total length of 87 kilometres within the municipal area;

- The R407 (TR034) which connects with the N1 at Prince Albert Road and runs through the town of Prince Albert, across the Kredouw Pass, connecting at Klaarstroom where it follows the N12 for 7 kilometres and then turns toward Willowmore;
- R381 (TR058) from Beaufort West toward Loxton is 95 kilometres long of which 68 kilometres are gravel;
- The R323 (TR083 and MR003) from Laingsburg which provides connectivity to Calitzdorp and Ladismith via Seweweekspoort of 77 kilometres in length of which 30 kilometres (MR003) is surfaced;
- The R353 (TR073) northwards from Leeu-Gamka at the N1 towards Fraserburg with a length of 93 kilometres; and
- The R354 (TR020) from Matjiesfontein towards Sutherland is surfaced and has a total length of 43 kilometres.

### 3.5.2 Condition of Road Network

Maintenance of the trunk and main road network in the District Municipality remains challenging; of significance is the poor road condition of the N12 which is second to the N1 corridor in terms of the volume of freight traffic carried. This road is highly deteriorated and the reseal of this road should therefore be a priority. The table below describes road conditions as available from the Western Cape's Department of Transport and Public Works' database and may differ from actual site conditions.

**Table 3-13: Provincial and District Road Conditions in Central Karoo District Municipality<sup>7</sup>**

Designation	Road No	Description	Length (km)	Surface	Condition
N1	NR001	Cape Winelands Boundary to Northern Cape Boundary	364	Asphalt	<b>Good</b>
N12	TR033	Eden District Boundary to Beaufort West (N1)	127	Asphalt	<b>Poor</b>
R61	TR035	N1 Voortrekker Street Intersection to Eastern Cape Boundary	74	Asphalt	<b>Good; Fair in Places</b>
R63	TR016	Northern Cape Boundary to Skietkuil to Eastern Cape Boundary	87	Asphalt	<b>Poor; Good to Fair in Places</b>
R323	TR083	N1 Laingsburg to Driefontein	30	Asphalt	<b>Mostly Good; Fair In Places</b>
R328	TR034	N1 Prince Albert Road to Prince Albert	44	Asphalt	<b>Poor to Fair</b>
R381	TR058	N1 Intersection Beaufort West to Northern Cape Boundary	96	Asphalt: 28km	<b>Good to Very Good</b>
				Gravel: 68km	<b>Poor</b>
R353	TR073	N1 Leeu-Gamka northbound to	74	Asphalt	<b>Good to Very Good</b>

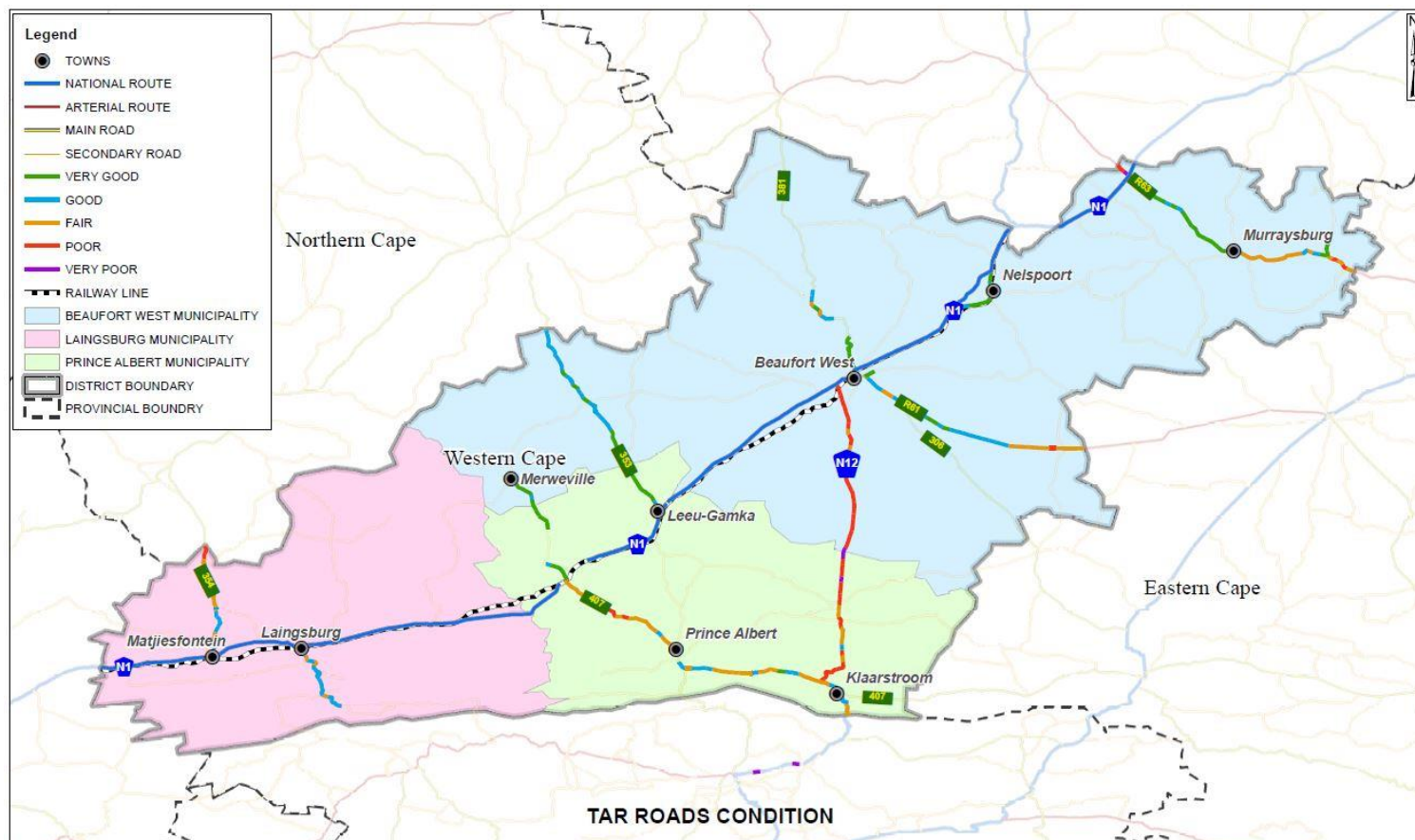
<sup>7</sup> Western Cape Department of Transport and Public Works Database

Designation	Road No	Description	Length (km)	Surface	Condition
		Northern Cape Boundary			
R354	TR020	Matjiesfontein towards Sutherland to Northern Cape Boundary	43	Asphalt	<b>Mostly Fair; Poor in places.</b>
R407	TR034	Prince Albert to Klaarstroom N12	47	Asphalt (small section concrete)	<b>Fair; Good in Places</b>
R332	MR004	Intersection R61 to Rietbron (Eastern Cape Boundary)	60	Gravel	<b>Good to Fair</b>

Re-graveling of sections of the R381 (TR058) have recently been completed and thus has improved road conditions.

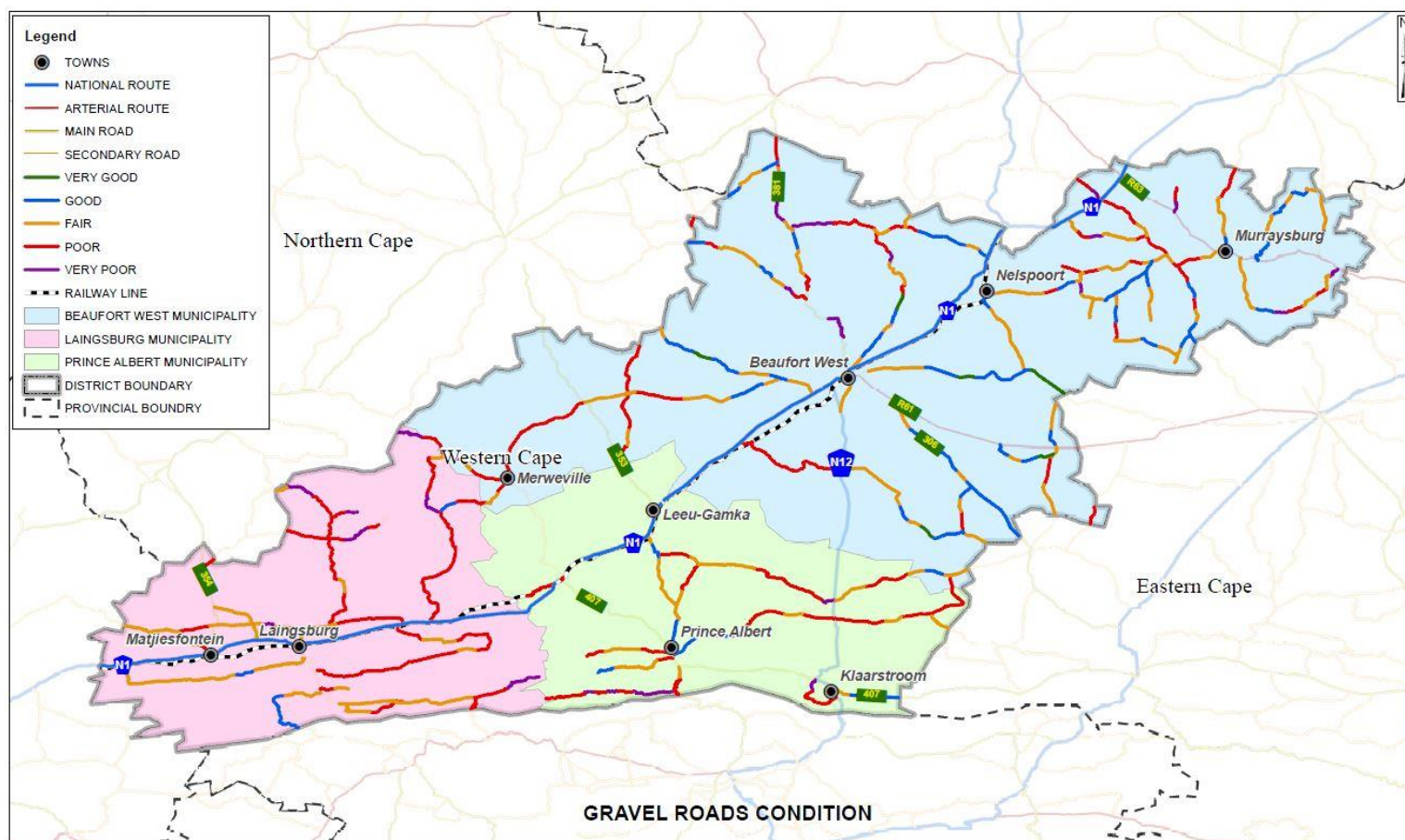
Other surfaced roads which may need attention in the medium-term is the R328 (TR034) between Prince Albert Road and the town of Prince Albert and the R63 (TR016) between Murraysburg and the Eastern Cape Boundary towards Graaff-Reinet.

**Figure 3-7: Condition of Surfaced Roads in Central Karoo District Municipality**



The District's gravel road network is mostly poor; however, road condition can vary from day-to-day as weather may impact on road condition particularly in the rainy season from January to March during which flash floods are prevalent. The maintenance and condition of the gravel road network is important to the local agricultural industry as their produce is transported on this network. Maintenance of the District's gravel road should therefore support the ailing agricultural industry.

**Figure 3-8: Condition of Gravel Roads in the Central Karoo District Municipality**



### 3.5.3 Traffic Volumes

The N1 Highway is clearly the most dominant traffic carrier in the District Municipality with an estimated 2,500 to 3,000 average annual daily traffic (AADT) on the corridor while heavy vehicles account for half of all vehicular traffic. The N12 is second in terms of volumes; based on statistics obtained from counting stations in 2013, the N12 carries around 800 to 1,100 vehicles per day, of which 20% are heavy vehicles. The R61 and

R407 roads carry around 100 to 700 vehicles per day. All other roads carry significantly less traffic as they mostly carry local traffic because of the low population density.

**Table 3-14: Traffic Count Data at selected Counting Stations on National and Trunk Roads, 2013**

Counting Station	Light Vehicles	Heavy Vehicles	Taxi's	Buses	Total (AADT)
<b>NR001 Section 5 – Intersection with DR01731</b>	1,314	988	26	26	<b>2,354</b>
Percentage (%)	56	42	1	1	
<b>NR001 Section 6 – Intersection with MR00373</b>	1,349	1,552	38	31	<b>2,970</b>
Percentage (%)	45	52	1	1	
<b>TR034 Section 2 – Intersection with MR00369</b>	441	28	5	1	<b>475</b>
Percentage (%)	92.9	5.8	1.1	0.2	
<b>TR033 Section 4 – Intersection with DR01721</b>	1,004	140	1	15	<b>1,160</b>
Percentage (%)	86.5	12.1	0.1	1.3	

#### 3.5.4 Road Safety & Accidents

The “Safely Home” Strategy is being used as the basis for addressing road safety in the Western Cape; the strategy is based on the “4 E’s Strategy” which comprises high levels of **enforcement**; targeted **education** and public relations activities aimed at the most vulnerable road user groups; low cost **engineering** solutions and continuous **evaluation** to ensure an intelligence-based strategy. The Safely Home Strategy is to be incorporated into the Safe Systems Road Safety Strategy of the Western Cape.

In terms of the Western Cape PLTF, this programme has seen a 30% reduction in fatal crashes across the Western Cape Province as at January 2013. Among the road safety initiatives implemented in the Central Karoo District Municipality includes the ‘average speed over distance’ (ASOD) enforcement system on several sections of road as seen in **Table 3-15** below. The system calculates the average speed of a vehicle from the time it passes the first camera until it passes the second camera. The average speed is then determined by the time that it has taken a vehicle to travel from where the first camera is located where the second camera is located. Reaching the second camera in a time shorter than the time which is determined by the distance and the speed limit, means that the driver was speeding.

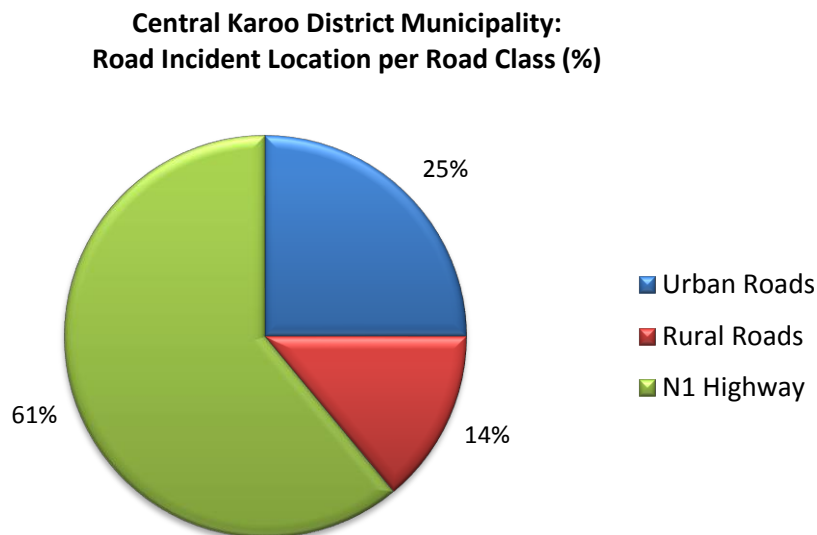
**Table 3-15: Average Speed Over Distance coverage in Central Karoo District Municipality**

Road	Sections	Description	ASOD Coverage (km)	Actual Road Distance (km)	Percentage of Actual Road Distance
<b>N1</b>	4	Touwsrivier to Laingsburg	72.1	81.7	88%
<b>N1</b>	5 & 6	Laingsburg to Beaufort West	190.6	198.8	96%
<b>N1</b>	7 & 8	Beaufort West to Three Sister	31.7	73	43%
<b>R61</b>	1	Beaufort West to Aberdeen	71.6	74.2	96%
		<b>TOTAL</b>	<b>366</b>	<b>427.7</b>	<b>86%</b>

**Photo 3-2: Average Speed Over Distance Camera on R61 between Beaufort West and Aberdeen**

The N1 through the District accounts for 61% of all incidents reported during 2013 in the District as shown in **Figure 3-9** below. Twenty-five percent of incidents occurred on urban roads, with most of these occurring in the town of Beaufort West. As a result, the N1 has a disproportionate impact on the road traffic incident rate of the District Municipality. The District rate is estimated at 33 incidents for every 1000 population for 2013; if the N1 is discounted this rate lowers significantly to 14 incidents for every 1000 population.



**Figure 3-9: Road Incident Location in terms of Road Class, 2013**

The N1 in turn accounts for the majority of fatal incidents (59%) during the same period followed by the rural or secondary road network comprising trunk, main and divisional roads. More than a third of incidents along the N1 involved passenger transport vehicles including buses, mini-bus taxis, and midi-buses. A further 35% of incidents involved heavy trucks and other delivery vehicles. In terms of vehicle accident types, more than a third of the incidents on the N1 were head/rear end collisions, followed by single overturned vehicles (27%), and side-swipes (23%).

These road traffic statistics suggest that the behaviour of drivers and other road users is the primary contributor to vehicle incidents on the District's roads. The practice of tail-gating is the primary contributory factor in terms of head/rear end collisions which is also the most common accident type nationally. Important factors contributing to the high level of single vehicle overturn incidents are driver fatigue on the long stretches of the N1, high vehicular speed, swerving to avoid objects, and tyre bursts. The incidents of side-swipes are mainly caused by unsafe overtaking, swerving in-front of traffic, and reckless and inconsiderate driving.

Figure 3-10: N1 Highway Vehicle Incidents per Vehicle Type, 2013

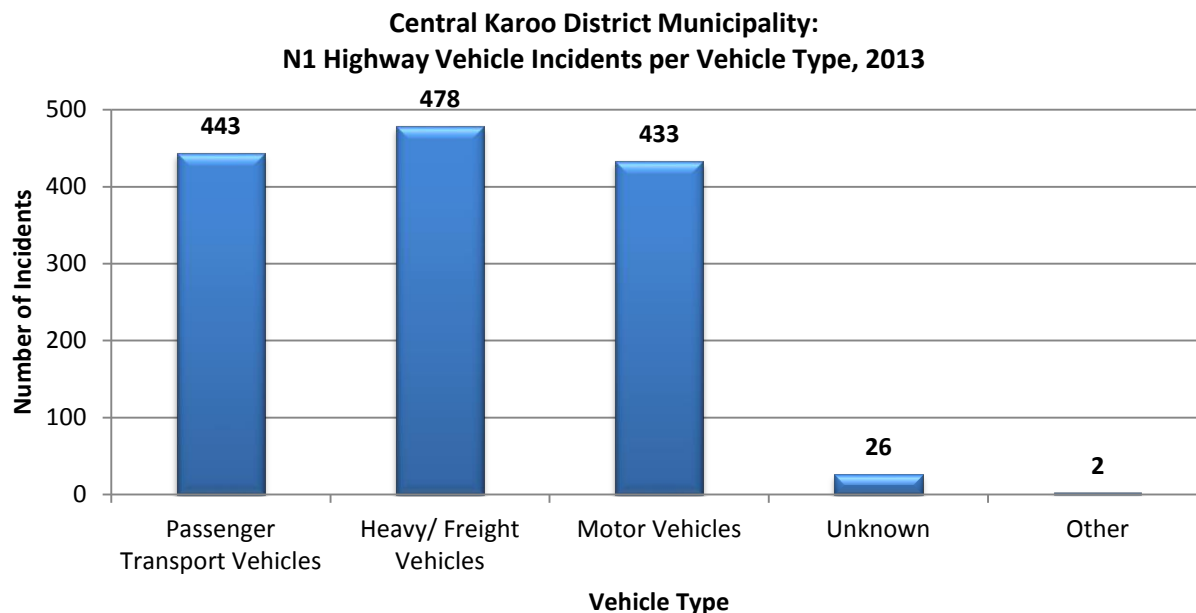
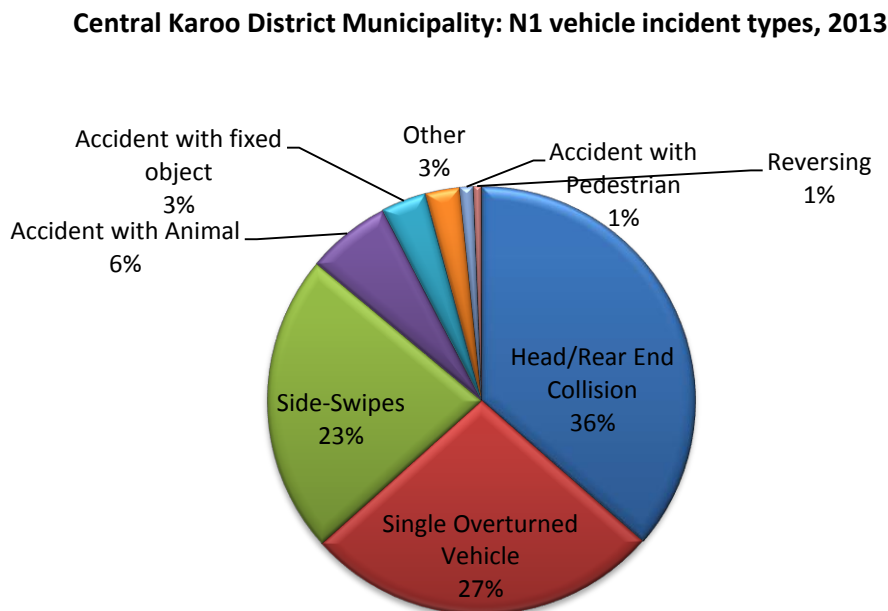


Figure 3-11: N1 Highway vehicle incident types, 2013



The important conclusion is that the primary focus of road safety initiatives should be reducing incidents on the N1 Highway and, importantly, that the N1 puts a highly disproportionate strain on emergency services of Local Municipalities.



### 3.6 Freight Transport

#### 3.6.1 Freight Corridor Analysis

Central Karoo District Municipality is located on the *Cape Town – Gauteng* freight corridor which means that freight traffic in the District is primarily through-flow as the amount of freight originating from or destined for the District is comparatively small. The corridor carries around 19 million tonnes of freight per annum comprising processed foods, coal, chemicals, beverages, and fruit and produce; in terms of context and significance, this is substantially more than the estimated 4 million tonnes per annum handled by the Port of Cape Town. Around 85% of freight on this corridor is transported by road raising concerns on the impact on road conditions, ballooning road maintenance and upgrading costs, and growing road safety issues. At the same time, the rail freight infrastructure is largely underutilised accounting for only 15% of total tonnage on the corridor.

The Western Cape Provincial Government's policy on road freight transport is advocating a shift in freight transport from road to rail in order to "safeguard the province's road network"<sup>8</sup>. The province's strategy to achieve its policy objectives includes the establishment of multimodal transfer facilities at strategic locations for freight haulage, establishment of weighbridges at strategic transport locations on the provincial road network, and maintaining engagement with Transnet on rail capacity issues.

A modal shift from road freight may have an impact on the economy of towns of the Central Karoo District Municipality along the N1 highway. A marked decline in the number of heavy vehicles along the corridor may impact the District's service industry hard in particular filling and service stations, truck and vehicle maintenance businesses, small retail shops, and other businesses that are largely dependent on the passing trucking industry.

It would therefore be important that policy and strategy advocating freight modal shift in favour of rail along this corridor consider the impact on the local economy and include strategies to minimise any negative impacts and should ideally leverage any strategic comparative advantage the District may hold.

#### 3.6.2 Overloading Control

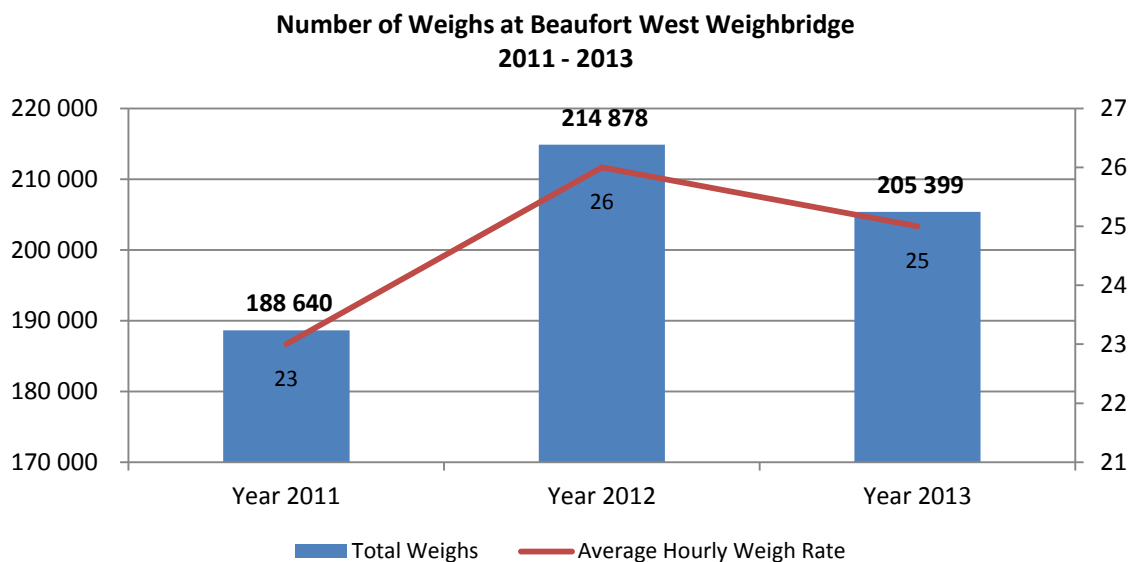
Overloading control is managed by the National Department of Transport and enforcement undertaken by the Provincial Traffic Department; there is only one weighbridge in the District at Beaufort West along the N1 Highway. This facility is the only one in the Western Cape Province that operates 24 hours per day and seven days per week.

The period from 2011 to 2013 saw an increase of 8.8% of the number of vehicles weighed per annum at the weighbridge; the annual average number of vehicles weighed per hour also increased from 23 in 2011 to 25 vehicles in 2013 (see **Figure 3-12** below).

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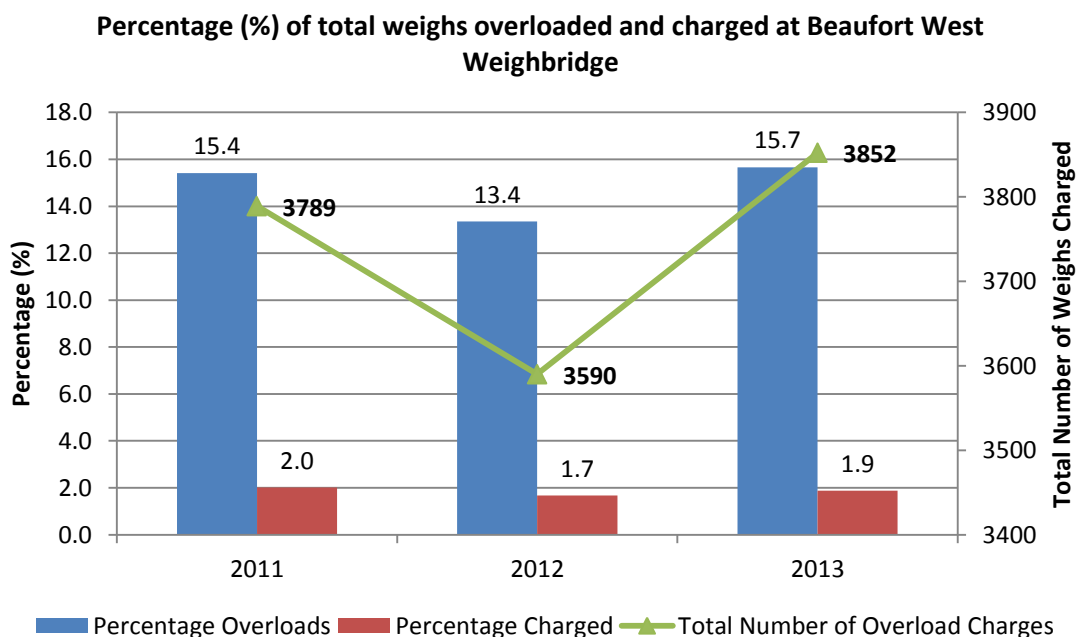
<sup>8</sup> Western Cape Provincial Government, 2013: Western Cape Provincial Land Transport Framework – Update 2011-12 – 2015/16, Cape Town.

**Figure 3-12: Number of Total Weighs from 2011 to 2013 at Beaufort West Weighbridge versus the annual hourly average weigh rate**

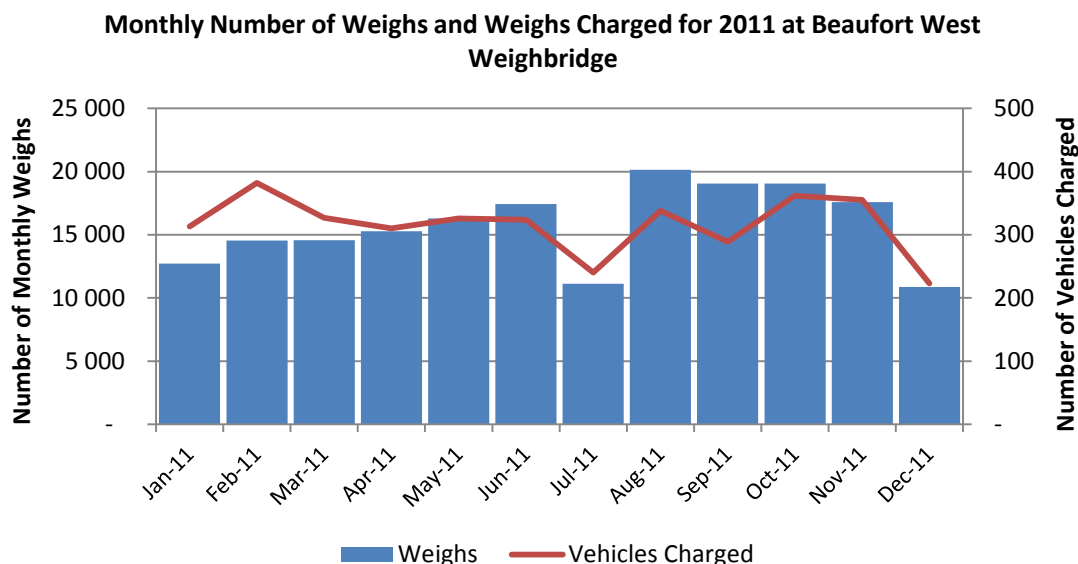


Around 15% of weighs were overloaded and an overload charge was made in around 2% of the total weighs for each year over the same period; in 2011 3,785 charges were made, in 2012 3,590, followed by 3,852 for 2013 (see **Figure 3-13** below).

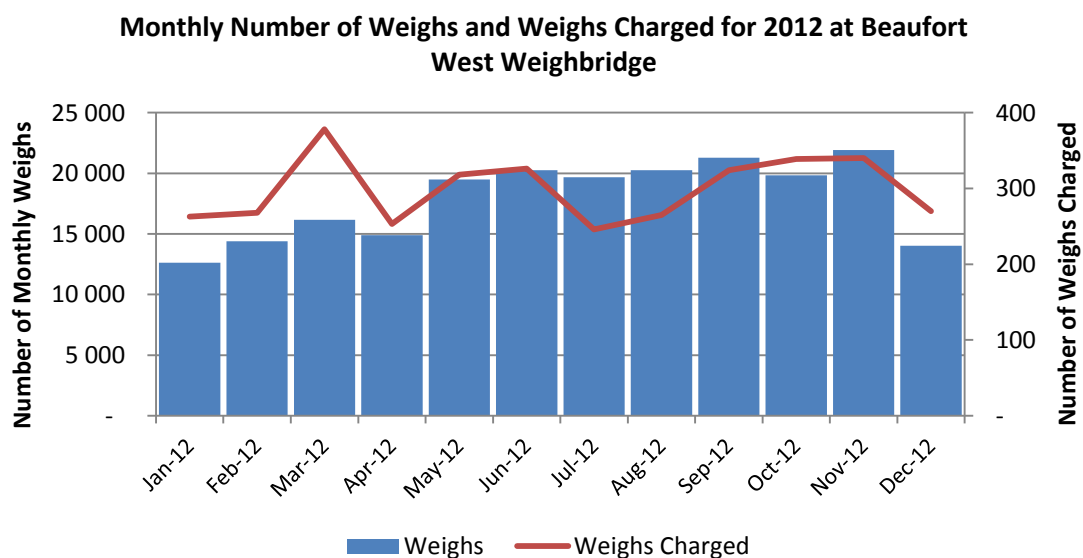
**Figure 3-13: Percentage of total weighs overloaded and charged at Beaufort West Weighbridge 2011 - 2013**



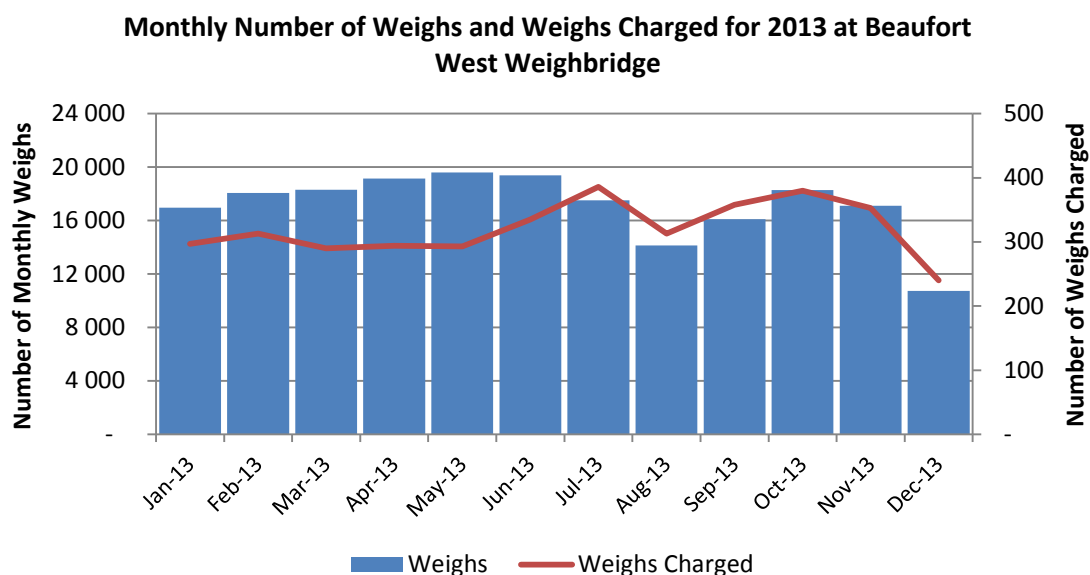
**Figure 3-14: Number of Weighs and Number of Overload Weighs Charged for 2011 at Beaufort West Weighbridge**



**Figure 3-15: Number of Weighs and Number of Overload Weighs Charged for 2011 at Beaufort West Weighbridge**



**Figure 3-16: Number of Weighs and Number of Overload Weighs Charged for 2011 at Beaufort West Weighbridge**



### 3.7 Other Transport Operations

#### 3.7.1 Transport and Tourism Activity

The tourism industry and the transportation system have a significant interdependent impact on the economy – transportation is the primary means of carrying tourists to tourist destinations and activities, and tourism activity potentially enables investment in transport infrastructure which in turn results in benefits for the broader economy. Tourism therefore has the potential to unlock economic development and create employment in the Central Karoo District provided that its tourism product is able to provide a unique competitive edge when compared to neighbouring District Municipalities in the Karoo.

An important aspect to the nature of the tourism industry in the Central Karoo District is that town's such as Beaufort West and Laingsburg are not end destinations – most tourists pass through and stop for refuelling and refreshments and occasionally spend one night at local guest accommodation. The District does however offer value in its tourism product offering as described in **Table 3-16** below.

**Table 3-16: Central Karoo District Municipality Town Tourism Character Descriptions**

TOWN	Heritage & Architecture	Natural & Environmental	Crafts, Cuisine & Other
<b>Laingsburg</b>	Laingsburg flood history and Karoo Architecture.	Star-gazing, nature reserves, Floriskraal Dam.	Craft shopping and overnight accommodation.
<b>Prince Albert</b>	Cape Dutch, Karoo & Victorian architecture.	Die Hel (Gamka's Kloof), Swartberg Pass, Mountains and	Craft-making and shopping, chef school, agricultural

TOWN	Heritage & Architecture	Natural & Environmental	Crafts, Cuisine & Other
		Reserve, Seweweekspoort, Meiringspoort.	activities (olive, wine and fruit farms) and art galleries.
<b>Beaufort West</b>	Chris Barnard Museum, Block Houses, Khoi-San rock art (Nelspoort).	Karoo National Park, Game hunting, and game farms.	Karoo cuisine, overnight accommodation, crafts shopping, and conferencing.

A significant element of the region's tourism product is scenic routes and passes which adds to the natural and heritage tourism themes in the District. The continued maintenance and upgrade of these roads is therefore important as it has the potential to further grow the region's tourism product. The upgrade of the region's tourism routes will need substantial investment and would need to be evaluated in terms of the District Municipality's economic development goals and key provincial priorities. An important catalyst to the development of these routes would be improved mobility between towns and tourist locations by implementing an effective and functioning public transport system and should ideally form part of the future Central Karoo Mobility Strategy.

**Table 3-17: Scenic Routes and Passes in Central Karoo District Municipality Region**

THEME	ELEMENT	DESCRIPTION
<b>Scenic Routes and Passes</b>	Seweweekspoort Pass	Historic mountain passes constructed to provide access from the coast to the hinterland, railway history and important transportation linkages and elements.
	Swartberg Pass	
	Gamkaskloof Pass	
	Meiringspoort	
	Molteno Pass & Roseberg Pass	
	R354 Route	
	Rooinek Pass	
	R353 Route and Teekloof Pass	
	R407 Route	
	Kredouw Pass	
	N12 Route & Droekloof	
	R63 Route	
	N1 Route	

The Karoo Tourism Strategy (2012) highlights several issues on the region's tourism product and lists a number of infrastructural requirements to realise growth in the region's tourism product:

- Improvement of provincial road links between Karoo towns;
- Effective signage on national and provincial roads;
- Improved municipal road infrastructure and urban streets;
- Resuscitation of rail connections between towns, and between the Karoo and main cities;
- Revitalisation of railway stations as key transport hubs for rail, taxis and private vehicles; and
- Establishment of a commercial airport at Beaufort West, with scheduled flights that serve the rest of the Karoo.

### 3.7.2 Learner Transport

The Western Cape Department of Education's Directorate: Infrastructure Planning and Management manage the planning of the Learner Transport Schemes in the Western Cape Province. A significant portion of the Department's learner transport scheme budget is awarded to a number of bus companies to provide transport to learners with a smaller portion transferred directly to schools to arrange their own transport. **Table 3-18** below shows the distribution of learner transport contracts over the Central Karoo District for 2015. Around 737 learners are provided transport to schools in terms of 6 contracts.

The Department's policy is that learner transport will be provided from outlying rural areas that are 5km or further from the nearest appropriate school and where no public transport is available. Learner transport would not be provided to towns where public transport is available or where sufficient classroom space or an appropriate school is available. Several taxi operators in Beaufort West offer learner transport services that are not eligible in terms of the Department's policy and this means that there are no alternative means of transportation to those who cannot afford these private learner transport services. Other alternative means on the side of non-motorised transport provision should be considered such as improvements in pedestrian walkways and the possible support in the provision of bicycles.

The draft national policy on learner transport considers that learner transport and public transport are inter-related and inter-dependent and should form part of broader transport planning. It is therefore foreseen that the Provincial Departments of Transport will in future play a more prominent role in the planning and implementation of learner transport.

Table 3-18: Central Karoo District Learner Transport Services Contracts, 2015

Municipality	Description	Primary Schools	Secondary Schools	P/S	S/S	TOTAL learners	Distance (km)	2015 Tariff '000 (R) <sup>9</sup>	Contractor	Current Contract End
Beaufort West	From Soetdorings, Arcadia Airport Turn-off, Kleinhoewe, Steengroewe, Loxton Turn-Off (Lemoenfontein) and De Jagers Pass Turn-off to schools.	Teske Gedenk J.D Crawford A.H Barnard H.M Dlikidla St. Matthew's	Bastiaanse Beaufort West Mandlenkosi	49	4	53	55.6	830	De Klerk, JG	1st school term 2011  4th school term 2015
	From Karoo National Park Residential Area to schools.	Teske Gedenk J.D Crawford A.H Barnard H.M Dlikidla St. Matthew's	Bastiaanse Beaufort West Mandlenkosi	18	5	23	30.2	1,500	Johnson, B	1 <sup>st</sup> school term 2011  4 <sup>th</sup> school term 2014
	From Toekomsrus and Hillside turn-off to schools.	H.M Dlikidla	Bastiaanse Beaufort West Mandlenkosi	97	450	547	16.2	1,600	Benjamin, N (Benjamin's Bus Services)	2 <sup>nd</sup> school term 2013  1 <sup>st</sup> school term 2018
Prince Albert	From Witrivier, Koueveld, Avondrus, Klues Farm, Remhoogte Primary School (Closed) and Môreson.	Klaarstroom		33	0	33	70.4	630	Fontuin, LR (Lio Taxi's)	1st school term 2016
	From Weltevrede, Vrisgewaagd, Damaskus and Trientjiesrivier.	Prince Albert	Zwartberg	14	21	35	61.2	1,050	Klink, DSJ	4th School term 2015
Laingsburg	From Matjiesfontein Community Hall, Pieter Meintjiesfontein, Ammorial, Tswang, Konstable and Jan De Boers/Bijnstein	Touwsrivier Steenvliet	De Kruine	19	27	46	121.2	910	Hanekom, D (Hanekom's Bus Services)	3rd school term 2011  2nd school term 2016
	<b>TOTAL</b>			<b>230</b>	<b>507</b>	<b>737</b>		<b>6,520</b>		

<sup>9</sup> Tariff amounts are budget estimates provided by the Western Cape Department of Education.

## 4. Spatial Development Framework

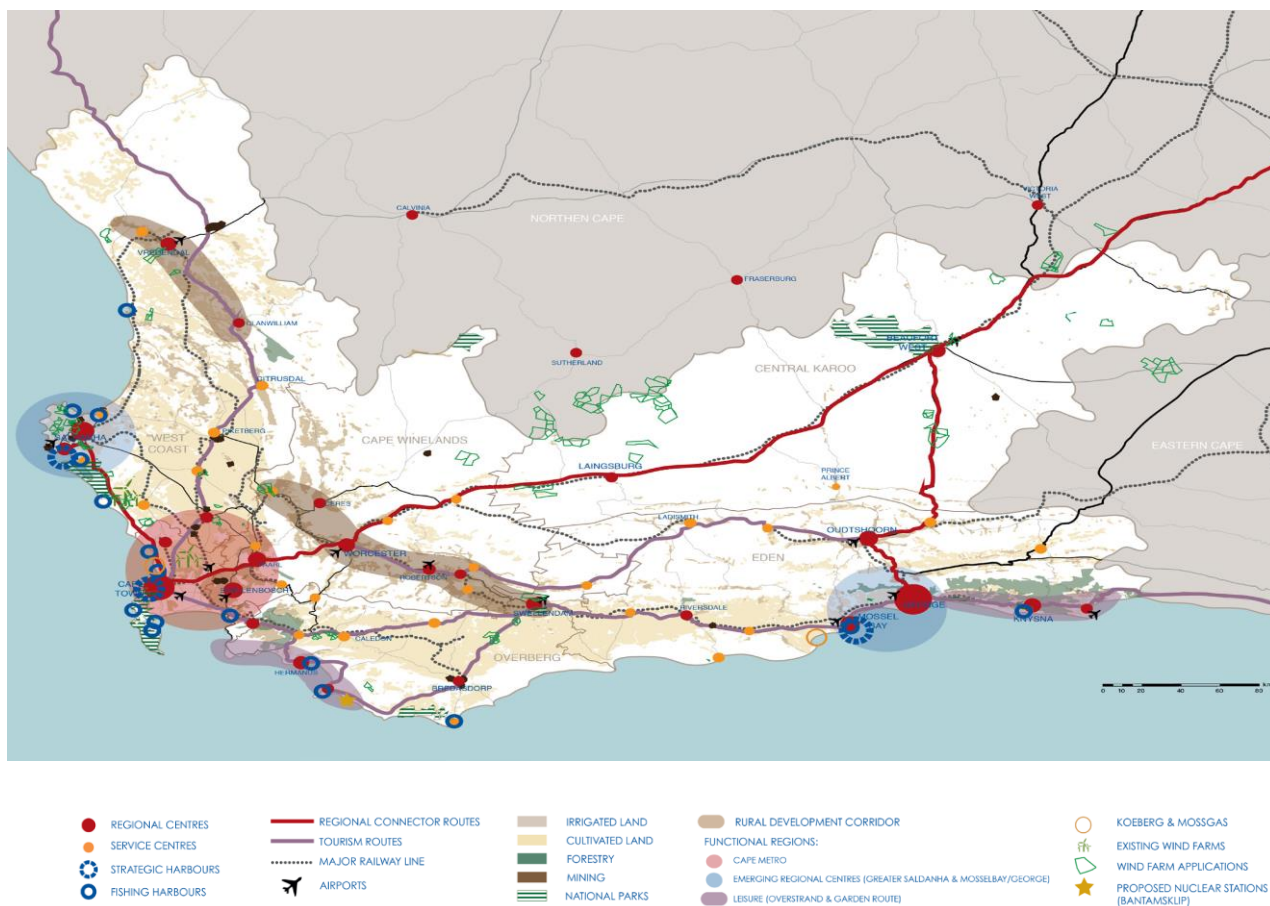
### 4.1 Western Cape Provincial Spatial Development Plan

The Western Cape Provincial Spatial Development Plan, 2014 intends to achieve the following in respect of their infrastructure transition strategy:

- Invest in public transport and NMT infrastructure;
- Shift freight from road to rail;
- Expand port and industrial infrastructural requirements at Saldanha Bay; and
- Promote denser settlement patterns to support the transition to public transport, and mixed land use patterns to reduce the need for travel and create walkable neighbourhoods.

One of the Plan's Spatial Development Principles is the focusing of development along strategic transport routes such as regional collector routes and the connecting of centres and settlements to enable efficient transportation of people, goods, services and materials as indicated in the map below:

**Figure 4-1: Western Cape Province - Space-Economy Framework, March 2014**





## 4.2 Central Karoo District Municipality SDF

The Central Karoo District Municipality's SDF emphasises one of two primary spatial structuring elements that guide spatial development decision-making in the District. These elements are used to manage and guide development decisions into certain patterns or arrangements, which are intended to promote more efficient future development, namely the N1 Highway and the north-south railway line between Cape Town and Gauteng.

These elements form the major movement corridor through the District and carries significant freight traffic through the country from north to south. It links all major and smaller settlements throughout the District and thus plays a significant role in terms of development, accessibility and integration.

These structuring elements provide the framework for settlement development as well as for inter- and intra-movement patterns. More than 75% of the District population reside along the N1 Highway. This predominant settlement location lends to land use intensification or densification along the N1 corridor. In this rural and sparsely populated area context, densification refers to expanding existing settlements along this corridor at a density and spatial layout suitable to local conditions.

### (a) Settlement Hierarchy or Nodes

The Central Karoo District Municipality's SDF indicates a hierarchy of urban and rural nodes each having differing characteristics to which specific development guidelines applies.

**Table 4-1: Central Karoo District Municipality Settlement Hierarchy**

Settlement Designation	Location
High Order Investment Node	Beaufort West
Primary Investment Node	Prince Albert
	Laingsburg
Secondary Investment Node	Murraysburg
	Merweville
	Leeu-Gamka
	Matjiesfontein
Lower Order Investment Node	Nelspoort
	Klaarstroom

### (b) Corridors

The N1 Highway and the Cape Town – Gauteng railway line is identified as a major movement corridor where the district must maintain the highest level of accessibility in respect of local and regional transport services. The N12, R61, R381, R407, R328, R353 act as the main mobility routes providing access between local areas.

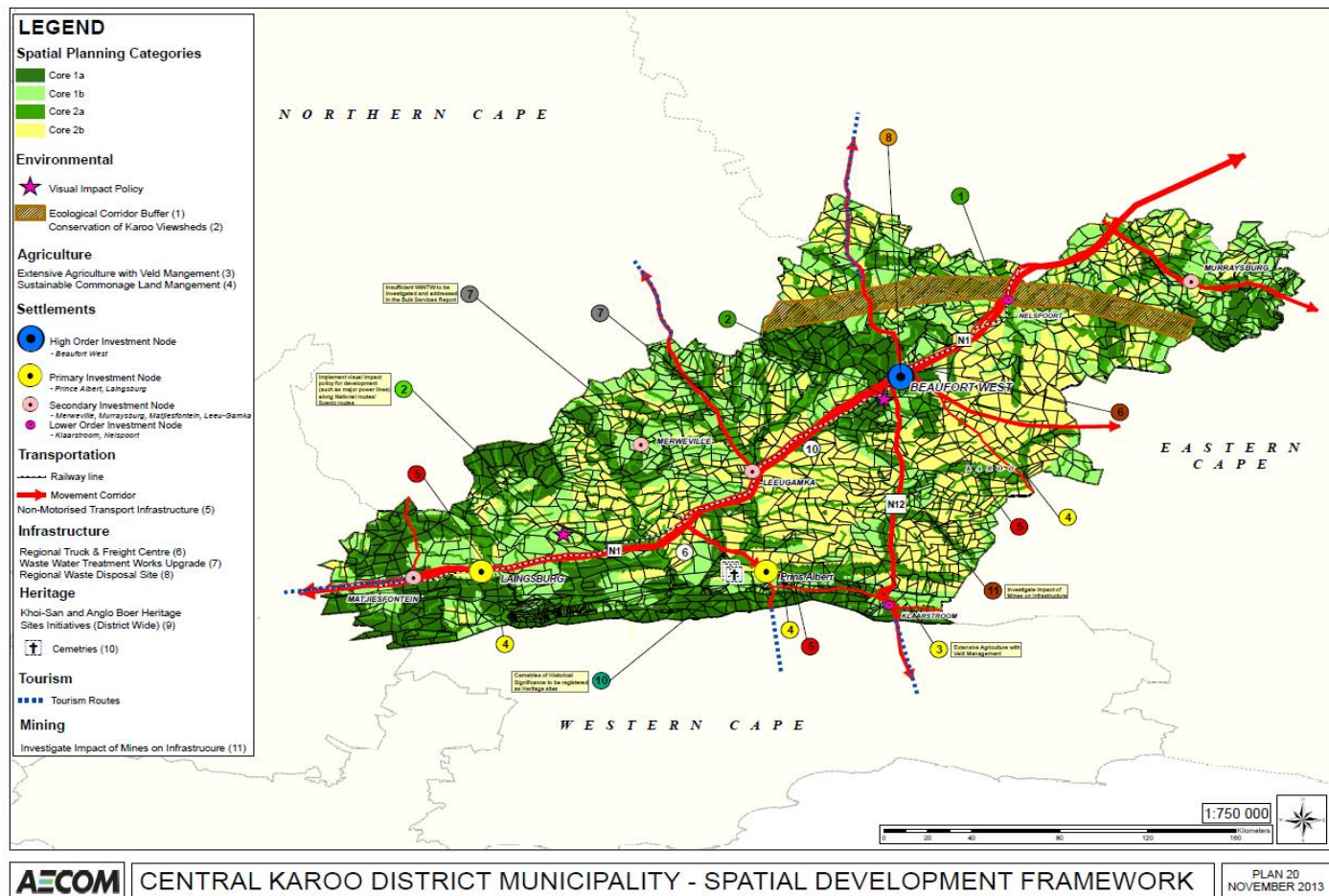
The SDF suggests that attention be given to improved and adequate road access to the secondary and lower order nodes within the District.

**(c) Other Transport related Proposals**

The following are key considerations highlighted in the SDF for the review of the Integrated Transport Plan:

- The prioritisation of the implementation of non-motorised transport infrastructure in settlements across the District to improve accessibility;
- The Implementation of the District Mobility Strategy in order to provide affordable and meaningful transportation for District inhabitants;
- Maintenance of the gravel roads of the secondary road system to ensure agricultural area connectivity and access to heritage areas such as the block-houses and the Swartberg Pass;
- The investigation on the impact of mining particularly hydraulic fracking, on road infrastructure; and
- A proposed transport logistical interchange facility for the interchange of road freight transported along the N1 highway.

**Figure 4-2: Central Karoo Spatial Development Framework, 2013**



Drawing name: PLAN 2014 SPATIAL DEVELOPMENT FRAMEWORK (Final) Date: 20/11/2013

### 4.3 Local Municipalities' SDF

#### 4.3.1 Beaufort West SDF

The Beaufort West SDF (2013) focuses mainly around the existing movement corridor on a spatial planning level such as the N1 highway and the adjacent rail link which both is connecting Johannesburg and Cape Town.

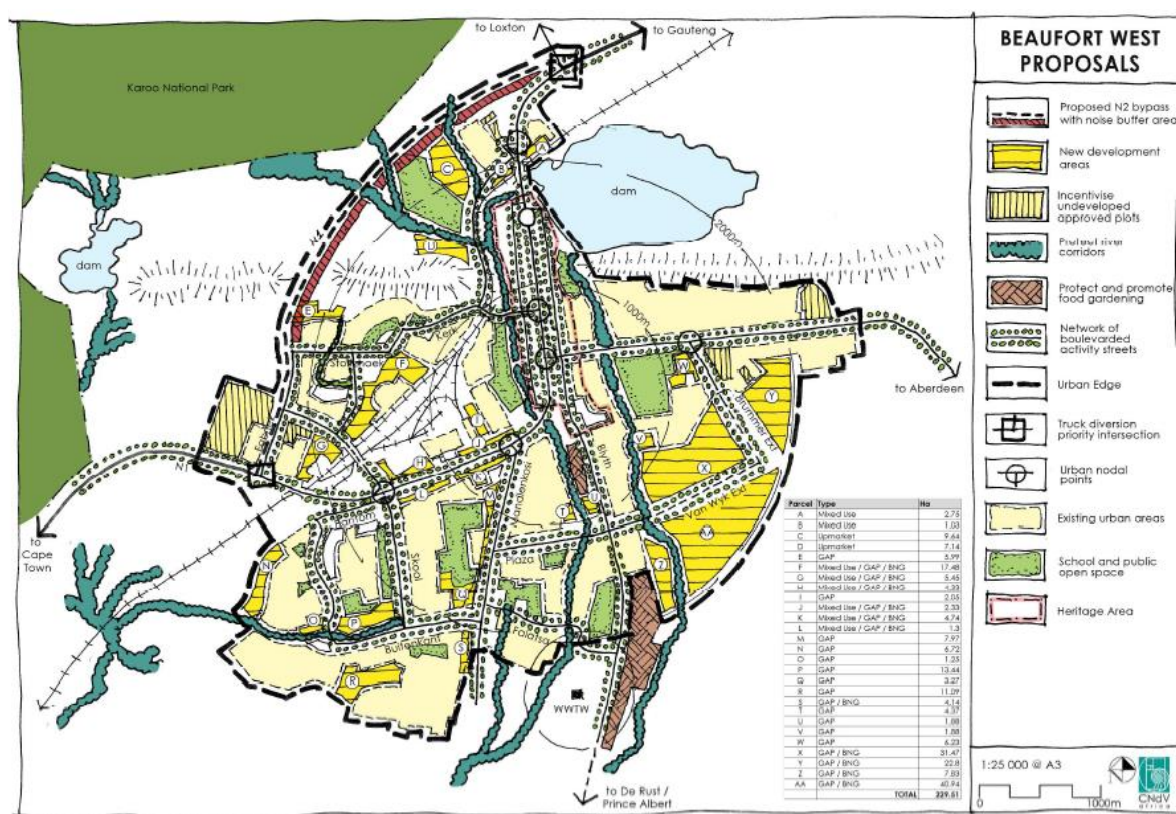
The SDF recognises the following transport-related proposals:

- An alternative freight bypass route around the western edge of Beaufort West town along which industrial and warehousing uses are encouraged. Re-routing the N1 around the town for road freight traffic only is seen as the most important action to enable development of other sustainable sectors in the town including retail, tourism and accommodation;

- The currently separate precincts of the town should be integrated through a continuous network of activity streets that reinforce the non-motorised transport network and link suburbs across buffer strips and vacant ground as well as the large new development area proposed to the southeast of the town; and
- The private Beaufort West airport is used by light aircraft for tourism purposes and is supported by an on-site guest house in the old terminal building. The airport may have potential for further development as a point of regional tourism arrivals.

Other projects which are planned for within the Beaufort West, Merweville, Nelspoort and Murraysburg areas are mostly focussed on the upgrading of gravel roads and the expansion of the non-motorised transport network.

Figure 4-3: Beaufort West Spatial Development Framework Plan, 2013



#### 4.3.2 Prince Albert SDF

The Prince Albert SDF (2014) focus on various needs of the communities such as the maintenance of tarred roads and speed bumps, provision of street signage and lighting and the construction of new roads. Furthermore two main issues were identified namely:

- Access to inter-town transport to education and medical facilities; and
- Most residents do not have access to shopping and social trips.

Prince Albert Road, Klaarstroom and Leeu-Gamka do not have access to any formal public transport services. The only existing formal public transport service within the borders of Prince Albert Local Municipality is situated in Prince Albert. Prince Albert has two minibus-taxi operators who provide a service from the residential area to town. Infrequent long-distance minibus-taxi services are available to go to Oudtshoorn, George and Cape Town.

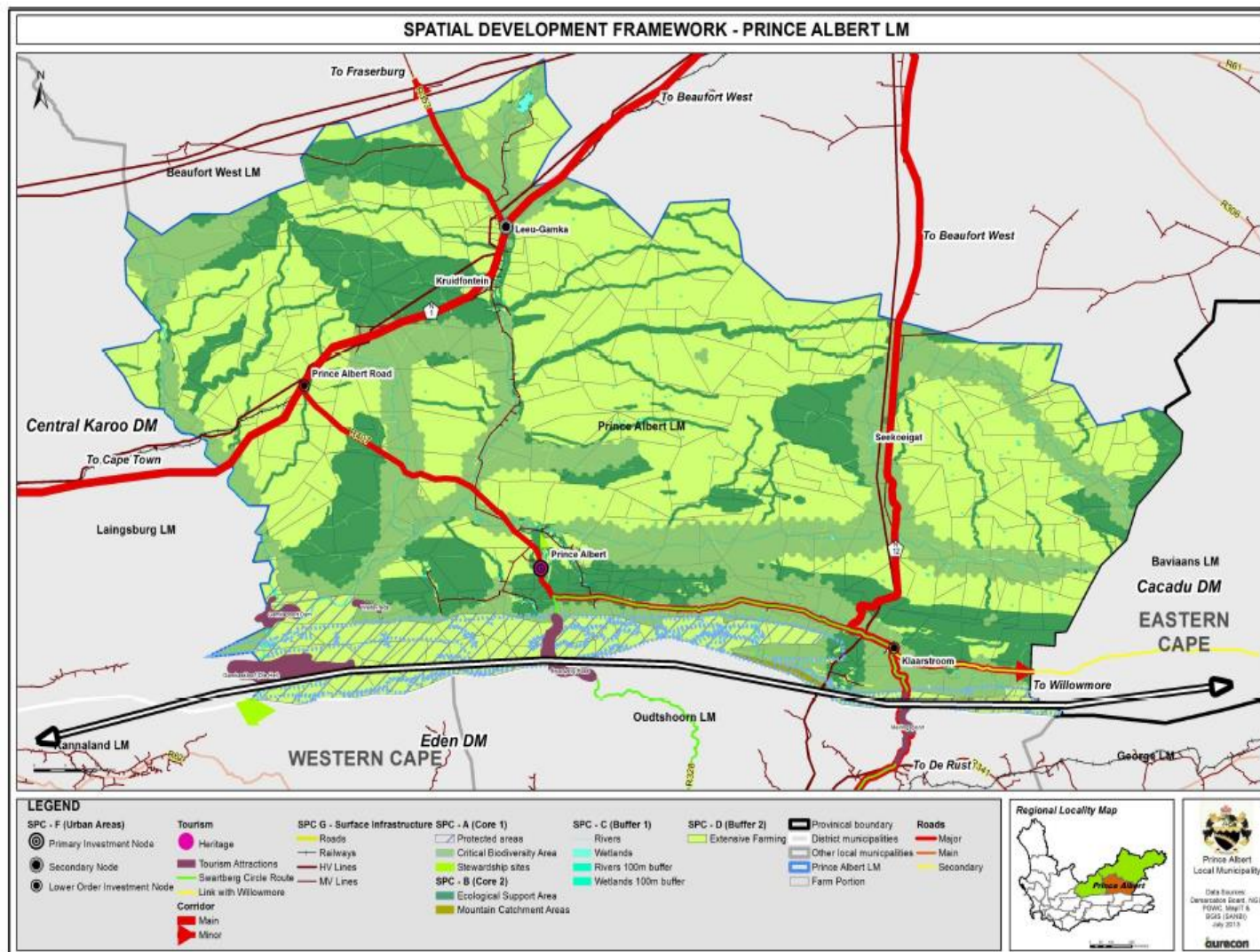
The current public transport system is expensive, inefficient, ineffective and inaccessible, which contributes to the rise of poverty levels. The residents of Prince Albert Road have to hire private vehicles for long-distance trips. In Leeu-Gamka, residents have to arrange with the Beaufort West minibus-taxi operators for a specific taxi journey. Klaarstroom has an existing taxi rank, but is almost exclusively used on social grant payout days. Residents have to phone to pre-book a seat for a minibus-taxi journey to Oudtshoorn.

Public Transport planning is especially important in areas where income levels are low because it means that car ownership is minimal and therefore these communities depend on public transport for moving around. Various Public Transport projects have therefor been planned to bring services closer to the communities and for it to be more accessible namely:

- Prince Albert and Leeu-Gamka: Upgrading of taxi and bus route;
- All wards: Pavements and Terminus areas;
- All wards: NMT – Bicycle friendly roads;
- Prince Albert: Vehicle testing centre;
- Prince Albert Road, Klaarstroom: Weigh bridge on the N1 and N12; and
- Prince Albert: Upgrading of the airfield.



Figure 4-4: Prince Albert Spatial Development Framework, 2013



#### 4.3.3 Laingsburg SDF

The transport network in the Laingsburg municipal area is seen to be inadequate in some areas and a number of projects have been identified over the past year. These are focussed on providing access to social services, employment and economic opportunities as well as general mobility for the existing communities. These projects are focussed towards the general mobility of local residents and the local public transport system.

The SDF has identified a number of transport improvement, new construction and upgrading projects for the Laingsburg area which are:

- The formalization of the NMT sidewalk and cycle route that link the business and industrial areas;

- To implement and sustain the development of the various nodes, functional mobility between the various nodes is critical. To achieve this, transportation routes need to be upgraded to enable and facilitate private and public transport and movement within the area. It is therefore clear that the prioritisation of development around the N1 and the provision of facilities and paving of roads and sidewalks are all key developmental priority for the Laingsburg municipality area.

**PROPOSALS**

1. Rehabilitate old road to Matlieffontein as scenic route and exposing the old Matlieffontein Road in Bergsig to visitors and tourists to promote integration and business.
2. Promote the old Matlieffontein Road as a secondary (internal) activity street encouraging small businesses, renovation of building frontages according to guidelines and implementing pavement upgrading and tree planting.
3. Upgrade intersection around truck stop as gateway to scenic route in Matlieffontein and outfield with tree planting, landscaping and pavement upgrading. Good location for business / retail / restaurant as also exposed to N1 traffic.
4. Upgrade bridge with signage, lighting and decoration. Provide for cyclists and pedestrians on both sides.
5. Promote Voorheker Road as a primary (passing) activity street, building on maximum exposure to passing traffic with high quality paving, street lighting and tree planting. Implement set back rules if Road Access Management policy is too limiting.
6. Upgrade intersection to Moerdraarskroeg building on effort of current shop and improving signage to be more informative and attractive.
7. Upgrade bridge, see 4 above but to a higher standard as this is the main Buffels River bridge in the town.
8. Improve signage, including early warning, to flood, centre and impact of retail complexes on corner.
9. Upgrade intersection to Seweweekspoort & R2, improve signage and plant trees & upgrade parking along Houtdorp Street.
10. Promote CBD around N1 as heart of Laingsburg and increase attractiveness to tourist traffic. Improve appearance on New Jersey Barriers or find another safety device.
11. Enhance and improve entrance to Gaidensville with signage, tree planting and pavement upgrading and suitable land-uses, e.g. corner shop.
12. Potential future expansion area once all existing retail areas developed.
13. Investigate potential as a market garden retirement village:
  - Position at flood line
  - Adequate water
  - Off-grid service technologies (avoid pumping up in WWWTW)

**LAINGSBURG TOWN**

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## 5. Operating Licence Strategy

### 5.1 Orientation

#### 5.1.1 Requirements for the Operating Licence Strategy

The provision of public transport in South Africa is governed by the National Land Transport Act, 2009 (Act No. 5 of 2009) (NLTA, 2009). A requirement of the NLTA is that every planning authority must prepare an integrated transport plan, the type of which depends upon the categorisation of the planning authority.

The Central Karoo District Municipality is categorised as a Type 2 Planning Authority and is required to prepare a District Integrated Transport Plan (DITP) which, inter alia, must include:

- A Current Public Transport Record (CPTR);
- An Operating License Strategy (OLS); and
- A Rationalisation Plan (RatPlan), if required.

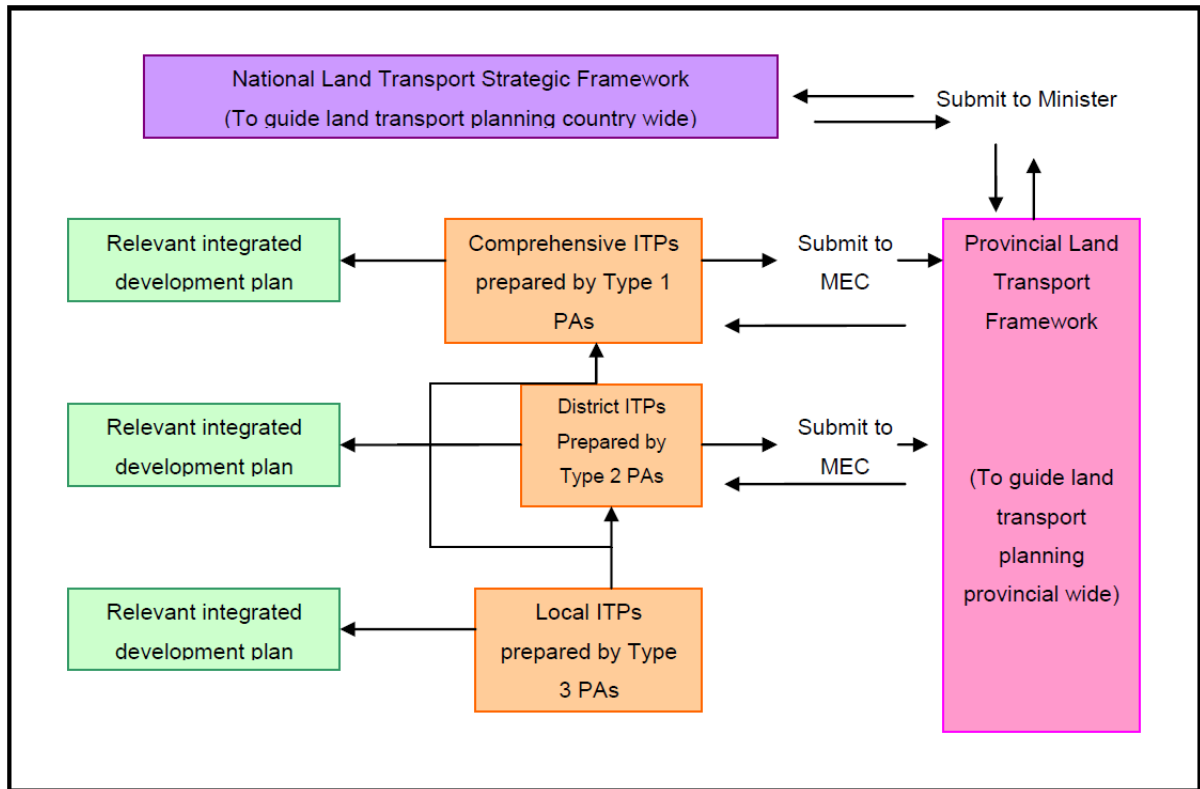
The interrelationship between the different types of plans and frameworks is shown in **Figure 5-1**, which is reproduced from the National Department of Transport's Technical Transport Planning Guidelines for District Integrated Transport Plans (2009).

This chapter has been prepared in accordance with the requirements as outlined in the Minimum Requirements for the Preparation of Integrated Transport Plans of 2003 (OLS: Minimum Requirements, 2003) and is therefore required to contain the Municipality's policy and strategies on non-contracted and contracted public transport in relation to, at least:

- The maximum passenger demand on a route in the peak hour;
- The calculated fleet requirements to service that demand;
- The existing number of valid operating licences pertaining to a route;
- The resulting additional capacity required, or a calculation of the resulting over-supply;
- A proposal as to the maximum number of operating licences (per vehicle classification category) that may be granted on that route or, in the case of an over-supply, a proposal as to what action to take to reduce the over-supply;
- The passenger facilities associated with each route that may be used by the holder of operating licences for the route; and
- Any particular conditions that should be attached to the operating licences issued in the future in respect of the route.



**Figure 5-1: Interrelationship between different types of plans (DITP Guidelines, 2009)**



The National Land Transport Act (Act 5 of 2009) further allows for the establishment of regulatory entities at all three spheres of government i.e.:

- A National Public Transport Regulator (NPTR);
- A Provincial Regulatory Entity (PRE); and
- A Municipal Regulatory Entity (MRE) in the case of a municipality to which the Operating Licence Function (OLF) has been assigned under Section 11(2) of Act 5 of 2009 (note that the term “Municipal Regulatory Entity” will be formalised with the adoption of the National Land Transport Amendment Bill, 2013 – which to date has not been promulgated.).

In terms of Section 11(1)(a) of the National Land Transport Act, National Government is responsible for the OLF which can be assigned to municipalities. This function is currently being undertaken by the Western Cape Provincial Regulatory Entity (PRE) of the Province, and the Province must continue to do so until an assignment takes place. The CKDM does not have the capacity or the resources to be able to undertake the OLF, thus, for at least the period of this OLS, an MRE will not be established.

- Section 55 of the NLTA describes the responsibilities of a planning authority in the case of OL's for public transport services provided for in transport plans and the liaison and communication requirements with the NPTR and PRE.

- ii. Section 55(1) requires from both the NPTR and the PRE to inform all planning authorities in whose areas the services will be operated of an application for an operating licence, before they consider such an application.
- iii. In Section 55(2)(a) the planning authority is then required to indicate the need for the service on the route or routes or in the area or areas to either the NPTR or PRE, and if there is a need for such a service, direct the NPTR and PRE to grant the operating licence and make any recommendations it considers fit regarding conditions to be attached to the operating licence having due regard to its integrated transport plan.
- iv. In Section 55(5) the NPTR and/or the PRE is obliged to act in accordance with the directions of the planning authority and must not grant an operating licence contrary to the directions of the planning authority, unless the planning authority failed to respond (Section 55(6)).

Note that the planning authority is required to direct both the NPTR and the PRE on how to dispose of applications for operating licences. This is in contrast to the previous arrangements under the National Land Transport Transitional Act where the Planning Authority dealt mainly with the former Provincial Operating Licence Board (now the PRE) by merely commenting and recommending how the application should be disposed of. This should be borne in mind where reference is made to the PRE in latter parts of this document as such section(s) of the document may also be applicable to the NPTR.

#### 5.1.2 Authority Responsible for the OLS

The planning authority responsible for the preparation of the Operating Licence Strategy (OLS) is the Central Karoo District Municipality (CKDM). The Central Karoo District Municipality's OLS was last reviewed with the 2009 to 2013 District Integrated Transport Plan and subsequently updated during 2011 and 2012 update of the Plan.

#### 5.1.3 Source Information

Information, which was utilised in the development of this chapter was received from the following sources:

- Operating licence statistics received, on 17 November 2014, from the Provincial Regulating Authority (PRE);
- Cordon, rank and queue length surveys, taken during the period of 30 October to 08 November 2014. These surveys were conducted in:

- Beaufort West;
- Laingsburg (cordon survey only);
- Prince Albert (cordon survey only);
- Merweville (cordon survey only); and

- Murraysburg (cordon survey only).

#### 5.1.4 Timeframe for OLS

This chapter constitutes the Operating Licence Strategy for the Central Karoo District Municipality for the period 2015-16 to 2019-20.

## 5.2 **Analysis of the Public Transport System**

### 5.2.1 Location and Use of Major Transport Corridors and Facilities

The major public transport corridor through the district is the N1 between Cape Town, the Free State and Gauteng. In addition, a branch leaves the N1 at Beaufort West and follows the R61 to Aberdeen, Graaff-Reinet and various destinations in the eastern part of the Eastern Cape and KwaZulu-Natal. The N12 (TR033) forms a secondary corridor between Beaufort West and the greater district municipal area to Oudtshoorn, George and the greater Garden Route region.

At some points along the N1 embayments are provided for vehicles to leave the road and stop, it is unconfirmed if any passengers actually make use of these facilities to board or alight from services. It was also observed that a number of persons hitch-hike on the outskirts of the towns to destinations in and outside the district.

Urban public transport operations are concentrated in the town of Beaufort West between the rank in the centre of town and the Rustdene, Nieuvelde Park, Essopville, and Kwa-Mandlenkosi residential areas. Local services from the Beaufort West taxi rank are primarily operated by sedan-taxi's with mini-bus taxi's utilised at busier periods. The average operator vehicle waiting time at the rank is around 10 to 12 minutes on weekdays and month-end weekends and may increase up to an average of 32 minutes on a regular weekend. This suggests that there is adequate capacity at the facility and that additional capacity may exacerbate the sustainability of services.

### 5.2.2 Transport System Characteristics

The Central Karoo District Municipality has a wide spectrum of transport modes operating the region; however, transport services are highly limited as a result of vast distances between settlements, the low population density, and the prevailing economic climate. Road-based public transport within the Central Karoo District Municipality is limited to:

**Table 5-1: Characteristics of Central Karoo District Municipality Public Transport System**

TRANSPORT MODE	Type of Transport Operation	Description of Services
<b>Sedan-Taxi's</b>	Unscheduled	Informal un-scheduled services within and between the towns in the district. These vehicles in some cases do not hold the necessary authority;
<b>Mini-bus Taxi</b>	Unscheduled	Un-scheduled long distance services through the district from Cape Town to the Eastern Cape and other national destinations. In some cases passengers from and to the Central Karoo District Municipality are accommodated on these services. Limited or infrequent minibus-taxi services are between the towns of the district;
<b>Bus</b>	Scheduled	De Klerk's Bus Services operate a scheduled local service within Beaufort West between the suburbs of Rustdene, Nieuveland Park, and Essopville.
	Scheduled (Long-distance Coach)	Scheduled routes between the major centres of South Africa with stops at Beaufort West and Laingsburg to load and off load passengers to and from the Central Karoo District Municipality, in addition to providing comfort breaks for ongoing passengers;
	Chartered	De Klerk's Bus Services are also authorised to provide charter services within the Western Cape and South Africa. Various other operators hold authorities to operate charter services through the district and some from the rail stations in the district when contracted by PRASA in the case of a train breakdown or similar incident;
	Contracted School Services	The Western Cape's Department of Education contract operators to convey qualifying scholars on school days. It is also understood that some school governing bodies also contract operators to provide services for scholars;
<b>Mixed Modes</b>	Farmworker Transport	There is prevalence in the district for farm workers to be transported into towns by farmers on bakkies, trucks and tractors. This occurs mainly over weekends for purposes of shopping and civil purposes.
	Patient Transport	The Western Cape's Department of Health provides emergency and non-emergency transport for patients that need to access hospitals for treatment. These services are operated on an as-and-when-basis. Emergency services are provided by the ambulance service, which operates from where the patient is situated. Patient transport is provided on set routes, with some

TRANSPORT MODE	Type of Transport Operation	Description of Services
		patients having to travel vast distances to the nearest stop and the service does not have a timetable forcing patients to wait long periods at inhospitable and sometimes unsafe points on the main roads.

### 5.2.3 Occurrence of Public Transport Services

#### **Local Services**

Local services in the Central Karoo District Municipality are operated by a mix of modes from buses, minibus-taxis, and sedan-taxis. The services are operated, on demand, every day of the week with higher levels of service during the morning and afternoon peak periods. On Saturdays the service is fairly constant during the morning, which coincides with shopping and business hours. Significantly higher demand is experienced on Friday afternoons and Saturday morning, especially during “month-end” and social welfare pay-out weekends. Beaufort West has the only scheduled bus service, which operates on a set route, on an hourly basis.

The situation in the local taxi industry has not changed significantly since the previous update of the Operating Licence Strategy; much of the vehicles are owner-operated with their passenger revenue severely constrained while the industry in general suffers from limited potential for growth. It is known that a number of the sedan-taxis are operating without the correct authority or without operating licences altogether to which the Beaufort West Taxi Association (BWTa) have shown some tolerance.

#### **Learner Transport**

Learner transport operates only on school days, as provided for in the Western Cape’s Department of Education contracts. Only qualifying scholars are permitted to make use of these services. From information provided by the Department it is observed that only four school transport contracts are operated within the Central Karoo District area. The operations of these contracts have been issued operating licences that are valid for approximately five years (expiring on 31 January 2018), with the exception of OL 1797933 which was issued for a period of two years expiring on 31 December 2015.

The three contracts in the Beaufort West area are all operated by a single operator using three different vehicles. The Prince Albert contract is operated by a further individual with one vehicle. The Provincial Regulating Authority (PRE) is required to issue the operating licence with the route specified, as per the contract and for a period that coincides to the period of the contract in terms of sections 52(1) and 56(1) of the National Land Transport Act.

## **Long Distance Services**

Long distance unscheduled mini-bus services are operated “on-demand” – where passengers pre-arrange or pre-book a trip with the operator and/or trips are made when passenger numbers are met for a ‘profitable’ trip – with a higher demand experienced over weekends, long weekends and holiday periods, such as December/January and Easter weekend. Long distance coaches operate numerous times each day of the week with pre-arranged bookings being made at specific vendors which issue tickets to passengers.

## **Significant Regulatory Issues and Impediments**

The National Land Transport Act has a focus on the metropolitan and urban areas of the country and does not cater for the situations that are being experienced in rural and semi-rural areas and towns. Although the Department of Transport (NDoT) published the Rural Transport Strategy in 2007 (Rural Strategy, 2007) which aims to improve the transport in rural areas, the included action plan does not deal with public transport services in any way.

## **5.3 Policy Framework and Restructuring Proposals and Requirements**

### **5.3.1 Policy Framework**

The issuing of operating licences in the Central Karoo District Municipality must be done in accordance with, firstly, the provisions of the National Land Transport Act, and secondly the recommendations of the Central Karoo Mobility Strategy. The particular difficulty in the case of the Mobility Strategy is that significant funding by way of subsidies will be required to support or implement the strategy in its current form. The funding requirements of an integrated public transport system will thus need to be weighed against national, provincial, and district policy objectives that address issues of poverty alleviation, employment, universal access, and accessibility.

### **5.3.2 Restructuring of the Public Transport System**

There has not been significant progress in the implementation of an integrated (rural) public transport system in the Central Karoo District Municipality since the previous update or review of the Integrated Transport Plan and Operating Licence Strategy. Moreover, this situation is also paralleled and evident in terms of the status of existing transport operations as examined in earlier sections of this report. The conclusions contained in the previous Plan are thus still considered valid and that the development of a concept of operations to validate the proposals therein should be considered following full consultation with stakeholders particularly the affected taxi industry.

This Operating Licence Strategy proposes the restructuring of the District’s public transport system based on a municipal-wide integrated rural mobility strategy with the urban services in Beaufort West as anchor to the operations. The current, single commercial bus service in the town of Beaufort West should ideally be replaced

by a fully universally accessible midi-bus to accommodate special needs passengers. As suggested in the previous Plan review, the lower capacity vehicle should meet most demand throughout the day and would be able to operate on a similar schedule as current services. The bus service will in turn be supported by a complementary demand-driven sedan taxi service which will primarily operate on the 'metered taxi' principle or pre-booked basis and provide additional capacity during peak periods.

The system structure for the remainder, and mostly rural, area of the District Municipality should be developed in line with the proposals of Central Karoo Mobility Strategy. The strategy proposes infrequent, but scheduled, public transport services that links all towns of the District Municipality, as well as a number of farm areas and rural hamlets. Of importance to note is that the strategy describes a number of proposed routes as feeders to the railway mainline and is considered as a model that loosely follows the old railway bus system structure. The strategy would therefore require a fully operational passenger rail system as backbone (or trunk) to be in place to support these routes. Passenger rail's mode share, however, has been falling consistently combined with reductions in the number of trips along the rail corridor, and the viability of this specific area of the strategy would need to be further defined and validated with detailed surveys and feasibility analysis. Alternatively, the mobility strategy should be more developed based on 'point-to-point' connectivity between settlements and towns that refers to direct passenger services between origin and destination.

Notwithstanding the proposals above, the initial idea underpinning the strategy of "*granting direct access to rural dwellers and providing a network of specific school services where there is a known demand, a connecting weekend service for general mobility and some rail connecting services...*"<sup>10</sup> should be remain the key driving focus.

#### 5.4 OLS Recommendations

This section of the report provides guidance to the authority in making decisions on applications for operating licences that may be received for operations within the municipal area. It is once again confirmed in terms of the recommendations of this strategy, that a new public transport dispensation in the District Municipality, and in particular operations in the town of Beaufort West will require broad participation by current taxi operators, and that the restructuring of the taxi industry should include the following:

- i. Firstly, the current operator environment should be stabilised where existing operator licences to points within the Central Karoo District Municipality must remain, and dormant ones should be cancelled and not replaced. Those operators awaiting licences should be considered for approval provided they are 'active' members of the Beaufort West Taxi Association;
- ii. New operator licences should only be considered in cases where they are responsive to the proposals made in the District's mobility strategy;

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<sup>10</sup> Central Karoo District Municipality, 2011: Update of the Current Public Transport Record and Operating Licence Strategy for the Central Karoo District Municipality, PGWC & CSIR

- iii. Operator licences to points from or to other municipal or authority areas should also remain in place and new one's be tested against government policy and its feasibility; and
- iv. Lastly, the Provincial Regulating Entity (PRE) should seek, consider, and comply with the District Municipality's comment prior to issuing any operator licence for the municipal area.

## **5.5 Implementation Programme**

The implementation of this strategy is based on two approaches; the first being the stabilisation of the operating licence environment by regulating and the cleaning-up of the status of existing operating licences in order to match the provisions of the National Land Transport Act. This also includes a process of cancelling dormant permits and the concluding permits awaiting decision at the Provincial Regulating Entity. Secondly, the submission of new applications should be undertaken in a manner that it falls within the framework proposals of the Central Karoo Mobility Strategy as it relates to the number of vehicles, and other operational aspects.

Further to the implementation of this strategy, are the acknowledgement, acceptance, and approval of the Operator Licence Strategy by all role-players and stakeholders. An essential component to the realisation of the strategy proposals is the continued refinement of the strategy to meet the changing needs of the taxi industry. The strategy will form a base for the inclusion of existing and legal operators into an integrated and restructured public transport system as envisaged in the mobility strategy.

## **5.6 Financial Implications**

The primary financial implication of the strategy is the proposals for new operator vehicles as part of an integrated rural (and urban) public transport system. Important to note is that the system will require substantial subsidy for both capital expenditure and operational expenses as a socially viable or acceptable fare may not cover all costs related to the system. Also, the introduction of larger vehicle capacities will significantly reduce employment opportunities.



## 6. Rationalisation Plan

The following chapter highlights issues and strategies that affects rationalisation of public transport in the Central Karoo District Municipality and essentially provides a review of the latest thinking on transformation of public transport provision as it relates to the District Municipality. This chapter summarises the Western Cape Government's Provincial Public Transport Institutional Framework.

### 6.1 Background

The Central Karoo District Municipality, with the assistance of the Western Cape Department of Transport and Public Works first developed the Central Karoo Mobility Strategy in 2008 which proposed the introduction of a pilot public transport service.

This pilot project was developed within the legislative framework provided by the National Land Transport Transition Act (NLTTA) which ultimately provided for policy and processes for the development of transport plans and reform of the taxi and bus industries. Also, provision was made for contracting authorities at provincial level for the contracting of public transport services in municipal areas.

The subsequent Public Transport Action Plan in 2007 introduced the concept of Integrated Rapid Public Transport Networks (IRPTN) which outlined the process for negotiated contracts with existing bus and taxi operators to rationalise public transport provision in terms of an integrated network of services. This led to the Western Cape Provincial Government investigating the establishment of Integrated Public Transport Networks in the District Municipalities of the Western Cape.

The NLTTA, however, was replaced by the National Land Transport Act (NLTA) which sets out revised provisions for the planning, provision, and regulation of public transport functions in respect of all spheres of government. In contrast to previous legislation, the NLTA required that municipalities be the primary responsible level of government for the delivery of public transport services.

The Western Cape Provincial Government realised the implications of the NLTA on the implementation of the integrated public transport systems in the province and requested an update of the 2008 Mobility Strategy in 2012 in order to align with the provisions of the Act.

The objectives of the update was therefore to align the strategy as an IPTN, develop a cost model, and provide greater clarity on the responsibility and legal implications of providing municipal public transport services.

In 2015, the Western Cape Government introduced the development of a Provincial Public Transport Institutional Framework (PPTIF) with the aim of addressing the key constraints to improving both public and non-motorised transport in the non-Metro areas of the Western Cape; the framework is essentially a revised strategic approach to expedite progress in public transport operations and infrastructure delivery.

## 6.2 Constraints to Progress in Public Transport Transformation

The PPTIF recognises several current constraints to transforming public transport transformation in the Western Cape, in general; these are:

i. **Lack of institutional capacity;**

Municipalities in the Western Cape, not unlike Central Karoo District Municipalities, have limited capacity to perform municipal land transport functions as provided for in the NLTA. Moreover, the municipalities have limited human resource capacity, with indications that the issue relates to remuneration and a general lack of skills and expertise.

ii. **Lack of a sustainable funding model;**

There are limited funding streams available for public and non-motorised transport improvement and transformation in non-metropolitan areas like Central Karoo District Municipality, with a National funding bias towards metropolitan areas. Spatial and economic challenges further curtail operating public transport networks profitably adding pressure on municipalities to fund any shortfalls.

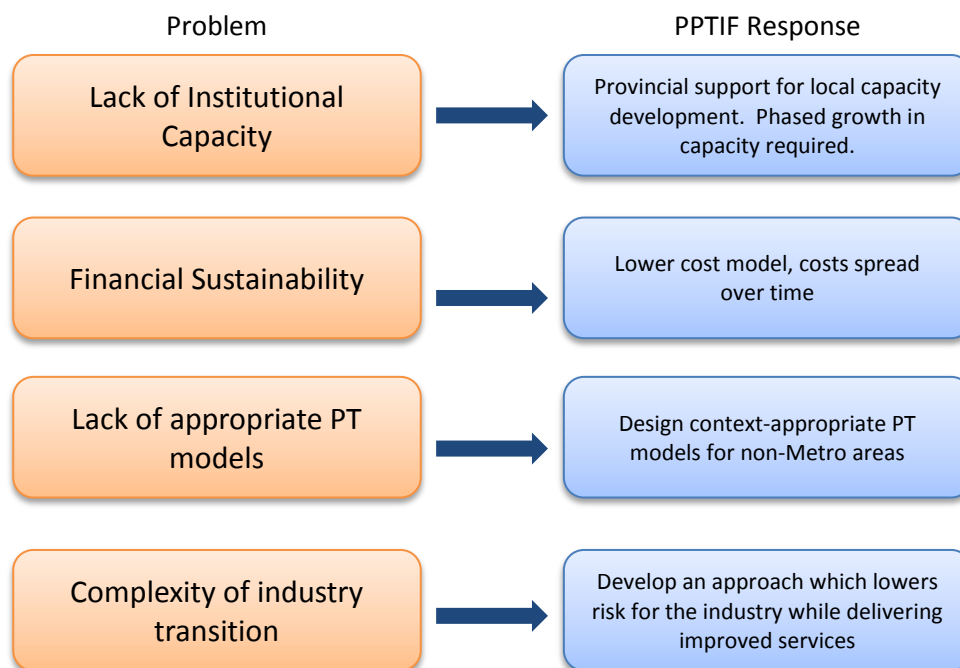
iii. **Lack of appropriate and realistic approaches to public transport improvement;**

There has not been an appropriate response the public transport provision in the urban-rural context. Furthermore, there is limited clarity on the best way forward in such contexts.

iv. **The complexity of industry transition;**

The introduction of IPTN's entailed the transformation of the mini-bus taxi industry which holds significant changes to the industry's business model in that the individual owner-operator makes way for contracted Vehicle Operating Companies (VOC's) made up of bus and taxi operators. As a result, there has often violent resistance to the implementation of IPTN's.

The PPTIF aims to address these constraints to progress through the development of appropriate technical, institutional, organisational, and financial models. This is an incremental approach to implementation that include providing provincial support for local capacity-building, the introduction of a lower cost model, the design of context-appropriate public transport models, and the development of a low-risk approach to the transformation of the mini-bus taxi industry.

**Figure 6-1: Provincial Public Transport Institutional Framework Response to PT**

### 6.3 PPTIF Categorisation

Through an extensive status quo analysis, five categories were developed to describe the differing contextual dynamics of the Western Cape Province; these are illustrated in the Figure 6-2 below. As can be seen, the Central Karoo District municipal area is classified as “Extensive Agriculture” and characterised by low intensity agricultural activity, low population densities, and low growth potential. This categorisation is used to understand the different types of intervention required to address the specific issues and competencies of different areas.

**Figure 6-2: PPTIF Categories<sup>11</sup>**

<sup>11</sup> Provincial Public Transport Institutional Framework, 2015: Western Cape Government, Department of Transport and Public Works



**Urban Growth Areas:** These are the economic centres of the Province, with very high growth potential, dynamic economies, relatively high population density and the greatest volume of local public transport movement in the Province. This includes the Cape Metro Functional Region and the George-Mossel Bay region.



**Industrial Development Area:** Including parts of the Saldanha Bay Local Municipality and the Industrial Development Zone (IDZ) that is currently being developed there. This is an area of both National and Provincial importance, with high growth potential.



**High Value Agriculture:** High intensity agricultural areas, often including groups of smaller urban centres of medium growth potential. Amongst others this includes the Robertson-Ashton region, the Malmesbury-Moorreesburg region and the Caledon-Bredasdorp-Swellendam region.



**Extensive Agriculture:** Low intensity agricultural areas with low population and density levels, few significant urban centres and low to very low growth potential. This includes most of the Central Karoo and part of the northern West Coast District Municipality.



**Coastal Tourism Towns:** Urban coastal towns with significant tourism activity, coastal transport corridors connecting a string of closely located towns and villages and very high growth potential.

#### 6.4 Incremental Approach

As mentioned, the framework provides for an incremental approach that seeks to address the key constraints to the implementation of public transport in the Province. It proposes the staged implementation of improvement initiatives which result in real improvements to the public transport user experience, but in a manner that reduces the capacity burden on government, lowers the cost of improvement, and reduces the risk of transformation to the public transport industry.

This is achieved in terms of three (3) stages with specific objectives for each. The approach is considered non-prescriptive and provides a framework only which can be applied to different contexts and adapted accordingly. These stages are briefly described below.

##### Stage 1:

This stage entails addressing 'basic' public transport and non-motorised transport infrastructure improvements that is combined with a strong focus on regulation and enforcement of existing public transport operators, as well as strengthened transport industry engagement. Of significance is that this stage does not impose a significant change to the business model of existing public transport operators, but rather allows these operators to capacitate and position themselves in a manner to participate in a formalised framework in future.

#### Stage 2:

Small subsidised service contracts are gradually introduced as part of Stage 2 where existing operators are encouraged to improve the quality of their public transport service offering. It is envisaged that in following in this manner that individual owner-operator type operations will be incentivised to consolidate in larger, formal entities. More focus is placed on transport and contract management which steadily builds capacity, with monitoring becoming a priority.

#### Stage 3:

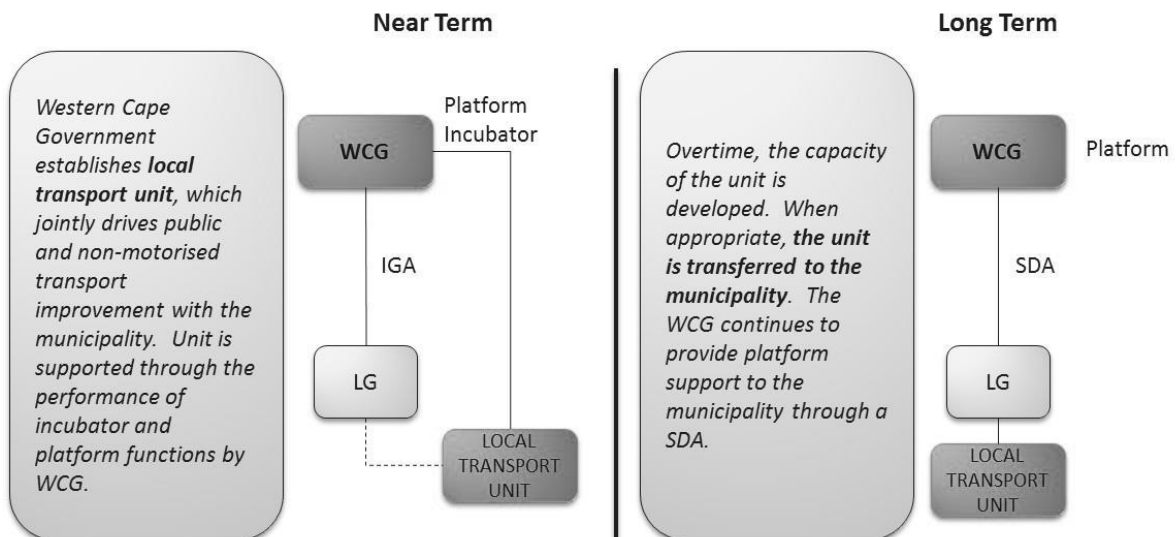
Where appropriate and suitable, the network and services established as part of stages 1 and 2 are consolidated and extended into an IPTN with gross contracts with contracted private operators. It is not expected that a full IPTN will always realise during this stage and, should circumstances permit, where considered appropriate, stage 2 may be the final step in the process.

### **6.5 Proposed Institutional Arrangements**

The Western Cape Government intends to invoke Section 12(1) of the NLTA where it will work jointly with Municipalities to perform or execute municipal land transport functions while progressively building municipal capacity. The Provincial report states that, in the longer term, municipalities will be able to perform their land transport functions either independently or jointly with neighbouring municipalities, possibly through the establishment of municipal entities.

Support from the Provincial Government will comprise two (2) areas; in the first, it will act as incubator to municipalities that will, together with the provincial unit in terms of an inter-governmental agreement, implement and manage local public and non-motorised transport improvement initiatives. These unit(s) will be transferred to municipal ownership and full management once fully developed and capacitated.

The second area of support is the provision of platform services to municipalities. These services include the development of centralised technology platforms and systems, such as intelligent transport systems (ITS), integrated fare management, and a call centre that is managed on a province-wide basis. This is an attempt to leverage the significant economies of scale generated by centralising those specific expertise. In essence, the Provincial Government will play a significant support role in the provision of public and non-motorised transport improvements.

**Figure 6-3: Proposed PPTIF Institutional Arrangements**

## 6.6 Funding and Implementation Plan

The framework suggests a 30 year timeline for development with a 5 year pilot phase using three (3) priority municipalities. In these municipalities a year of planning and a year of establishment will be required (2 years in total). Thereafter, Stage 1 will be implemented over at least 2 years. Stage 1 will continue to be implemented as Stage 2 comes on stream. Stage 2 will be implemented over a 3 year period, before moving toward Stage 3. Therefore, Stage 2 will be reached within the 5 year time period under consideration here. The pilot programs will be reviewed and successful elements thereof will be rolled-out in the subsequent phases of the timeline.

High-level costing has been developed for several municipalities with Prince Albert Local Municipality listed as one. None of the three priority municipalities are located in the Central Karoo District Municipality. The Municipality may only be able to participate in the initiative in the later stages of the extended timeline for implementation.

## 7. Transport Needs Assessment

The transport needs assessment was undertaken by way of primary and secondary sources; public meetings and semi-structured interviews were held with key stakeholders and municipal officials. A review of the District Municipality's Integrated Development Plan (IDP) as well as the 2013 National Travel Household Travel Survey (NHTS) were carried out to establish the current situation in terms of the community's needs on transportation.

### 7.1 Background

As noted previously, the Central Karoo District Municipality has the largest administrative land area in the Western Cape, is rural in nature with a low population density. The District has very low growth potential and has poor socio-economic linkages with the nearest economic centres. Furthermore, urban communities are largely dependent on social grants. The result is a low demand for travel with walking the dominant form of transportation for the majority of residents.

The transport needs assessment reveals a distinct difference in needs between urban and rural communities; urban communities require affordable and reliable transport for commuting and learner transport purposes while rural communities need safe, affordable, and reliable transport to access opportunities in surrounding economic and administrative centres.

#### 7.1.1 Economic Development

The low economic potential of the District compelled local authorities to consider the transportation sector as catalyst for economic growth. Most of the road freight on the N1 passes through the District and for long it has been considered how this can be leveraged to support growth in the region. There is a further concern that excessive road freight traffic volumes will significantly deteriorate the road network thereby impacting negatively on economic growth and expanding road maintenance programmes to unsustainable levels. Therefore, a clear priority is road maintenance, particularly of the gravel road network, to an appropriate standard and to ensure that the maintenance backlog is not extended.

Transport proposals which may impact on the region's economy include the Beaufort West freight bypass route, and the redevelopment of the Beaufort West airport as a major tourist gateway for the Great Karoo. Only pre-feasibility studies have been undertaken in respect of the freight bypass route thus far; the implementation of this route by SANRAL is highly unlikely and may only be considered again should prevailing conditions on the N1 through the town change significantly.

The agricultural sector has also seen declines in output, particularly in the Prince Albert area. Transport and access to markets is therefore an important consideration in slowing declines in this sector. The tourism industry is also dependent on this to maintain growth in the industry.

A large area of the District Municipality is rich in mineral deposits with uranium and shale gas extraction and exploration being the most significant potential economic drivers. Shale gas extraction will entail the transport of equipment, water, and waste to and from sites which will require the development of adequate transport infrastructure including the upgrade of major transport routes. Other possible transport impacts, depending on the scale and location of activity, may include increased traffic that may cause delays on provincial and national roads, pavement deterioration, noise, and loss of biodiversity. Increasing infrastructure will also result in ballooning maintenance funding requirements. The impact of the before mentioned proposals on the existing road infrastructure needs to be investigated further.

#### 7.1.2 Mobility

In terms of recent IDP engagements, the mobility of rural residents is consistently a concern of local residents, particularly for those in the outlying settlements of Merweville, Murraysburg, Leeu-Gamka, and Matjiesfontein; these settlements are in some instances more than 150 kilometres from Beaufort West which is the District's administrative centre. These vast distances, coupled with the low economic potential in the region, make the provision of affordable passenger transport services costly.

Most people, like the unemployed, are left without any means of transport, while those who can afford to travel pay excessive amounts in travel costs. The passenger train service was previously used but has become unusable with scheduled trip times not suitable to local residents' needs. The long distance bus services, on the other hand, have limited coverage, are mostly unaffordable to the majority, and pay points are not readily available at which to make bookings.

A prominent reoccurring thread in community priorities is the largely unavailable and unreliable emergency and non-emergency medical transport. When a call is made for an ambulance for transport to a local or regional medical facility, response times are usually lengthy leaving residents destitute.

The Central Karoo Mobility Strategy, and subsequently repackaged as an Integrated Public Transport Network (IPTN), seeks to address the issues of mobility by proposing an integrated network across the District area comprising bus services that would support learner, patient and general public demand for transport. The plan provides clarity on possible fare strategy and levels, potential service coverage, infrastructure and operational requirements, and clarity on the organisational responsibility for the Central Karoo District Municipality. However, the major issue in implementing the proposed plan is that it may require an operating subsidy of around 86% in order to run sustainably.

An important consideration in the development of the strategy and IPTN was that the District and Local Municipalities do not have human resource capacity and necessary funding to implement an integrated public transport system. Such a system will require highly skilled public transport and administrative professionals; with a lack of technical skills and considerable difficulty in attracting skilled professionals to reside in the District



implementation may be significantly hampered. Also, funding sources for the implementation of the system are not within the control of local authorities and may not always be predictable and sustainable.

#### 7.1.3 Road Upgrade and Maintenance

Road upgrade, rehabilitation and maintenance have a high priority for local communities with each Local Municipality capturing the need in their respective IDP documents. Improvement priorities are for:

- The resurfacing of existing surfaced roads as it is a dust nuisance to local residents;
- Surfacing and maintenance of urban gravel roads following flash-floods; and
- The rehabilitation of major provincial roads.

#### 7.1.4 Non-Motorised Transport

Walking and cycling are a common and accepted means of travel over relative short distances in towns. A key element is to promote these modes and to ensure that the necessary infrastructure is provided to improve the use, safety and comfort of users. Most towns have established pedestrian networks providing dedicated space for pedestrians and cyclists. Challenges in the implementation of NMT infrastructure do exist; there is sometimes discontinuity in networks with only sections being constructed hindered by limited funding; further issues are that infrastructure is not always responsive to the user needs in terms of the quality of pavement, comfort, and the lack of lighting along routes.

### 7.2 **Process for Project Identification**

Projects were identified in two ways; transport and related projects were identified in the 2014/15 Integrated Development Plans of the Central Karoo District Municipality, Beaufort West Local Municipality, Prince Albert Local Municipality, and Laingsburg Municipality. Secondly, a round of public meetings was held in each local municipality during November 2014. However, attendance at these meetings was poor; the issues raised at these meetings are nonetheless included in this assessment.

### 7.3 **Transport Project Proposals**

The transport projects identified in the latest IDP documents and identified at the public meetings are listed for the District Municipality and each of the three local municipalities.

**Table 7-1: IDP Projects per District and Local Municipalities, 2015**

Transport Projects & Proposals		Location
<b>CENTRAL KAROO DISTRICT MUNICIPALITY</b>		
<b>1</b>	Pedestrian Bridge across N1	Beaufort West

Transport Projects & Proposals		Location
2	Public transport shelters at schools and hospital	Beaufort West
3	Gravel Road rehabilitation	All Areas
4	N1 freight Bypass	Beaufort West
5	Improved Mobility & Accessibility in District	All Areas
6	Chemical and Hazardous Waste Spills Management	All Areas
<b>BEAUFORT WEST LOCAL MUNICIPALITY</b>		
1	Redevelopment of Beaufort West Airport	Beaufort West
2	Affordable public transport	All Areas
3	Tarring of Urban Gravel Roads	Beaufort West, Murraysburg, Merweville
4	Maintenance of existing tar roads	All Areas
5	Freight logistics hub at Beaufort West	Beaufort West
6	Pedestrian Bridge across the N1	Beaufort West
7	Pavements and Bicycle Lanes	Beaufort West
8	Assistance for youths for drivers licences	All Areas
9	Traffic Calming	Beaufort West
10	Bridge between Kwa-Mandlenkosi and Die Lande	Beaufort West
11	Better road safety initiatives	All Areas
<b>PRINCE ALBERT LOCAL MUNICIPALITY</b>		
1	Maintenance of Tar Roads and Potholes	Prince Albert, Klaarstroom
2	Maintenance of the Swartberg Pass	
3	Non-motorised Transport Infrastructure	All Areas
3	Construction of speed bumps	Prince Albert
4	Establishment of a pavement management system	All Areas
5	Improved access to medical transport services	All Areas
6	Learner Licence Courses	All Areas
7	Improved Learner Transport	All Areas
8	Road Safety during road-works	All Areas
9	Public Transport Shelters	All Areas
10	Safe Pedestrian Crossings	Prince Albert
11	Affordable Long Distance Transport	All Areas
<b>LAINGSBURG LOCAL MUNICIPALITY</b>		
1	Transport for Emergency and Non-Emergency	All Areas

Transport Projects & Proposals		Location
	purposes	
2	Drivers Licence Testing Centre	Laingsburg
3	Paving of Roads and Sidewalks	Laingsburg
4	Improved Non-Motorised Transport Infrastructure	All Areas
5	Need for Transport to Beaufort West and other towns	All Areas

#### 7.4 Project Prioritisation Methodology

As a starting point in developing a prioritisation model of projects and issues listed in the ITP, it is best to analyse common transport-related issues arising from strategic municipal documents and public meetings. The most common issue is maintenance of existing urban and rural roads (surfaced and gravel) in all areas of the District. A further important priority is the provision of affordable and reliable public transport to enable access to schools, hospital, shopping and to allow general access. As mentioned, non-motorised transport particularly walking, accounts for the largest modal share and, therefore, the expansion of networks in local towns to higher standards have considerable priority. Other priorities relate to road safety education and access to improved medical transport services.

The key project focus areas as identified in the Central Karoo District Municipality ITP of 2013 therefore remains in place which states the following:

- A lack of affordable public transport in most parts of the District;
- The need to maintain and upgrade infrastructure;
- High unemployment and the potential to use transport and mobility projects to support development;
- The need to regulate and control the transport system through planning, control and enforcement; and
- Upgrading and improvement of non-motorised transport infrastructure.

## 8. Stakeholder Consultation

This chapter provides the extent of the public and stakeholder consultation and participation throughout the process in the update of the Central Karoo District Municipality Integrated Transport Plan.

Public meetings on the DITP were scheduled in each of the Local Municipalities during November 2014 in the towns of Beaufort West, Prince Albert, and Laingsburg. Public turn-out at meetings was significantly low with the highest number of participants at Prince Albert. In order to fully incorporate and consider the input of local residents, the project team chose to supplement consultation by means of extracting public input on transport from IDP engagements.

Other forms of stakeholder consultation and participation included the bodies listed below. Each of the Local Municipalities were visited by way of several roadshows for consultation and information gathering.

- The Central Karoo District Municipality (Technical Services);
- Prince Albert Local Municipality (Technical Services);
- Laingsburg Local Municipality (Technical Services and Traffic Department);
- South African National Roads Agency;
- Beaufort West Taxi Association (Mr Appies);

Consultation was also undertaken in terms of Project Steering Committee meetings which were held at the Beaufort West and Laingsburg in terms of the table below.

**Table 8-1: Schedule of Central Karoo DITP Project Steering Committee Meetings**

Location/Venue	Date
<b>Laingsburg</b>	25 September 2014
<b>Beaufort West</b>	14 July 2015

The schedule of meetings and public notice is attached as **Annexure 2**.

## 9. Summary of Local Integrated Transport Plans

The following chapter provides an overview of transport and roads projects for each Local Municipality in Central Karoo District Municipality and is tabulated in terms of the six transport programme areas.

### 9.1 Beaufort West Local Municipality

As the largest of the three local municipalities, the key priorities for Beaufort West Municipality is maintaining and improving spend on road maintenance and upgrade as well as accelerating road safety initiatives. Transport projects for Beaufort West Local Municipality were identified in their Integrated Development Plan (2014), Integrated Transport Plan (2013), and in terms of consultations with municipal officials and at ITP Steering Committee Meetings. The resulting list of projects is shown in the table below.

**Table 9-1: Beaufort West Local Municipality – Transport and Roads Project List (2015-2020)**

Project No.	Project Type	Project Activity	Project Cost R ('000)
<b>Public Transport Programme</b>			
PT001	-	-	
<b>Transport Infrastructure Programme</b>			
TI013	New Road Infrastructure	Bridge between Kwa-Mandlenkosi and Die Lande	5,000
TI014	Road Upgrade	Gravel Roads – Beaufort West	3,200
TI015	New Road Infrastructure	N1 Freight By-pass Route (Beaufort West)	90,500
TI016	Roads & Stormwater	New Drainage - Murraysburg	1,000
TI017	Road Upgrade	Fabriek St/ Industrial Area, Beaufort West	15,000
TI018	Pedestrian Bridge	Bridge across N1 at Beaufort West	34,000
TI019	Road Upgrade	Gravel Roads in Beaufort West	853
<b>Transport Management Programme</b>			
TM002	Intersection Improvements	Signalised Intersection at Mandlenkosi Street, Beaufort West	6,500
<b>Non-Motorised Transport Programme</b>			
NMT002	Pedestrian Walkways	Pedestrian Paths at Nelspoort	300
NMT003	Bicycle Lanes	Bicycle lanes – all areas	1,000
<b>Safely Home Programme</b>			
SH001	Traffic Calming	Speed Humps (Beaufort West)	150
<b>Tourism Transport Programme</b>			
TT001	-	-	-

### 9.2 Prince Albert Local Municipality

Transport projects for Prince Albert Local Municipality were sourced from the Municipality's Integrated Development Plan (2014) and District Integrated Transport Plan (2013) as well as through consultation with

local officials and transport stakeholders. Public transport proposals and projects are addressed at District municipal level and are included in items related to the implementation of the Central Karoo Mobility Strategy. The projects are listed in **Table 9-2** below and categorised in terms of the key transport programme areas.

**Table 9-2: Prince Albert Local Municipality – Transport and Roads Project List (2015-2020)**

Project No.	Project Description	Project Activity	Project Cost R ('000)
<b>Public Transport Programme</b>			
PT001	-	-	-
<b>Transport Infrastructure Programme</b>			
TI020	Road Rehabilitation	Primary Access Roads in Prince Albert	4,800
TI021	Road Resurfacing	Existing Tar Roads (Prince Albert)	5,000
TI022	Church Street Upgrade	Cycling lanes, sidewalks, road resurfacing, lighting, storm-water, and parking improvements.	18,000
TI023	Roads & Stormwater	Storm-water upgrade in North End & Bitterwater	5,000
TI024	Road Upgrade	Paved and surfaced roads (Prince Albert, Leeu-Gamka, Klaarstroom)	3,200
TI025	New Roads	Construction of Roads (Rondomskrik)	5,000
<b>Transport Management Programme</b>			
TM003	Regulation and Control	Drivers Licence & Vehicle Testing Centre	2,500
TM004	Regulation and Control	Weighbridge on N1 and N12	16,000
TM005	Road Management	Pavement Management System	100
<b>Non-Motorised Transport Programme</b>			
NMT001	Pedestrian Infrastructure	Sidewalks, Pedestrian Paths, and Cycle Paths (Prince Albert, Bitterwater, Klaarstroom)	412
NMT004	Pedestrian Infrastructure	Pedestrian Walkways: Leeu-Gamka	295
<b>Safely Home Programme</b>			
SH001	Traffic Calming	Speed Humps in Rondomskrik	230
<b>Tourism Transport Programme</b>			
TT001	-	-	-

### 9.3 Laingsburg Municipality

The transport projects for Laingsburg Local Municipality were identified in the Municipality's Integrated Development Plan (2014), the District Integrated Transport Plan (2013), and by way of consultation with local municipal officials. Public transport infrastructure related projects form part of proposals made for the implementation of the Central Karoo District Municipality Mobility Strategy and, therefore, not listed in the table below.

Table 9-3: Laingsburg Local Municipality – Transport and Roads Project List (2015-2020)

Project No.	Project Description	Project Activity	Project Cost R ('000)
<b>Public Transport Programme</b>			
PT001	-	-	-
<b>Transport Infrastructure Programme</b>			
TI029	Re-seal of Roads	Re-seal of Tarred Roads (Laingsburg)	7,800
TI030	Road Construction	Primary Access Road at Matjiesfontein	2,047
TI031	Construction	Göldnerville new sidewalks & open spaces	368
TI032	Road Construction	Matjiesfontein urban roads	4,900
TI033	Roads & Storm-water	Göldnerville – Rehabilitation of Gabions	1,202
TI034	Roads & Storm-water	Storm-water Channel under railway-line: Access to Göldnerville (Hugo Street) – Engineering Works	7,700
TI035	Road Construction	Kambros Street, Laingsburg	1,200
TI036	Road Construction	Investigate and secure alternative access from N1 to Göldnerville	10,000
<b>Transport Management Programme</b>			
TM006	Planning	Integrated Infrastructure Maintenance Plan	300
TM007	Planning	Infrastructure Asset Plan and Register	250
TM008	Planning	Roads and Storm-water Master Plan	500
<b>Non-Motorised Transport Programme</b>			
	-	-	-
<b>Safely Home Programme</b>			
	-	-	-
<b>Tourism Transport Programme</b>			
TT002	Tourism Signage	Tourism Signage along TR083, TR020	110

## 10. Summary of Budgets, Proposals, Programmes & Projects

The following chapter provides a summary of the Central Karoo District Municipality budget and project proposals for roads and transport improvements up to 2020. The budget is categorised in terms of public transport, infrastructure, management, non-motorised transport, road safety, and tourism transport programmes.

### 10.1 Transport Priority Context

Based on the preceding analysis, there are two (2) principle priority areas for transportation in the Central Karoo District Municipality:

- i. Maintaining existing transport infrastructure to an acceptable level by implementing appropriate and management and monitoring systems; and
- ii. The implementation of a sustainable rural public transport system based on the Central Karoo Mobility Strategy.

A further priority area is improvements in non-motorised transport infrastructure and networks which should ideally respond to community user requirements and be a primary transport service provision priority for urban communities as oppose to additional infrastructure provision. The impact and importance of transport to the tourism industry in the District should also be considered and appropriately prioritised based on empirical assessments and needs. The impact of the N1 Highway on the region is another priority element particularly as it relates to (i) road safety, and (ii) freight movement.

Road traffic accidents places a disproportionate resource burden on the broader Central Karoo District community in terms of emergency services; heavy vehicles damage local road infrastructure; and a move of freight from road to rail have a still yet undetermined impact on local communities.

Based on this priority context, and to align with provincial and district strategic objectives, the ITP projects have been grouped in terms of the following transport programme areas:

- i. Public Transport;
- ii. Non-Motorised Transport;
- iii. Transport Infrastructure;
- iv. Safely Home;
- v. Tourism Transport; and
- vi. Transport Management.

### 10.2 Summary of Projects

The summary of projects for the District Municipality describes the total estimated cost for each project; the cost of each project is further indicated across the ITP review period in the subsequent section of this chapter.



The transport and roads projects identified for Central Karoo District Municipality is listed in **Table 10-1** below. These projects were identified in terms of the Municipality's Integrated Development Plan (2014), and further informed by consultation with District municipal officials and the ITP Steering Committee.

**Table 10-1: Central Karoo District Municipality – Transport and Roads Project List (2015-2020)**

Project No.	Project Description	Project Activity	Project Cost R ('000)
<b>Public Transport Programme</b>			
<b>PT001</b>	Central Karoo Public Transport System	Planning and Management	13,000
<b>PT002</b>	Central Karoo Public Transport System	Equipment	900
<b>PT003</b>	Central Karoo Public Transport System	Public Transport Infrastructure	9,700
<b>PT004</b>	Central Karoo Public Transport System	Public Transport Operations	29,500
<b>PT005</b>	Public Transport Infrastructure	Beaufort West – General Infrastructure Upgrades	400
<b>PT006</b>	Operator Licence Support	Resolve issues with registration of vehicles	50
<b>Transport Infrastructure Programme</b>			
<b>TI001</b>	Regravel of Roads	All Areas	65,385
<b>TI002</b>	Routine Road Maintenance	All Areas	55,150
<b>TI003</b>	Short Section Regravel	All Areas	9,883
<b>TI004</b>	Blading	Routine Blading	38,350
<b>TI005</b>	Swartberg Pass	Maintenance & Regravel	6,000
<b>TI031</b>	TR033 (Klaarstroom to Beaufort West)	Reseal Works (55 – 110km)	103,000
<b>TI032</b>	TR033 (Klaarstroom to Beaufort West)	Reseal Works (0 – 55kms)	35,000
<b>TI019</b>	Regravel: Various District Roads	Construction: Regravel	34,725
<b>TI020</b>	Laingsburg Flood Damage Repairs	Road Repair Work	18,353
<b>TI021</b>	TR020 near Matjiesfontein	Reseal Works	60,806
<b>TI030</b>	TR016 - Murraysburg	Reseal Works	72,000
<b>TI033</b>	MR309 Vleiland/Seweweekspoort	Road Upgrade	40,000
<b>Transport Management Programme</b>			
<b>TM001</b>	Transport Planning	Impact of Fracking on Transport in CKDM	1,500
<b>Non-Motorised Transport Programme</b>			
<b>NMT005</b>	Pedestrian Walkways: Laingsburg	Construction of walkways (completed 2015/16)	150
<b>Safely Home Programme</b>			
<b>SH001</b>	Traffic Calming	Speed Humps: Klaarstroom and Rondonkrik	230
<b>Tourism Transport Programme</b>			
<b>TT001</b>	Tourism Road Signage	Improve Tourism Road Signage along N1	250

### 10.3 Funding Strategy

The successful implementation of the projects proposed in the Central Karoo District Integrated Transport Plan requires sound financial resources. From a financial perspective there are currently two critical and related challenges on which the Financial Framework should seek to give guidance.

- Firstly, an increase in financial resources above current trajectories is required if the envisaged public sector improvements in the transport sector are to be realized; and
- Secondly, the institutional framework and associated revenue generating powers must be enhanced.

Any actions taken over the next few years should be consistent with a long term vision. Thus, this chapter seeks to sketch out such a vision from a financial perspective before focusing on the more immediate steps to be taken.

Notwithstanding the Central Karoo District Municipality's Capital Budget, the Integrated Transport Plan's projects and proposals can be funded from a number of different sources as set out in **Table 10-2** below. The National Department of Transport established the Public Transport Infrastructure and Systems Grant (PTIS) which provides for the provision of new and the improvement of existing public transport systems and infrastructure comprising transport interchanges, dedicated public transport lanes and roads, traffic control systems, as well as public transport operations, planning and design. This fund, however, does not provide for the upgrading, maintenance and improvement of existing roads and can only be sourced in the development of an integrated public transport system and is mostly focused on metropolitan scale public transport operations.

**Table 10-2: Sources of Funding for Transport Infrastructure and Systems**

TRANSPORT INFRASTRUCTURE FUNDING			
	Programme/Grant	Funding Provider	Notes
1	<b>Municipal Infrastructure Grant (MIG)</b>	Department of Cooperative Governance & Traditional Affairs	A grant provided to Municipalities to provide specific capital finance for basic municipal infrastructure projects contained in a Business Plan.
2	<b>Special Municipal Infrastructure Grant</b>	Department of Cooperative Governance & Traditional Affairs	Provides for special projects not listed in but linked to the IDP which may carry acceptable levels of risk with sustainable benefits for the municipality.
3	<b>Public Transport Systems and Infrastructure Grant</b>	Department of Transport	To provide for accelerated planning, establishment, construction and improvement of new and existing public transport and non-motorised transport infrastructure and systems.
4	<b>Shova Kulula</b>	Department of Transport	National Bicycle Project (excludes non-motorised transport infrastructure)
5	<b>Rural Transport Services and</b>	Department of Transport	Strengthen rural transport services by improving accessibility to essential services.

TRANSPORT INFRASTRUCTURE FUNDING			
	Programme/Grant	Funding Provider	Notes
	<b>Infrastructure Grant</b>		
<b>6</b>	<b>Provincial Roads Budget</b>	Western Cape Department of Transport & Public Works	Maintenance, construction of transportation infrastructure including roads under jurisdiction of the Province, public transport facilities and traffic control systems, etc.

A review of the District and Local Municipalities' budgets suggest that they are highly reliant on grant funding from national and provincial government for the implementation of transport-related projects. However, the principal sources of funding for the transport projects in the Central Karoo area:

- i. Local Municipalities obtain own internal revenue sources collected from rates and taxes;
- ii. Allocations to Municipalities by the Western Cape Provincial Government for maintenance and construction of proclaimed provincial roads which is granted on the basis of a 20% contribution by the Local Municipalities; and
- iii. Grants to municipalities in terms of the Municipal Infrastructure Grant (MIG).

The Municipal Infrastructure Grant (MIG) is awarded for all forms of municipal infrastructure projects, however, Municipalities utilise most of these funds for the implementation of bulk water and sewer projects. Also, municipalities find securing their 20% funding contribution towards the provincial transport infrastructure grant challenging at times.

The tables to follow (**Table 10-4** to **Table 10-7**) describes the budgeted municipal funding for capital projects related to transport, roads, and storm-water for the ITP review period.

**Table 10-3: Central Karoo District Municipality – Medium Term Budget Framework (2015 to 2020)**

Item	R ('000)				
	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020
<b>Revenue (excl. Capital Transfers)</b>	<b>78,498</b>	<b>68,209</b>	<b>71,234</b>	-	-
<i>Property Rates</i>	-	-	-	-	-
<i>Service Charges</i>	-	-	-	-	-
<i>Investment Revenue</i>	200	200	200	-	-
<i>Transfers recognised – operational</i>	36,301	23,776	23,735	-	-
<i>Other own revenue</i>	41,997	44,233	47,299	-	-
<b>Expenditure</b>	<b>78,202</b>	<b>67,913</b>	<b>70,938</b>	-	-
<b>Capital Transfers</b>	<b>296</b>	<b>295</b>	<b>296</b>	-	-

Table 10-4: Central Karoo District Municipality – Allocated Capital Funding for Transport and Roads

Funding Source	Rands ('000)					Source
	2015/16	2016/17	2017/18	2018/19	2019/20	
Western Cape Government (Roads)	35,828	37,985	40,643	-	-	CKDM
Central Karoo District Municipality	-	-	-	-	-	
Rural Roads Asset Management Grant	1,794	-	-	-	-	DORA
Municipal Infrastructure Grant	-	-	-	-	-	
<b>TOTAL</b>	<b>37,622</b>	<b>37,985</b>	<b>40,643</b>	<b>-</b>	<b>-</b>	

Table 10-5: Beaufort West Local Municipality – Allocated Capital Funding for Transport and Roads

Funding Source	Rands ('000)					Source
	2015/16	2016/17	2017/18	2018/19	2019/20	
Western Cape Government - Transfers	30	0	0	-	-	WCG
Beaufort West Local Municipality	0	0	0	-	-	
Municipal Infrastructure Grant (Roads & Transport Only)	1,179	1,945	1,000	-	-	BWM
<b>TOTAL</b>	<b>1,209</b>	<b>1,945</b>	<b>1,000</b>	<b>-</b>	<b>-</b>	
<b>TOTAL MIG Allocation</b>	<b>13,647</b>	<b>14,020</b>	<b>14,579</b>			

Table 10-6: Prince Albert Local Municipality – Allocated Capital Funding for Transport and Roads

Funding Source	Rands ('000)					Source
	2015/16	2016/17	2017/18	2018/19	2019/20	
Western Cape Government - Transfers	30	0	0	-	-	WCG
Prince Albert Local Municipality	123	0	1,144	-	-	PAMUN
Municipal Infrastructure Grant (Roads/Stormwater Projects)	707	1,250	1,800	-	-	PAMUN
<b>TOTAL</b>	<b>860</b>	<b>1,250</b>	<b>2,944</b>	<b>-</b>	<b>-</b>	
<b>TOTAL MIG Allocation</b>	<b>7,466</b>	<b>7,572</b>	<b>7,731</b>	<b>-</b>	<b>-</b>	<b>PAMUN</b>

**Table 10-7: Laingsburg Local Municipality – Allocated Capital Funding for Transport and Roads**

Funding Source	Rands ('000)					Source
	2015/16	2016/17	2017/18	2018/19	2019/20	
<b>Western Cape Government - Transfers</b>	30	0	0	-	-	WCG
<b>Laingsburg Local Municipality</b>	0	0	0	-	-	
<b>Municipal Infrastructure Grant (Roads/Stormwater Projects)</b>	2,575	2,165	1,500	-	-	LLM
<b>TOTAL</b>	<b>2,605</b>	<b>2,165</b>	<b>1,500</b>	-	-	
<b>TOTAL MIG Allocation</b>	<b>6,562</b>	<b>9,629</b>	<b>11,730</b>	-	-	<b>LLM</b>

The situation on budget allocations for roads and transport-related projects in Central Karoo District municipalities has not changed since the release of the previous ITP (2014), namely:

- Local Municipalities primarily rely on capital grant transfers from MIG and the Western Cape Provincial Government for the implementation and maintenance of transport infrastructure;
- Limited funding is allocated specifically to the provision of the public transport operations and infrastructure;
- When considering the District's modal split, the funding of non-motorised transport infrastructure needs further attention in terms of a wider roll-out that also corresponds with improvements in the responsiveness of infrastructure to users' needs;
- Road safety programmes (under the "Safely Home" umbrella) require a comprehensive approach in order to address road safety objectives; and
- Investment in transport infrastructure to support the tourism industry is limited with funding mainly focusing on road upgrade and maintenance;

#### 10.4 Project Prioritisation

As stated in Section 10.1 of this report, the areas of priority for intervention are the following:

- The maintenance of and improvements to roads;
- The implementation of a subsidised rural public transport system;
- Improvements in non-motorised transport infrastructure provision; and
- The improvement of road safety initiatives;

Despite the above priorities, the availability of funding remains the principal consideration in prioritising transport and road projects. The reality is that available funding is apportioned to operational activities, essential and routine maintenance.

In consultation with the District and Local Municipalities, a number of high priority projects, programmes and initiatives were identified for implementation in the review period of 2015 to 2016. It is important to note that the tables below includes funded and unfunded projects – importantly, projects relating to public transport services are considered in terms of a packaged approach under the implementation of the Central Karoo Mobility Strategy.

**Table 10-8: Central Karoo District Municipality: High Priority Transport and Road Projects, 2015 to 2020**

Project No.	Project Description	Project Cost R ('000)	Funding Source
<b>TI040</b>	Road Upgrade: MR309 Seweweekspoort	50,000	WCG
<b>PT005</b>	Beaufort West: Public Transport Infrastructure (General)	400	CKDM
<b>PT001 - 004</b>	Central Karoo PT System: All components	53,000	Funding not secured
<b>TI001 - 007</b>	Road Regravel: Central Karoo	47,545	CKDM/WCG
<b>TI011</b>	Road Blading: Central Karoo	38,350	CKDM/WCG
<b>TOTAL BUDGET REQUIRED</b>		<b>189,295</b>	

**Table 10-9: Beaufort West Local Municipality: High Priority Transport and Road Projects, 2015 to 2020**

Project No.	Project Description	Project Cost R ('000)	Funding Source
<b>TI013</b>	Bridge between Kwa-Mandlenkosi and Die Lande	5,000	BWM
<b>TI018</b>	Pedestrian Bridge across N1 and pedestrian walkways	15,000	SANRAL
<b>TI014 &amp; 019</b>	Road Upgrade: Gravel Roads – Murraysburg & Beaufort West	11,734	MIG/BWM
<b>TI017</b>	Road Upgrade: Fabriek Street, Industrial Area, Beaufort West	15,000	BWM
	Reseal of Surfaced Urban Roads: Beaufort West	25,000	MIG/BWM
<b>TOTAL BUDGET REQUIRED</b>		<b>71,734</b>	

**Table 10-10: Prince Albert Local Municipality: High Priority Transport and Road Projects, 2015 to 2020**

Project No.	Project Description	Project Cost R ('000)	Funding Source
<b>TI022</b>	Major Road Upgrade: Church Street, Prince Albert (pedestrian paths, cycling lanes, crossings, storm-water upgrade)	18,000	PAMUN/WCG
<b>TI020</b>	Road Rehabilitation: Prince Albert Access Roads	4,800	PAMUN
<b>NMT002 &amp; 004</b>	Pedestrian walkways: Sidewalks, cycle paths	707	PAMUN/MIG
<b>TI021</b>	Road Resurfacing: Existing roads – Prince Albert	5,000	PAMUN

Project No.	Project Description	Project Cost R ('000)	Funding Source
TM003	Drivers Licence and Vehicle Testing Centre	2,500	WCG
<b>TOTAL BUDGET REQUIRED</b>		<b>31,007</b>	

**Table 10-11: Laingsburg Local Municipality: High Priority Transport and Road Projects, 2015 to 2020**

Project No.	Project Description	Project Cost R ('000)	Funding Source
TI029	Re-seal of Roads: Laingsburg	7,800	LLM/MIG
TI030	Road Construction: Access Roads - Matjiesfontein	2,060	LLM/MIG
TI034	Roads & Storm-water: Hugo Street – Access to Göldnerville (Engineering Works for rail above road bridge)	7,700	LLM/MIG
TI036	Investigate and Secure alternative access road to Göldnerville	10,000	LLM
TM008	Roads and Storm-water Master Plan: Laingsburg	500	LLM
<b>TOTAL BUDGET REQUIRED</b>		<b>28,060</b>	

## 10.5 Five Year Implementation Programme of Projects

The five-year road and transport project budget for Central Karoo District Municipality is set out in the table below. The lion's share of the proposed budget is allocated to improvements in transport infrastructure with allocations to new road construction, upgrade and maintenance. This is an effort to address the severe road infrastructure backlog.

**Table 10-12: Total Funding Required for implementation of the Central Karoo DITP, 2015 to 2020**

Authority	Rands (‘000)				
	2015/16	2016/17	2017/18	2018/19	2019/20
PUBLIC TRANSPORT PROGRAMME					
Central Karoo District Municipality	0	14,050	4,110	17,700	17,690
Beaufort West Local Municipality	-	-	-	-	-
Prince Albert Local Municipality	-	-	-	-	-
Laingsburg Local Municipality	-	-	-	-	-
Total Budget Per Annum	0	14,050	4,110	17,700	17,690
Total Budget For 5 Years	53,550				
NON-MOTORISED TRANSPORT PROGRAMME					
Central Karoo District Municipality	-	150	-	-	-
Beaufort West Local Municipality	-	490	230	270	310
Prince Albert Local Municipality	707	-	-	-	-
Laingsburg Local Municipality	-	-	-	-	-
Total Budget Per Annum	707	640	230	270	310
Total Budget For 5 Years	2,157				
TRANSPORT INFRASTRUCTURE PROGRAMME					
Central Karoo District Municipality	90,103	133,461	226,923	77,200	61,420
Beaufort West Local Municipality	2,190	5,100	27,953	66,000	50,000
Prince Albert Local Municipality	-	1,900	14,800	11,200	8,100
Laingsburg Local Municipality	368	10,135	13,077	7,450	4,200
Total Budget Per Annum	92,661	150,596	282,753	161,850	123,720
Total Budget For 5 Years	811,580				
SAFELY HOME PROGRAMME					
Central Karoo District Municipality	-	70	60	50	50
Beaufort West Local Municipality	-	50	50	50	-
Prince Albert Local Municipality	-	-	-	-	-
Laingsburg Local Municipality	-	-	-	-	-
Total Budget Per Annum	-	120	110	100	50
Total Budget For 5 Years	380				
TOURISM TRANSPORT PROGRAMME					



Authority	Rands ('000)				
	2015/16	2016/17	2017/18	2018/19	2019/20
Central Karoo District Municipality	-	70	60	50	50
Beaufort West Local Municipality	-	-	-	-	-
Prince Albert Local Municipality	-	-	-	-	-
Laingsburg Local Municipality	-	-	50	60	-
Total Budget Per Annum	-	70	110	110	50
Total Budget For 5 Years	340				
TRANSPORT MANAGEMENT PROGRAMME					
Central Karoo District Municipality	-	1,500	-	-	-
Beaufort West Local Municipality	-	-	6,500	-	-
Prince Albert Local Municipality	-	3,950	3,850	6,350	3,850
Laingsburg Local Municipality	-	300	750	-	-
Total Budget Per Annum	-	5,750	11,100	6,350	3,850
Total Budget For 5 Years	27,050				
TOTAL ITP BUDGET PER ANNUM	93,368	171,226	298,413	186,380	145,670
TOTAL ITP BUDGET FOR 5 YEARS	895,057				

The project specific and detailed list of road and transport projects across the reporting period is indicated in **Annexure 1**.

Submitted by:

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# ANNEXURE 1

## **Annexures 1: Integrated Transport Plan: Prioritised Five Year Expenditure Programme**

No	Project	Source	Town	Ward	Cashflow					Progress on Projects	Type (Planning/ Design/ Construction/ Operation)	Funding Source	Strategic Goals				
					2015/16	2016/17	2017/18	2018/19	2019/20			WCG: Western Cape Government, CKDM: Central Karoo District Municipality	Strategic Goal 1: Create opportunities for growth and jobs	Strategic Goal 2: Improve education outcomes and opportunities	Strategic Goal 3: Increase wellness, safety and tackle social ills	Strategic Goal 4: Enable resilient, sustainable, quality and inclusive living environment	Strategic Goal 5: Embed good governance and integrated service delivery through partnerships and spatial alignment
PUBLIC TRANSPORT PROGRAMME																	
PT001	Central Karoo PT System: Planning and Management	DITP, 2014	Central Karoo			R 6 200 000	R 1 600 000	R 2 400 000	R 2 800 000	Planning Stage; No funding available.	Design and Construction	WCG / DOT	•				
PT002	Central Karoo PT System: Equipment	DITP, 2014	Central Karoo			R 900 000				Mobility Strategy is complete. No further funding available.	Operation	WCG / DOT	•				
PT003	Central Karoo PT System: Public Transport Infrastructure	DITP, 2014	Central Karoo			R 6 500 000	R 2 000 000	R 1 200 000		Mobility Strategy is complete. No further funding available.	Design and Construction	WCG / DOT	•			•	
PT004	Central Karoo PT System: Public Transport Operations	DITP, 2014	Central Karoo				R 510 000	R 14 100 000	R 14 890 000	Mobility Strategy is complete. No further funding available.	Operation	WCG / DOT	•			•	
PT005	Public Transport Infrastructure: General	DITP, 2014	Beaufort West			R 400 000				Approved	Construction	CKDM	•				
PT006	Operator Licence Support: Registration of Vehicles	DITP, 2014	Central Karoo			R 50 000				Planning Stage	Planning	CKDM	•				
TOTAL BUDGET REQUIRED PER ANNUM					R 0	R 14 050 000	R 4 110 000	R 17 700 000	R 17 690 000								
Public Transport Programme: TOTAL BUDGET FOR REVIEW PERIOD					R 53 550 000												
NON-MOTORISED TRANSPORT PROGRAMME																	
NMT00 1	Pedestrian Walkways: Sidewalks in Prince Albert (Leeu-Gamka)	PAMUN SDBIP, 2015	Prince Albert		R 295 000						Design and Construction	MIG	•		•	•	
NMT00 2	Pedestrian Walkways - Nelspoort	BWM LITP	Nelspoort			R 300 000				Approved	Design and Construction	BWM	•		•	•	

No	Project	Source	Town	Ward	Cashflow					Progress on Projects	Type (Planning/ Design/ Construction/ Operation)	Funding Source	Strategic Goals				
					2015/16	2016/17	2017/18	2018/19	2019/20			WCG: Western Cape Government, CKDM: Central Karoo District Municipality	Strategic Goal 1: Create opportunities for growth and jobs	Strategic Goal 2: Improve education outcomes and opportunities	Strategic Goal 3: Increase wellness, safety and tackle social ills	Strategic Goal 4: Enable resilient, sustainable, quality and inclusive living environment	Strategic Goal 5: Embed good governance and integrated service delivery through partnerships and spatial alignment
NMT003	Bicycle Lanes Beaufort West	BWM IDP	All Areas			R 190 000	R 230 000	R 270 000	R 310 000	To meet annual target set in terms of the BW IDP	Design and Construction	BWM	●		●	●	
NMT004	Pedestrian Walkways: Sidewalks, Cycle Paths - Prince Albert	PAMUN SDBIP, 2015	Bitterwater, Klaarstroom		R 412 000						Design and Construction	MIG	●		●	●	
NMT005	Pedestrian Walkways: Sidewalks & Pedestrian Crossings		Laingsburg			R 150 000				Not yet approved	Design and Construction	LLM	●		●	●	
TOTAL BUDGET REQUIRED PER ANNUM					R 707 000	R 640 000	R 230 000	R 270 000	R 310 000								
Non-Motorised Transport Programme: TOTAL BUDGET FOR REVIEW PERIOD					R 2 157 000												
TRANSPORT INFRASTRUCTURE PROGRAMME																	
TI001	Road Regravel: Various Roads	CKDM, 2015	Central Karoo		R 14 880 000	R 14 370 000	R 36 590 000	R 0	R 0	At various stages of implementation	Construction	WCG / CKDM	●				
TI002	Routine Road Maintenance - Central Karoo District	CKDM, 2015	Central Karoo		R 10 000 000	R 10 570 000	R 11 080 000	R 11 450 000	R 12 050 000	Ongoing	Construction	WCG / CKDM	●				
TI003	Short-Section Regravel: Various Roads	CKDM, 2015	Central Karoo		R 3 280 000	R 1 050 000	R 1 553 000			Project Commenced	Construction	WCG / CKDM	●				
TI004	Road Blading	CKDM, 2015	All Areas		R 7 000 000	R 7 280 000	R 7 670 000	R 8 050 000	R 8 350 000	Ongoing	Construction	WCG / CKDM	●				
TI005	Road Rehabilitation: Swartberg Pass	PAMUN ITP	Prince Albert				R 2 000 000	R 2 000 000	R 2 000 000	Funding unavailable	Construction	WCG / CKDM					
TI006	New Roads: Bridge between Kwa-Mandlenkosi and Die Lande	IDP, 2015	Beaufort West			R 2 900 000	R 2 100 000			Approved	Design and Construction	BWM	●			●	
TI007	Road Upgrade: Gravel Roads - Beaufort West	BWM Budget, 2015	Murraysburg			R 2 200 000	R 1 000 000			Approved	Construction	MIG	●				

No	Project	Source	Town	Ward	Cashflow					Progress on Projects	Type (Planning/ Design/ Construction/ Operation)	Funding Source	Strategic Goals				
					2015/16	2016/17	2017/18	2018/19	2019/20			WCG: Western Cape Government, CKDM: Central Karoo District Municipality	Strategic Goal 1: Create opportunities for growth and jobs	Strategic Goal 2: Improve education outcomes and opportunities	Strategic Goal 3: Increase wellness, safety and tackle social ills	Strategic Goal 4: Enable resilient, sustainable, quality and inclusive living environment	Strategic Goal 5: Embed good governance and integrated service delivery through partnerships and spatial alignment
TI008	New Road: N1 Freight By-pass Route - Beaufort West	DITP, 2014	Beaufort West					R 45 000 000	R 45 000 000	Not Supported by SANRAL; No funding available	Planning, Design & Construction	SANRAL/ WCG	●			●	
TI009	Roads & Stormwater: New Drainage - Murraysburg	BWM Budget, 2015	Murraysburg				R 1 000 000			Approved	Construction	MIG	●				
TI010	Road Upgrade: Fabriek Street, Industrial Area, Beaufort West	DITP, 2014	Beaufort West				R 5 000 000	R 5 000 000	R 5 000 000	Project Approved. Funding to be secured.	Design and Construction	BWM	●			●	
TI011	Pedestrian Bridge across N1 Highway - Beaufort West	DITP, 2014	Beaufort West				R 18 000 000	R 16 000 000		Not Supported by SANRAL. No funding available	Planning	SANRAL	●		●	●	
TI012	Road Upgrade: Gravel Roads - Beaufort West	BWM Budget, 2015	Beaufort West				R 853 400			Approved	Construction	MIG	●				
TI013	Road Rehabilitation: Prince Albert Access Roads		Prince Albert			R 1 900 000	R 2 900 000					PAMUN	●				
TI014	Road Resurfacing: Existing Surfaced Roads - Prince Albert		Prince Albert					R 2 900 000	R 2 100 000				●				

No	Project	Source	Town	Ward	Cashflow					Progress on Projects	Type (Planning/ Design/ Construction/ Operation)	Funding Source	Strategic Goals				
					2015/16	2016/17	2017/18	2018/19	2019/20			WCG: Western Cape Government, CKDM: Central Karoo District Municipality	Strategic Goal 1: Create opportunities for growth and jobs	Strategic Goal 2: Improve education outcomes and opportunities	Strategic Goal 3: Increase wellness, safety and tackle social ills	Strategic Goal 4: Enable resilient, sustainable, quality and inclusive living environment	Strategic Goal 5: Embed good governance and integrated service delivery through partnerships and spatial alignment
TI015	Major Road Upgrade: Church Street, Prince Albert (Stormwater, Reseal, Pedestrian, Parking)	PAMUN	Prince Albert				R 9 000 000	R 5 000 000	R 4 000 000	Not approved.	Design and Construction	PAMUN / WCG	●		●	●	
TI016	Roads & Stormwater: North End and Bitterwater		Prince Albert, Leeu-Gamka										●				
TI017	Road Upgrade: Paved and Surfaced Roads - Prince Albert		Prince Albert, Leeu-Gamka				R 1 000 000	R 1 200 000	R 1 000 000			PAMUN	●				
TI018	New Roads: Rondonkrik						R 1 900 000	R 2 100 000	R 1 000 000				●				
TI019	Regravel ito Western Cape Government Contracts	WCG	Beaufort West				R 3 426 000	R 19 279 000	R 12 020 000	Road ID's to be confirmed.	Design and Construction	WCG	●				
TI020	Laingsburg: Flood Damage Repairs	WCG	Laingsburg		R 3 879 000	R 14 081 000	R 393 000			Planned Project	Construction	WCG	●				

No	Project	Source	Town	Ward	Cashflow					Progress on Projects	Type (Planning/ Design/ Construction/ Operation)	Funding Source	Strategic Goals				
					2015/16	2016/17	2017/18	2018/19	2019/20			WCG: Western Cape Government, CKDM: Central Karoo District Municipality	Strategic Goal 1: Create opportunities for growth and jobs	Strategic Goal 2: Improve education outcomes and opportunities	Strategic Goal 3: Increase wellness, safety and tackle social ills	Strategic Goal 4: Enable resilient, sustainable, quality and inclusive living environment	Strategic Goal 5: Embed good governance and integrated service delivery through partnerships and spatial alignment
TI021	Reseal Works: TR020 - km 0.00 - 42.70 from Matjiesfontein to NC Border	WCG	Matjiesfontein			R 26 849 000	R 32 536 000	R 1 421 000			Construction	WCG	●				
TI022	Re-seal of Roads: Laingsburg	LLM	Laingsburg			R 1 400 000	R 1 900 000	R 2 100 000	R 2 400 000	Approved	Construction	LLM	●				
TI023	Road Construction: Access Roads - Laingsburg		Matjiesfontein			R 1 030 000	R 1 030 000						●				
TI024	Goldnerville: 180 houses, new sidewalks & open spaces	LLM IDP, 2014	Laingsburg		R 367 519					Approved. Under Construction	Construction	MIG	●				
TI025	Road Construction: Matjiesfontein Urban Roads	LLM	Matjiesfontein			R 1 600 000	R 1 950 000	R 1 350 000		Approved	Design and Construction	LLM	●				
TI026	Roads & Stormwater: Göldnerville - Rehabilitate Gabions	LLM MTEF, 2014	Laingsburg			R 1 105 000	R 97 000			Approved ito capital LLM budget	Construction	LLM	●				



No	Project	Source	Town	Ward	Cashflow					Progress on Projects	Type (Planning/ Design/ Construction/ Operation)	Funding Source	Strategic Goals				
					2015/16	2016/17	2017/18	2018/19	2019/20			WCG: Western Cape Government, CKDM: Central Karoo District Municipality	Strategic Goal 1: Create opportunities for growth and jobs	Strategic Goal 2: Improve education outcomes and opportunities	Strategic Goal 3: Increase wellness, safety and tackle social ills	Strategic Goal 4: Enable resilient, sustainable, quality and inclusive living environment	Strategic Goal 5: Embed good governance and integrated service delivery through partnerships and spatial alignment
TI027	Roads & Stormwater: Hugo Street, Access to Göldnerville off the N1, Rail above Road - Engineering Works	LLM IDP, 2014	Laingsburg				R 3 100 000	R 2 800 000	R 1 800 000	Planning investigations undertaken. No funding available for implementation.	Design and Construction	LLM	●			●	
TI028	Road Construction: Kambros Street - Laingsburg	LLM	Laingsburg					R 1 200 000			Construction	LLM	●				
TI029	New Road: Investigate & secure alternative access road to Goldnerville	LLM	Laingsburg			R 5 000 000	R 5 000 000				Planning	LLM / WCG	●			●	
TI030	Reseal Works:TR016 - Murraysburg to Northern Cape Border	WCG	Murraysburg		R 51 064 000	R 19 261 000	R 1 675 000			Tender Stage	Design and Construction	WCG	●				
TI031	Reseal Works: TR033 - Klaarstroom to Beaufort West (55-110kms)	WCG	Beaufort West			R 40 000 000	R 63 000 000			Approved	Design and Construction	WCG	●				
TI032	Reseal Works: TR033 - Klaarstroom to Beaufort West (00-55kms)	WCG	Klaarstroom				R 35 000 000			Approved	Design and Construction	WCG	●				
TI033	Road Upgrade: MR309 - Vleiland to Swartberg/Seweweekspoort	CKDM, 2015	Laingsburg				R 15 000 000	R 21 000 000	R 14 000 000	Project approved but finding not secured	Design and Construction	WCG / CKDM	●				
TOTAL BUDGET REQUIRED PER ANNUM					R 90 470 519	R 150 596 000	R 265 753 400	R 147 850 000	R 110 720 000								
Transport Infrastructure Programme: TOTAL BUDGET FOR REVIEW PERIOD					R 765 389 919												

SAFELY HOME PROGRAMME																	
SH001	Traffic Calming: Speed Humps at Klaarstroom & Rondomskrik		Klaarstroom, Rondomskrik			R 70 000	R 60 000	R 50 000	R 50 000			CKDM	●		●		
SH002	Traffic Calming: Speed Humps - Beaufort West	BWM LITP	Beaufort West			R 50 000	R 50 000	R 50 000			Construction	BWM	●		●		
TOTAL BUDGET REQUIRED PER ANNUM					R 0	R 120 000	R 110 000	R 100 000	R 50 000								

No	Project	Source	Town	Ward	Cashflow					Progress on Projects	Type (Planning/ Design/ Construction/ Operation)	Funding Source	Strategic Goals				
					2015/16	2016/17	2017/18	2018/19	2019/20			WCG: Western Cape Government, CKDM: Central Karoo District Municipality	Strategic Goal 1: Create opportunities for growth and jobs	Strategic Goal 2: Improve education outcomes and opportunities	Strategic Goal 3: Increase wellness, safety and tackle social ills	Strategic Goal 4: Enable resilient, sustainable, quality and inclusive living environment	Strategic Goal 5: Embed good governance and integrated service delivery through partnerships and spatial alignment
Safely Home Programme: TOTAL BUDGET FOR REVIEW PERIOD					R 380 000												
TOURISM TRANSPORT PROGRAMME																	
TT001	Signage: Tourism Road Signage: Central Karoo District		All Areas			R 50 000	R 55 000	R 70 000	R 75 000				●				
TT002	Signage: Tourism Road Signage: Laingsburg - TR083 & TR020		Laingsburg				R 50 000	R 60 000		Not approved and unfunded	Planning	LLM	●				
TOTAL BUDGET REQUIRED PER ANNUM					R 0	R 50 000	R 105 000	R 130 000	R 75 000								
Tourism Transport Programme: TOTAL BUDGET FOR REVIEW PERIOD					R 360 000												
TRANSPORT MANAGEMENT PROGRAMME																	
TM001	Transport Planning: Investigation on the Impact of Fracking on the District's Transport Infrastructure	DITP, 2014	Central Karoo			R 1 500 000					Planning	CKDM	●				
TM002	Intersection Improvements: Signalised Intersection at Mandlenkosi Street	IDP, 2015	Beaufort West				R 6 500 000			Project Approved by BWM		BWM / SANRAL	●		●		
TM003	Drivers Licence & Vehicle Testing Centre: Prince Albert	PAMUN LITP	Prince Albert					R 2 500 000		Approved. Funding to be secured.	Operations	WCG	●		●		
TM004	Weighbridge on N1 and N12 - Prince Albert	DITP, 2014	Prince Albert			R 3 850 000	R 3 850 000	R 3 850 000	R 3 850 000	Approved. Funding & operational model to be finalised.	Operations	WCG / PPP	●		●		
TM005	Pavement Management System - Prince Albert Municipality	PAMUN IDP, 2015	Prince Albert			R 100 000				Approved	Planning	PAMUN	●			●	
TM006	Integrated Infrastructure Maintenance Plan - Laingsburg Municipality	PAMUN	Laingsburg			R 300 000					Planning	LLM	●			●	

No	Project	Source	Town	Ward	Cashflow					Progress on Projects	Type (Planning/ Design/ Construction/ Operation)	Funding Source	Strategic Goals				
					2015/16	2016/17	2017/18	2018/19	2019/20			WCG: Western Cape Government, CKDM: Central Karoo District Municipality	Strategic Goal 1: Create opportunities for growth and jobs	Strategic Goal 2: Improve education outcomes and opportunities	Strategic Goal 3: Increase wellness, safety and tackle social ills	Strategic Goal 4: Enable resilient, sustainable, quality and inclusive living environment	Strategic Goal 5: Embed good governance and integrated service delivery through partnerships and spatial alignment
TM007	Infrastructure Asset Plan and Register - Laingsburg Municipality	PAMUN	Laingsburg				R 250 000				Planning	LLM	●			●	
TM008	Roads & Stormwater Master Plan - Laingsburg Municipality	PAMUN	Laingsburg				R 500 000				Planning	LLM	●			●	
TOTAL BUDGET REQUIRED PER ANNUM					R 0	R 5 750 000	R 11 100 000	R 6 350 000	R 3 850 000								
Transport Management Programme: TOTAL BUDGET FOR REVIEW PERIOD					R 27 050 000												
TOTAL CENTRAL KAROO DITP BUDGET PER ANNUM					R 91 177 519	R 171 206 000	R 281 408 400	R 172 400 000	R 132 695 000								

# ANNEXURE 2

## Annexures 2: Public Participation Advert



Wes-Kaapse  
Regering

BETER TESAME.

## BELANGRIKE KENNISGEWING

### SENTRALE KAROO-DISTRIKSMUNISIPALITEIT

Jy kan by die Openbare Deelname-vergadering wat in jou area aangebied gaan word jou insette lewer oor die Sentrale Karoo-distrik se Geïntegreerde Vervoerplan (GVP) met betrekking tot die Vervoerbehoefte in die Sentrale Karoo.

Die Openbare Deelname sal deel vorm van die Geïntegreerde Vervoerplan (GVP), wat ingevolge die Wet op Nasionale Landvervoer (WNLV) afdeling 36 'n statutêre vereiste is.

Wat is die GVP? Dit is 'n vyfjaar- munisipale vervoerplan om projekte en programme te identifiseer wat die behoeftes van die gemeenskap aanspreek.

Sluit by ons aan en sê jou sê.

Die Openbare Deelname-vergaderings sal op die volgende datums plaasvind:

- 4 November 2014: Kwa-Mandlenkosi-gemeenskapsaal, Beaufort-Wes, 19:00-20:30
- 5 November 2014: Ouditoriumsaal (Vloedmuseum – Toerismekompleks), Laingsburg, 19:00-20:30
- 6 November 2014 : Sydwell Williams-gemeenskapsaal, Prins Albert, 19:00-20:30

Indien jy enige geskrewe insette en kommentaar wil lewer, kan jy dit voorlê met die titel "Sentrale Karoo GVP-insette", met die insluiting van jou naam, organisasie en kontakbesonderhede, en pos na:

**Mnr M Brown**  
**Departement van Vervoer en Openbare Werke**  
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**8000**  
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11806MA

# ANNEXURE 3

**Annexures 3: Municipal Construction Expenditure Report for the Western Cape Department of Transport and Public Works**

Project	Description	Deliverables	Temporary, Local Jobs Created(Actual values are underlined)			State	Start Date	End Date	'2015/16	'2016/17	'2017/18	'2018/19	'2019/20	Period total	Project total
			Total	Women	Youth										
Beaufort West															
C0837.01: Regravel DR2254, DR2304 and MR582	The regravell of DR2254, DR2304 and MR582 in the Beaufort West region.	Regravel Road, Gravel 77.8 km	19	5	7	Design	26/10/2017	29/07/2019	-	-	3 426	19 279	12 020	34 725	35 550
C0982.01: Reseal TR16/10 between Murraysburg & the EC Border & Rehab TR16/8 between the N1 & NC Border	Reseal of TR16/10 between Murraysburg and the Eastern Cape Border and Rehab of TR16/8 between the N1 (Skietkuil) and Northern Cape Border.	Rehabilitate Road, Surfaced 4.64 km	70	25	25	Tender	12/02/2015	12/05/2016	51 064	19 261	1 675	-	-	72 000	72 000
		Reseal Road, Surfaced 10.08 km													
CKDM/2012/IMMS 4096 - Regravelling on DR2308 (0 - 30.5)km	Regravel on DR2308 (0 - 30.5)km	Regravel Road, Gravel 30.5 km	49	17	12	Approved	01/07/2015	29/02/2016	9 760	-	-	-	-	9 760	9 760
CKDM/2012/IMMS 4097 - Regravelling on DR2308 (33.5 - 37)km	Regravel on DR2308 (33.5 - 37)km	Regravel Road, Gravel 3.5 km	18	5	5	Approved	01/03/2016	28/03/2016	-	1 120	-	-	-	1 120	1 120
CKDM/2012/IMMS 4098 - Regravelling on DR2308 (41.8 - 48.62)km	Regravel on DR2308 (41.8 - 48.62)km	Regravel Road, Gravel 6.82 km	14	5	4	Approved	29/03/2016	13/06/2016	-	2 182	-	-	-	2 182	2 182
Laingsburg															
C1042: Reseal of TR20/01 from km 0.00 - 42.70	Reseal of TR02001 from km 0.00 - 42.70 between Matjiesfontein and Northern Cape Boundary	Reseal Road, Surfaced 42.7 km	57	20	20	Design	15/09/2016	18/05/2017	-	26 849	32 536	1 421	-	60 806	60 806
C1051.01: Flood Damage Repairs in Laingsburg Area	Flood damage repairs in the Laingsburg area between Matjiesfontein and Leeu Gamka		0	0	0	Envisaged	08/10/2015	11/10/2016	3 879	14 081	393	-	-	18 353	18 353
Prince Albert															
CKDM/2012/IMMS 4089 - Regravelling on DR1721 (0 - 19.61)km	Regravel on DR1721 (0 - 13)km	Regravel Road, Gravel 19.61 km	25	9	6	Under construction	10/11/2014	30/06/2015	5 058	-	-	-	-	5 058	6 500
CKDM/2012/IMMS 4105 - Installation of Stormwater Structures on MR582	Installation of pipe and portal culverts including hydraulic structures on MR582	New Culvert 1	107	3	49	Completed	02/07/2012	21/11/2014	-	-	-	-	-	-	8 000
CKDM/2012/IMMS 4106 - Upgrade on MR582	Construction of fill and sub-base road layers as part of upgrade on MR582. Close to Merweville (N1)	Upgrade Road, Gravel 12.3 km	60	1	44	Under construction	22/10/2012	20/02/2015	-	-	-	-	-	-	39 703
			419	90	172	TOTAL for Central Karoo District			69 761	63 493	38 030	20 700	12 020	204 004	253 974

# ANNEXURE 4

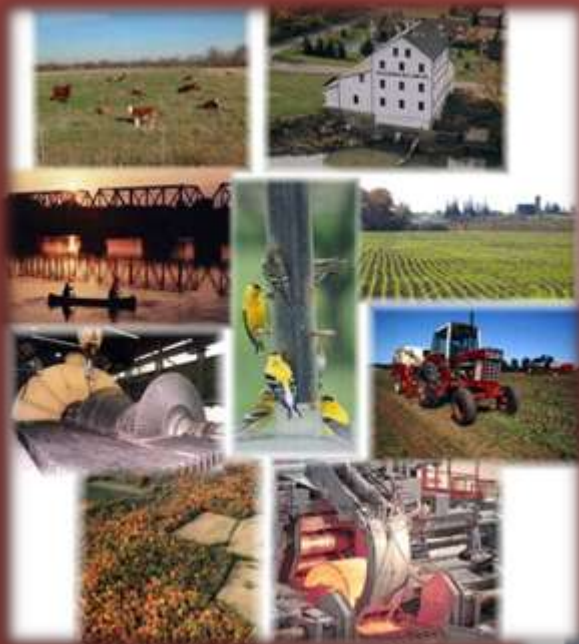
**Annexures 4: Central Karoo District Municipality Road Projects Summary – Proposed Capital Expenditure for 2015/16 to 2017/18**



Project	Rands ('000)					
	2015/16		2016/17		2017/18	
	Length (km)	Budget	Length (km)	Budget	Length (km)	Budget
<b>REGRAVEL</b>						
4089 – DR1721 (km 0.00-19.61)	16.00	5,120				
4096 – DR2308 (km 0.00-30.50)	30.00	9,600				
4098 – DR2308 (km 41.80-48.62)			6.82	2,340		
MR582 (0.00-38.90)			35.00	12,030	3.90	1,443
MR374 (km 59.90-76.14)					16.24	6,008
MR318 (km 0.00-20.01)					20.01	7,404
TR5801 (km 38.20-47.50)					9.30	3,441
<b>Sub-Total</b>	<b>46.00</b>	<b>14,720</b>	<b>41.82</b>	<b>14,370</b>	<b>49.45</b>	<b>18,297</b>
<b>SHORT-SECTIONS REGRAVEL</b>						
MR369 (km 23.30-39.10)	5.00	3,280				
MR587 (km 77.00-90.27)			6.00	1,050	7.27	1,553
<b>Sub-Total</b>	<b>5.00</b>	<b>3,280</b>	<b>6.00</b>	<b>1,050</b>	<b>7.27</b>	<b>1,553</b>
<b>TOTAL CAPITAL EXPENDITURE</b>	<b>51.00</b>	<b>18,000</b>	<b>47.82</b>	<b>15,420</b>	<b>56.72</b>	<b>19,850</b>

# ANNEXURE J

# Khulis'umnotho Central Karoo District LED



Prepared By:  
Urban-Econ



**URBAN-ECON**  
Development Economists

Prepared For:  
Department of Trade &  
Industry



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## ***ACRONYMS***

BFW-	Beaufort West
BPO-	Business Process Outsourcing
BRAIN-	Business Referral and Information Network
CKDM-	Central Karoo District Municipality
CKEDA-	Central Karoo Economic Development Agency
CSIR-	Council for Scientific and Industrial Research
DBSA-	Development Bank of Southern Africa
DEAT-	Department of Economic Affairs and Tourism
DFI-	Development Finance Institution
DTI-	Department of Trade and Industry
ETDP-	Education Training and Development Practices
GDS-	Growth and Development Strategy
IDC-	Industrial Development Corporation
IDP-	Integrated Development Plan
IDT-	Independent Development Trust
IPAP-	Industrial Policy Action Plan
ISRDP-	Integrated Sustainable Rural Development Programme
JIPSA-	Joint Initiative on Priority Skills Acquisition
LED-	Local Economic Development
LERP-	Local Economic Regeneration Programme
LM-	Local Municipality
NGO-	Non Governmental Organisation
MERSETA- Authority	Manufacturing, Engineering and Related Services Sector Education and Training
MIG-	Municipal Infrastructure Grant
NAFCOC-	The National African Federated Chamber of Commerce
NAMAC-	National Alliance for Media Arts and Culture
PPP-	Public Private Partnership
REAF-	Rural Economic Assistance Fund
SABS-	South African Bureau of Standards
SEDA-	Small Enterprise Development Agency
SMEDP-	Small and Medium Enterprise Development Programme



SMME-	Small Medium and Macro Enterprises
TETA-	Transport Education and Training Authority
THETA-	Tourism, Hospitality, Sport education and Training Authority
URP-	Urban Renewal Programme
VfWSEP	Vision for Water and Sanitation Education Programme





## ***TABLES***

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## ***EXECUTIVE SUMMARY***

The CKDM has an LED Strategy Framework. This strategy is very outdated (2005) and very incomplete. The Strategy does not provide socio-economic profile of the area or any key LED objectives. The LED merely states certain identified initiatives. In view of the requirements for local government to have a credible LED strategy in place, the current Local Economic Development Strategy has to be reviewed to reflect the most recent local and regional development dynamics and appropriately packaged as an LED Strategy. This document serves to replace the existing LED Strategy Framework as well as the LED component of the IDP.

This project was conceptualised by DTI in order to assist the CKDM to develop a credible Local Economic Development Strategy which integrate seamlessly with their IDP.

Urban-Econ, a firm of development economists has been appointed by the Department of Trade and Industry in order to assist the Central Karoo District Municipality to develop a credible Local Economic Development Strategy which integrates seamlessly with their IDP. The LED's credibility will be determined by the following aspects:

- ✓ Economic profile/state of the economy of the district municipality/metro
- ✓ An LED vision and objectives
- ✓ An LED Strategy
- ✓ A List of bankable projects (these should have project proposals with objectives, beneficiaries, role-players and their roles, institutional imperatives, funding and the duration)
- ✓ Implementation/action plan (Inclusive of Capacity Building Strategy)
- ✓ Monitoring and evaluation model

The purpose of an LED strategy is to identify measures that could create economic development and economic growth in the region and for Urban Econ to provide technical assistance and support to the Central Karoo District Municipality, whilst also capacitating them along the way.

### **1. Policy Framework**

In establishing an appropriate Local Economic Development (LED) framework for the Central Karoo District Municipality, it is essential to make reference to relevant policies at a local, provincial and national level. By reviewing the relevant policies, one can contextualize the environment in which the LED framework will exist and more importantly, provide guidelines and targets that will direct the LED framework in an appropriate manner. This will also ensure that the LED policy which is developed aligns with National and Provincial Policy and Local initiatives. For each policy mentioned, a brief description is provided, followed by the direct implications for the Central District Municipal area. This policy analysis will be completed for national, provincial and district policies and legislation. More specifically the following policies are reviewed:

#### **National level:**

- The Constitution
- The White Paper on Local Government
- Accelerated and Shared Growth Initiative for South Africa (AsgiSA)
- National Spatial Development Perspective (NSDP)
- The Tourism Growth Strategy
- The Municipal Systems and Municipal Structures Act
- Local Government: Municipal Finance Management Act (no.56 of 2003)
- Joint Initiative on Priority Skills Acquisition (JIPSA)
- The Broad-Based Black Economic Empowerment Act
- The National Local Economic Development Framework
- Integrated Sustainable Rural Development Strategy
- Regional Industrial Development Strategy (RIDS)



- National Strategy for the Development and Promotion of Small Businesses in South Africa

### **Provincial Level:**

- Western Cape Province Growth and Development Strategy: iKapa Elihlumayo
- Western Cape Micro-Economic Development Strategy
- Western Cape Spatial Development Framework
- Western Cape Strategic Infrastructure Plan
- Human Development Strategy for the Western Cape

### **District Level:**

- Central Karoo Integrated Sustainable Rural Development Strategy, 2003
- Central Karoo Growth and Development Strategy
- Central Karoo Integrated Development Plan, 2007 – 2011
- Central Karoo Local Economic Development Strategy
- Central Karoo District Nodal Vision, 2010
- Central Karoo SDF
- Central Karoo Economic Generation Study- Strategic Framework, 2003
- Strategic Framework for Sustainable Tourism Development in the CKDM, 2003
- Growth potential of Towns in the WC, 2004

## **2. Socio Economic Analysis**

This section will describe the economic status quo of the economy of the Central Karoo District Municipality. This creates an opportunity to examine the economy and the different economic sectors, which in turn identifies the sectors of the economy that have the largest contribution to the national economy.

Certain sectors show more potential for economic growth and development, which then create opportunities where further investment can contribute to an improvement. Sectors that show low contributions are also indicated which can help identify opportunities in order to develop those sectors. Ultimately, the aim is to create an economy that is more diversified and does not only depend on selected sectors for economic growth but on various sectors. This will then sustain the economy in times of low economic growth in some sectors while other sectors might help stabilise the economy.

The outcomes of the section include:

- Definition of the Area
- Economic Profile
- Demography & Population Flows
- Households and Housing
- Education & Skills
- Transport
- Socio-Economic Implications
- Core Problems and Causes
- Environment
- Tourism Challenges

The following are the **main findings within the socio- economic analysis:**

1. The CKDM consist of high unemployment
2. Households are characterised by a low income base
3. A High illiteracy rate exists
4. Lack of tertiary facilities
5. Large dependency on Social Grants
6. The population is concentrated around N1
7. Beaufort West is the connecting point for the N12 and N1



8. Distance between main markets is a major constraints to small business
9. There is a lack of a Public transport system
10. Large percentage of roads are still gravel
11. Large portion of population are below poverty line
12. Large portion of household have no income
13. 46.5% of household fully own their dwellings
14. Household owning their dwelling are more stable
15. There is a high Housing Backlog?
16. Growing Population (1%)
  - i. Planning for services
17. Largest Local Municipality is Beaufort West
18. The smallest LM is Laingsburg
19. Rural population is 20.1% ;Urban population is 79.9%
20. Young Population & Large portion EA Population
  - a. Job Opportunities
  - b. Tertiary Education Facilities
21. Positive Economic Growth
22. Limited Economic Opportunities
23. Sectoral Contribution reflects Economy that is fairly well diversified, but still dependant on agricultural activities (sheep, Fruit, dairy products, etc.)
24. Broadening economic base is important
25. Prins Albert and Laingsburg have highest unemployment rates

### 3. Opportunity Analysis and project Identification

The purpose of this section is to provide an assessment of all the relevant economic activities and development opportunities within the main economic sectors contributing to the growth of the CKDM.

The criteria used against which to measure potential include the following:

- Availability of raw materials/resources
- Economic linkages
- Market trends
- Gap analysis/Agglomeration advantages
- Logistics/Nodal point function
- Regional service delivery function
- Availability of labour
- Technology change
- Enabling policy environment

The following opportunities were identified

Agricultural Sector:	Manufacturing Sector:
<ol style="list-style-type: none"> <li>1. Labour Intensive agricultural projects</li> <li>2. Specialized Horticulture</li> <li>3. Soya Beans</li> <li>4. Warehouse and Milling Operation</li> <li>5. Structured Agricultural Training</li> <li>6. Incorporate farm workers in value-adding processes</li> <li>7. Organically produced seed</li> <li>8. Community Seed production project</li> <li>9. Agro-processing industries/activities</li> <li>10. Agro-based tourism</li> <li>11. Organic Agriculture</li> <li>12. Agriculture Waste Management Systems</li> </ol>	<ol style="list-style-type: none"> <li>1. Industrial Cluster Development</li> <li>2. Industrial Park Development</li> <li>3. Manufacturing opportunities in niche markets</li> <li>4. Manufacturing activities using local produce as inputs</li> <li>5. Supportive and service industries linked to the Agriculture sector</li> <li>6. Community Development Projects</li> <li>7. Promotion of manufacturing activities in accordance with national initiatives</li> </ol>



<b>Retail &amp; Trade Sector:</b> <ol style="list-style-type: none"> <li>1. Gaps in regional retail hierarchy</li> <li>2. Manufacturing and agriculture supplies and services</li> <li>3. Fresh Produce Market</li> <li>4. Multi Purpose Retail facility Agricultural supplies and services</li> <li>5. Vendors at shopping malls</li> <li>6. SMME opportunities</li> <li>7. Wholesalers</li> </ol>	<b>Transport Sector:</b> <ol style="list-style-type: none"> <li>1. Transportation corridor development with surrounding areas and economies of importance</li> <li>2. Transportation for rail commuters</li> <li>3. Upgrade current infrastructure (Roads, Taxi Ranks, Pedestrian</li> <li>4. Introducing new communication technology, i.e. logistics, ICT, networking platforms, call centres, Logistics/Distribution Centre</li> <li>5. subsidised mass public transport system</li> </ol>
<b>Finance and Business Sector:</b> <ol style="list-style-type: none"> <li>1. Capital Funding for Government Programmes</li> <li>2. Awareness Programmes</li> <li>3. Financial Packages</li> <li>4. Business Incentives</li> <li>5. Business/office Park Development</li> </ol>	<b>Tourism:</b> <ul style="list-style-type: none"> <li>• Development and improvement of existing tourist attractions</li> <li>• Development of specific tourist routes</li> <li>• Tourism database (attractions, accommodation, operators)</li> <li>• Tourism forum</li> <li>• Provision of training and bursaries in tourism/hospitality training</li> <li>• Improvement of signage</li> <li>• Provision of on-the-job training opportunities</li> <li>• African Cuisine Restaurant (Organic) And Retail Outlet (Multipurpose Centre)</li> <li>• Conferencing</li> <li>• Tourist Guides</li> <li>• Fun Train Project</li> <li>• Karoo Astronomy Tourism</li> <li>• Heritage and Museum Tourism</li> <li>• Nightlife and Entertainment</li> <li>• Casino</li> <li>• Private Hospital (Medical Tourism)</li> </ul>

The following are the **main findings within the opportunity analysis:**

- The Gross Geographic Product (GGP) growth rate of CKRDM is 5.4%, for 1995 – 2008.
- The Fastest growing sectors is **Finance and business services** (11.4%), **Manufacturing** (9.1%) and **Construction** (9%).
- The sectors that contribute the most to the GGP of the Central Karoo are Finance, Transport, Trade and Services.
- The sectors that contribute the most to employment are Services (30.1%) and Agriculture (22.6%).
- The agricultural sector is characterised by low productivity relative to its importance in employment. Agricultural productivity and value-added by the activities in agriculture need to be addressed in the LED Strategy.
- The main weakness of the CKDM economy is that it currently does not add value to their primary products. There are weak linkages between the sectors as Manufacturing, transport, trade and tourism could work to serve the primary sector, agriculture.
- The manufacturing sector is the most important sector in terms of production, but not in employment. In addition, while the contribution of manufacturing to production has increased, its contribution to employment has decreased over the same period.



- h. The finance, business services and trade sectors showed strong growth in the CKDM, in terms of both production and employment, while employment growth in the transport sector has been slow.
- i. The services sector is a large source of employment, but a small contributor to production. The LED Strategy must address productivity concerns in this sector.

#### 4. Development Opportunities

The following **development opportunities and constraints** were identified within the Central Karoo:

- a. The agriculture transport and trade are the sectors in the Central Karoo with a comparative advantage, with the Manufacturing sector demonstrating a low comparative advantage
- b. Within the agricultural sector, the main constraints to development are lack of arable land, water constraints, high input costs, low productivity and lack of access to financial support.
- c. Opportunities identified within the agricultural sector include the development of agricultural value chains, such as meats and horticulture, as well as a focus on niche and export markets.
- d. Important opportunities within this sector involves the strengthening of backward and forward linkages, a focus on value-adding activities, as well as training and R&D (research and development).
- e. The manufacturing sector is constrained a lack of investment in industrial activities, lack of forward and backward linkages and a shortage of labour with the necessary skills.
- f. Development opportunities within the manufacturing sector include agro-processing, textile and clothing value chain and the investigation of waste recycling as an economic opportunity.
- g. The Transport and Communications sector has a particularly important role to play in terms of creating an enabling environment for economic development. The improvement and expansion of transport linkages and communication technology will improve the accessibility of the Central Karoo.
- h. In terms of services, many communities are still in need of higher order social amenities and the Municipality can play an important role in this regard. A shortage of especially tertiary education facilities within the Central Karoo has been highlighted as a particular constraint.
- i. In the tourism sector, the improvement of transport linkages, infrastructure, tourism facilities, information and tourist services, as well as the development and implementation of a strong tourism marketing strategy for the area, are the main factors to be addressed.

Taking the development opportunity analysis into account, the following strategic thrusts were proposed:

- Thrust 1: Expansion of the Agricultural Sector
- Thrust 2: Industrial and Beneficiation Development
- Thrust 3: Waste Recycling/Processing
- Thrust 4: SMME Development and Command Centre
- Thrust 5: Human Resource Development
- Thrust 6: Transport Development
- Thrust 7: Tourism Development

The thrusts aim at utilising existing economic strengths and opportunities by transferring these into workable programmes and projects.

#### 5. Implementation Manual

Implementation guidelines are developed to serve as guide for implementation of CKDM LED project. This includes what the public sector can do in order to bring about a favourable environment for economic growth. Various support structures that are necessary for the implementation of LED projects are explored. General guidelines for project implementation are given with variations for Central Karoo District projects by way of a projects matrix.



### 6. Strategic Alignment and institutional Framework

Following the implementation guidelines of LED programmes and projects, a strategic framework was developed. This covers the institutional arrangements that are required to support LED initiatives in the CKDM. This includes a recommended institutional framework provide practical recommendations to attract investors, marketing guidelines, a proposed phased implementation plan and a monitoring and evaluation framework.





## ***SECTION 1: INTRODUCTION***

### **1.1 Introduction**

Urban-Econ has been appointed by the Department of Trade and Industry in order to assist the Central Karoo District Municipality to develop a credible Local Economic Development Strategy which integrates seamlessly with their IDP. The LED's credibility will be determined by the following aspects:

- ✓ Economic profile/state of the economy of the district municipality/metro
- ✓ An LED vision and objectives
- ✓ An LED Strategy
- ✓ A List of bankable projects (these should have project proposals with objectives, beneficiaries, role-players and their roles, institutional imperatives, funding and the duration)
- ✓ Implementation/action plan (Inclusive of Capacity Building Strategy)
- ✓ Monitoring and evaluation model

The purpose of an LED strategy is to identify measures that could create economic development and economic growth in the region and for Urban Econ to provide technical assistance and support to the Central Karoo District Municipality, whilst also capacitating them along the way.

### **1.2 Purpose of the study**

The purpose of this study is to develop a credible LED strategy that investigates economic development opportunities in the CKDM.

The study will focus on the review of the existing LED strategy and formulation of an inclusive new credible LED strategy to ensure the effective and continued implementation of economic development strategies, programmes and bankable projects. The key issues that need to be addressed include the eradication of poverty through sustainable job creation, skills training and enhancement, economic development as well as diversification of the economic base for effective investment.

### **1.3 Location of the Study Area**

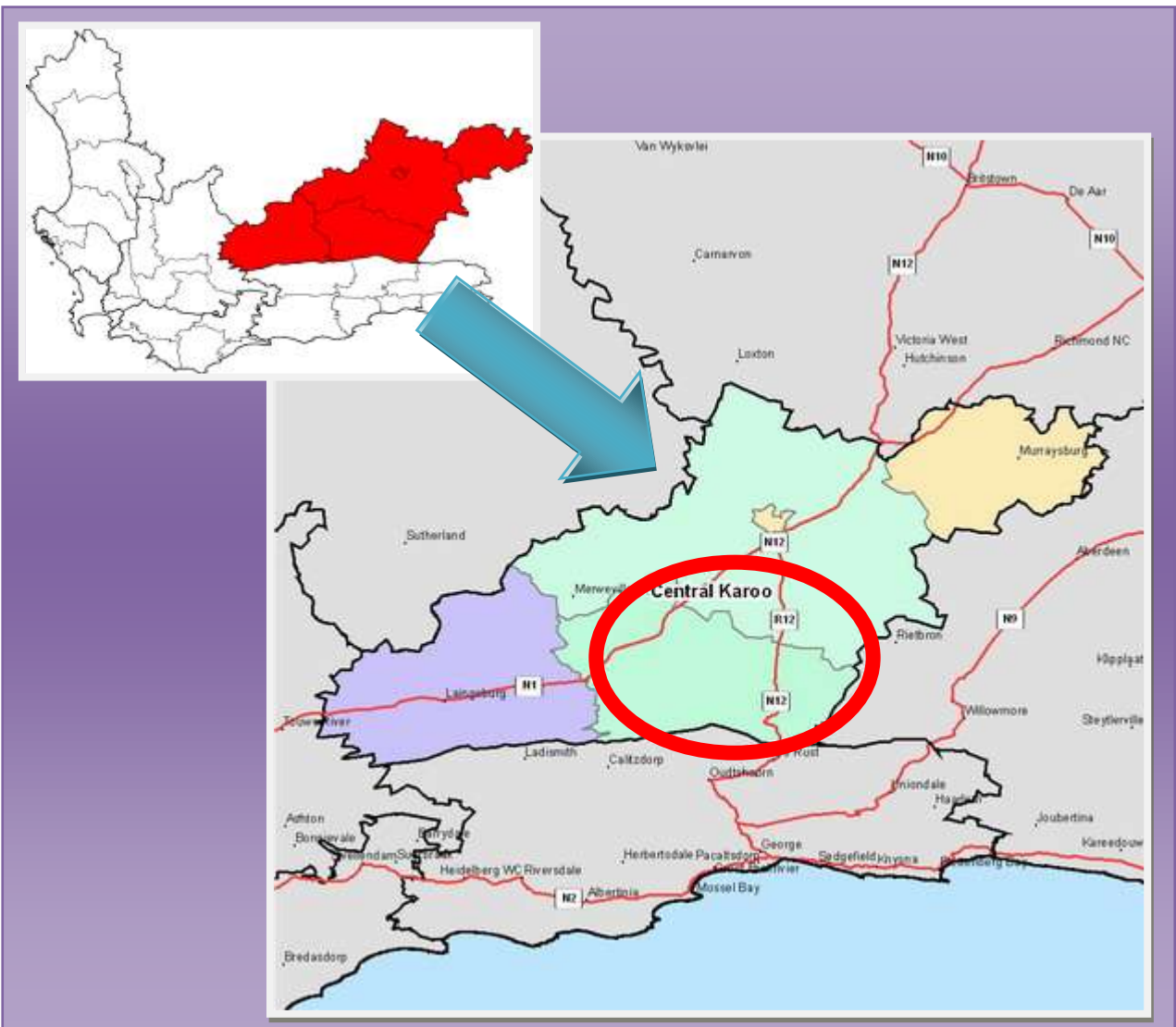
The Central Karoo District will be the study area and the initiatives and capacity building will be focused on the needs and challenges experienced in the CKDM regarding LED.

The Central Karoo District Municipality is a category C municipality situated in the northeast of the Western Cape Province. It is extremely sparsely populated and much of the area is desert. The district municipality incorporates four municipal areas - Beaufort West, Laingsburg, and Prince Albert and is the district Management area (DMA), which includes the town of Murraysburg. The Central Karoo has a surface area of 38 853km<sup>2</sup>. **Map 1.1** shows the location of the CKDM.





**MAP 1.1: CENTRAL KAROO DISTRICT**



(Source: ISDP CKDM, 2003)

Central Karoo is about 450 km North West of Cape Town and about 1200 km South West of Johannesburg along the N1 road. The district borders the Eastern Cape to the East and the Northern Cape to the North.

### 1.4 Concept of LED

LED is a process that requires participation from various stakeholders. It encourages the private, public and civil society sectors to work together in order to create an enabling environment for economic development. Participation between these stakeholders further creates common vision and goals to overcome economic challenges and utilise opportunities for economic development of the region.

Participation in LED is not subject to the Municipality alone. It includes the entire region and all the stakeholders namely the community, businesses and NGO's residing in it. The Municipality as the elected entity has the role to facilitate the economic growth and development within a region and therefore act as driver for Local economic development. The community, businesses and the NGO's are all part of the region and therefore are stakeholders in the LED process.



### 1.5 Report Outline

The remainder of the report includes the following sections:

<b>Section 2:</b>	Policy Framework	This chapter provides an overview of the national, provincial, district and local municipal planning initiatives that provide the framework in which the LED Strategy will be developed.
<b>Section 3 :</b>	CKDM Profile & Economic Scan	The CKDM profile provides a demographic & economic overview of the Central Karoo District Municipality and assesses indicators such as population growth, education, income, and GGP
<b>Section 4 :</b>	Opportunity Analysis and Product Identification	The potential analysis incorporates a SWOT and local sectoral potential analysis which assists in creating an understanding with regard to the sectoral competitive advantages of the local economy and is used to determine the development potential within the CKDM. These opportunities are identified under projects and programmes.
<b>Section 5:</b>	Implementation Manual	The guidelines for implementation of the strategy are detailed in this section. The section includes an implementation plan, proposed institutional arrangements to execute the implementation plan and potential sources of funding for the implementation of the strategy.
<b>Section 6:</b>	Strategic Alignment and Institutional Arrangements	This final section provide an overview of the institutional structure and operation as well as formulate the strategic framework that will guide economic development within the CKDM



## ***SECTION 2: POLICY FRAMEWORK***

### **2.1 Introduction**

In establishing an appropriate Local Economic Development (LED) framework for the Central Karoo District Municipality, it is essential to make reference to relevant policies at local, provincial and national level. By reviewing the relevant policies, one can contextualize the environment in which the LED framework will exist and more importantly, provide guidelines and targets that will direct the LED framework in an appropriate manner. This will also ensure that the LED policy which is developed aligns with National and Provincial Policy and Local initiatives. For each policy mentioned, a brief description is provided, followed by the direct implications for the Central District Municipal area. This policy analysis will be completed for national, provincial and district policies and legislation. More specifically the following policies will be reviewed:

#### **National level:**

- The Constitution
- The White Paper on Local Government
- Accelerated and Shared Growth Initiative for South Africa (AsgiSA)
- National Spatial Development Perspective (NSDP)
- The Tourism Growth Strategy
- The Municipal Systems and Municipal Structures Act
- Local Government: Municipal Finance Management Act (no.56 of 2003)
- Joint Initiative on Priority Skills Acquisition (JIPSA)
- The Broad-Based Black Economic Empowerment Act
- The National Local Economic Development Framework
- Integrated Sustainable Rural Development Strategy
- Regional Industrial Development Strategy (RIDS)
- National Strategy for the Development and Promotion of Small Businesses in South Africa

#### **Provincial Level:**

- Western Cape Province Growth and Development Strategy: iKapa Elihlumayo
- Western Cape Micro-Economic Development Strategy
- Western Cape Spatial Development Framework
- Western Cape Strategic Infrastructure Plan
- Human Development Strategy for the Western Cape

#### **District Level:**

- Central Karoo Integrated Sustainable Rural Development Strategy, 2003
- Central Karoo Growth and Development Strategy
- Central Karoo Integrated Development Plan, 2007 – 2011
- Central Karoo Local Economic Development Strategy
- Central Karoo District Nodal Vision, 2010
- Central Karoo SDF
- Central Karoo Economic Generation Study- Strategic Framework, 2003
- Strategic Framework for Sustainable Tourism Development in the CKDM, 2003
- Growth potential of Towns in the WC, 2004

### **2.2 Policy Review**

The following sub-section will provide concise overviews of the national, provincial and district policy environment regarding LED in South Africa. The various legislature as well as policies will relate to the specific



objectives and outcomes as well as to how this will have an impact on LED in Central Karoo District Municipal area. **Table 2.1** provides a brief description and implication of each of the policies mentioned in **Section 2.1**




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## KHULIS'UMNOTHO – LOCAL ECONOMIC DEVELOPMENT

TABLE 2.1: CKDM LED POLICY ENVIRONMENT

### NATIONAL LEVEL

POLICY/LEGISLATION	DESCRIPTION	IMPLICATIONS
 <p>The Constitution</p>	<p>The overarching piece of legislation is the <b>Constitution of the Republic of South Africa (Act 108 of 1996)</b>. Section 152 of the Constitution outlines the objectives of local government. These objectives are:</p> <ul style="list-style-type: none"> <li>• to provide democratic and accountable government for local communities;</li> <li>• to ensure the provision of services to communities in a sustainable manner;</li> <li>• to promote social and economic development;</li> <li>• to promote a safe and healthy environment; and</li> <li>• to encourage the involvement of communities and community organisations in the matters of local government.</li> </ul>	<p>The Central Karoo District Municipality (CKDM) is legally compelled to promote social and economic development in its area of jurisdiction. This development should be focussed on addressing the basic needs of the population, reflecting the importance of service and infrastructure provision, community services, educational components and business support to all the areas where there is a lack thereof or where improvements are required.</p>
<p><b>Accelerated &amp; Shared Growth Initiative for South Africa</b></p>	<p>ASGISA aims to guide the country's economy and to improve its growth, through interventions that are intended to serve as catalysts for accelerated and shared growth and development. Through ASGISA, government has set an economic growth target of 5% GDP growth per annum from 2004 to 2014. This target has been broken down into two phases, namely a target of 4.5% p.a. between 2004 and 2009 and 6% p.a. from 2010 to 2014. This growth must be managed in a way that generates employment opportunities (labour intensive growth) and ensures that the fruits of economic growth contribute to</p>	<p>The CKDM must make concerted effort to meet national growth targets set out by Asgisa. Thus, during policy-making, Asgisa objectives must at all times be considered in respect to local economic development initiatives and their contribution to the National Asgisa goals. This is especially relevant for LED projects that are in line with the ASGISA priority sectors.</p>

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POLICY/LEGISLATION	DESCRIPTION	IMPLICATIONS
	poverty alleviation in an equitable manner.	
<b>The White Paper on Local Government</b>	This policy identifies local government's responsibilities with regard to economic development. This includes promoting their respective localities, SMME's and providing skills training.	The White Paper has a direct impact on the development, policy formulation and human resource development projects of the district municipality. It emphasises the need and importance of local municipal support to business through training and development of support centres.
<b>Rural Industrial Development Strategy, 2006</b>	The RIDS calls on all regions to build their industrial economies based on local competitive advantages and opportunities. It aims to bridge the first-second economy gap in South Africa based on the spatial development principles of the NSDP. Such a strategy focuses fundamentally on addressing the key obstacles to the functioning of the economy, primarily through infrastructural interventions which will better enable all regions to access markets and resources.	Central Karoo District Municipality LED projects in the manufacturing sector should be implemented with cooperation and coordination of the provincial, district and local municipality LED departments and forums to save time and resources whilst growing the regional industrial economy. Support funds will be launched by the DTI that will support local industrial development projects, which will contribute thus to the industrial development of the Central Karoo District.
<b>National Spatial Development Framework</b>	In order to address the distortions of the past apartheid space economy, the National Spatial Development Programme (NSDP) was adopted in 2003. This perspective programme provides an indication of potential in different geographic spaces across the country and is used as an instrument that informs the respective development plans of the national, provincial and local government, which include Integrated Development Plans (IDPs), Provincial Growth and Development Strategies (PGDSs) and the Medium Term Strategic Framework (MTSF).	The NSDP provides a common reference point for National, Provincial & Local governments to analyse and debate the comparative development potentials of localities in SA. The Central Karoo District Municipality is thus responsible to adhere to the guideline provided in the NSDP.
<b>The Broad-Based Black Economic Empowerment Act</b>	To uproot inherited social imbalances, the Broad-Based Black Economic Empowerment Act of 2004 was passed. Here, systematic measures are in place to uplift the previously disadvantaged	The CKDM is responsible for addressing issues of transformation in the region. LED initiatives that empower the historically disadvantaged individuals (including minority communities such

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POLICY/LEGISLATION	DESCRIPTION	IMPLICATIONS
	community. Designated individuals include Africans, Coloureds, Indians, women, workers, the youth, disabled persons and those that live in rural communities.	as those of Asian origin and 'coloureds') should be priority.
<b>Integrated Sustainable Rural Development Strategy</b>	The purpose of the Integrated Sustainable Rural Development Strategy is to enhance the welfare of the poor that inhabit rural areas of South Africa. Municipalities are key players in the implementation of the ISRDS due to their decentralized nature and ability to physically interact with their respective rural communities.	The decentralized nature of the strategy implies that Central Karoo District Municipality is responsible for catalysing the transformation of local rural areas into economically viable communities. To facilitate positive change, an in depth understanding of local rural areas is required along with an excellent relationship with the local businesses. A local Tourism Strategy should be orientated in such a manner that it contributes to rural sustainable development in the CKD region. The LED initiatives for rural communities should grow the rural economy and train community members. There should be incentives to prevent loss of skilled and knowledgeable people from the rural areas.
<b>National Strategy for the Development &amp; Promotion of Small Businesses in South Africa</b>	This strategy aims to boost and transform the South African economy through promotion of small businesses. This will lead to increased employment opportunities and an environment that facilitates entrepreneurialism.	In promoting Local Economic Development, it is essential for the CKDM to promote the growth of its business sector. In order to do this, CKDM needs to facilitate an environment where SMME's can flourish. This can be done by increasing investment in infrastructure that encourages a competitive business environment, increased productivity, opportunities for employment and entrepreneurialism. Furthermore, a local Tourism Strategy can contribute to this environment by promoting tourist-related business opportunities for SMME's.
<b>Development Facilitation Act</b>	The Development Facilitation Act provides guidelines for reconstruction and development programmes that are directly related to land. For example, policy and legislation that centre on land	When developing sector strategies such as the LED Strategy, CKDM is required to adhere to the Development Facilitation Act. More specifically, objectives that have a direct impact on land

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POLICY/LEGISLATION	DESCRIPTION	IMPLICATIONS
	development are required to promote integration and sustainability of the land as well as supporting equal opportunities in both rural and urban areas.	development must be achieved in a manner that compliments the Development Facilitation Act
<b>National Environmental Friendly Management Act</b>	This act provides principles, institutions and procedures for co-operative and coordinated environmental governance. According to the Act, environmental governance must 'place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interest equitably'. Furthermore, development must be socially, environmentally and economically sustainable.	When identifying LED projects, CKDM Municipality is required to adhere to the National Environmental Management Act. More specifically, objectives that have a direct impact on the environment (i.e. bird-watching) must be achieved in a manner that compliments the Development Facilitation Act.
<b>The National Local Economic Development Framework</b>	In order to achieve consistency and uniformity in LED strategies, a national framework has been established in which specific outcomes over the 5 year period are defined.	CKDM is required to follow the guidelines set out by the national government when developing their LED framework.
<b>Joint Initiative on Priority Skills Acquisition (JIPSA)</b>	JIPSA is developed as part of ASGISA to facilitate the acquisition of skills prioritized by ASGISA and to engage with businesses to meet their Broad Based Black Economic Empowerment (BBBEE) obligations for skills development, as all empowerment Charters have an obligation for skills development that need to be realised. JIPSA will also look to organised labour to lead and demonstrate innovation in working together with government and business to enhance productivity and secure training for quality jobs.	CKDM is responsible to identify the scarce skills within the area and to consider long-term fundamentals for the skills needed in order to achieve sustained economic growth. This can be done by a regional skills audit and providing skills training where gaps exist.
<b>Tourism Growth Strategy</b>	The Tourism Growth Strategy provides a three year plan (2008-2010) to boost South Africa's competitiveness in the global tourism and travel market. Through increasing global competitiveness, the tourism industry aims to contribute significantly to Asgisa's growth target of 5%.	Tourism in the CKDM was identified by numerous development strategies e.g. LED strategy as an industry with significant development and growth potential. This suggests that a local tourism strategy is obligatory and will boost economic development at both the district and local level.

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POLICY/LEGISLATION	DESCRIPTION	IMPLICATIONS
The Municipal Structures and Municipal Systems Acts	The Municipal Structures Act of 1998 defines types and categories of municipalities, division of functions and powers within municipalities, and the regulation of internal systems. Alternatively, the Municipal Systems Act of 2000 provides municipalities with guidelines which <i>'enable municipalities to move progressively towards the social and economic upliftment of local communities'</i> so that basic services may be met.	The CKDM must operate in a manner such that it satisfies the conditions set out by the Municipal Structures Act. In addition, the Municipal Systems Act stipulates that the CKDM is legally bound to fulfil its duties and produce an IDP document to encourage development in its community.
The Municipal Finance Management Act	The object of the Municipal Finance Act (56 of 2003) is to secure sound and sustainable management of the fiscal and financial affairs of municipalities and municipal entities by establishing norms and standards and other requirements.	It is important that the CKDM adheres to financial procedures presented in the Act when engaging in financial matters relevant to any LED activities.
PROVINCIAL LEVEL		
POLICY/LEGISLATION	DESCRIPTION	IMPLICATION
Western Cape Province Growth & Development Strategy: iKapa Elilhlumayo	The iKapa Elilhlumayo aims to provide a <i>'home for all'</i> and to eliminate identified challenges in the Western Cape Province. A core purpose of this document is to provide provincial and local government with a guideline for formulating their respective IDP's so that provincial and local goals may be aligned.	It is necessary for the CKDM to work in conjunction with the Western Cape Provincial government to vertically align goals of local IDP's (and subsequently LED frameworks) with the iKapa Elilhlumayo. This creates ample opportunity and scope for inter- and intra-governmental integration, co-ordination and cooperation between spheres to focus resources on agreed upon priority areas.
Western Cape Micro-Economic Development Strategy	The MEDS consists of a comprehensive framework of cost-efficient interventions to boost the Western Cape's economy with the view that it may be sustainable in the future. This framework includes 18 tailor-made strategies for sectors identified as having high growth potential such as Exports, Tourism, Agriculture, ICT and Cultural	To boost regional economy, the CKDM should follow the guidelines provided by the MEDS. The MEDS will guide the Central Karoo District Municipality to harness their resources into meaningful co-operation and co-funding arrangements to achieve their goals in a focused and co-ordinated manner.

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POLICY/LEGISLATION	DESCRIPTION	IMPLICATIONS
	industries	
<b>Western Cape Provincial Spatial Development Framework</b>	This policy aims to address the biased nature of past public investment. Former infrastructure and development strategies have largely benefited a small proportion of the Western Cape population and subsequently it is necessary to pursue strategies that counteract these imbalances. Issues of particular regions within the Western Cape Province.	CKDM should take note of spatial challenges relevant to the Western Cape Provincial Government and engage in strategies that compliment, not counteract, efforts to eliminate them
<b>Western Cape Strategic Infrastructure Plan</b>	In order to achieve the 5% average growth rate set by AsgiSA, an efficient and reliable institutional and physical environment is necessary. The Western Cape Provincial government has responded to this need by developing the Strategic Infrastructure Plan. This document provides a full analysis of the Western Cape's infrastructure sectors.	The SIP directs the CKDM in investing in infrastructure that will enable a strong and sustainable local economy.
<b>Human Capital Development Strategy for the Western Cape</b>	Unemployment stems from lack of skills and general lack of opportunities for both the everyday worker and the aspiring entrepreneur. The HCDS aims to turnaround the current situation through nurturing and developing the educational system in the Western Cape.	CKDM is responsible for improving and updating the current education system in its region. It is particularly important for the municipality to provide quality education in the rural areas where lack of skills is prevalent.
DISTRICT LEVEL		
POLICY/LEGISLATION	DESCRIPTION	IMPLICATION
<b>Central Karoo Integrated Sustainable Rural Development Strategy, 2003</b>	The overall aim of the CK ISRDs is to ensure that the internal capacity required for integrated and sustainable development is reached by the year 2010. The key action areas identified by the ISRDP are as follows:	The CKDM should ensure that internal capacity be attained to transform the node into an economically viable, socially stable and harmonious functioning entity.

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POLICY/LEGISLATION	DESCRIPTION	IMPLICATIONS
	<ul style="list-style-type: none"> <li>Strengthen &amp; focus existing rural development programmes,</li> <li>Re-align national &amp; provincial budget through IDP's</li> <li>Match economic potential &amp; social needs in the basket of services</li> <li>Build local institutional capacity</li> <li>Mobilise communities to influence process &amp; outcomes; and mobilise stakeholders &amp; strategy partners</li> </ul>	
Central Karoo Growth and Development Strategy	<p>The Central Karoo GDS is the overarching development strategy for the CK aimed at promoting and revealing sustainable economic growth and development potential. The GDS is the long term mechanism promoting development and initiating growth potential within the CK.</p> <p>Growth and development targets for the CK include:</p> <ul style="list-style-type: none"> <li>Economic growth targets</li> <li>Social development targets</li> <li>Spatial development targets</li> <li>Strategic Infrastructure development targets</li> <li>Targets for sustainable development of municipal Institution</li> </ul>	<p>The Growth and Development strategy offers guidance to the CKDM with regard to developmental issues in the region. In order for the Central Karoo to achieve its vision of sustainable growth and development clear strategic interventions were recognised and transformed into development projects. The process forward is not envisaged to be plain sailing as the Central Karoo is faced with various unique and limiting regional challenges. These challenges have to be addressed in a proactive manner to ensure that they do not restrict growth and development in the Central Karoo.</p>
Central Karoo Integrated Development Plan, 2007 - 2011	<p>The IDP provides a vision and mission, objectives and detailed programmes and projects to be implemented in the District within a five year planning horizon. The CKD IDP seeks to integrate all physical, economic, environmental and social planning activities and programmes that will both promote and lead to the optimal utilisation of the CKDM limited resource base in order to address respective development challenges and potential. The IDP defines the various interventions to be made in order to achieve social, economic,</p>	<p>The CKDM IDP directs Local Economic Development as one of the most important and highest priorities within the region. Therefore, Economic development should be designated as the first strategic objective to be enforced by the district during the IDP's five year reign.</p>

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POLICY/LEGISLATION	DESCRIPTION	IMPLICATIONS
	institutional, infrastructure and municipal sustainability.	
Central Karoo Local Economic Development Strategy	<p>This strategy is to support pro-poor economic growth and job creation through an integrated approach. It will support six core areas:</p> <ul style="list-style-type: none"> <li>▪ New Business Creation</li> <li>▪ Improving Infrastructure</li> <li>▪ Attracting Inward investment</li> <li>▪ Strengthen the LED capacity</li> <li>▪ Encouraging Local procurement</li> <li>▪ Improving skills and knowledge</li> </ul>	<p>The CKDM should deem the development of the LED Strategy critical in response to the ever increasing social and economic pressures in the region.</p>
Central Karoo District Nodal Vision, 2010	<p>The Central Karoo District was declared a presidential Node for development in 2003. The CK Nodal Vision supports the perspective of ‘developmental government’ and aims to include all citizens in the realisation of the Nodal Vision 2010 – with specific focus on those less fortunate within the region. The sectors Highlighted by the Vision are Agriculture, Tourism, Trade and Transport. The Nodal Vision 2010 is underpinned by key strategic objectives, which are vital in the future growth and development trajectory of the region</p>	<p>In order for the CKDM to realise its expectations of economic development, strengthening and amplification of internal capacity as well as the appropriate and effective allocation of resource assistance is required from National and Government side.</p>
Central Karoo SDF	<p>The CKDM has early in 2007 embarked on the path on developing a Spatial Development Framework. It is envisaged that this framework will arrange, support and expand the inherent development potential found within the Central Karoo borders, in a sustainable way by means of integrated management, which will ensure the economic advancement of the area to the benefit of the people</p>	<p>All policy and strategy documents produced by the CKDM should reflect similar goals and priorities. It is therefore crucial for the Spatial Development Framework to be taken into account at all times when considering other policies and/or strategies for the region. In particular, when formulating the LED document, the CKDM should take into consideration the way in which the region is to be spatially developed. Goals of the LED must contribute to objectives of the SDF and allow for the integration of existing land uses.</p>
Central Karoo Economic	<p>The CK ERS forms part of the Central Karoo’s LED strategy aimed at</p>	<p>The CK ERS provides the CKDM with a strategic framework that is</p>

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POLICY/LEGISLATION	DESCRIPTION	IMPLICATIONS
Generation Study- Strategic Framework, 2003	providing local authorities with the means to identify economic development potential and opportunities as well as viable programmes and projects for implementation.	designed to guide and stimulate economic development. Local authorities should implement a structured plan of action for economic development in the region.
Strategic Framework for Sustainable Tourism Development in the CKDM, 2003	The purpose of the framework is to orchestrate an organised, relevant and integrated approach towards tourism development. The framework provides a rough idea of what a strategy should encompass in order to facilitate effective community based tourism and align these efforts with existing and future tourism plans and programmes	The CKDM should use the framework to guide and stimulate activities required to effectively and sustainably develop the CKDM's tourism industry.
Growth potential of Towns in the WC, 2004	The WC DEAT and development planning are responsible for determining the potential and challenges facing the province and the respective regions. The overarching objective of the study was to provide an overview of the current situation in which small, rural towns in the WC are finding themselves and to demonstrate the importance of the urban centre's contribution towards sustainable, structural, socio economic and economic growth.	CKDM towns with identified with low development potential requires various types of investment structures/types i.e. infrastructural investment, Social (people) investment. This investment structures can be addressed through LED.

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## SECTION 3: SOCIO- ECONOMIC ANALYSIS

### 3.1 Introduction

This section will describe the economic status quo of the economy of the Central Karoo District Municipality. This creates an opportunity to examine the economy and the different economic sectors, which in turn identifies the sectors of the economy that have the largest contribution to the national economy.

Certain sectors show more potential for economic growth and development, which then create opportunities where further investment can contribute to an improvement. Sectors that show low contributions are also indicated which can help identify opportunities in order to develop those sectors. Ultimately, the aim is to create an economy that is more diversified and does not only depend on selected sectors for economic growth but on various sectors. This will then sustain the economy in times of low economic growth in some sectors while other sectors might help stabilise the economy.

### 3.2 Defining the Area: Central Karoo District Municipality

Map 3.1 shows the location of the CKDM.

MAP 3.1: CKDM AREA





(Source: Municipal Demarcation Board, 2008)

The district municipality (DC5) is located in the northern part of the **Western Cape Province**. It is extremely sparsely populated and much of the area is desert. It consists of 3 Local Municipalities and the CK DM which includes Murray's Burg. The geographical area of the province is **38853** square kilometres. Central Karoo is about 400 km North West of Cape Town and about 1200 km South West of Johannesburg along the N1 road. The district borders the Eastern Cape to the East and the Northern Cape to the North.



Central Karoo is the largest district in the Western Cape Province; invariably this means that distances between settlements within the district are vast. Laingsburg is about 200 km from Beaufort West, while Prince Albert is 170 km.

The Central District Municipality is classified as a 'Category C' municipality. The District includes the following Category B municipalities:

Municipalities	
	<ul style="list-style-type: none"> <li> <b>Laingsburg LM:</b> Laingsburg is approximately 200 km from Cape Town on the N1 highway that passes through the town. It has a surface area of <b>8 785km<sup>2</sup></b> and a total population of <b>8 154</b> people in 2007. The population density is 0.9 persons per km<sup>2</sup>. Apparently it is the smallest population in the province and is also the smallest in the whole of South Africa. Laingsburg Municipality is characterised by rural agriculture that consist of mainly extensive small stock grazing (Dorper and Dohne Merino sheep). This municipality gets only 50mm of rainfall per year. Small amounts of wool are produced in Laingsburg municipality. The municipality produce 80 000 sheep carcasses per year, though there are only two abattoirs in the area. The region is also known for the production of apricots, dried yellow peaches, pears, plums, quinces and tomatoes. In 2007 the economy was concentrated in mainly three sectors, namely wholesale and retail trade (23%), transport and communication (21.0%) and agriculture, forestry and fishing (20.8%). Laingsburg contributed 8.6% of the District's R871.5million in 2007. Growth between 1995 and 2007 was strong at an annual average rate of 5.0%. Transport and communication, construction and agriculture, forestry and fishing sectors grew strongest over the period 1995 and 2007 with an average at 10.2%, 11.1% and 6.5% respectively. </li> </ul>
	<ul style="list-style-type: none"> <li> <b>Prince Albert</b> is approximately 400km north of Cape Town and about 170km south of Beaufort West on the N1. The Local Municipality covers the towns of Leeu Gamka, Klaarstroom and Prince Albert. It has the second largest population in the CKDM, with 10 156 people or 16.8% of the District's population in 2007. Prince Albert is known for its architecture and agriculture and is also a tourist centre. The chief farming activities in this area are deciduous fruit for the export market, olives vineyards, vegetable seed production, lucerne and ostrich. The average rainfall for the area is about 41mm per year. Farming is much more diversified in this region with small stock farming forming an important part into the farming community. Small stock farmers with sheep, Angora goats and game. Karoo Lamb, olives, olive oils and cheese are local delicacies. Prince Albert is well situated for overnight stops from Gauteng, Cape Town and Port Elizabeth. The economy is concentrated in mainly three sectors, namely Finance and business services (46.2%), wholesale and retail trade (16.5%) and transport and communication (11.3%) Prince Albert contributed 30.9% of GDP of the District's R871.5million in 2007 with an estimated average annual growth of 8.9% between 1995 and 2007. </li> </ul>
	<ul style="list-style-type: none"> <li> <b>Beaufort West LM:</b> Recorded an annual average growth rate of 3.8% during the period 1995-2007, compared the CKDM which recorded 5.4%. The largest share of the regional GDP comes from Beaufort </li> </ul>





West, although this share has been decreasing since 1995. In 2007 Beaufort West decreased its regional GDP share to 55.5% from 57.4% in 2004. Over the period 1995-2007 the growth in Beaufort West for the following sectors were:

- Manufacturing (11.7%)
- Construction (9.4%)
- Wholesale and retail trade (5.0%)

Beaufort west municipality is looking to develop an effective informal trading sector. Indications from the IDP are that there are high levels of infrastructure provision but unemployment and poverty are the key concern in Beaufort west.

- **Central Karoo DMA:** The CKDMA founded in 2000, forms part of the CKDM. A DMA is run directly by the DM as opposed to being part of the LM. The DMA are usually National Parks and usually have a low population density. The CK DMA's has a particular low population density of 1.08/km<sup>2</sup>. The region also have the smallest population in the district at 6 040 in 2007, or 9.9% of the total CKD population. The largest economic sector in 2007 was construction (27.8%) and agriculture (19.3%). The DMA area contributed only an average of 3.2% between 1995 and 2007. The region faces several challenges, amongst which are high levels of unemployment (35.5%), a slow growing economy, large distances to markets and dry climate.

### Areas of Economic Need

There are great distortions in the distribution of resources in the Central Karoo Region.

Beaufort West dominates the economy and it is mainly due to its size and population.

Of the four regions Prins Albert is in a better economic position to grow due to more economically viable Agricultural sectors and the Tourism industry in and around the town.

According to the Growth potential study of towns in the WC, towns with very low development potential includes:

- Matjiesfontein
- Merweville
- Murraysburg and
- Leeu - Gamka

**Table 3.1: CKDM Areas of Economic Need**

Town	Human Need	Development		Economic Base	Place Identity
		Quantitative	Qualitative		
Beaufort West	Medium	Medium	Very High	Regional Centre/ Agriculture service centre	Northern gateway to the cape
Laingsburg	Medium	Low	Medium	Agriculture Service Centre	Flood survivor of the Central Karoo
Leeu-Gamka	High	Very Low	Very Low	Residential	Railway character
Town	Human Need	Development		Economic Base	Place Identity
		Quantitative	Qualitative		
Matjies Fontein	Medium	Very Low	Very low	Tourism	Old fashioned Victorian





					charm
Merweville	High	Very Low	Very Low	Agriculture Service Centre	Small village surrounded by Karoo "koppies"
Murraysburg	High	Very Low	Very Low	Agricultural Service centre	Declining Karoo Town
Prins Albert	Medium	Low	Medium	Agriculture Service Centre/ Tourism	Tranquil Karoo/ swart Berg

(Growth potential Study of towns in the Western Cape, 2004)

### Infrastructure overview

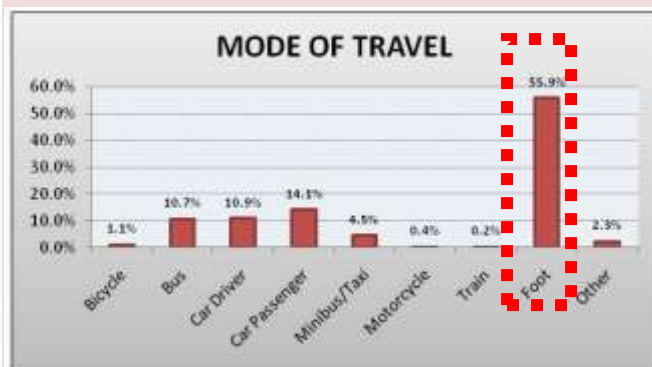
The infrastructure of the District is mainly a number of main and National roads flowing from Beaufort West to destinations such as Gauteng, Free state and the Northern Cape. These include the **N1** highway, the **N12** on route to the Southern Cape. A number of dirt roads provide accessibility to local farms. National roads represent **5%**, minor roads **56%** of which **940km** are tarred and **6 631km** are gravel road. The road network coverage for the CKDM is **1km per 5km**. Approximately **461km/19%** of about **2 480km** is estimate to be in good/very good condition. The rail network in the CK is very limited with 1 railway line running through the district that transports goods and people.



### Mode of Transport in Central Karoo:

- 1) A Large percentage of the population in the Central Karoo does not have access to modern transport.
- 2) About 55.9% commutes to work and school on foot.
- 3) Bus services on N2, long distance mini Taxi services available.
- 4) Taxis operate in towns
- 5) Only about 15.4% make use of public transport.
- 6) Public transport is limited especially in the rural areas. This is due to the high costs and travelling distances between towns.
- 7) The usage of trains (rail) (0.2%) is also notably lower.

Figure 3.1: CKDM Mode of Transport



(Source: Quantec Research, 2001)

**Implication: Lack of PT make it difficult for poor residence to reach public services(distances of towns)**

## 3.3 Demographic Indicators

### Population

There is a total number of 60 618 people that live in the Central Karoo District, resulting in a population density of

#### Population and number of households in CKDM

**Table 3.2 Population and Households**

**Population**

**Number of households**



2 people/km<sup>2</sup>. The population is spread over the 4 LM's: Beaufort West (36 268), Laingsburg (8 154), Prins Albert (10 156) and Murraysburg (6 040). Of the Population 79.9% are urban and 20.1% are rural.

<b>Beaufort West</b>	36 268	8 574
<b>Laingsburg</b>	8 154	2 270
<b>Prins Albert</b>	10 156	2 422
<b>Murraysburg</b>	6 040	1 555
<b>Central Karoo</b>	<b>60 618</b>	<b>14 822</b>

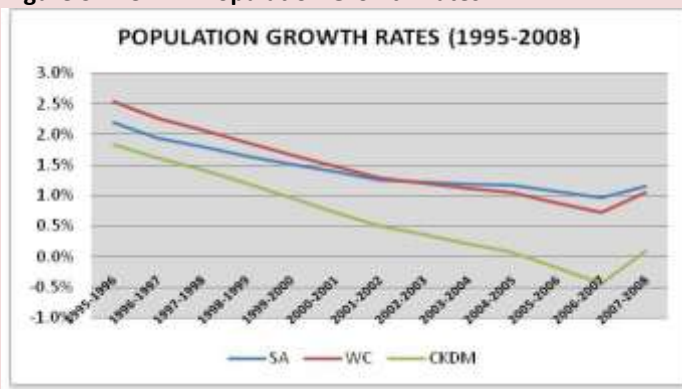
(Source: Quantec Research, 2008)

### Population Growth

A significant slowdown in population growth is evident in the Central Karoo with the current population growth below 1%. In 2006 the population grew with -0.4%. The decline can be ascribed to factors such as urbanization. The Central Karoo's population to the Western Cape and South Africa is 1.3% and 0.1% respectively.

**Implication: If the current trend continues the Central Karoo will soon have a negative population growth.**

**Figure 3.2: CKDM Population Growth Rates**



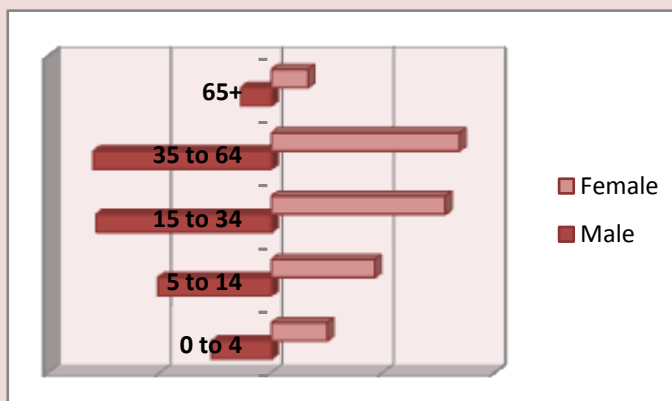
(Source: Urban-Econ calculations based on Standardised Regional Data, 2008)

### Population Composition

The population of Central Karoo is dominated by the female population (51.5%). The District is characterised by a small senior (6.8%) and large youth population, with 62% within the Potential Economically Active age group (15-65).

**Implication: The majority of the population is of income generating age and therefore potential economic contributors, with the precondition that adequate employment opportunities are available.**

**Figure 3.3: CKDM Population Composition**



(Source: Community Survey, 2007)

### Population Migration

An upward migration trend is observed with the migration flow into the Central Karoo. It is estimated that 3 109 people will migrate to the district by 2008. The Northern Cape represents 4.7% of in migration into the district. Reasons for **In- migration**: Better job opportunities, Accessible and effective infrastructure, superior quality of life available in the Western Cape Province.

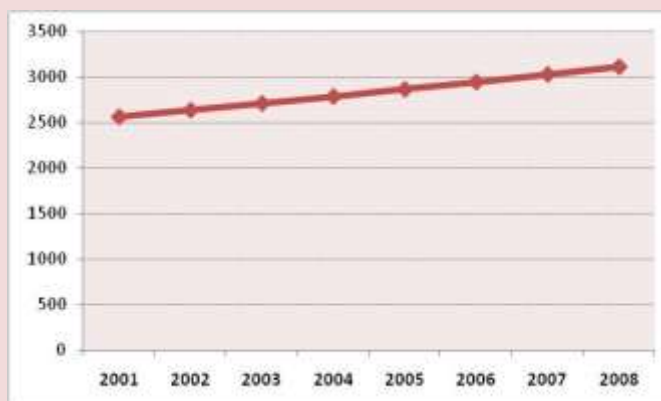
**Out- Migration Facts:**



From 2002 onwards people were leaving the area and the trend is projected to estimate that most Africans and whites will continue to leave the district until 2025. This is largely due few job opportunities as the district has limited economic activity. It is estimated that there is going to be an out-migration of 4 coloureds in the CKDM.

**Implication: Infrastructure, housing, and regional planning will need to be extend beyond existing backlog**

Figure 3.4: CKDM Population Migration



(Source: Quantec Research, 2008)

### Education and Human Capital

#### Literacy

Literacy is the ability to read and write; according to the Labour Force Survey (2007) 88.5% of the Central Karoo population is literate with basic skills in reading and writing.

#### Education

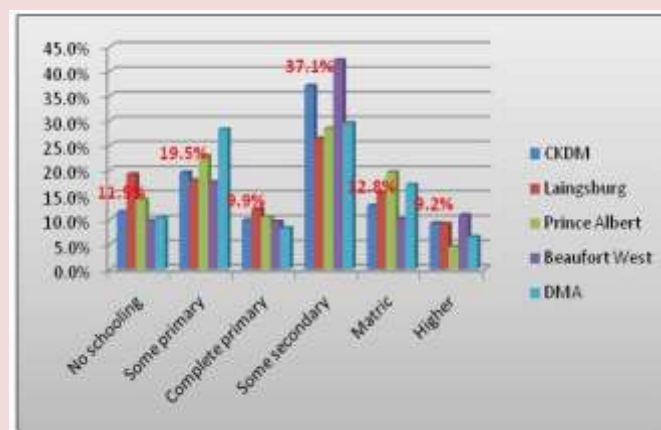
Education is often a means to expand the range of career options a person may choose from and a direct influence on a person's income and ability to meet basic needs and thus an important indicator of human development.

#### Population Level of Education

- 1) The majority of the population (37.1%) has some form of secondary schooling.
- 2) 9.9% has completed their primary education.
- 3) Approximately 12% is without any schooling.
- 4) A limited portion (12.8%) of the population has passed Grade 12.
- 5) The CKDM have 26 secondary and primary schools. This represents 1.9 % of schools in the Western Cape.

**Implication: The workforce of the Central Karoo is primarily unskilled.**

Figure 3.5: CKDM Population Education Levels



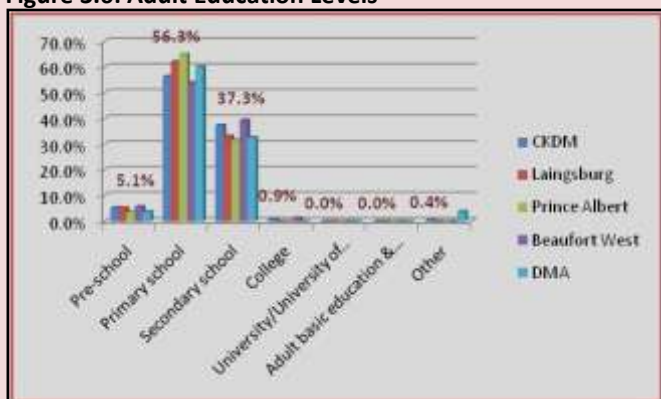
(Source: Community Survey 2007)

#### Adult Level of Education

- 1) In terms of the highest level of education attained, 56.3% only have Primary school education
- 2) Only 1.2% of the CKDM population have a tertiary education.
- 3) The CK have one tertiary institution in Beaufort West ( South Cape College) with approximately 90 students

**Implication: The low level of adult education can be ascribed to the unavailability of education to**

Figure 3.6: Adult Education Levels



especially Africans before 1994.

(Source: Community Survey 2007)

### Poverty and Inequality

#### Social Grants

In 2007 the government issued **18 892** grants in Central Karoo District Municipality. The total grant funding amounts to **R900 000** per month ( $\pm$  R10.8million per annum).The majority of the grants issued are for child support, and physical disabilities and old age pensions. According to the IDP these figures could be more as people who who's grants are paid through the bank are not calculated.

**Implication: Approximately a third of the population is reliant of government grants**

**Table 3.3: Government Grants**

Grant	Number of Recipients
Old age pension	3 078
Disability grant	3 773
Child support grant	9 276
Care dependency grant	327
Foster care grant	141
Grant in aid	78
Social relief	50
Institutions	2 169
<b>Total</b>	<b>18 892</b>

(Source: Community Survey, 2007)

### Housing

#### Tenure

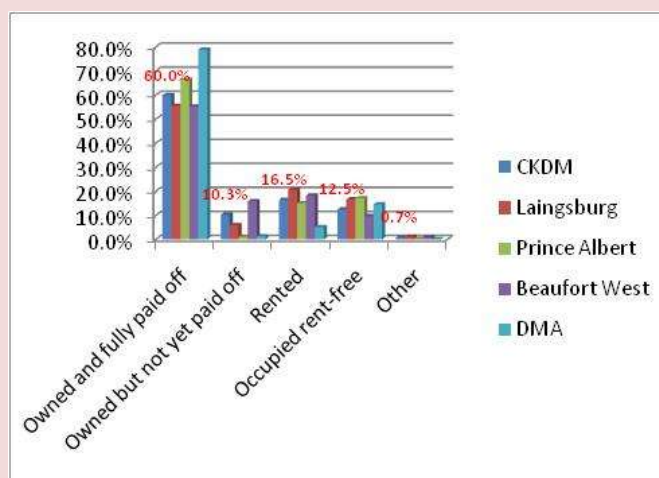


Tenure is the arrangement under which a household occupies its home.

- 1) 60% of the houses are owned and fully paid-off.
- 2) 10.3% of the houses are mortgaged
- 3) 12.5% occupy their homes rent free
- 4) Housing Backlog: There is currently a housing backlog of 4 411 houses in the district.
- 5) **1 287** houses has been constructed over a period of 10 years (1994 – 2004)
- 6) It has been determined that there is a high demand for middle income (GAP) housing (R200 000 – R350 000 price category) based on the limited supply in the current market which currently focuses on the high-income end.

**Implication: The high number of owned and paid off homes indicates reasonable economic welfare in the District**

**Figure 3.7: CKDM Tenure Status**



(Source: Community Survey, 2007)





### Housing Type

Housing type implies the structure of the dwelling a family occupies as their home. Two main categories can be distinguished, these are, formal permanent structures and informal non-permanent structures.

#### Housing types in CKDM:

- 1) Approximately 90% of the dwellings in the district is formal alone standing brick houses, with a small occurrence of other housing types.
- 2) Approximately 3% of the dwellings in the Central Karoo are informal and non-permanent with the majority being informal dwellings and structures.

**Implication: The high occurrence of formal brick housing indicates reasonable household welfare in the Central Karoo.**

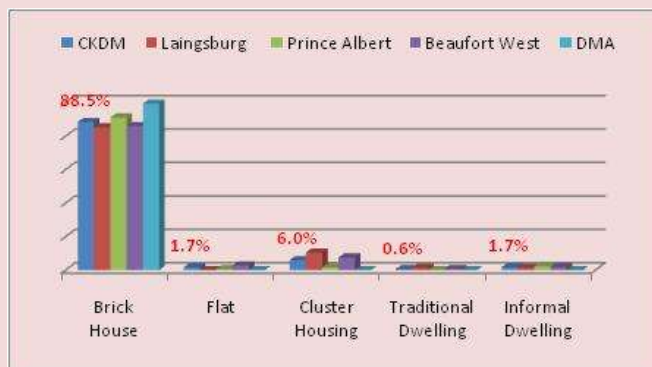
#### Formal Permanent Structures

- Alone standing brick houses
- Flat complexes
- Cluster housing

#### Informal Non-permanent Structures

- Traditional dwellings and huts
- Informal dwellings such as shacks

**Figure 3.8: CKDM Housing Types**



(Source: Community Survey, 2007)

### Health Care

Health care is the prevention, treatment, and management of illness and the preservation of mental and physical well being through the services offered by the medical, nursing, and allied health professions to the population

- 1) The Central Karoo has a good health care infrastructure with mobile services effectively serving remote areas.
- 2) The priority in the region is the fight against TB (400 cases per 100 000 population).
- 3) Nurses on average see 37 patients a day.
- 4) Local Communicable disease are TB, HIV and AIDS (7% infection rate)
- 5) The estimate HIV/AIDS prevalence rate is 3.3% for 2010 with estimate deaths of 106 people for the same year.

**Implications: HIV/AIDS effecting and taking the life's of economically active individuals leaving dependants behind and increasing dependency on the welfare system.**



### Access to Services

A service performed for the benefit of the public such as water, electricity etc.

- 1) Despite households access to free basic services: **16%** of households within the CK are without electricity, **4%** are without piped water, **20%** are without waste removal services
- 2) In general the CK is lagging in the provision of key basic services, in particular of refuse removal, energy and sanitation.

**Implications:** In the Central Karoo there is a lack of basic services to particularly farm workers.

**Table 3.4: Free Basic Services**

Services	Percentage of Households
Water	38%
Sanitation	31.7%
Refuse	22.7%
Electricity	38%

(Central Karoo Cabinet Lekgotla Report, 2008)

### Social Disparities

**Table 3.5 : CKDM Social Disparities**

District Municipality (2007)	HH with no Income	Number of Medical Facilities	Number of Schools
City of Cape Town (CT)	102 062	-	700
West Coast (WCDM)	5880	74	133
Eden (EDM)	12 894	92	143
Central Karoo (CKDM)	4 421	21	26

(Source: Quantec Data, 2007)

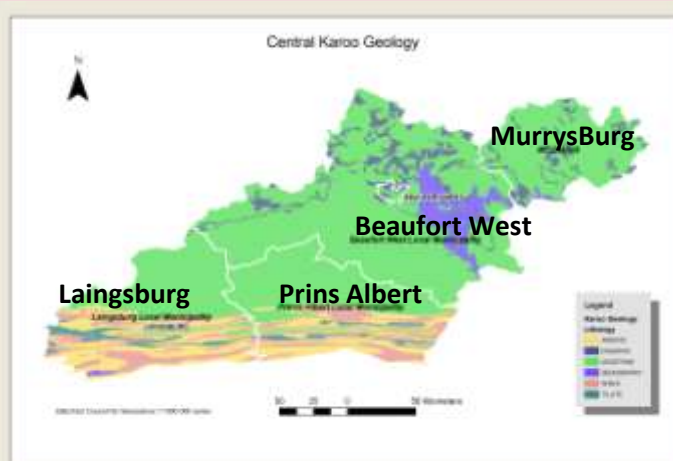
### Areas of Urban Distress

The population of the Central Karoo are located in urban areas (**74.9%**) and the remaining **25.1%** are in rural areas.

The estimate **25.1%** of the rural inhabitants are subdivided as follows:

- 1) 36.8% of persons residing in Prins Albert are living in rural areas
- 2) Beaufort West have 17.8% rural inhabitants
- 3) Laingsburg have 8.7% of residents in rural areas.

The settlement pattern of the Central Karoo towns is similar to that of the most small South African Town – consisting of predominantly "white" core receiving the majority of basic and social services. Whereas the marginalised group are located in the surrounding areas on the periphery of towns in relatively small dormitory facilities. This has increased the difficulty of incorporating



these marginalised urban areas into the town's core and allowing for an inward growth towards the town core.

### 3.4 Performance and Structure of the Economy

#### Labour and Employment

##### Unemployment

Unemployment according to the official definition must satisfy the following conditions:

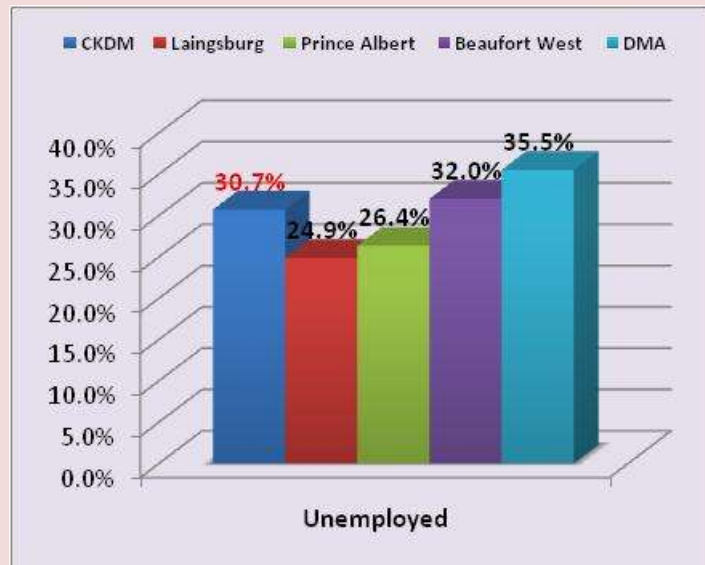
- ✓ No work during last 7 days
- ✓ Able to work within 2 weeks
- ✓ Active steps to look for work

##### Unemployment in CK:

- 1) Approximately 6,500 persons are unemployed in the CK according to the community survey (2007).
- 2) The district DMA (Murraysburg) local municipality has the highest level of unemployment (35.5%).

**Implication: The CK has an oversupply of labour (30.7%) that is able and willing to work.**

Figure 3.8: Levels of Unemployment



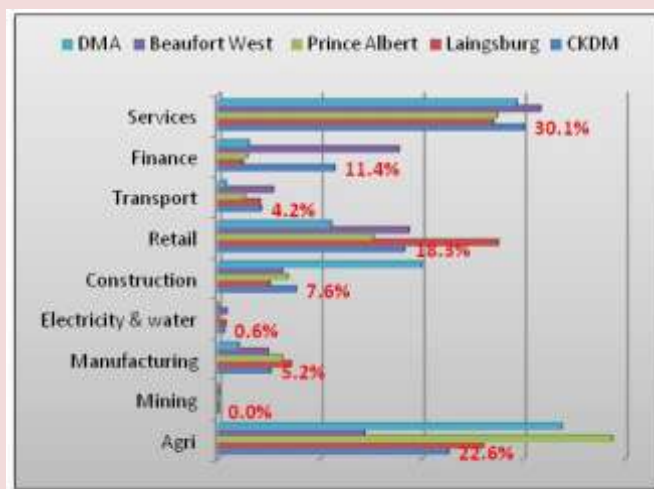
(Source: Community Survey, 2007)

##### Employment per sector

- 1) The major employers of the district are the service (30.1%) and agriculture sectors (22.6%) sectors.
- 2) Employment by the retail sector is significantly higher in Prins Alert
- 3) Agricultural activities in the District are grouped in all local municipalities.
- 4) The Central Karoo district labour force participation rate is approximately 54.9%

**Implication: The economic employment of the Central Karoo has a very small base; the majority of the employment per economic sectors is concentrated in the service and agriculture sectors.**

Figure 3.9: Employment per Sector



(Quantec Research Standardized Regional, 2007)

##### Labour Income

- 1) Household income in the Central

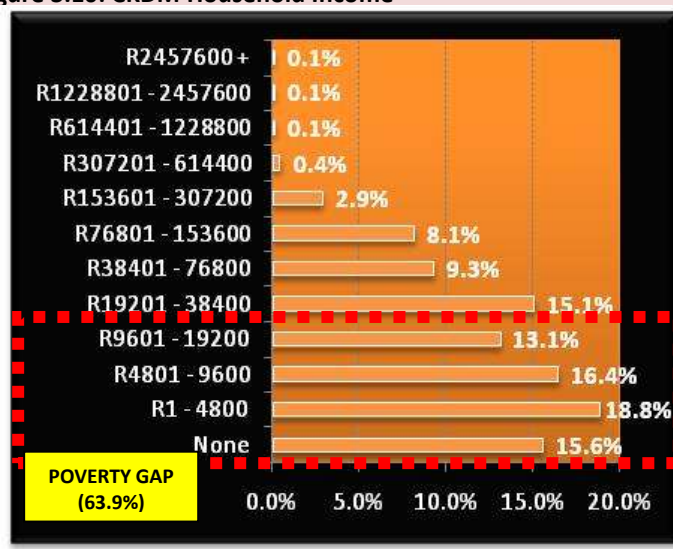


Karoo is concentrated in the lower income categories.

- 2) The majority of the households in the CKDM earn in the poverty Gap income categories with a monthly income below R1 600.
- 3) 15.6% of households earn no income at all.

**Implication: The low income is indicative of high levels of poverty.**

**Figure 3.10: CKDM Household Income**



(Source: Municipal Demarcation Board, Urban Econ Calculation, 2008)

### Labour Productivity

Labour productivity is the output of goods and services per labour unit.

Gross Domestic Product (GDP)

$$\text{Labour Productivity} = \frac{\text{Gross Domestic Product (GDP)}}{\text{Number of Employed Individuals}}$$

- 1) Labour productivity is generally lower in Central Karoo compared to the local average.
- 2) Laingsburg and Murraysburg both have low labour productivity.
- 3) Labour productivity in Prins Albert is particularly larger.

**Implication: The economic output per worker is low in the Central Karoo District**

**Table 3.6 Labour Productivity**

	Rand /annum
Central Karoo DM	R 64,498.18
Beaufort West	R 57,736.34
Prins Albert	R 118,287.01
Laingsburg	R 47,757.04
CK DMA	R 33,801.31

(Source: Urban-Econ Calculation, Quantec: Standardised Regional, 2007)

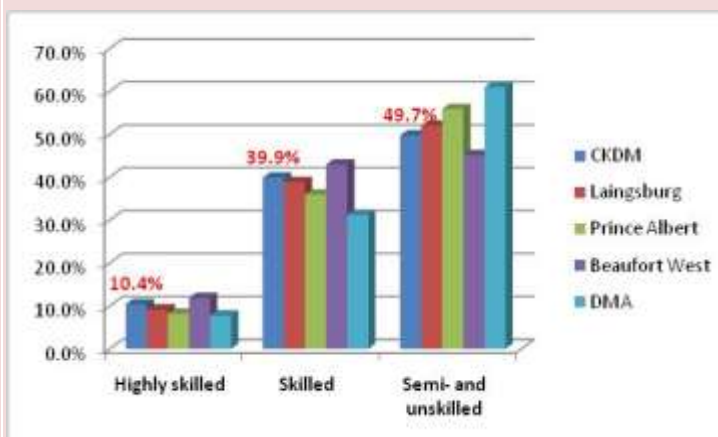
### Level of Employment

Level of employment is a measure and categorisation of skill required for specific employment.

- 1) The majority of the population (49.7%) is involved in semi and unskilled occupations.
- 2) Only 10.4% of the employees are highly skilled.

**Implication: Low skill employment has low labour productivity and subsequently lower income and economic significance.**

**Figure 3.11: CKDM Skills levels**



(Quantec Research Standardized Regional, 2007)





### Occupation

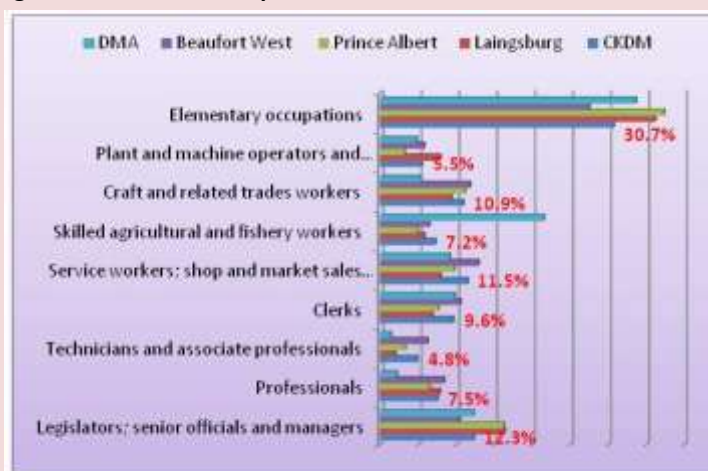
Occupation is the type of work a person does according to the South African Classification of Occupations to obtain an income irrespective of industry.

#### Occupation Profile:

- 1) The leading occupation categories are elementary occupations and craft.
- 2) A small number of senior officials, professionals and technicians are found.

**Implication: The majority of the occupations require low skill and expertise.**

Figure 3.12: CKDM Occupation



(Community Survey data, 2007)

### Production Profile

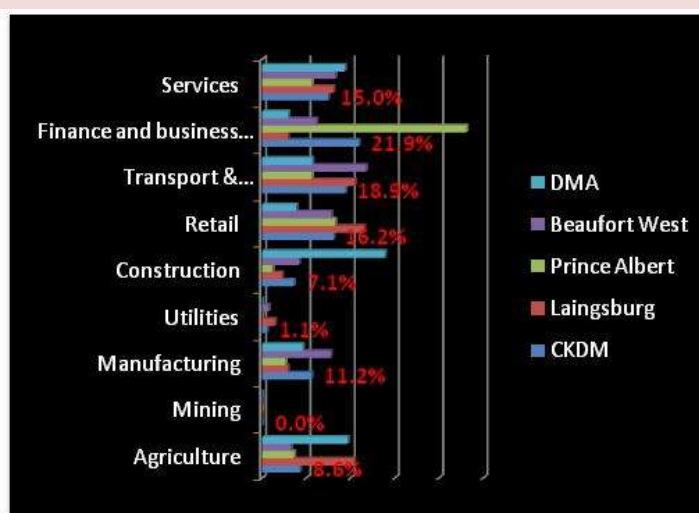
#### GDP Per Economic Sector

Gross Domestic Product (GDP) indicates the scale of produce within the geographic boundaries of the Study Area (Central Karoo).

#### Production in Central Karoo:

- 1) The total GDP of the Central Karoo was approximately R871.5 million in 2007.
- 2) The GDP of the Central Karoo grew by an average of 5.4% over the last decade.
- 3) The leading industries in the Central Karoo are Finance and business Services (21.9%), Transport (18.9%), Retail (16.2%) and Services (15%).
- 4) The leading industries produce approximately 72% of the total GDP of the District.
- 5) A high occurrence in finance and business services is evident in Prins Albert (46.2%) indicating that this is a very prominent generator of income and economic activity.
- 6) Fastest growing industries are: **Finance and business services** (11.4%), **Manufacturing** (9.1%) and **Construction** (9%).
- 7) **Mining** are experiencing **negative growth** of -6.7%.

Figure 3.13: CKDM Economic Profile



(Urban-Econ calculation based on Quantec, Standardised regional, 2007)

Table 3.7: Growth Rate per Sector

Average Annual Growth Rate per Sector (2005 – 2007)	
Agriculture	1.3%
Mining	-6.7%
Manufacturing	9.1%
Electricity & Water	1.0%
Construction	9.0%
Wholesale & retail trade; catering and accommodation	6.2%
Transport & communication	5.9%
Finance and business services	11.4%
Services	0.1%

(Quantec Research Standardized Regional, 2007)

**Implication: The economic base of the central Karoo is relatively evenly distributed among the sectors with the exception of utilities and mining which have implications in terms of long term economic sustainability.**



### Comparative Advantage

#### Locational Quotient

The location quotient is a calculated ratio between two economies, in this case the district and provincial economies. This ratio is calculated for all industries to determine whether or not the district economy has a greater share or advantage of that industry.

#### Observations from Table 3.3

- 1) The sector with the highest location quotient is Agriculture.
- 2) Other sectors with high location quotients are utilities, construction and transport.
- 3) Sectors with especially low location quotients are mining and manufacturing.

**Implication: CKDM has a comparative advantage in terms of agriculture, utilities, construction and transport.**

Figure 3.14: CKDM Location Quotient

Table 3.8 Location Quotient

Sector	Location Quotient
Agriculture, forestry and fishing	1.9
Mining	0.1
Manufacturing	0.4
Electricity & water	1.6
Construction	1.2
Wholesale & retail trade	1.1
Transport & communication	1.2
Finance and business services	0.6
Community, social and personal services	0.8

(Urban-Econ calculation based on Quantec, Standardised regional, 2008)

### Trade Performance

#### Export Profile

#### Exports in Central Karoo District Municipality:

- 1) The main export destinations Europe (36.2%), America (7.4%) and Asia (6.4%)
- 2) The majority of the products exported is primary food related goods such as beverages, spirits and vinigers.

**Implication: The scale of exports in the Central Karoo is very limited and does not contribute significantly to the economy.**

Figure 3.15: CKDM Countries of Exports

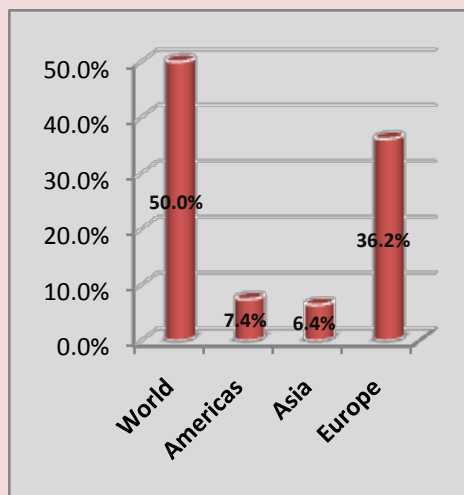
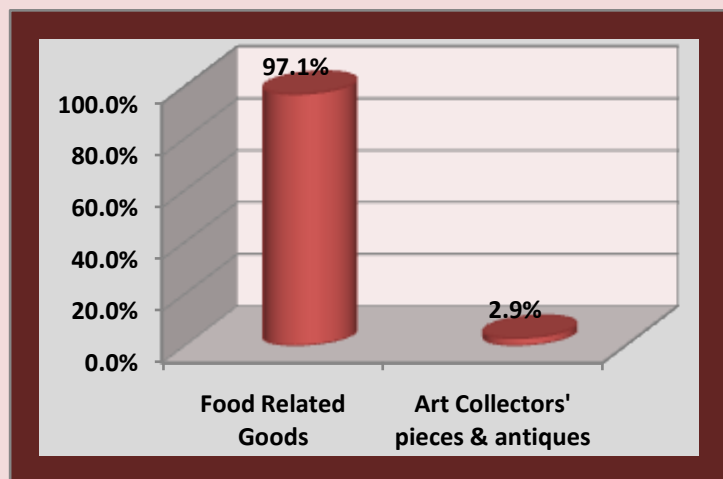


Figure 3.16: CKDM Export Products



(Source: Quantec International Trade Survey, 2007)

(Source: Quantec International Trade Survey, 2007)

### Tourism

**Domestic** -A resident visitor who visit within the economic territory of the country of residence

**Foreign** – A person who resides outside South Africa and visit the country temporarily

- 1) According to the CK Nodal Economic Development profile, the tourism sector employed 2.4% of the total workforce in the CK in 2004.
- 2) The contribution from tourism to the total GDP was approximately 2.3%.
- 3) The WC is the prime tourist destination attracting 22% of all foreign visitors to South Africa and hosting about 2.53million domestic trips every year.
- 4) Central Karoo is however not part of the tourism boom and only 3% of domestic and 2% of foreign tourist to the WC view the CK as their final destination

**Implications: The region is mainly seen as a convenient stop en route between Gauteng and Cape Town and very few visitors stay longer than one night.**



### ENVIRONMENT

#### Environmental Analysis

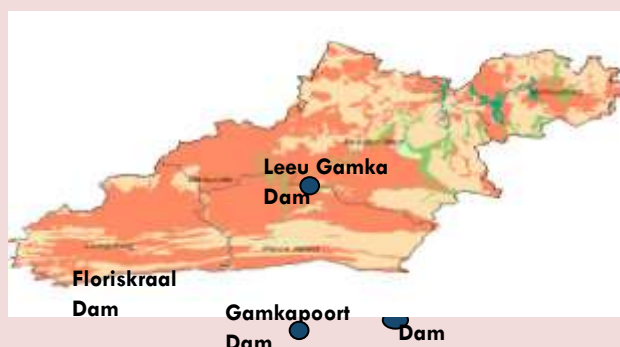
##### Terrain and natural resources:

Central Karoo forms part of the greater Karoo and is classified as a unique arid zone. The Karoo plateau is the largest of its kind outside Asia.

The land is rich in fossil, and is home to the largest variety of succulents in the world. Several mountain ranges border the district.

##### Central Karoo Aridity Zones

The CKDM is mostly Semi-desert: The southernmost parts (Prince Albert, Klaarstroom and Vleiland) can be classified as semi-arid and can sustain agricultural activities other than sheep farming.



Irrigated Land  
■ Irrigated  
 Not irrigated

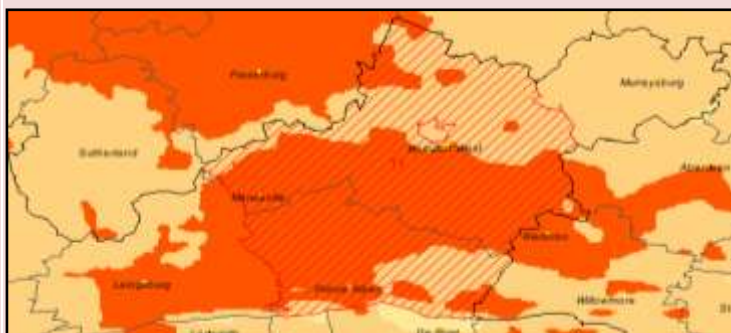
(Source: CKDM IDP, 2007/2008)



### Soils

The underlying geology is generally sedimentary rock, giving rise to sandy soils of low fertility. There are some alluvial soils but mainly in the valley bottoms only.

- 1) **The** average annual rainfall of 260mm per year .Most of the rain is received during summer, (November and May)
- 2) **Temperatures: Winter : below -0, Summer: +/- 37°**
- 3) **Vegetarian:** Mainly Karoo Veld (sparse, not much nutrients hence - low animal carrying capacity)
- 4) **Carrying Capacity:** Estimate 1 small animal per 7 hectares.
- 5) **Minerals:** Uranium - Estimate several million tons of in the Central Karoo. Uranium mining expected to grow to be one of the economic drivers of the region with a potential of over R. 620 billion worth of business.
- 6) **Water: Four Dams,** Floriskraal Dam (Near Laingsburg, serves Little Karoo needs), Leeu Gamka Dam(between Beaufort West and Laingsburg, serves local farming needs), Oukloof Dam serves a limited number of farms in the Prince Albert area, the balance served by the Gamkapoort Dam.
- 7) **Irrigation:** lack of water resources – lack of land under irrigation



### Rainfall – Mean

- 0-200mm
- 201-400mm
- 401-600mm

### Land Use/ Land Available for Economic Development

#### Rural Area

Areas used for agriculture and tourism

Areas used for agricultural and tourism purposes;

Natural areas, some statutory protected and others not; and



- Areas used for infrastructure purposes, i.e. roads, electrical infrastructure, dams, etc. outside urbanised areas or settlements





### Urban Areas

70% of all land use in urban settlements is devoted to housing development. Non-urbanised areas within the Beaufort West, Laingsburg and the Prince Albert Municipal areas are changing from being a purist agricultural area, to an eco-tourism and game farming area. This change in the use of land will result in increased development applications for urban related uses such as resort developments, guest houses, road and farm stalls which includes curio shops and other tourism related retail uses, hotels and motels and backpacker accommodation.

**MAP 3.2: CKDM SPATIAL PLANNING CATEGORIES**



(CKDM SDF, 2008)

**Map 3.2** includes the Spatial planning Categories within the Central Karoo District Municipality which includes Agriculture, Resort and tourism related areas and bio region boundaries.



MAP 3.3 CKDM LAND MANAGEMENT AREA



(CKDM SDF, 2008)

**Map 3.3** includes the spatial planning Categories within the Central Karoo District Municipality which includes projects with regional Impacts. From **Map 3.3** the main Agricultural Corridors within the district and land available for economic development can be seen.

## Socio – Economic Threats

### Socio – Economic Threats

- 1) **The legacy left by the privatisation** of Spoornet and other governmental institutions which saw many retrenchments and crippled the economies of especially smaller towns in the region
- 2) **Lack of job opportunities** within the CKDM and subsequent out-migration of young matriculates and graduates
- 3) **Lack of entrepreneurship spirit** for people to start up their own enterprises
- 4) **Economic leakages of local buying power** to other regions such as the South Cape
- 5) **Sense of fatality and disillusionment amongst those in extreme poverty** especially on peripheral farms and smaller towns such Murraysburg, Nelspoort, Leeu Gamka, Klaarstroom and Merweville
- 6) **Over dependency on state support**
- 7) The loan shark industry has increased over the past few years and has had a dire effect on local, vulnerable communities who cannot survive on state grants alone. The poverty is deepening because these state dependent households are now **becoming dependent on an illegal credit system** that even reverts to withholding their clients ALLPAY cards as collateral. The outcome is community members having to pay almost 80% of their state grants to loan sharks or financial institutions, which is threatening development and the very social fabric of our societies.
- 8) **HIV/Aids** affecting and taking the lives of economically active persons (often the breadwinner) who leave



dependents behind

9) **Seasonality of labour** market mostly situated in the agricultural sector

10) **Decline of farm labour** on farms due to legislation on land rights, the high cost of farming, associated droughts and turbulent export markets.



## SECTION 4: OPPORTUNITY ANALYSIS & PROJECT IDENTIFICATION

### 4.1 Introduction

The purpose of this section is to identify potential local economic development opportunities in the Central Karoo District Municipality, based on the current situation within the municipality, as detailed in the preceding situation analysis.

A SWOT analysis and local sectoral potential analysis will help create an understanding with regard to the sectoral competitive advantages of the district economy and this will be used to determine the development potential within the Greater Central Karoo.

The analysis seeks to identify supply and demand factors to assess market opportunities based on the gap between existing and potential levels of development and by reviewing the resource base for potential exploitation and beneficiation, i.e. extent, location, utilization and opportunities.

In addition constraints to development such as the impact of HIV/Aids on the demographic profile, exploitation of resource base, international market influences, environmental degradation, lack of entrepreneurial skills and poverty are identified.

This section is structured according to the following sub-sections:

- SWOT Analysis
- Sector Potential Analysis

### 4.2 SWOT Analysis

A SWOT analysis is a commonly used tool used to facilitate a strategic review of a particular organisation. It is a high-level exercise that identifies strengths, weaknesses, opportunities and threats of the organisation. The strengths and weaknesses are internal factors that the organisation may control. Opportunities and threats are those factors external to the organisation and therefore the organisation has little or no control over these macro environment factors.

The SWOT analysis does not identify what should be done. Rather, it provides a framework for identifying where strategic opportunities may exist and how to avoid weaknesses inherent in the organisation or external threats from limiting future expansion and growth. The purpose of the SWOT analysis is to identify and assess the strengths, weaknesses, opportunities and threats in the Central Karoo District Municipality, in terms of regional economic development.

The identification of strengths, weaknesses, opportunities and threats within the district area provides the basis upon which the pillars of the LED strategy may be built.

The SWOT analysis is illustrated in **Figure 4.1**.





**FIGURE 4.1: CKDM SWOT ANALYSIS**

### STRENGTHS

- Increase in property prices & commercial development shows growing investor's confidence
- Hype around proposed uranium mine contributing factor for increased private sector investment
- Established Tourism Sector
  - Game Farming industry established
  - Established and organized hospitality industry
  - Eco-tourism industry established – (Karoo National Park and other)
- Established Agriculture sector
- N1 route through 2 major towns
- Organised business, organised civil society and government structures
- Beaufort West seen as economic & administrative hub
- Development of airport in pipeline
- Town accessible to Northern Cape, Eastern Cape, Western Cape and Garden Route
- Close proximity to the Sutherland telescope (SALT)
- Functional Spoornet Stations (freight & commuter) with infrastructure lying dormant
- Business Nodes well located from spatial perspective
- Diversifying tourism sector (township routes, proposed Khoi San village, etc)
- Tourism Gateways in LB & BW (to position the region as a gateway to the markets of the Western Cape in the South, Northern Cape in the north, Eastern Cape in the east and Gauteng in the North east)
- Central Karoo forms part of the greater Karoo landscape currently being investigated by Prof. Doreen Atkinson from Free State University, as an inter-provincial initiative to be marketed as one tourist region such as the outback of Australia.

### WEAKNESSES

- High percentage of unemployment
- Low levels of income
- Limited ability of population to create their own job opportunities
- Limited skills development
- Limited business retention – Lack of retention strategies
- Limited business incentives for business attraction
- Towns such as Nelspoort, Merweville, Prins Albert, Klaarstroom & Leeu Gamka are secluded
- No competitive advantage with relation to other regions and towns such as Oudtshoorn and George.
- Lack of aftercare for SMME's – hence lack of growth
- Lack of aggressive marketing strategy for the region
- Shortage of tourism facilities in smaller towns
- Lack of retail facilities in smaller towns
- Lack of office space in smaller towns
- No identified industrial areas in smaller towns.



### OPPORTUNITIES

- Uranium mining
- Commercial developments
- Airport development
- Wind Power Generation
- Archeological sites & paleontology (rock art & fossils)
- International filming industry interested in Karoo landscape & architecture (potential for linkages with the neighbouring Graaf-Reinet film & tourism industry)
- Transport interchange & storage potential
- Small stock farming on commonage
- Biodiversity
- Rich history
- Potential for food gardens for income generation in Murraysburg
- Processing /value adding to raw products
- Tourism opportunity: Open space and Rural character
- Property industry: Karoo Architecture and rural character

### THREATS

- N1 realignment (bypassing town)
- Closing down of businesses/lack of new business initiatives (all towns)
- Unemployment – related to crime, alcohol & drug abuse
- HIV/Aids affecting economically active sector of population
- Large number of households largely dependent on state support
- Out-migration of matriculants - large number of children & aged stay behind
- Brain drain of specialists & graduates who do not return
- Households have also become dependent on illegal credit systems
- Downscaling in normal & seasonal labour employment in agriculture
- Import of seasonal labour from neighboring regions
- Value addition in other neighboring regions not locally



### 4.3 Sector Potential Analysis

This section provides insight of the potential of the most prominent economic sectors within the Central Karoo Municipal economy.

This section is divided into two parts namely:

- Criteria for determining Development Potential
- Sector Opportunities

#### 4.3.1 Criteria for Determining Development Potential

Before commencing with the discussion of the relevant development potential criteria, it is deemed necessary to first clarify the meaning of potential. The Concise Oxford Dictionary (1990) describes “potential” as follows:

- Capable of coming into being or action
- The capacity for use or development
- Usable resources

Therefore, potential refers to resources and / or capacity, which can be utilised or developed. In order to identify or determine this development potential and/or opportunities within an economy, a set of criteria is required against which to evaluate whether the resource and/or capacity can be regarded as having potential. The set of criteria serves as an evaluation tool to identify areas with potential for development and opportunities within each of the local economic sectors. These include:

- Availability of raw materials and resources
- Economic linkages
- Market trends
- Gap analysis / agglomeration advantages
- Logistics / Nodal point function
- Regional service delivery function
- Availability of labour
- Technology change
- Enabling policy environment.

A discussion of each of the above-mentioned aspects follows below:

#### **Availability of raw materials and resources**

Raw materials / local resources are one of the most important production factors. Without these, no product can be manufactured and no service can be delivered. The availability of raw materials/other resources makes local development promotion much easier, more feasible, viable and sustainable. Depending on the nature and extent of the resources/materials, these can also be a major tourist attraction, and apart from attracting tourists to the area, these raw materials / resources can be used for local beneficiation and value adding through local processing.



### **Economic linkages**

Economic linkages refer to the interaction of various economies with one another, or various sectors within one economy. These interactions can take place in various manners and on various scales. Linkages are important for an economy and its activities to be sustainable. One economy in general can't provide in all local needs and therefore need to interact with neighbouring or nearby economies.

When referring to linkages one can define two major categories:

#### *Backward linkages:*

This type of economic interaction refers to the raw material or intermediate products required as inputs into the delivering of the end product or service. In many cases the inputs required in the local economy cannot be delivered by the same economy and need to be inputted from other economies. In other cases the inputs are available but it is cheaper to obtain the same inputs from other outside economies. A very important question one always need to ask in determining the development potential is: Can't some of the inputs be supplied or manufactured locally, saving transport costs, creating employment opportunities and contributing to local beneficiation and value adding? If the answer is yes there is definitely potential for development within the economy.

#### *Forward linkages:*

Forward linkages refer to the supplying of intermediate products as inputs into the production process, and/or delivering an end product or service at the end of the production process.

### **Market trends**

Market trends refer to the consumption trends and preferences of the general market. It can either indicate that there is a potential for an increase in the production of a specific product or delivering of a specific service, or it can indicate there is a need for change in products and service delivery. For instance, a trend can be observed for people consuming more organically farmed products than traditional products. This therefore indicates that the agriculture sector should focus more on producing organic products than traditional products.

### **Gap analysis / agglomeration advantages**

This criterion refers to the identification of a gap within the local economy or an advantage for various industries to group together to stimulate economic growth. Agglomeration advantages can be illustrated by developing a mining logistical hub or cluster. Therefore, all manufacturing orientated and related activities are grouped together in delivering services and information to the manufacturing sector.

### **Logistics / Nodal point function**

To determine if the area has potential for delivering a logistics or nodal point function, one needs to answer the following question: Can the area serve as a distribution point for specific products or services? This relates to the next criterion.

### **Regional service delivery function**

Currently, the local economy is not strongly linked with the regional economy. An analysis is thus required to determine the economic comparative advantages. If these advantages can be exploited successfully, the area may become a regional service provider in terms of its competitive advantages.



### **Availability of labour**

Labour as one of the important production factors also indicates the potential for development of an economy. When considering potential within the local labour pool, the determining factors include the quantity and quality of the labour force. Quantity refers to the magnitude of the labour force and quality refers to the educational and skills level of the labour force. If the educational and skills level of the local labour force meets the requirements for manufacturing development, the potential for development is high.

### **Technology change**

Technology change refers to the change in production methods. Good examples are genetic manipulated production, the Internet, etc. The changes in technological techniques and methods increase the potential for developing an incubator in the area. Incubators provide collective services (i.e. training and facilities) required by industries and also individual people to become self-sustained in their newly adopted economic activities.

### **Enabling policy environment**

Potential for development can also be identified when considering the policy environment. Various policies stimulate, support and encourage development, whereas others inhibit development. A good example of supporting policy is the SMME development programme of GODISA. They provide funding and other necessary inputs for upcoming SMMEs.

## **4.3.2 Sector Opportunities**

The purpose of this sub-section is to provide an assessment of the economic activities within the nine economic sectors in order to determine their potential for economic development. The following sectors will be addressed:

1. Agriculture Sector
2. Mining Sector
3. Manufacturing Sector
4. Utilities Sector
5. Construction Sector
6. Trade Sector
7. Transport & Communication Sector
8. Finance & Business Services
9. General Government Services



## 4.3.2.1 Agriculture Sector

### AGRICULTURE SECTOR DEFINITION



The agriculture sector incorporates establishments and activities that is primarily engaged in farming activities, but also includes establishments focusing on commercial hunting and game propagation and forestry, logging and fishing.



### AGRICULTURE IN THE CKDM

The CKDM agriculture sector comprises of mainly large commercial farming. Lamb and goat production dominates the sector, and a small region produces horticultural crops such as olives, apricot and grapes. Very little agro- processing occurs in the node. Meat carcasses and skin are exported to major markets for further processing and/or export.

Agriculture forms a very big part of the community and local economic activities in the Central Karoo Municipal area. As a result agriculture is one of the major role players in the economy of the Central Karoo and contributed 8.6% to the CKDM economy in 2007. This indicates that the Agricultural sectors relative contribution is declining in comparison to the contribution of 10.5% in 2005. This decline was caused by an increase in the production of other sectors, such as the manufacturing sector. Other causes can be ascribed to the fact that most of the emerging farmers in the CKDM are struggling with debt. As a result most people are not attracted to the sector because of the time it takes before making a profit. Drought conditions also had a negative impact on agricultural activities in the Central Karoo.

The agriculture sector also provides work to 22.6% of the working population in the Central Karoo Municipal area. There has been a major decline in agricultural employment over the years. This decline occurred due to land reform where most white farmers are becoming reluctant to employ farm workers. It is difficult to diversify in the Central Karoo. One reason being that there is no suppliers of inputs in the local area and as a result the cost much more to produce and compete with other well established companies for the same market. The other reason is that most of the farms that are distributed through the land reform process are owned by trusts and difficult to employ people outside the trust. Cost of labour including transaction costs associated with labour is high.

The climatic conditions of the Central Karoo restrict agriculture activity to mainly small stock farming. In the Southern areas of the region where there is better access to water, deciduous fruits and vegetables are grown. However there are areas with untapped agriculture potential. In Prince Albert, Laingsburg and Murraysburg, agriculture is a big contributor to the GGP and the biggest employer (except Laingsburg). Wage levels however remain low in the agriculture sector.

The following table provide a snapshot of the CKDM agriculture sector.

**Table 4.1: Economic Snapshot of CKDM Agriculture Sector, 2007**

ECONOMIC INDICATOR	AGRICULTURE
GGP Contribution (2007)	8.6%
Average Growth Rate (1995 – 2007)	1.3%
Employment Contribution	22.6%





Sub- Sectors

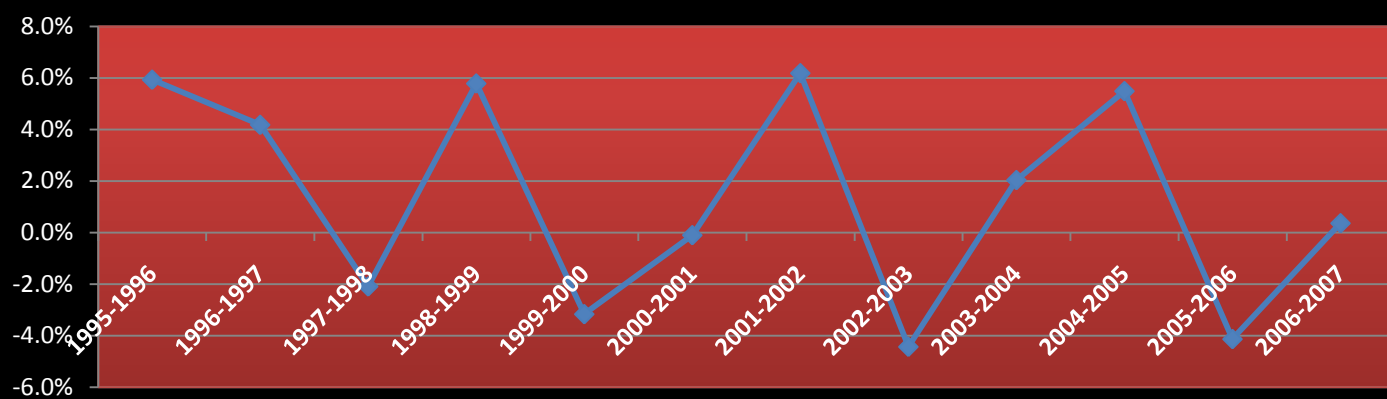
Fishing and Hunting

**Agricultural products produced in the Central Karoo include:**

- Fresh Meat (mutton, Game, Lamb, Ostrich, goat, beef, etc)
- Processed Meat (biltong, cold meat, droë wors)
- Fresh Fruits and vegetables (figs, olives, apricots, grapes, herbs etc).
- Processed fruit and vegetables (chutney, dried figs, olives, jams etc) and
- Processed animal by – products (leather products, dairy products, wool and mohair products etc).

**Figure 4.1: Agriculture Sector growth in the CKDM (1995-2007)**

### AGRICULTURE GROWTH



(Source: Quantec, 2008)

### FACTORS IN THE ANALYSIS OF DEVELOPMENT POTENTIAL

The following factors, specific to the Central Karoo District, have an influence on development potential within the Agricultural sector:

#### Availability of Land and Water

In the Central Karoo district there is an increased interest in Agriculture due to land reform, but the challenge experienced is that agricultural land is shifted for uranium mining. Land is bought up by non – bona fide farmers and transformed into game farms. Some farms are bought by foreigners and are used for Holiday resorts. There is also a great demand for land used for residential purposes.

The external climate conditions, such as drought, are also a big challenge in the area, because it reduces output and increases risk and cost levels. Wool and mohair production has decreased by large percentages as a result of the periodic droughts in recent years. Another important constraint to agricultural expansion in the Central Karoo Municipal area and in South Africa is the availability and cost of water. Almost 50% of South Africa's water is used for agricultural purposes. There is also very little land under irrigation, due to the lack of water resources in the region, but also because the soil is very porous.

Despite the dry climate and need for water there are only four dams that predominantly serve the region.

- The **Floriskraal Dam** is located near Laingsburg but serves predominantly Little Karoo needs
- The **Leeu Gamka Dam**, situated between Beaufort West and Laingsburg, serves local farming needs
- The **Oukloof Dam** serves a limited number of farms in the Prince Albert area, with the balance served by the **Gamkapaort Dam**



### Economic Linkages

Various linkages exist for Agriculture in the Central Karoo. There are strong backward linkages with various sectors, such as the manufacturing sector for the production of machinery and fertilisers, the transport sector for the transport of inputs, as well as the electricity and water sector for the provision of adequate water supplies to farmlands for irrigation and other processes. Other backward linkages include inputs from labourers, most of which have fairly low levels of education and generally earn low wages.

Inputs for the production of food and beverage products can be obtained locally by small-scale agricultural production around the District. Certain organically grown products are used to produce products, which in return can be consumed locally or exported to neighbouring towns. Leather products are aimed at the region's stream of passing tourist. Sheep and goat meat is for domestic consumption. Wool, mohair and deciduous fruit mainly go to major centres for export.

Although the agricultural economic linkages in the Central Karoo seem to be fairly well developed, there are possibilities to improve the existing economic linkages and establish new linkages. For instance, the possibility to develop organic farming in the area, which can expand the linkages to existing markets, as well.

Stronger linkages between agriculture and tourism can also be created, by not only expanding on existing situations, but also in creating new opportunities, such as accommodation on farms, incorporating the adventure tourism on areas on farms which are not utilised by crop production, as well as creating education opportunities. For instance, game farming can also help alleviate poverty in the Central Karoo Municipal area. Game farming includes linkages to agribusiness, like processed venison products. Game farms also provide opportunities for eco-tourism development and the settlement of emerging farmers/tourist operators. These opportunities are discussed in more detail at a later stage.

### Technology Changes

In the Central Karoo, Agriculture poses a great threat to the environment if new technologies promoting sustainable agriculture are not implemented. The aim would be to implement new technologies to improve the efficiency of farming practises.

### Enabling Environment

Some of the constraining factors in terms of the supporting/enabling environment that have been identified in earlier studies include:

- Lack of financial services and support for the intensive and subsistence farmers
- Lack of supporting services for farmers in the area
- Lack of efficient representation of farmers' interests
- Under-utilisation of the services of extension officers

### Availability of Labour and Skills

With unemployment at **30.7%**, in terms of the quantity of the labour force in the agricultural sector, the Central Karoo Municipal area does not have a shortage in labourers. In terms of the quality of the labour force the population has a literacy rate of 89%, which can be trained to obtain agriculture education and skills. The 11.5% who are not literate can be trained in labour-intensive work such as cutting and packaging of fruit and vegetables.

## VALUE CHAIN & GAP ANALYSIS

In order to further investigate some of the development opportunities identified above, this section contains a value chain analysis of three agricultural industries, namely horticultural, meat production, and Agri Tourism. The analysis will focus on the elements/components of typical value chains in each industry and point to current gaps within the Central Karoo District Area, in terms of these value chain elements.

### HORTICULTURE

Horticulture is the science, business and art of growing and marketing fruits, vegetables, flowers, and ornamental plants. It's unique among plant sciences because it not only involves science and technology, but it also incorporates art and design principles.

Horticulture can be divided into two groups - edible plants (fruits, vegetables, nuts) and aesthetic plants [meaning those grown for their beauty].





**HORTICULTURE IN SOUTH AFRICA**

South Africa has a highly developed deciduous fruit industry geared for the export of a large percentage of its products. The deciduous fruit industry consists mainly of pome fruit (apples and pears), stone fruit (apricot, peaches & nectarines, plums) as well as table grapes. Peaches, pears and apricots and grapes are also processed and supplies as either canned or dries fruit products to the international and local markets. The total area planted to deciduous fruit in South Africa amounts to 74 246 hectares. The total number of deciduous fruit producers is 2 225. The Western Cape has the largest concentration growers which represent 74% of the total area planted to deciduous fruit. The Northern Cape is the second largest area representing 15% of the total area followed by the Eastern Cape (8%).

The South African deciduous fruit industry is an export orientated industry with large volumes being exported annually. The exporters are represented in the industry by the Fresh Produce Export Forum (FPEF). The current members of the FPEF include 88 of 172 registered exporters, representing more than 80% of export volumes. During the 2005 season 108 exporters were responsible for exporting more than 50% of the total export volume.

The deciduous industry creates employment for almost 100 000 employees (converted to equivalents) throughout the whole of South Africa. Permanent labour is mainly employed to perform task such as harvesting, supervising, operational duties in pack houses, irrigation management, and insect and disease management on a seasonal basis, tractor and forklift driving.

South Africa is self-sufficient with regard to vegetable production and also exports both fresh and processed vegetables. Tomatoes are the most important vegetable crop, followed by onions. A steady growth in more sophisticated vegetable products, such as asparagus, celery, lettuce and baby-marrow's is taking place. The ornamental plant industry has grown into an important branch of South African horticulture. Although ornamental plants, seedlings and pot plants are economically by far the most important, cut flowers also make a noticeable contribution. The export of fern leaves is also noteworthy. At present, it is estimated that 150 ha of greenhouses are in use in South Africa, in which mainly English cucumbers and tomatoes are produced. Greens, such as peppers, lettuce, spinach and celery are grown on a much smaller scale and mostly under 50% shade-cloth structures. Hydroponic vegetable production is firmly established. Horticultural crops, particularly vegetables are produced throughout South Africa (Sub Sector Study: Deciduous Fruit, 2007).

**HORTICULTURE DISTRIBUTION**

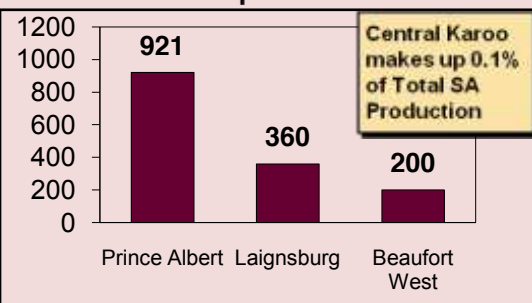
The south-western and southern regions of the Western Cape for deciduous fruit, grapes, wine and vegetables. The low lying, sub-tropical areas of Mpumalanga and the Northern Province for sub-tropical crops, citrus and vegetables. The lower reaches of river valleys of the Eastern Cape for citrus and vegetables. The Upington area is responsible for the distribution of grapes and wine.

**CENTRAL KAROO HORTICULTURE PRODUCTION**

The following shows the horticulture production in the Central Karoo

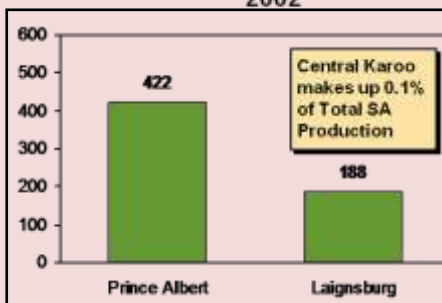


### Central Karoo Grape Production: 2002



(Source: Rural Economic Profile –CK, 2006)

### Central Karoo Deciduous Fruit Production: 2002<sup>1</sup>

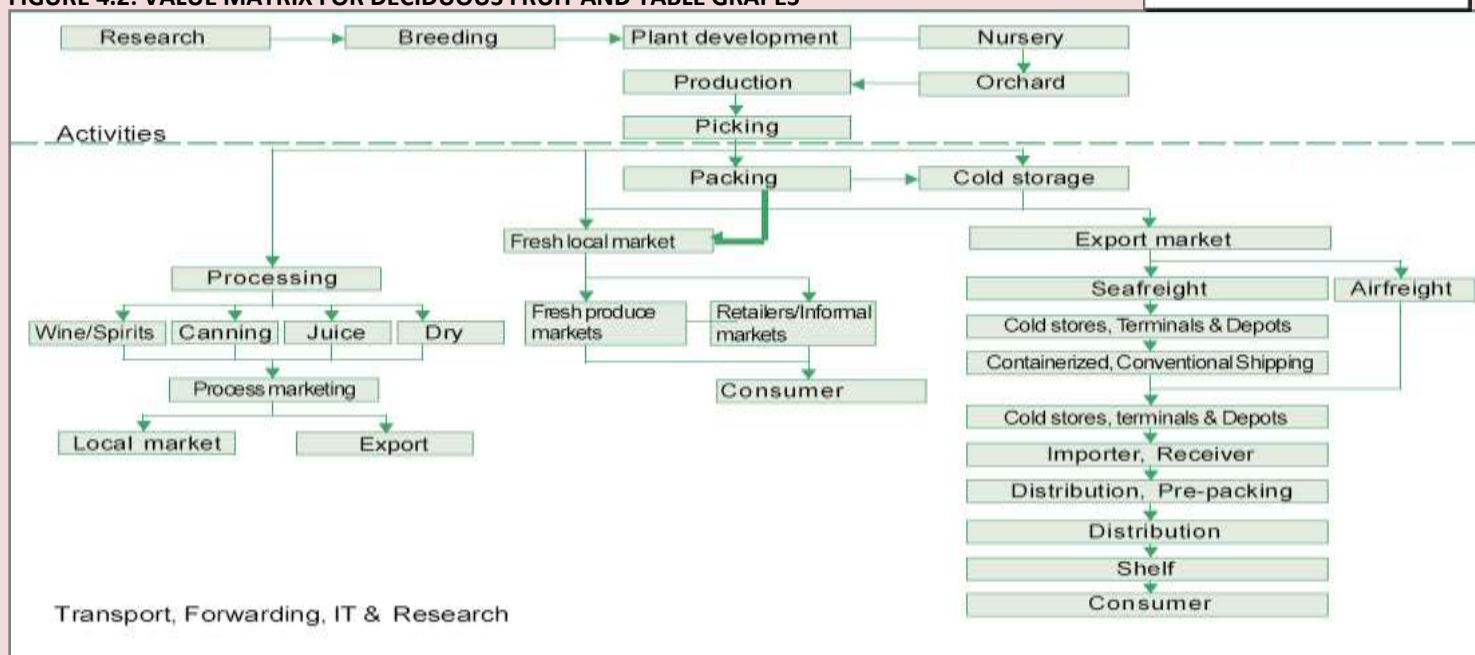


(Source: Rural Economic Profile –CK, 2006)

#### Current Activity

- **Fruit Processing**
  - Fruit processing takes place on a limited scale on individual farms
    - 40 Tonnes of White Genoa Figs are dried in the Prince Albert region
    - Juices, jams and preserves are produced, also in the Prince Albert region
    - Olive oil production is growing
- **Wine Making**
  - A small winery has been established in Prince Albert, but grapes from Laingsburg are still sent to De Doorns for processing

### FIGURE 4.2: VALUE MATRIX FOR DECIDUOUS FRUIT AND TABLE GRAPES



The Central Karoo is currently contributing to the deciduous fruit and grape value chain on mainly the primary production level, while little is contributed on the production, processing, Cold storage, packing and process marketing levels. The following gaps have been identified within the Central Karoo deciduous Fruit and grape value chain:

- By far the most prominent gap deciduous fruit and grape industry is **poor production** and **processing**. The transport of these products to ports is still a concern, but corrective measures can result in growing this sector.
- **Regional Cold storage facility:** Establishing a regional cold storage facility to enable fruit and vegetable production.
- **Infrastructure/Logistics** – Efficient infrastructure and logistics, such as the availability of efficient freight transport, cooling facilities, roads, telecommunications etc. is extremely important in order to create effective value chains.
- **Access to high growth/niche markets** – As already mentioned, there is huge potential in exploiting the growing market for organic products. This could be especially relevant for The Central Karoo in terms of creating opportunities for small-scale and emerging farmers. Programmes must focus on assisting such farmers in gaining access to these markets and ensuring that international standards for organic produce are met.
- The introduction of **grapes** and particular the **winemaking industry** is very exciting. The export possibilities for these products look very good as the wine industry has been very strong contributors to the Western Cape Economy. The **employment opportunities** in this industry out weights that of the existing agriculture sector by far and should have a very positive aspect once these wine farms are operational.
- **Skills and Training** - In the CKDM practical skills for horticulture development is needed. These skills includes, seed sowing, pricking out seedlings, propagation, planting, soil testing, pruning, potting plants, caring for plants etc.



### MEAT PRODUCTION

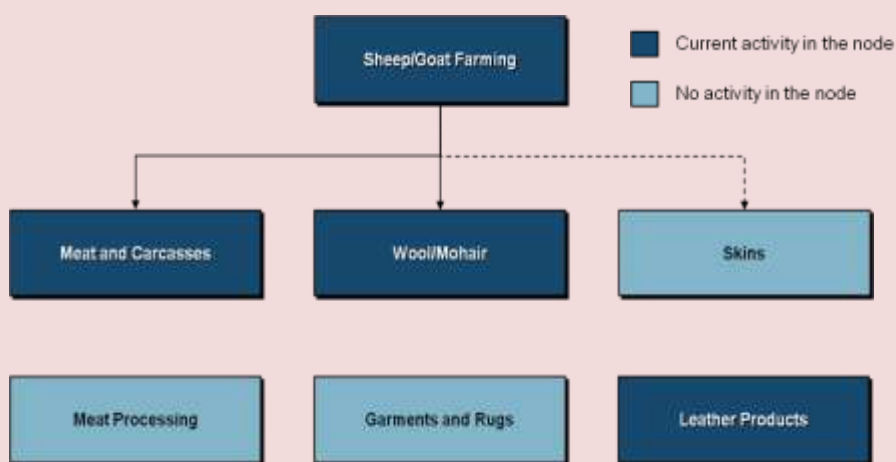
#### MEAT PRODUCTION IN SOUTH AFRICA



South Africa's climate is ideally suited for stock farming, and it is the most viable agricultural activity in a large part of the country. Almost 70% of the 122.3 million hectares of land surface of South Africa are suitable for raising livestock, particularly cattle, sheep, pigs and goats. On primary production level the South African red meat industry has a strong dualistic character, which stems from the past existence of self-governing states of the pre-1994 political dispensation. This has given rise to a large-scale commercial production sector co-existing with a small-scale, so-called communal, production sector in the former self-governing states. The commercial and communal production sectors respectively are also known as the developed and developing sectors (Analysis of selected food Value chains, 2004).

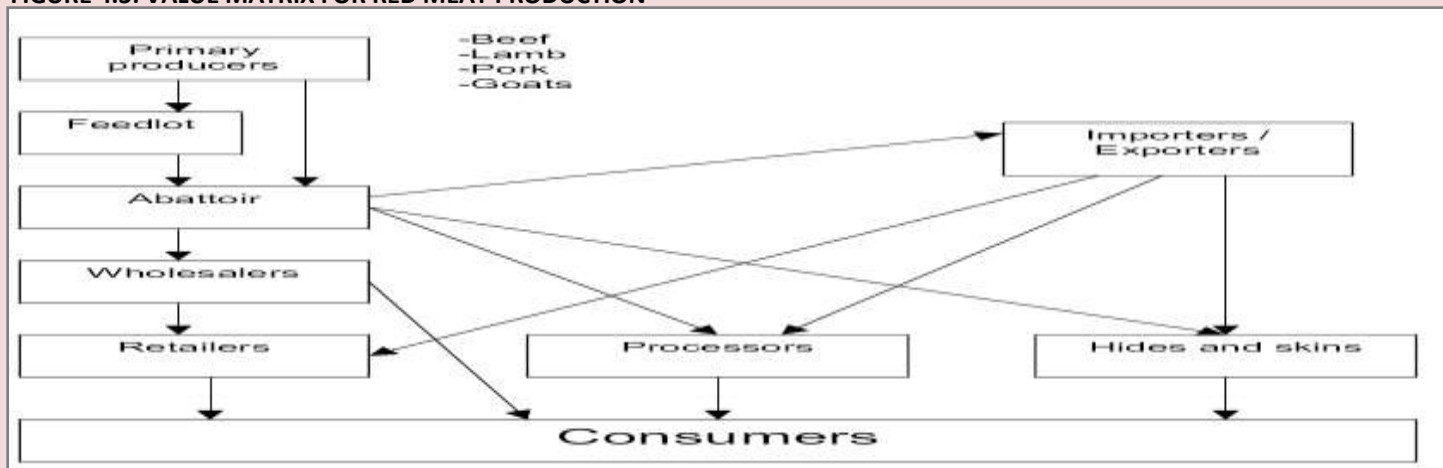
#### CKDM VALUE ADDING ACTIVITIES

Except for some leather manufacturing, most value adding activities take place outside the node



(Source: Rural Economic Profile – CK, 2006)

FIGURE 4.3: VALUE MATRIX FOR RED MEAT PRODUCTION



#### Local Perspective

The Central Karoo contribution to the red meats value chain is currently concentrated in the primary production area, while a limited contribution is made to secondary and tertiary production activities. The following are gaps in the value chain that should be addressed in the Central Karoo to ensure sustained growth in the red meats industry:

**Research and development** – Investment in technological research and the development of new products is crucial in gaining a



competitive advantage, and producers should be up to date with new developments.

**Infrastructure/Logistics** – Efficient infrastructure and logistics, such as the availability of efficient freight transport, cooling facilities, roads, telecommunications etc. is extremely important in order to create effective value chains.

**Meat processing capacity** – In order to add value to the meat produced within the Central Karoo, there is a need for meat processing facilities. This includes products like Karoo Lamb etc.

**Skin Processing** – No processing of skin is taking place in the district. Current abattoir value –adding activities can be expanded to include skin processing.

**Wool and Mohair processing** – improving the quality of wool and mohair products.

**Livestock feed production** – The availability of affordable and correctly formulated livestock feed is an important factor in red meat production. As a producer of Lucerne, there is an opportunity for the Central Karoo to produce Livestock feed and fulfil this requirement. An improvement in the capacity of the Central Karoo to produce commercial feed will have positive implications for the production of red meat in the area.

**Financing** – Targeted provision of finance is necessary to promote participation of emerging farmers and overcome barriers to entry.

**Skills** – The CKDM should ensure that the necessary skill is developed for meat production to take place. This include basic skills such as animal husbandries, slaughter men ect. More advanced skills includes production managers, meat process workers ect.

### AGRI-TOURISM

Agricultural Tourism refers to the act of visiting a working farm or any agricultural, horticultural or agribusiness operation for the purpose of enjoyment, education, or active involvement in the activities of the farm or operation (Agri Tourism in KZN, 2005).

#### Concepts of Agri Tourism



**Certified Farmer's Market (CFM):** A location approved by the local authority, where certified farmers offer for sale only those certified agricultural products they grow themselves. Other agricultural and non-agricultural products may be sold at the markets depending on regulations and market rules.

**Community Supported Agriculture (CSA):** Partnership between consumers and farmers in which consumers pay for farm products in advance and farmers commit to supplying sufficient quantity, quality and variety of products. This type of arrangement can be initiated by the farmer (farmer directed) or by a group of consumers (participatory).

**Direct Marketing:** Any marketing method whereby farmers sell their products directly to consumers. Examples include roadside stands, farm stands, U-pick operations, community supported agriculture or subscription farming, farmers' markets, etc.



**Farm Stays:** The activity of visiting a farm for overnight stays and for the purpose of participating in or enjoying farm activities and/or other attraction offered.

**Farm Visits:** The activity of visiting a farm for short periods of time for the purpose of participating in or enjoying farm activities and/or other attraction offered.

**Roadside Stands:** Also known as farm stands, refers to any activity where the farmer sells agricultural and value added products from his farm directly to consumers at a stand or kiosk located on or near his farm or along a road near the farm.





**U-Pick or Pick-Your-Own Operations:** These are fruits and farms or orchards where the customers themselves harvest the fruits or products. The prices they pay for the volume harvested will be usually higher than what the grower would get from a broker.

**Rent-a-Tree Operations:** These are arrangements where customers rent or lease trees from farmers. The consumers pay the farmer at the beginning of the season, the farmer takes care of the trees and either the farmer or the customer will do the harvesting.

**Value-Added:** Any activity or process that allows farmers to retain ownership and that alters the original agricultural product or commodity for the purpose of gaining a marketing advantage. Value-added may include bagging, packaging, bundling, pre-cutting, etc.

### Agri Tourism in South Africa

According to Peter Myles, director of tourism studies at the Nelson Mandela University, farm stays and agricultural tourism are not marketed effectively in South Africa. He stated that in 2003 1.8 million foreign arrivals was to South Africa who brought R53.9bn to the economy. Only 7% of foreign tourists spent part of their holiday in South Africa on farms. In order to promote agri tourism, Myles suggested that groups of farmers and local communities come together, assess what their surroundings have to offer and collectively approach tour operators to come to the area. He said such co-operation would lead to localities benefiting from tourism because more diverse activities would be offered. According to Agriculture Minister Thoko Didiza, farming and tourism should be combined in a diversified way to getting money injected into agriculture and make it attractive to young people. Therefore it is important to attract emerging farmers, especially the youth, into the sector and change black people's impression of farming as "an occupation of enslavement".



Combining classical farming activities and tourism would build a bridge between the first and second economies, she said.

Although government did not have a specific budget for promoting agricultural tourism, funding for such ventures came from poverty alleviation and land care programmes for rural areas.

According to the Minister, a balance has to be struck concerning land use, by determining how much land should be set aside for food security, how much for conservation and for residential developments such as golf estates. She said it was possible to combine the different land-use options in some areas such as having a luxury estate while the surrounding land could be conserved and used for tourism.

### Benefits of Agri Tourism

Various organisations and linkages can be formed locally. These linkages can include tourism organisations, farmers, crafters, local government etc. The benefits of these organisations working together can be to promote a wide range of businesses that are producing goods in a rural region. These benefits can be linked to the farmer, the local community and the region as a whole. It is the function of local government to create an atmosphere for economic growth in their respective municipalities.

These organisations can benefit from marketing together and not just as individuals. It can be easier to lobby government for assistance be it financial or capacity building. Brochures can be produced that can be made available in local tourist offices.

Linkages can be made with other attractions in the area, like game Parks, heritage sites, etc.

### How Agri Tourism can Add value in the CKDM

There may be a niche market for "farm" style accommodation that offers peace and quiet, rustic accommodation, personal contact, simple activities and a connection to agrarian roots in South Africa. However agri tourism does not seem to be organised as such. It does not seem that there is a government supported programme in place. There are rural areas and farms that practice this type of activity in South Africa and agricultural and rural shows are held regularly. An example of these is the Royal Agricultural Show (KZN).

Agri Tourism can be incorporated into normal agricultural practises in the Central Karoo. It gives an opportunity to the public in visiting agricultural, horticultural, or similar enterprises to learn more



about them, to take part in farming activities, or just to enjoy a day out. It is an alternative for improving the incomes and potential economic viability of small farms and rural communities. Agri Tourism provides recreational experiences and visits to rural settings or rural projects where customers participate in and experience many kinds of activities, events or attractions developed specifically for them.

The Central Karoo offers good combination of tourism experiences. Local areas like Prins Albert and Laingsburg, Matjiesfontein are such destinations. These areas have grown into an eclectic and fascinating mix of arts and crafts, restaurants and homely comforts, with a wide range of sporting, environmental and historical pursuits thrown in too. Popular activities include the Olive Festival in Prince Albert and the Beaufort West Heart Festival. Other towns in the region have smaller festivals and sport gatherings. These include:

- The Laingsburg Marathon
- The Karoo fees in Laingsburg
- Leeu Gamka's NG Kerk Bazaar
- Prince Albert: Witblitz fees
- Landbouskou
- Oktoberfest
- Harvest Festival

Many farmers in the Central Karoo can supplement their farm's income by offering Farm stays and visits.

Agri Tourism projects include:

1. Identification and history of farm and family
2. A tour of the farm
3. Light lunch
4. Showing of Angora goats (sex, age, etc)
5. Farming methods
6. Sheering demonstrations in season and mohair classification
7. Sheep counting competition
8. coffee / tea and finger snacks

Activities include:

- 4x4 tours
- 4 wheel motorbike rides
- wildlife viewing
- hand painting demonstrations for women as well as painting of cushions or tray cloths (depending on time)
- Curio shop



Other Agri tourism Projects that can be incorporated include:

- Level One
- Roadside Stands sales
- Pick-Your-Own
- Community Support Agriculture



### DEVELOPMENT POTENTIAL

According to research conducted by Urban-Econ in the previous chapter, the agricultural sector in the Central Karoo has a location quotient of larger than one, indicating a comparative advantage in this sector. Due to this high percentage the agriculture sector has huge potential to grow and stimulate economic development.

The challenge however for the agriculture sector in the region is to add value to more local products, which currently are just leaving the economy of the area "untouched". All the skins and hides produced in the region for example are sent to places such as Paarl and



Port Elizabeth as raw materials without any value addition to be refined and returned as high level economic goods. Approximately 50% of the sheep carcasses is marketed and processed outside the district. This creates an opportunity for agro-processing within the District. The pursuit of this opportunity would also be in line with the priorities of provincial and national government. Food production and agro-processing are identified as target sectors by AGISA, WESGRO, the DTI and in the National Integrated Manufacturing Strategy.

The following areas of potential have been identified within the Agriculture/Agro-industry Sector:

AGRICULTURAL OPPORTUNITIES	
<b>Labour Intensive agricultural projects</b>	Intensive commercial farming requires the highest capital input and the highest levels of organizational, technical and financial management, as well as being labour intensive. Such projects can be used to create focal points of economic activity within low-income communities.
<b>Specialized Horticulture</b>	Essential Oils, herbs and spices.
<b>Soya Beans</b>	Replacement field crop.  Oil Processing <ul style="list-style-type: none"> <li>oil may be refined for cooking and other edible uses</li> <li>sold/ use for biodiesel production or industrial uses</li> <li>Candle Making</li> <li>SOY-BASED FOAMS are currently being developed for use in coolers, refrigerators, automotive interiors and even footwear. Beginning in October 2007, Ford Mustangs rolled off the production line with soy flexible foam in the seats.</li> <li>Human Consumption</li> <li>Feed for Animals</li> <li>The high-protein fibre (which remains after processing has removed the oil) is toasted and prepared into animal feed for poultry, pork, cattle, other farm animals and pets.</li> <li>Bio composites (Building Materials) - recycled newspaper and soybeans.</li> </ul>
<b>Warehouse and Milling Operation</b>	The availability of affordable and correctly formulated livestock feed is an important factor in red meat production. As a producer of Lucerne, there is an opportunity for the Central Karoo to produce Livestock feed and fulfil this requirement. An improvement in the capacity of the Central Karoo to produce commercial feed will have positive implications for the production of red meat in the area. The CKDM can become an important node for animal feed/ agriculture equipment distribution through the establishment of a warehouse and milling operation.
<b>Structured Agricultural Training</b>	It is important for farmers and farm workers to work together to ensure the sustainable development of the products farmed. Farmers should therefore ensure that farm workers enrol in structured agriculture training programmes. The DoA can be approached to provide such training through the Cape Institute for Agricultural Training in Elsenburg.
<b>Incorporate farm workers in value-adding processes</b>	Agriculture is the highest employment sector, but poses a threat with seasonal employment. There is the potential of processing and packaging of products be done on the farms which will prolong the employment period.
<b>Organically produced seed</b>	There is no organically grown seed available in South Africa. Empowerment Group Diverse International identified this shortage as a market opportunity and launched the National organic Seed project. The Central Karoo District can take advantage of this project as its dry climate makes it a favourable place to grow organic seed.
<b>Community Seed production project</b>	Organic seed can be produced in people's backyard and then sold to the organic farmer/ central marketing agent.
<b>Agri Training Facilities</b>	To teach community and farmers organic seed production techniques and provide information on organic farming processes and access to information.



### OTHER DEVELOPMENT OPPORTUNITIES WITHIN THE AGRICULTURE SECTOR

<b>Agro-processing industries/activities</b>	Meat Processing, Goat meat (Young meat for export), Wool and mohair production, preservation of organic fruit and vegetables, Skin processing, Leather tanning, dairy product processing (goat/small specialised cattle dairy)
<b>Agro-based tourism</b>	Tourists visiting the large commercial farms in the area, e.g. ostrich farm, game farms and hunting. Accommodation and Restaurants. Game trails, Eco-Tourism – all local municipalities. Breeding of Rare game species (Hunting)
<b>Organic Agriculture</b>	Organic agriculture promotes linkages and connections between land and water, plants and people. Soil fertility is enhanced through the use of composted waste to be generated at the farm site and recycled into it, multiple crops and rotations, a belief in the beneficial results of encouraging biodiversity through numerous species, and no use of synthetic fertilizers or pesticides.
<b>Agriculture Waste Management Systems</b>	<ul style="list-style-type: none"> <li>Potential for processing and application of waste in the agricultural sector. <ul style="list-style-type: none"> <li>Agricultural waste 4 electricity</li> <li>Garden Refuse Recycling</li> </ul> </li> </ul>

### Import and Export Factors

South Africa produces many products of world-class quality for export. The country has a major importer of diverse products from most countries. From pharmaceuticals to telecommunications, South Africa is an advanced consumer of the latest on offer from international sources (South Africa Info, 2008).

#### Agricultural products

##### Imports

South Africa supplements local agricultural production with imports, key among these being consumer-oriented products, forestry products and intermediate products. One of the mainstays of the South African economy, the agricultural sector holds many opportunities with both large commercial and emerging farmers in areas such as capital investment, training, equipment and services supply.

##### Exports

South Africa is among the world's top five exporters of avocados, grapefruit, tangerines, plums, pears, table grapes and ostrich products. Farming contributes some 8% to the country's total exports. The largest export groups are wine, citrus, sugar, grapes, maize, fruit juice, wool, and deciduous fruit such as apples, pears, peaches and apricots. Other important export products are avocados, dairy products, flowers, food preparations, hides and skins, meat, non-alcoholic beverages, pineapples, preserved fruit and nuts, sugar, and wines. A number of high-growth niche markets are emerging, such as herbal beverages and luxury seafood (South Africa info, 2008).

#### Imports / Exports CKDM

The scale of exports in the Central Karoo is very limited and does not contribute significantly to the economy. The majority of the products exported is primary food related goods such as beverages, spirits and vinegars. The main export destinations include Europe, America and Asia (Quantec, 2008). The CKDM is currently not importing any products for local use.

#### Import/Export Opportunities

##### Organic Seed production / Organic Agriculture

The global market for organically grown products is a growing trend. There has been a shift (trend) towards high quality, organically farmed produce, which is captured by a smaller, high-quality portion of the market. This trend has especially been visible within the





middle to high-income portion of the market and looks to be an escalating one, in terms of domestic sales and exports.

Already boutique chain stores such as the Woolworths group, has focused their entire marketing strategy on this end of the market and only sells organically grown, non-preservative foodstuffs. These products range from fruit and vegetables to niche market olives, grapes (wines), teas, etc.

Some 70% to 100% of the produce from large organic farms in South Africa is exported, whereas smaller farms tend to produce for the local market. An estimated 80% of all exports are to the EU, primarily the UK, Germany and the Netherlands. Despite the existence of EU producer subsidies that put pressure on prices, there are further export opportunities, particularly given southern hemisphere/seasonal advantage and the weakness of the Rand.

Production for the local market includes a variety of vegetables and produce not of export quality. Some 15% of produce is sold directly to the public, with 30% going to national retail chains and 15% to small retailers. The remaining 40% is used in processing (Wesgro, 2000).

Organic farming is very appropriate for the inclusion of emergent farmers in the Central Karoo Municipal area because it implies traditional farming methods. For example land is ploughed with traditional hand-held ploughs and teas such as Honeybush is harvested and processed with hand held implements. Organic farming is, whilst being a viable commercial opportunity, also a communal effort. Organic farming practices need organic inputs, and cannot be readily produced along farms, which uses non-organic production methods. This implies a greater effort among the local community to really benefit from organic farming.

### **Organic seed farming**

The CKDM is utilised for seed production on a contract basis for a European Company who supply the feedstock and technology. The CKDM can expand this market by organic seed production agriculture which will give access to niche markets.

### **Branded Karoo Lamb and Mohair**

The Central Karoo District is popular with its Karoo Lamb and the mohair industry is regarded as the largest in the world with a market share of 60%. Prins Albert falls within Cape Mohair country, which consistently produces the world's highest quality mohair and accounts for 60% of world production. The local market for mohair rugs and garments has grown phenomenally during the past years, making Johannesburg the mohair consumer capital of the world. The industry provides much local employment. Shearers and Classers from Prins Albert are sought after throughout the Karoo. The district is home to the oldest Angora stud in South Africa. Local farmers host visitors from all over the world and are actively involved in the industry development and offer training and sheering courses.

Although the wool and mohair is not processed locally opportunities can be created to add value to these secondary products. These products will give access to huge export markets.

Other Export opportunities include:

- Processing and Value addition to skins and hides
- Processing and value adding to fruit and vegetables

### **Import/Export competitive advantage**

CKDM agriculture and agribusinesses have a number of competitive advantages making the region an important trading partner and a viable investment destination.

### **Infrastructure:**

The CKDM has a well –developed network of roads and railways. The region has access to major ports and international airports. Upgrading of the Beaufort west airport can contribute to the region as a favourable export destination.



## 4.3.2.2 Manufacturing Sector

### MANUFACTURING SECTOR DEFINITION



Manufacturing is defined as the physical or chemical transformation of materials or compounds into new products, whether the work is performed by power driven machines or by hand.

Manufacturing is regarded as the foundation of economic development, which can be attributed to the sector's significant multiplier effect due to its backward and forward linkages with other sectors. Linkages with the primary sectors of agriculture, fisheries and mining as well as the tertiary sector such as trade, transport and communication are common. Manufacturing adds to the value of the products and plays a role in creating direct and indirect jobs through processing and beneficiation of the raw materials.

In the context of this section, manufacturing is viewed as the value added activities of transforming primary products into secondary products. It includes:

- Processing of primary agriculture products (Agri-processing)
- Conversion of primary products into secondary products (e.g. clay into bricks)
- Conversion of secondary products into final products (e.g. wool into garments)



### MANUFACTURING IN THE CKDM

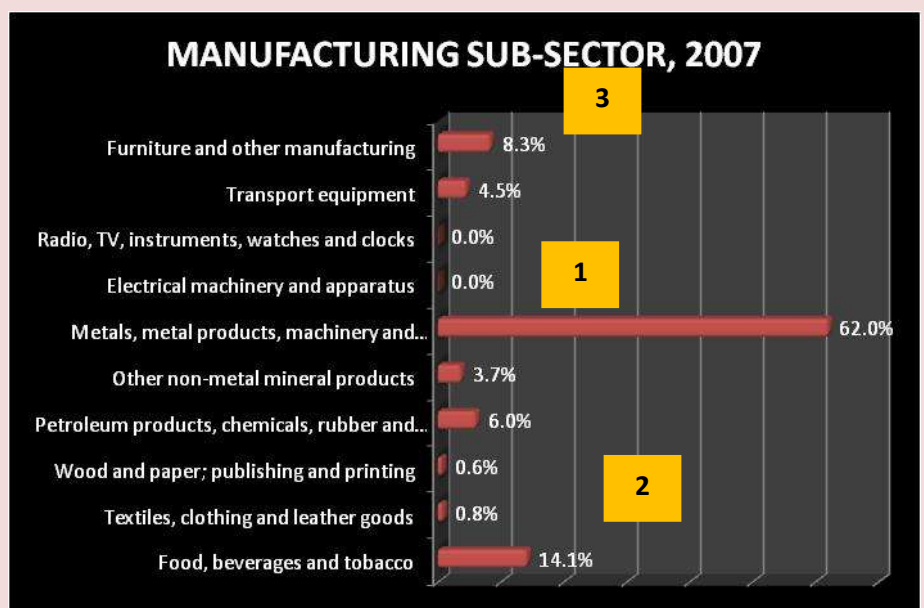
Manufacturing in the Central Karoo region is very low. The region is characterised with basic manufacturing which include pallet making, brick making (Murraysburg), casket manufacturing in Laingsburg and small scale manufacturing (hydroponics with its herbs and salad products, bottling of olives and olive oils, etc.).

Figure 4.4: CKDM Manufacturing Sub- sector

In general, the industrial base in the Central Karoo is relatively small, although it has exhibited steady growth since 2003. In 2007, the manufacturing accounted for 11.2% of the total manufacturing output in the District, and 5.2% of formal manufacturing employment.

The largest portion of manufacturing output is situated in Beaufort West. In terms of manufacturing employment in the Central Karoo, Laingsburg and Prins Albert have a relatively large number of employees per industry and a large gross output in total. Industries in the DMA, on the other hand, are medium- and small-sized with a lower percentage of workers employed.

Manufacturing Industries in the Central Karoo Region includes:

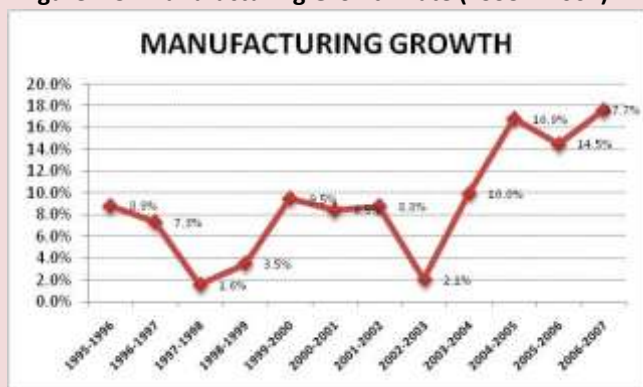


- Printing and Publishing
- Coffin Manufacturing
- Battery Products
- Steel Construction
- Building Construction
- Casket and Furniture Manufacturing
- Welding Repair Engineering
- Steel Slabs and Pump works
- Slabs, Pillars, Paving and kerbs
- Auto Electrical and Aircon gas

The leading manufacturing industries in the Central Karoo include:

- Metal Product, Machinery and Equipment
- Food and beverages
- Furniture Manufacturing
- Petroleum Products
- Transport Equipment
- Other-non metal mineral products
- Textile Clothing and leather goods
- Wood and paper products

Figure 4.5: Manufacturing Growth Rate (1995 – 2007)



(Source: Quantec, 2008)

Table 4.2: Economic Snapshot of CKDM Manufacturing Sector, 2007

ECONOMIC INDICATOR	MANUFACTURING
GDP Contribution (2007)	11.2%
Average Growth Rate (1995 – 2007)	9.1%
Employment Contribution	5.2%
Main Sub- Sectors	<ul style="list-style-type: none"> <li>• Metal Product, Machinery and Equipment</li> <li>• Food and beverages</li> <li>• Furniture Manufacturing</li> </ul>

### FACTORS IN THE ANALYSIS OF DEVELOPMENT POTENTIAL

The following factors, specific to the Central Karoo District, have an influence on development potential within the Manufacturing sector:

#### Resource Base

Manufacturing within the Central Karoo is linked with the primary sector such as Agricultural and mining activities.

Mining Activities in the CK is limited in contrast with Agricultural activities which plays a major role in the District economy. Except for Agriculture as an important economic sector the small numbers of activities that take place in the primary sector are done on a small scale.

**Raw materials** that are found in the vicinity of the Central Karoo include uranium resources, small scale fruit and vegetable production, angora goats (mohair), ostrich (leather), game etc.

The Central Karoo is **weak** in terms of:

- Human Resource (Skills)



- A Conducive Business Environment (there are no significant business associations and thus little coordination)
- Local markets which are small and products which are transported to potential markets.

On the **positive** side Central Karoo has:

- An “untapped” source of raw material provided by mining products
- Good road and rail infrastructure
- Useful geographical position and reasonable access to markets
- Satisfactory climate.

### Market Conditions

Trends are specifically becoming a more important part of everyday life. Such is the case with regards to Textile and clothing. The Central Karoo with a reasonable local textile industry could take advantage of supplying branded clothing. The market for branded clothing includes the younger population and tourists visiting the Central Karoo (Wool processing, jerseys, Dye etc).

### Agglomeration advantages

The agglomeration and cluster of certain production functions would create opportunities where knowledge spill-over's occur and where industries can benefit. The agglomeration potential in the manufacturing of art and crafts associated with leather products, ostrich-ware and tourism is a good example of the benefit of agglomeration. The agglomeration of the meat processing and food and beverage sector is another development opportunity.

### Economic Linkages

Various linkages exist for the manufacturing of products in the Central Karoo. Inputs for the manufacturing of food and beverage products can be obtained locally by small-scale agricultural production around the District. Certain organically grown products can be used in order to manufacture products, which in return can be consumed locally or exported to neighbouring towns. The tourism sector already creates various opportunities where traders sell arts and crafts to the tourists. Other Craft base industries include leather products. This type of linking between the manufacture of tourism products and the tourism industry enables these two sectors to create added development opportunities. The potential manufacturing of mining products on small scale is another link between two sectors, which is an added potential in and around the Central Karoo.

### Labour and Skills

Certain skills are necessary for specific manufacturing procedures. It is important that skills that are needed within the manufacturing sector be supplied by way of training programs. These can be done by developing certain courses in which people can enrol and attain the skills. Manufacturing knowledge, depending on the manufacturing sub-group, also requires very specific skills. Such skills are mainly learnt 'on-the-job' rather than in tertiary education institutions. However, skills can be imported from the Western Cape Province and from outside South Africa to allow for skills transfer to the locals.



## VALUE CHAIN AND GAP ANALYSIS

In order to further investigate some of the development opportunities identified above, this section contains a value chain analysis of three manufacturing industries, food Manufacturing, textile and Clothing Manufacturing, and Leather and Allied Product Manufacturing. The analysis will focus on the elements/components of typical value chains in each industry and point to current gaps within the Central Karoo District Area, in terms of these value chain elements.

### AGRIFOOD PROCESSING

Industries in the Agri - Food Manufacturing Sub-Section transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products. The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers.

### National Manufacturing Perspective

South Africa has developed an established, diversified manufacturing base that has shown its resilience and potential to compete in





the global economy.

The manufacturing sector provides a locus for stimulating the growth of other activities, such as services, and achieving specific outcomes, such as employment creation and economic empowerment. This platform of manufacturing presents an opportunity to significantly accelerate the country's growth and development.

The dominant manufacturing Industries in South Africa which relates to manufacturing opportunities in the CKDM include:

- Agri - Food Manufacturing
- Textile, Clothing and foot wear

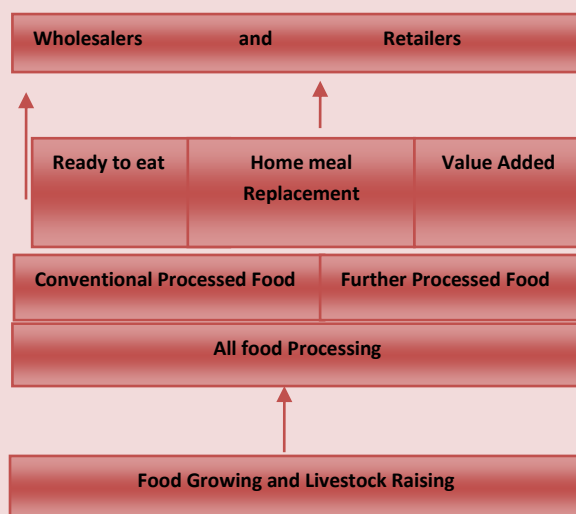
### Agri Food Manufacturing

The agri-food complex (inputs, primary production, processing) contributes approximately R124 billion to South Africa's GDP and employs approximately 451 000 people in the formal sector. Exports of processed agricultural products amounted to R17.2 billion in 2001.

The South African agri-food complex has a number of competitive advantages, making it both an important trading partner and a viable investment destination. A world-class infrastructure, counter-seasonality to Europe, vast biodiversity and marine resources, and competitive input costs make the country a major player on the world's markets.

The establishment of preferential trade agreements, such as the Africa Growth and Opportunity Act (AGOA) for the US market and a free trade agreement with the European Union confer generous benefits (South Africa.info).

**FIGURE 4.6: AGRI FOOD MANUFACTURING VALUE CHAIN**

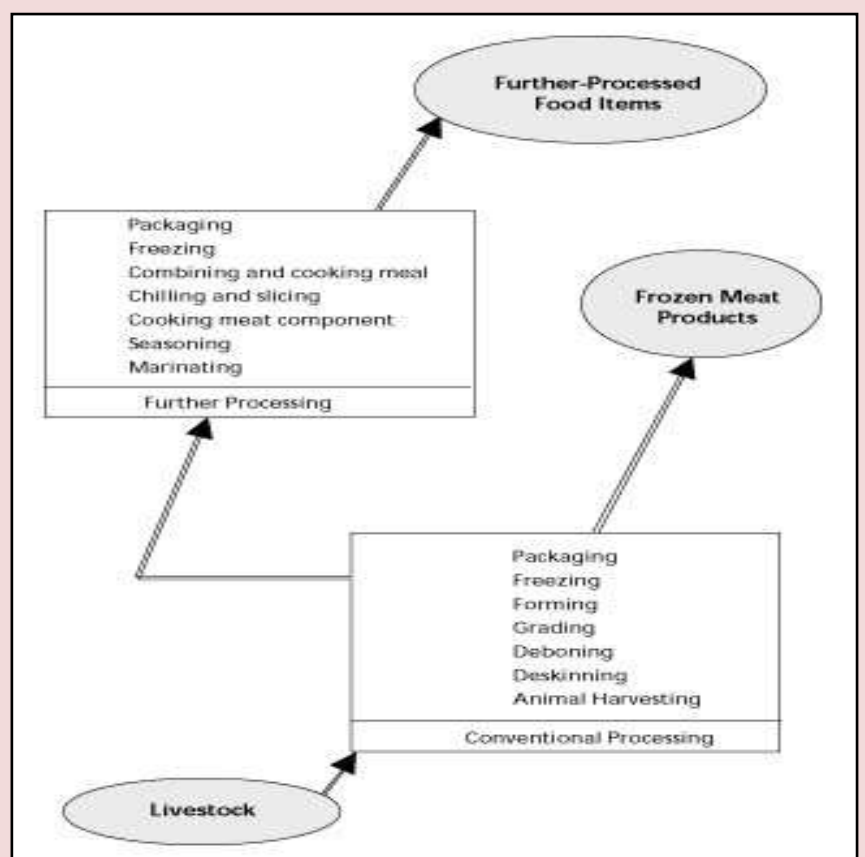


### Local Perspective

The Central Karoo contribution to the Food Manufacturing value chain is currently concentrated in the primary production area which includes food growing and livestock rising. The following are gaps in the value chain that should be addressed in the Central Karoo to ensure sustained growth in the Food and beverage industry:

**Enabling environment** – Factors that contribute to an enabling environment that promotes food manufacturing include slaughterhouses, Cold Storage Facilities, Packaging Plant, Canneries etc. Other factors that contribute to an enabling environment that promotes industrial development include adequate infrastructure, reliable electricity and water supply, information and communication technology networks, safety and security, and general levels of business confidence in the area.

**FIGURE 4.7: MANUFACTURING FURTHER PROCESSED MEAT PRODUCTS**



**Further Processing Food:** In further processing plants, meat and poultry parts, received from animal harvesting plants, are seasoned, marinated, and processed through cooking lines. Precooked and ready-to-eat products are then chilled for slicing, possibly combined with other ingredients, refrigerated in freezers, packaged, and shipped.

**Value adding processing:** for local and export markets

**Training and skills** – The lack of appropriate skills is a severely constraining factor in the food manufacturing sector, production workers, artisan and skilled precision workers. The lack of skilled artisans, for instance, has a negative effect on not only the food manufacturing industry, but the entire manufacturing sector. The specific skills areas where shortages are experienced should be investigated and training in these skills should be promoted. This can be part of the Seta's R23-million National Skills Fund (NSF) project to develop scarce and critical skills in the food and beverage manufacturing sector.

**Research and Development** – Technological innovation is another key determinant of global competitiveness. Traditionally, South African firms have imported and adapted technology, instead of developing their own from basic research. Innovation and the improvement of technological capabilities are therefore crucial to strengthen the competitiveness of South African industries. Local government can play a role in promoting R&D and facilitating cooperative ventures with research facilities, e.g. the CSIR, Mintek.

### TEXTILE, CLOTHING, CRAFT AND LEATHER MANUFACTURING

#### National Textile and Clothing Perspective:

The South African textile and clothing industry has a powerful vision. It aims to use all the natural, human and technological resources at its disposal to make South Africa the preferred domestic and international supplier of South African manufactured textiles and clothing. Though the textile and apparel industry is small, it is well placed to make this vision a reality. Due to technological developments, local textile production has evolved into a capital-intensive industry, producing synthetic fibres in ever-increasing proportions. The apparel industry has also undergone significant technological change and has benefited from the country's sophisticated transport and communications infrastructure. The South African market demand increasingly reflects the sophistication of First World markets and the local clothing and textile industry has grown accordingly to offer the full range of services from natural and synthetic fibre production to non-woven's, spinning, weaving, tufting, knitting, dyeing and finishing. Since 1994, about US\$900 million has been spent on modernising and upgrading the industry, making it efficient, internationally competitive, and ready to become a major force in the world market. Exports account for R1,4 billion for apparel and R2,5 billion for textiles, mostly to the US and European markets. Exports to the US increased by a dramatic 62% in 2001, driven primarily by the benefits offered under the Africa Growth and Opportunity Act (AGOA) which provides for duty-free imports of apparel produced in South Africa (South Africa. Info).

#### Manufacturing Process

##### Textile Mills

Industries in the Textile Mills Sub-Section group establishments that transform a basic fibre (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this Sub-Section, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this Sub-Section include preparation and spinning of fibre, knitting or weaving of fabric, and the finishing of the textile. Major industries in this flow, such as preparation of fibres, weaving of fabric, knitting of fabric, and fibre and fabric finishing, are uniquely identified. Texturising, throwing, twisting, and winding of yarn contains aspects of both fibre preparation and fibre finishing and is classified with preparation of fibres rather than with finishing of fibre. Excluded from this Sub-Section are establishments that weave or knit fabric and make garments. These establishments are included in Sub-Section, Apparel Manufacturing.

##### Textile Product Mills

Industries in the Textile Product Mills Sub-Section group establishments that made textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make no apparel textile products, such as sheets and towels).

##### Apparel Manufacturing

Industries in the Apparel Manufacturing Sub-Section group establishments with two distinct manufacturing processes: (1) cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment) and (2) the manufacture of garments in establishments that first



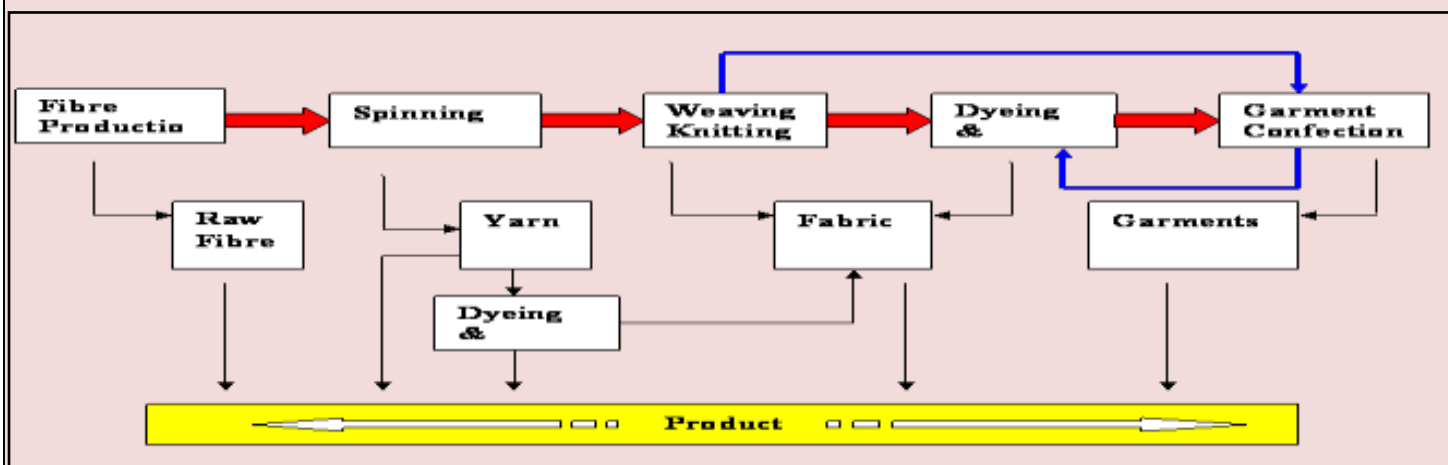
knit fabric and then cut and sew the fabric into a garment. The Apparel Manufacturing Sub-Section includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the Textile Mills Sub-Section, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

### Leather and Allied Product Manufacturing

Establishments in the Leather and Allied Product Manufacturing Sub-Section transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this Sub-Section because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this Sub-Section is partly because leather tanning is a relatively small industry that has few close neighbours as a production process, partly because leather is an input to some of the other products classified in this Sub-Section and partly for historical reasons.

FIGURE 4.8: TEXTILE AND CLOTHING MANUFACTURING VALUE CHAIN



The Textile and clothing sector value chain in the Central Karoo District is concentrated around activities linked to the Agricultural sector. In terms of the above diagram, activities in the CKDM Textile industry revolve around Mohair, wool, skin processing and primary manufacturing. The following gaps in the value chain should be addressed for downstream/beneficiation activities to develop and grow:

**Enabling environment** – Factors that contribute to an enabling environment that promotes industrial development include adequate infrastructure, reliable electricity and water supply, information and communication technology networks, safety and security, and general levels of business confidence in the area. These factors often have a significant impact on the cost competitiveness of firms.

**Investment incentives** – Local government can promote investment in priority industries through incentives that make it profitable for firms to invest in certain areas/activities. The CKDM can also play an important role in providing information on national/provincial government incentives and other industrial development initiatives.

**Training and skills** – The lack of appropriate skills is a severely constraining factor in the textile and clothing Industry, specifically machine operating skills, elementary textile knowledge and personal skills needed in textile processing. The lack of skilled these skills have a negative effect on not only the textile and clothing industry, but the entire manufacturing sector. The specific skills areas where shortages are experienced should be investigated and training in these skills should be promoted.

**Research and Development** – Technological innovation is another key determinant of global competitiveness. Traditionally, South African firms have imported and adapted technology, instead of developing their own from basic research. Innovation and the improvement of technological capabilities are therefore crucial to strengthen the competitiveness of South African industries. Local government can play a role in promoting R&D and facilitating cooperative ventures with research facilities, e.g. the CSIR, Mintek.



**Machinery and Equipment** - Textile machinery and equipment ranges from the machinery used to create fibres, yarns, fabrics, and final products as well as machinery used to apply chemical finishes and dyes. Additional equipment used to facilitate the logistics of the supply chain are also found in this industry such as computer and telecommunication devices, ERP and other planning systems, intra- and extranet, as well as Internet and other communication systems. It is important that the necessary machinery and Equipment be available to further process textile products.

### Conclusion

In conclusion, manufacturing industries in the global economy earn their economic position based on their competitiveness. Therefore, industries in South Africa need to maximise their performance in terms of the competitive factors that are under their control. The main role of government, including the CKDM, is to ensure a **favourable business climate** and a **suitable infrastructure** for industries to grow and to **promote investment, R & D and innovation** in priority industries.

### DEVELOPMENT POTENTIAL

The Central Karoo district does not currently exhibit a comparative advantage in the Manufacturing Sector, although it is a growing sector. However, the following development opportunities have been identified in the Central Karoo Manufacturing sector:

OPPORTUNITIES WITHIN THE MANUFACTURING SECTOR	
<b>Industrial development cluster</b>	<ul style="list-style-type: none"> <li>Manufacturing development can be promoted through the development of industrial clusters around growth sectors that appear to have a (potential) comparative advantage, e.g. industries linked to the agriculture sector; textile and clothing.</li> </ul>
<b>Industrial Park Development</b>	<ul style="list-style-type: none"> <li>The CKDM should identify an area zoned and planned for the purpose of industrial development. The Industrial Park should include the construction of industrial stalls/incubation to accommodate SMME's, with emphasis on manufacturing. This should include primary value adding products which can in turn be sold to wholesalers and retailers.</li> </ul>
<b>Manufacturing opportunities in niche markets</b>	<p>Invest in niche products in growing the manufacturing industry in the CKDM. This includes the development of small and medium manufacturing concerns producing goods for domestic and international niche markets.</p> <ul style="list-style-type: none"> <li>The CKDM <b>meat industry</b> provides opportunities to small-scale manufacturers who would like to engage in value added activities such as the manufacturing of processed meat, leather and leather products.</li> <li>Downstream processing of ostrich leather products</li> <li>Manufacturing of leatherwear from local skins and hides</li> <li>Organic food supplements and bio-medical products</li> <li>SMME manufacturing, incl. clothing, upholstery, arts and crafts, etc.</li> <li>Essential oils cultivation and extraction</li> <li>furniture industry</li> </ul>
<b>Manufacturing activities using local produce as inputs</b>	<ul style="list-style-type: none"> <li>Mining product beneficiation, e.g. uranium processing for nuclear fuel</li> <li>Agro-industrial processing, e.g. Dairy processing, Meat processing, processing of mohair.</li> </ul>
<b>Supportive and service industries linked to the Agriculture sector</b>	<ul style="list-style-type: none"> <li>Given the pace of globalisation of agriculture, rapid changes in science base, and the diverse regional features of research systems, there is a need to take stock of recent experience and re-think strategies for the future development of regional agricultural research and innovation systems. For the CKDM these supportive and service industries should relate to research systems currently being promoted in different regions and to identify promising directions for future investments. These industries should be targeted for growth, since more/larger contracts for the delivery of services/inputs to the mines will improve backward linkages.</li> </ul>
<b>Promotion of further investment in currently successful manufacturing activities</b>	<ul style="list-style-type: none"> <li>Manufacturing firms that are currently successful or have a strong presence in the Central Karoo could increase its positive impact on employment in the area if its operations were expanded through further investment. Targeted investment incentives should be focussed on niche market identified above.</li> </ul>





<b>Community Development Projects</b>	<ul style="list-style-type: none"> <li>Jewellery Design and manufacturing</li> <li>Sewing</li> <li>Livestock Banking</li> </ul>
<b>Promotion of manufacturing activities in accordance with national initiatives</b>	<ul style="list-style-type: none"> <li>E.g. Department of Transport's Bicycle Project – This project, which entails the rolling out of 1 million bicycles by 2010 in order to promote affordable, sustainable transport, holds an opportunity for the Central Karoo in terms of the manufacturing and transport sector.</li> </ul>

### 4.3.2.3 Trade Sector

#### WHOLESALE AND RETAIL TRADE SECTOR DEFINITION

The trade sector is defined as the resale (sale without reformation) of new and used goods to the general public for personal and household consumption or use by shops, department stalls, etc. Business is the derived demand from the local buying power; this suggests that the business sector cannot develop if there is limited buying power. The impact of the SMME sector is also impacting the wholesale and retail trade sector with a large number of small businesses parts of this sector. This sector excludes the activities from the informal sector and does not highlight the importance of the informal sector's contribution to the economy.



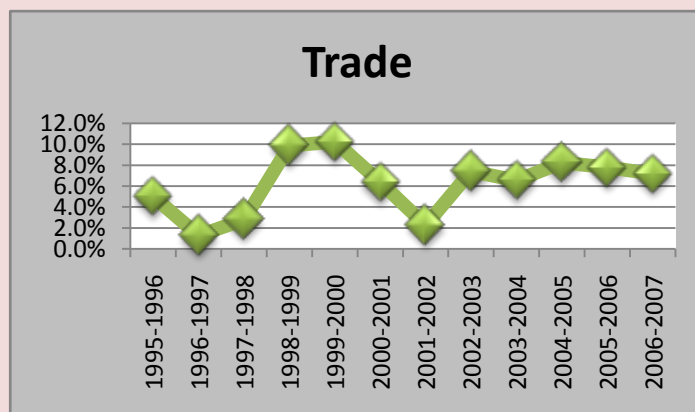
#### WHOLESALE AND RETAIL TRADE IN THE CKDM

The wholesale and retail trade sector is one of the largest sectors in the Central Karoo economy. The majority of trade activities take place in the urban settlements and towns within the Central Karoo District Municipality. The CBD of Beaufort West is an important area for economic activity in the Central Karoo. The number of businesses and the type of establishments located there gives an indication of the importance of the CBD to the economy of the Central Karoo.

#### WHOLESALE AND RETAIL TRADE SECTOR

The sector has realised positive growth over the time period indicated. This shows that the sector is constantly growing with consumer demand and supply reflecting in the growth of the sector. The average growth rate was 6.2% per annum (1995 – 2007). A growth in the sector usually also co-indicates with employment creation as business owners are more eager to employ people in an expanding economy.

**Figure 4.9: CKDM Trade Sector Performance (1995-2007)**



#### CKDM Wholesale and retail trade sub sectors

According to the Quantec and Urban Econ's Calculations 18.3% of the Central Karoo's workforce is employed in this sector. This is the sector that employs the third largest number of people in the region after the agriculture and community and other personal service sectors. Beaufort West is the largest urban centre and the most developed in the Central Karoo with linkages to other national markets. The large urban population in Beaufort West (36 268) means that there are a distinctive higher percentage of establishments and consumption of wholesale and retail than in any other area in the Central Karoo. This is also the case for Prins Albert which is the second largest within the district.

#### SUB-SECTORS

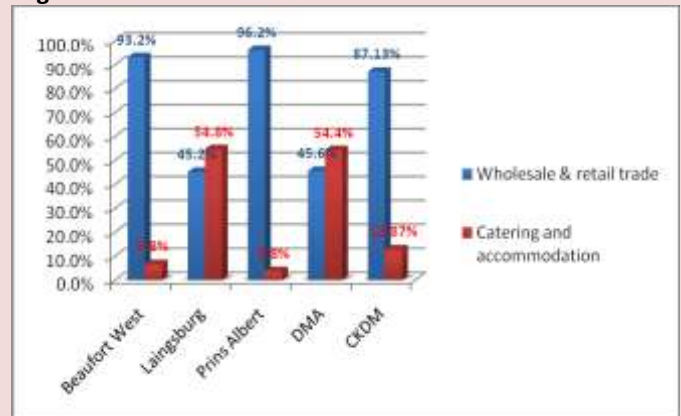
##### Wholesale & Retail Trade

The dominant contribution (**87.13%**) was made by Wholesale & Retail Trade Sub- Sector. There is a distinctive higher percentage of



establishments and consumption of wholesale and retail trade in Beaufort West and Prins Albert. This sector is also one of the most important sources of informal employment, with the informal trading segment having mushroomed in the region over the last decade.

Figure 4.10 : CKDM Trade sub-sectors



### Catering and Accommodation

The Catering and Accommodation Sub Sector accounted for **12.87%** in 2007. The dominance of the catering and accommodation sub-sector can be ascribed to tourism in the areas. Tourism activities contribute significantly to the trade and service related activities in the region as a whole. These areas contain out of a number of accommodation and tourism facilities and destination points, with the majority of which are neither graded, nor registered with the Tourism Bureaus.

Table 4.3: Economic Snapshot of the CKDM Trade Sector

ECONOMIC INDICATOR	TRADE
GDP Contribution (2007)	16.1%
Average Growth Rate (1995 – 2007)	6.2%
Employment Contribution	18.3%
Main Sub- Sectors	<ul style="list-style-type: none"> <li>• Wholesale and retail Trade</li> <li>• Catering and Accommodation</li> </ul>

### FACTORS IN THE ANALYSIS OF DEVELOPMENT POTENTIAL

The following factors, specific to the Central Karoo District, have an influence on development potential within the Trade sector:



### Resource Base

In the Central Karoo region, a number of cattle farming activities take place. Along with this is the increasing number of game farming in the area. These activities together with the processing of the livestock into certain products can be sold by retailers in the local market. Business represented by the retail sector within the CKDM includes:

- wholesale and trade
- retail trade
- repair of personal household goods
- sale, maintenance and repair of motor vehicles and motor cycles
- Catering and accommodation
- 

The Beaufort West CBD plays an important role in trade within the Central Karoo. The CBD is characterised as an important retail area which consequently also attracts a great number of people to that area.

### Market Conditions

An increase in the number of by passers ( $\pm 7000$  in season) (N1 alignment) through the District creates markets for the informal sector in which it can provide certain goods and services to these tourists. Ultimately the amount of informal trade should be reduced and linked to formal trade of tourism produces. An increase in demand of certain goods such as cattle products or beverages entails opportunities to trade these goods in the local market.

### Linkages

This sector has linkages with various other sectors for example the tourism and manufacturing sector. Products are produced in the manufacturing sector and are then sold in the retail sector of the economy. This illustrates that there are various linkages that form part of the wholesale sector and that activities in the other sectors may well influence the output of this sector.

### Regional Functionality

When goods and services are not readily available in the area in which people reside they will most often go to other areas in search of these products. Beaufort West with its large number of wholesale and retail stores offers a variety of goods to the consumer in Beaufort West but also to people staying in other towns in the Central Karoo. To ensure easy access to products the development of the Beaufort West Mall and Square increases an opportunity that not only eases access to trade services but also agglomerates traders. This attracts large numbers of people to one location for all their wholesale and retail requirements.

### Availability of Labour and Skills

Trade is a sector, which has many 'informal' participants. This is as a result of the low-skill requirements. As in most parts of South Africa, the poor normally turn to 'vending' as a means of survival. However, only formal trade sector is reflected in the District's Gross Geographic Product.

### DEVELOPMENT POTENTIAL

The following areas of potential have been identified in the Wholesale and Retail Trade Sector:

#### OPPORTUNITIES WITHIN THE TRADE SECTOR

<b>Gaps in regional retail hierarchy</b>	<ul style="list-style-type: none"> <li>• Provide shopping facilities to fill the gaps between the regional settlement hierarchy and regional retail hierarchy.</li> </ul>
<b>Manufacturing and agriculture supplies and services</b>	<ul style="list-style-type: none"> <li>• This includes all services and supplies needed by the manufacturing and agriculture sectors, for example Building Materials &amp; Hardware, agriculture equipment ect.</li> </ul>
<b>Fresh produce market</b>	<ul style="list-style-type: none"> <li>• A local fresh produce market would act as a local off-set point for the product of farmers, which could lessen transportation costs.</li> </ul>
<b>Multi Purpose Retail facility</b>	<ul style="list-style-type: none"> <li>• That sells local produced products in smaller towns. Economic space for trade is needed</li> </ul>



<b>Vendors at shopping malls</b>	<ul style="list-style-type: none"> <li>This includes more vendors at the premises of shopping malls through a controlled but not intrusive strategy. These vendors should include a variety of shopping mall components. This includes exclusive food courts that offer different cuisine ect. This could also be a means to keep/attract more tourists to the region.</li> </ul>
<b>SMME opportunities</b>	<ul style="list-style-type: none"> <li>Lower retail rental space i.t.o cheaper rent</li> </ul>
<b>Wholesalers</b>	<ul style="list-style-type: none"> <li>Of local produced food/products distribution to other areas. Linkage with the transport sector</li> </ul>

### CONCLUSION

The Trade sector has enormous potential for growth and employment creation. This is based on the substantial leakage of disposable income out of the Beaufort West Municipal area. The major shopping node in the CKDM exists in the settlements of Beaufort West. Apart from these towns, the retail supply consists mostly of small isolated shops scattered throughout the district. Many of these are informal in nature and only cater in the day-to-day requirements of local residents. Although facilities in the Central Karoo District Municipal area would never be able to compete with the agglomeration advantages of shops in areas like George, the population and its consumable spending power can support a variety of shops and consequently more local jobs can be created and more money invested locally. The development of the two shopping Centres in BFW has a great impact on the local area.

This development of the mall retains spending power in the local area. The Chamber of Commerce is trying to create an environment which is conducive to trading, such as to educate the local people and to develop the local economy in order to empower people and SMME's to attain growth and change. Trade and service activities are, to a large extent a function of the scale and nature of the agricultural and manufacturing activities within the area. This implies that the difficulties that are currently being experienced in the agricultural sectors as well as the growth in the manufacturing sector could all impact on the scale and nature of trade and service activities in the Central Karoo Municipal area. The exception to this is tourism activities, which should therefore be actively promoted to act as a balance against the other activities occurring in the area.

## 4.3.2.4 Transport & Communication

### TRANSPORT & COMMUNICATION SECTOR DEFINITION

This sector includes activities related to providing passenger or freight transport, whether scheduled or not, by rail, road, water or air and auxiliary activities such as terminal and parking facilities, cargo handling and storage. Division 75 of the SIC (Standard Industrial Classification) includes postal activities and telecommunications.



### TRANSPORT & COMMUNICATION IN THE CKDM

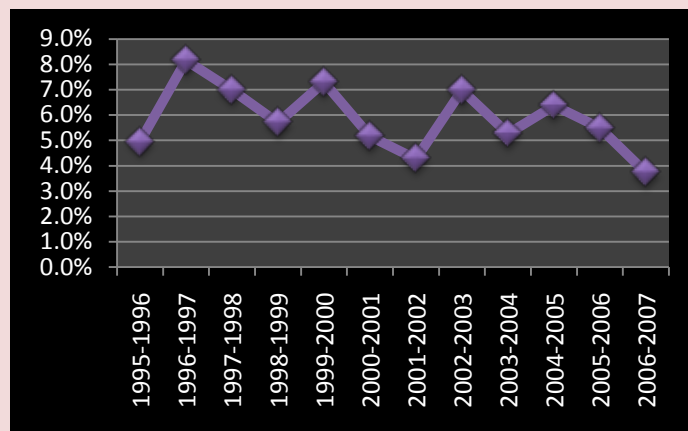


### CKDM TRANSPORT SECTOR

Figure 4.11: CKDM Transport Sector Growth Rate, (1995-2007)

The Central Karoo District Municipality has a number of transport companies located in the area as well as various tourist information offices, telecommunication and post office. The district has two airfields and is well linked by road and rail to the rest of the country.

Transportation is a major economic driver in the district. The Transport and Communication sector contributed 18.9% to national GDP during 2007 and if it is broken down even further it shows that transport and storage contributed 68.2% while post and telecommunication contributed 31.8% to GDP in 2007. The sector employed 4.2% of the regional workforce during 2007.



#### Transport

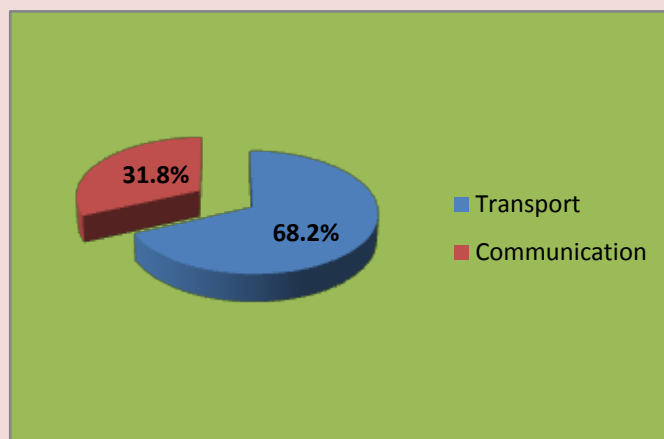
The Central Karoo's strong transport sector does not result from transport that originates in the region but rather from traffic that pass through the district. The passing traffic constitutes a range of traffic types from large freight vehicles and trains to private cars and formal and informal public transport.

The Central Karoo region has two national roads that run through the district, the first is the N1 and the second is the N12 which connects to the N1 south of Beaufort West providing a link to Oudtshoorn and George. The national roads that lead through the CK region increase the linkages to the rest of the country. The majority of the roads in the CK region are tarred roads and in good condition while traffic flow is managed by traffic lights and stop streets. Entry into Beaufort West by means of roads is easily accessible with traffic flow heavier at certain peak times of the day/year.

#### Public Transport

There is limited supply for public transport in the Central Karoo, which can be ascribed to the limited economic activity and low levels of affordability. Public transport is mostly by means of local bus services, long and short distance minibus taxi's and local informal sedan services. Transport for education, social and medical needs remains of concern. This is particularly true for the poorer part of the population outside the main towns due to the size of the region and the long distances from the main towns. For this group transport connection present a significant problem. Non-motorised transport alternatives (Cycling etc) must be considered as option for the local mobility of the rural population.

Figure 4.12: CKDM Transport Sector



#### Telecommunication and Post

The Communication sub-sector contributes 31.8% of the sectors total performance. Development within this sector is also supported by the importance of communication in the new global economy. The introduction of new technology to the area, i.e. logistics, ICT, marketing channels, networking platforms, call centres, etc. can all contribute to the development of various clusters and linkages within the local economy.

The Central Karoo region is well host with telecommunication companies. According to the 2007 Community Survey 61.3% of households in the region have access to telephones. There is a post office in each local area.





**Table 4.4: Economic Snapshot of the CKDM Transport Sector**

ECONOMIC INDICATOR	TRADE
GGP Contribution (2007)	16.1%
Average Growth Rate (1995 – 2007)	6.2%
Employment Contribution	18.3%
Main Sub- Sectors	<ul style="list-style-type: none"> <li>• Wholesale and retail Trade</li> <li>• Catering and Accommodation</li> </ul>

### FACTORS IN THE ANALYSIS OF DEVELOPMENT POTENTIAL

The following factors, specific to the Central Karoo District, have an influence on development potential within the Transport & Communication sector:

#### Availability of Raw Material

Transport does not comprise of raw materials but the transportation of raw materials surely does occur. The raw materials that need to be transported include mohair, animal skin, meat and fruit products. These materials are transported to major ports for export purposes and to the manufacturer for processing or to the wholesale and retail services where it is sold to the public.

#### Market Trends

Communication is vital to get information from one place to another. The use of sources that makes the flow of information quicker adds value to the business environment. The internet is an import tool used in the business environment and more and more businesses and organisations are using this as a method to promote their products and services. The supply of communication systems needs to be in good order and of the highest standard to support economic growth and development in the region.

#### Economic Linkages

Normal linkages with the tourism, manufacturing, construction etc. sectors exist within the Transport sector. This sector is an important part of national and international trade. Central Karoo is in a position where it has access to various modes of transport to trade internationally. These include by road, rail and aviation. Other initiatives that also add value are the N1 that runs through Beaufort West.

#### Agglomeration advantages

If the transport service is close to the actual inputs that need to be transported it minimises the transport cost and also reduces the time goods need to be transported. Services such as 'just in time' delivery can be implemented which increases the logistics of the sector.

#### Logistics

With the various linkages and agglomeration that can take place in the Central Karoo the potential development of the region as a package, storage and distribution hub would be ideal.

#### Infrastructure

A good working public transport system would enable people to move around quickly especially from rural areas and it will ensure tourists can get around easily. Well maintained transport infrastructure could also increase the attractiveness of the Central Karoo Region for investors.



### Availability of Labour and Skills

Many South Africa universities are churning out ICT graduates who end up in other fields or in ICT companies in the Western Cape Province. ICT skills in CKDM are low/not available.

### DEVELOPMENT POTENTIAL

#### OPPORTUNITIES WITHIN THE TRANSPORT SECTOR

Utilise existing infrastructure optimally through proper routine maintenance and rehabilitation routines

- This could also stimulate the creation of job opportunities, e.g. public works programmes

Upgrading of Beaufort West Airport to increase accessibility to the region

- The upgrading of the BFW airport will also have positive implications for the area's accessibility, especially in terms of air transport links.
- Car Rental Company to accommodate tourist that want to visit other areas besides BFW.

Transportation corridor development with surrounding areas and economies of importance

- This should also entail attracting investment and creating business opportunities(owned and operated by woman), especially along the transportation corridor/s

Examples Include:

- 1) Regional public transport corridor development plan
- 2) Freight – Export Contracts, Warehousing shipping
- 3) Trucking – Long Haul Trucking
- 4) Short distance from wholesalers to Harbours
- 5) Aviation – Medical Evacuation/Medical Tourism

Transportation for rail commuters

- Main station BFW
- Upgrading of Railway lines and reopening of railway stations
- passenger rail transport service between a town centre, and outer suburbs and commuter towns
- A public transport hub behind the main railway station, to facilitate connections with other modes of transport available
- Improving the safety and efficiency of rail commuter services, in order to utilize the system to full capacity

Introducing new communication technology, i.e. logistics, ICT, networking platforms, call centres, etc.

Possibility of a Logistics/Distribution Centre in the Central Karoo should be investigated that link with the identified potential for processing industry and retail.

Need for an effective subsidised mass public transport system and a district level institutional structure to focus on and take charge of managing the public transport function.



Control and regulation of the minibus-taxi industry

Encourage usage of alternative transport modes

- Bicycles

## 4.3.2.5 Finance & Business Services

### FINANCE & BUSINESS SECTOR DEFINITION

This sector includes *inter alia* financial intermediation; insurance and pension funding; real estate activities; renting or transport equipment; computer and related activities; research and development; legal; accounting; bookkeeping and auditing activities; architectural, engineering and other technical activities; and business activities not classified elsewhere. The sector therefore includes business activities offered by individuals, organisations or the renting of equipment.



### FINANCE & BUSINESS IN THE CKDM

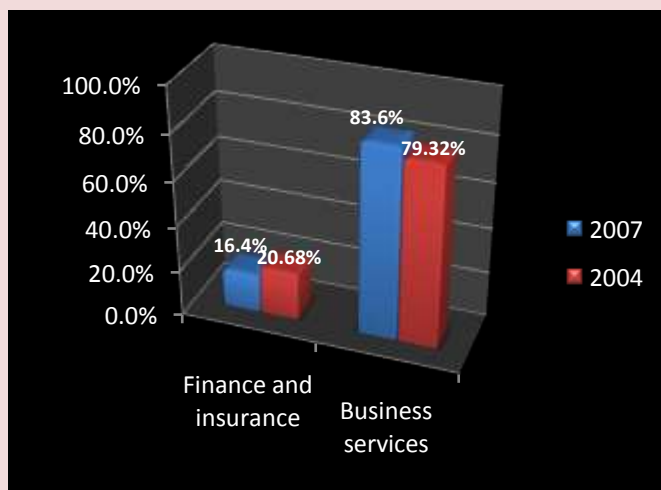
The Finance and Business Service Sector is the major economic contributor within the Central Karoo. This sector contributed 21.9% towards the Central Karoo Municipal area's GGP in 2007. As a Tertiary sector, the performance of the finance sector is dependent on growth in the other economic sectors. This sector provides work to 11.4% of the working population in the Central Karoo Region.

#### Sub Sectors

The dominant contribution (83.6%) was made by the Business services and 16.4% was made by Finance and Insurance in 2007. This also illustrates that business services increased from 2004 to 2007. The same trend is true for finance & insurance. The insurance industry plays an important part as unpredictable floods and other natural disasters can have major implications for the sector.

The financial sector has an important role in terms of the SMME sector. A number of entrepreneurs make use of credit facilities in order to start and run their new businesses. Most often people borrow money from the banks to finance their start-up of capital expenditure of the business. An increase in interest rates affects these entrepreneurs more often than not because of large amounts of credit they have with the banks. Another aspect of the financial sector is the availability of funding; in order to stimulate the economic growth people should have access to good and sufficient financial institutions.

Figure 4.13: Finance and Business Service Sub-Sectors



CKDM has a number of financial institutions most of which have their headquarters in Beaufort West. Branch offices of financial institutions, such as ABSA, FNB are located in the other local towns such as Prins Albert, Laingsburg and Murraysburg. In some of the more rural settlements and smaller towns, most of the financial services are rendered by ATM machines.

These institutions in Beaufort West are easily accessible and awareness of the type and different products available from these institutions should be communicated effectively to the public. Accessibility of the financial institutions is better in the central business areas and the surroundings than in the informal and rural areas of the Central Karoo. In order to improve the accessibility to the informal areas financial institutions should consider opening small information offices in those areas.





A common problem throughout South Africa is safety at All pay points. Elderly people often fall victim to robbery and/or assault due to the insecure locations of some pension payout points.

**Table 4.5: Economic Snapshot of the CKDM Finance sector**

ECONOMIC INDICATOR	FINANCE AND BUSINESS SERVICES
GGP Contribution (2007)	21.9%
Average Growth Rate (1995 – 2007)	9.2%
Employment Contribution	11.4%
Main Sub- Sectors	Finance and Insurance Business Services

### FACTORS IN THE ANALYSIS OF DEVELOPMENT POTENTIAL

The following factors, specific to the Central Karoo District, have an influence on development potential within the Finance & Business sector:

#### Economic linkages

The private sector does not operate and function in isolation in the Central Karoo. The local authority as well as the private sector should work together in order to understand the reality of the sector and what is needed for growth and development in this sector. The SME sector can also supply services that are indicative of the Finance and business service sector.

The number of financial institution and their accessibility create the opportunity for entrepreneurs to access finance from various sources. The financial sector with its ability to provide finance, insurance etc to various sectors has string linkages with all sectors. The baseline is that any economic activity needs finance and the financial sector is the provider of these sources.

#### Agglomeration advantages

The development of office parks ensures that services are in close proximity of one another and that easy access is possible for clients.

#### Market trends

The business sector is in many ways one of the sectors that can provide employment and economic development in any economy. In order to support the establishment of viable and potential businesses the financial sector should provide credit support to these establishments.

#### Availability of Labour and Skills

The education of people in order to help them understand the basics of the financial services accessible for business development should be considered. The South Cape College as an educational institution together with other tertiary institutions in South Africa provides skills to people for employment in the finance and Business Service sector.

#### Logistics

The supply of business services is mostly concentrated within the Beaufort West CBD; development with regards to this sector could identify suitable property outside of the CDB/other areas and establish them there.

#### Infrastructure

The CKDM should supply properties with serviced land suitable for business to encourage business development.

The improvement with regards to access to financial institutions in the rural/informal areas in the Central Karoo should be considered. Better access to financial institutions creates opportunities for people to start businesses, invest in pension and insurance funds etc. Other types of funding should also be promoted.



### DEVELOPMENT POTENTIAL

#### OPPORTUNITIES WITHIN THE FINANCE AND BUSINESS SERVICE SECTOR

<b>Capital Funding for Government Programmes</b>	Finding funding for capital projects is a major concern for many government facilities. In searching for funding for capital projects, it is very important that facilities consider and use a variety of potential sources, including public grants and loan programs, as well as private sources such as foundations and donations from local residents.
<b>Awareness Programmes</b>	Financial education has an important role to play in ensuring that the CKDM population are equipped with the knowledge they need when making important decisions with regards to their financial situations. Improving financial literacy in the CKDM is a societal challenge which requires the contribution of a range of different stakeholders. Public authorities, the private sector, academia, financial and insurance institutions can all play their part when addressing knowledge deficits amongst consumers regarding the wide range of financial products and services on offer. Examples of awareness raising can be promoted through: <ul style="list-style-type: none"> <li>• Schools</li> <li>• Workplace</li> <li>• Current Customers</li> <li>• Events</li> <li>• Publications and brochures</li> <li>• Telephone and Internet</li> <li>• TV and Radio</li> </ul>
<b>Financial Packages</b>	Offer special financial packages to the CKDM population as they struggle with the effects of the current economic and financial crisis. <ul style="list-style-type: none"> <li>• Responsive to the needs of sector/clients</li> <li>• Design with customers in mind</li> </ul>
<b>Business Incentives</b>	Provide business incentives to encourage SMME and young Entrepreneurs. The main government departments, public entities and public-private partnerships that help small businesses get access to finance/ business incentives include: <ul style="list-style-type: none"> <li>• The Small Enterprise Development Agency (SEDA)</li> <li>• Department of Trade and Industry (DTI)</li> <li>• Industrial Development Corporation (IDC)</li> <li>• Khula Enterprise Finance</li> <li>• CASIDRA</li> <li>• Banks</li> </ul>
<b>Business/office Park Development</b>	<ul style="list-style-type: none"> <li>• To ensure that services are in close proximity of one another and that easy access is possible for clients.</li> </ul>



## 4.3.2.6 SERVICE SECTOR

### SERVICES SECTOR DEFINITION

This sector includes the general activities of central, provincial and local government such as health and social work, education, infrastructure provision, community organisations (NGOs), recreational, cultural and sporting activities, and other community, social and personal services. This includes sewage and refuse removal, sanitation and similar activities and military and navy activities.



### SERVICES IN THE CKDM

The Central Karoo District Municipality is the only Rural Presidential Node in the Western Cape. The CKDM Oversees Environmental Health throughout the region. The service sector contributed 15% to the districts GGP during 2007. This is the sector that contributes the most towards employment (30.1%) in the Central Karoo region. This percentage (30.1%) indicates the importance of the services sector in employing regional residents. It is believed that this sector will continue to play a major role in the regional economy, as these services will continually be in demand. Future investment in this sector is, however, dependant on Central, Provincial and Local Government investments in the Central Karoo Municipal area.

#### Sub Sectors

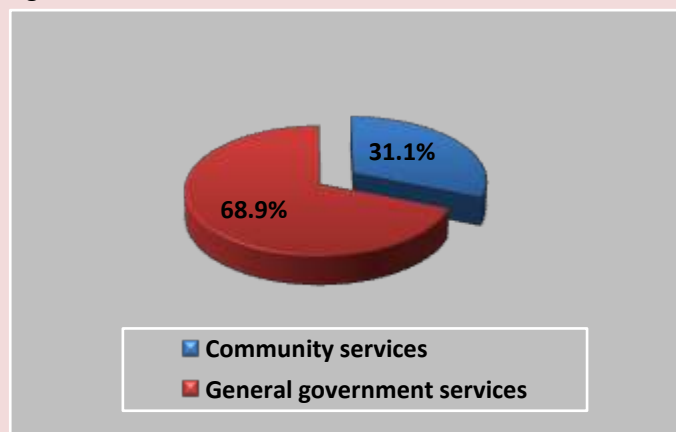
The Service sector can be divided into two sub-sectors namely general government services and community, social and personal services.

Government services are the largest contributor (68.9%) in this sector followed by community services (31.1%). General Government services decreased with 0.4% from 2004 to 2007 and Community, Social and other personal services increased by 0.5% from 2004 to 2007.

Figure 4.14: CKDM Service Sector

#### General Government Services

This Service sector mainly includes activities related to government services in the Central Karoo. Activities in this sector can mainly be found in the established urban nodes of the Central Karoo, where a larger concentration of people and economic activities are found. Beaufort West hosts most of the government departments within the District (CKDM and BFW LM and provincial Departments). The region consists of 3 local municipalities, the Central Karoo District Municipality and other provincial departments. Government departments situated in the Central Karoo include Red Door, PlekPlan and Dept. of Transport etc. The municipality has certain roles and responsibilities it needs to undertake for effective governance of Central Karoo Municipal area and the economy of the region.



#### Community Services

In terms community and personal services, the Central Karoo has long been neglected in the provision of higher order social facilities, mainly due to low population densities in the rural areas which make the provision of these facilities very difficult.

Although there are some well-established sporting facilities in the larger urban areas, as well as some recreational facilities, there is still a huge requirement for such facilities in disadvantaged areas, i.e. sport-orientated facilities, libraries, recreational facilities.

The education sector has been identified as one of the service sector in which there is a severe shortage, especially in terms of tertiary training facilities. There is also a lack of schools in rural areas, which forces pupils to attend schools in urban areas. A further serious problem is the growing mismatch between supply and demand for labour due to the dominance of an academic focus in training. The



focus therefore needs to shift towards vocational and artisanal training in order to meet the demand for specific skills in the Central Karoo economy.

### Infrastructure and Basic Services

<b>STRENGTHS</b> <ul style="list-style-type: none"> <li>• Good quality service</li> <li>• Sufficient water resources</li> <li>• Water canals</li> </ul>	<b>OPPORTUNITIES</b> <ul style="list-style-type: none"> <li>• Effective use of water canals</li> </ul>
<b>WEAKNESSES</b> <ul style="list-style-type: none"> <li>• Lack of 5yr maintenance plans</li> <li>• Insufficient municipal funds for regular effective maintenance</li> <li>• Maintenance and provision of roads &amp; storm water not sufficient</li> <li>• Bucket system in certain farming communities</li> <li>• Upgrade of individual sanitation services for farming communities per household (not communal)</li> </ul>	<b>THREATS</b> <ul style="list-style-type: none"> <li>• High maintenance cost of upkeep of gravel Roads</li> </ul>

### Education

Approximately 12% of the CKDM's population is without any schooling/ illiterate. Only a limited portion (12.8%) of the population has passed Grade 12. The illiteracy rate and situation in the Central Karoo is very problematic at this stage. Adult literacy and youth between the ages of 15-19 is problematic for the CKDM.

**Table 4.6: Economic Snapshot of the CKDM Service Sector**

ECONOMIC INDICATOR	SERVICES
GGP Contribution (2007)	15%
Average Growth Rate (1995 – 2007)	30.1%
Employment Contribution	0.7%
Main Sub- Sectors	<ul style="list-style-type: none"> <li>• Community Services</li> <li>• General Government Services</li> </ul>

### Health

<b>STRENGTHS</b> <ul style="list-style-type: none"> <li>• Sufficient state hospitals &amp; clinics</li> <li>• Regional HIV/AIDS strategies &amp; programmes</li> <li>• Mobile services to reach all areas</li> </ul>	<b>WEAKNESSES</b> <ul style="list-style-type: none"> <li>• Poor location of state hospitals in relation to ADI settlements/town ships</li> <li>• Insufficient access to doctors (doctor patient ratio skewed)</li> <li>• Insufficient access to medical facilities</li> <li>• Lack of permanent GP's in smaller settlements</li> <li>• Large distance from nearest private clinics/specialist</li> </ul>
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<b>THREAT</b> <ul style="list-style-type: none"> <li>HIV/AIDS</li> <li>TB, Fetal alcohol syndrome, alcohol abuse, teenage pregnancies</li> <li>Unemployment</li> <li>Dependency on the state grants and illegal credit system sole income &amp; resource for medical expenses.</li> </ul>	<ul style="list-style-type: none"> <li>Lack of services for private patients (state officials &amp; service industry)</li> </ul>	
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### FACTORS IN THE ANALYSIS OF DEVELOPMENT POTENTIAL

The following factors, specific to the Central Karoo District, have an influence on development potential within the General Government Services sector:

#### Logistics

HIV/AIDS has a negative effect on the economy as people require more health services and spend less time at work and decrease productivity if the disease is not treated. Antiretroviral medicine used to improve the health of people that have HIV/AIDS needs to be distributed and accessible.

#### Infrastructure

Infrastructure provision to all members of the community as well as improved access to health, educational and other infrastructure increases the attractiveness and service delivery of an area. The CKDM should ensure that infrastructure provision such as waste disposal, water and electricity supply and other government services are of a good standard to enable development in the region.

### CONSTRAINTS

The only constraining factors for development in the services sector are availability of funds, supply and demand, consumer preferences and their needs.

Some of the problems experienced in this sector in the CKDM, include:

- Shortage of educational facilities and personnel
- Lack of capacity in Government departments
- Lack of job opportunities —————> out-migration of young matriculates and graduates
- Lack of Skills
- Lack of entrepreneurship spirit
- Over dependency on state support
- HIV/Aids** affecting and taking the lives of economically active persons (often the breadwinner) who leave dependents behind
- Seasonality of labour** market mostly situated in the agricultural sector
- Decline of farm labour** on farms due to legislation on land rights, the high cost of farming, associated droughts and turbulent export markets.

### DEVELOPMENT POTENTIAL

- In terms of the education sector, it is important to undertake an **identification of specific skills shortages** within the Central Karoo. These identified shortages should then be addressed by the establishment of **tertiary training facilities** in the Central Karoo Region that can train the local labour force in the desired skills areas. Skills shortage has also been acknowledged as a major development constraint within ASGISA, and several medium-term educational interventions are being implemented by national government. ASGISA also encourages the development of an **Employment Services System**, which matches potential employers to employees, as well as a **scarce skills database**.
- Further potential also exists in the business services sector for the development of a **Call Centre**, since **business process outsourcing (BPO)** is one of the fastest growing markets in South Africa. Foreign direct investment has also increased in the call centre industry. Business process outsourcing has also been identified as a priority sector within ASGISA, and a joint project between government and business is currently focusing on strategies and incentives to create 100,000 direct and indirect jobs in this industry by 2009.
- Improve **access to basic service** throughout the region.



- Provide land for **housing developments**.
- Create an **enabling environment** for development and investment.
- **Private Hospital** in Beaufort West

### Synthesis:

This section analysed the economic potential which exists in the Central Karoo Region, and the identification of development opportunities and constraints within the different economic sectors. The main challenge for local economic development in the Central Karoo is to diversify the economic base and add value to the primary products produced in the area.

Forward and backward linkages within the economy should also be strengthened, and a unique opportunity exists for utilising the by-products of different economic sectors, e.g. agriculture and manufacturing, etc. for beneficiation and value-adding. This entails the processing and recycling of agricultural products. The value chain analyses of several industries which hold potential for the Central Karoo have also pointed to certain gaps that need to be addressed in order to further develop these value chains.

### Conclusion

The following **development opportunities and constraints** were identified within the Central Karoo Region:

- The agriculture and transport sectors are the sectors in the Central Karoo with a comparative advantage, with the Agriculture sector demonstrating a latent potential comparative advantage
- Within the agricultural sector, the main constraints to development are lack of arable land, water constraints, high input costs, low productivity and lack of access to financial support.
- Opportunities identified within the agricultural sector include the development of agricultural value chains, red meats and horticulture, as well as a focus on niche and export markets.
- The manufacturing sector is constrained by the decline in the agriculture sector, a lack of investment in industrial activities, lack of forward and backward linkages and a shortage of labour with the necessary skills.
- Development opportunities within the manufacturing sector include agro-processing, Textile, leather and clothing, the investigation of agriculture waste recycling as an economic opportunity.
- The performance of many of the other sectors, such as finance, trade and services, is essentially a derived demand. These sectors will benefit from the development of the previous economic sectors, as well as the general strengthening of economic linkages within the Central Karoo. The Transport and Communications sector has a particularly important role to play in terms of creating an enabling environment for economic development. The improvement and expansion of transport linkages and communication technology will improve the accessibility of the District
- In terms of services, many communities are still in need of higher order social amenities. A shortage of especially tertiary education facilities within the Central Karoo has been highlighted as a particular constraint.





## 4.3.2.7 Tourism Industry

### TOURISM INDUSTRY

Tourism is not an economic sector in its own (as classified by the SIC), but forms part of other sectors especially the trade, transport and finance sectors. However, due to its increasing importance as an income and employment creator in South Africa, it is believed that this sector should be discussed separately from the other sectors.

Defining the tourism sector is therefore difficult as it includes many different sources of goods and services. The World Trade Organisation's definition of tourism states that tourism comprises the activities of persons travelling to, and staying in places outside their usual environment, for not more than one consecutive year, for leisure, business and other purposes. The usual environment of a person consists of a certain area around his / her place of residence, plus all other places he / she frequently visits" e.g. the workplace



### TOURISM IN THE CKDM

Tourism has been identified as one of the sectors with the largest potential for growth and development in the Western Cape. This is particularly valid in the CKDM, where the unique diversity of communities, cultures and natural resources imply huge potential for sustainable tourism. The Central Karoo does not share in the tourism industry of the Western Cape, though. Only 2.2% of all tourists to the Western Cape visit the region. The length of stay and the average expenditure per day is also significantly lower than the rest of the province

The Central Karoo host one of the countries busiest national roads, the N1, and is in proximity to the Garden Route and the newly established R62 tour route that passes through the Klein Karoo to Oudtshoorn.



The prime attractive value of the Central Karoo is its natural beauty, wide-open spaces, magnificent landscapes, panoramas, largest eco system in South Africa and the sense of solitude. These attributes, although appealing to both the domestic and international tourist markets, require careful planning to convert into sustainable tourist attractions without destroying the original resource that attracted the visitor in the first instance. In addition to the open landscapes, the Karoo vegetation is able to support large herds of arid area wildlife and limited numbers of predators, as well as the "big five" on extensive tracks of land.

The "passing tourist" plays an important role in this sector due to the locality of towns like Beaufort West and Laingsburg on the N1 national road. Accommodation and other services to these tourists provide a number of employment opportunities in this region. As this category of tourist is normally on route to other destinations their length of stay in the region is very short. Even a very successful overnight destination such as the Karoo National Park testifies that the majority of their visitors are passing through and only stay for very short periods.



The main source markets are Gauteng and Western Cape for domestic visitors and Germany for overseas tourists.

The Karoo National Park is however one of the most successful tourist attractions in the region. Occupancy in the overnight facilities of the park exceeds 95% throughout the year. A significant limitation is the inadequate fencing of the park. This prohibits the park from introducing the dangerous animals that the tourists are coming to see in



our country. Herein are the economic opportunities for this area.

Prince Albert seems to have good ties with the Garden Route and receives a significant number of Garden Route tourists. The Swartberg pass and Gamkaskloof attract a constant flow of visitors, which ensures that the 35 guesthouses and other accommodation establishments are often fully occupied. There are a number of opportunities that could be exploited in this area and some initiatives, like the pontoon over the Gamkapoort dam may unlock a significant new market for tourism in this area.

Other true tourist destinations include the fossil sites that scattered through the region.

The following tourist activities exist in the Central Karoo region

- Luxury trains Rovos rail and the Blue train both stop in Matjiesfontien in south western Central Karoo.
- The Karoo National Park offers hiking trails, accommodation, conference facilities and some species of game.
- Places of historic interest include the Victorian town of Matjiesfontein and the Chris Barnard Museum



Accommodation facilities in the region include:

Accommodation	Beds
Hotels	302
Self Catering	213
B&B	100
Guesthouse	99
Backpackers	4

### FACTORS IN THE ANALYSIS OF DEVELOPMENT POTENTIAL

The following factors, specific to the Central Karoo, have an influence on development potential within the Tourism Industry:





### Market trends

Various trends are starting to develop in the tourism industry. One of the trends is the development of medical tourism and activities related to this. Medical tourism usually has a specific target market, and it should be specifically developed to cater for those needs. Central Karoo has a number of cultural aspects and landmarks and the packaging of these landmarks is a great opportunity to develop cultural tourism. Beaufort West as the largest town of the Central Karoo should also position itself within the conference market and supply facilities to cater for this market.

### Economic linkages

Tourism as an industry is an activity that can be part of most economic sectors. As such tourism can be part of trade for the selling of arts and crafts. It also provides accommodation which is normally a business service activity. The transport sector can also benefit from tourism as the tourist will need transportation to get from one area to the other.

### Agglomeration advantages

The larger amount of activities and attractions in a specific area, the larger number of tourists they will attract and keep for longer periods. An important aspect of tourism is to keep the tourist in an area as long as possible so that they can spend a large amount of money. This money in turn creates spin-off effects and generates employment opportunities in various sectors. Local areas should address this issue by developing a larger number of attractions and facilities to keep the tourist in the region for longer periods of time.

### Logistics

Information centres that supply the tourist with directions help and guidance to tourism activities, accommodation facilities, history etc. should be established in strategic positions throughout the region. This will enable the tourist to get all the information that they need. This will also package the tourism products in an organised manner.

### Regional service delivery

The national roads in the region mean that the CKDM is an important entry point. The location of a number of tourism agencies and operators within the region provide a regional service to the tourist.

### Labour

Skills development in specifically educating the staff of tourism information centres/ The SMME development in the short stay accommodation market should be promoted by using local labour and skills. Training in accommodation and the hospitality industry for staff should also be provided.

### Availability of raw materials

The Central Karoo area is characterised with wide-open spaces, magnificent landscapes which offers great tourist sites and destinations for development. The Karoo National Park just outside Beaufort West is one of the most attractive tourist attraction sites in the region. The promotion of tourism can be done by also focusing on eco-tourism development, the utilisation of the Agritourism and game farms in the region.

## DEVELOPMENT POTENTIAL

### OPPORTUNITIES WITHIN THE TOURISM INDUSTRY

<b>Promotion, information and infrastructure</b>	<ul style="list-style-type: none"> <li>Improved and focused marketing of the area as a tourist destination</li> <li>Development of tourism packages</li> <li>Improvement of tourism infrastructure, incl. transport links, signage, information services</li> <li>Urban renewal projects</li> <li>Stop crime</li> </ul>
<b>Development of tourism attractions</b>	<ul style="list-style-type: none"> <li>Focusing resources on development of existing tourism potential, especially SANPARKS and Prins Albert</li> <li>Development of edu-tourism</li> <li>Development of eco-tourism</li> <li>Development of sports related tourism</li> </ul>



	<ul style="list-style-type: none"> <li>• Agriculture based tourism</li> <li>• Mining Tourism</li> </ul>
<b>Development of specific tourist routes</b>	<ul style="list-style-type: none"> <li>• Eco-tourist route</li> <li>• Mine route</li> <li>• Restoring paleontological heritage such as was done at “Cradle of Humankind” tourist route</li> </ul>
<b>Tourism and hospitality training</b>	<ul style="list-style-type: none"> <li>• Ensure that the demand for skilled and semi-skilled labour in the tourism sector is met through e.g. a hospitality training college, training programmes, bursaries</li> </ul>
<b>Tourism facilities</b>	<ul style="list-style-type: none"> <li>• Development and improvement of tourism facilities and accommodation for the emerging, middle and high income tourist market</li> <li>• Specific focus should fall on ensuring tourism demand and needs can be met in terms of the 2010 FIFA World Cup</li> </ul>
<b>SMME's in tourism</b>	<ul style="list-style-type: none"> <li>• Focus on strengthening the role of SMME's within the tourism sector in order to maximize employment creation</li> </ul>
<b>Accommodation</b>	<ul style="list-style-type: none"> <li>• This opportunity needs to be exploited in particular five star hotels and resort</li> </ul>
<b>African cuisine restaurant (Organic) and retail outlet (Multipurpose Centre)</b>	<ul style="list-style-type: none"> <li>• A restaurant that offer purely African food, ranging from morogo to potjiekos. Retail outlet which sell textile and clothing produced from the areas mohair and leather products, including a curio shop (arts and craft).</li> </ul>
<b>Conferencing</b>	<ul style="list-style-type: none"> <li>• This opportunity must be exploited to host National Events especially with government departments(Provincial Gov) hosted in the Central Karoo to bring public participation and engagement processes such as Imbizo's, Summits, Launches to BFW as the most central point of the node.</li> </ul>
<b>Tourist Guide Sector</b>	<ul style="list-style-type: none"> <li>• Opportunity in developing black tourist guides</li> </ul>
<b>BFW Airport</b>	<ul style="list-style-type: none"> <li>• Service providers like the transport sector and accommodation facilities need to support this structure. Tourist will need transport from the airport to various attractions including a high impact accommodation facility.</li> </ul>
<b>Fun Train Project</b>	<ul style="list-style-type: none"> <li>• Opportunity for service providers to develop a fun train to serve the district</li> </ul>
<b>Astronomy Tourism</b>	<ul style="list-style-type: none"> <li>• CKDM area has a potential to be developed into an astronomy area. It has a very clear sky and wide open space. This could be an attraction.</li> </ul>
<b>Heritage and Museum Tourism</b>	<ul style="list-style-type: none"> <li>• Matjiesfontien</li> <li>• Restoring Karoo Style architecture (Murraysburg, Merweville and Nelspoort)</li> </ul>
<b>Nightlife and Entertainment</b>	<ul style="list-style-type: none"> <li>• That caters for all ages (youth and adults) interests ranging jazz music to disco. This can be an opportunity to keep passing tourist longer in the district.</li> </ul>

### TOURISM VALUE CHAIN AND GAP ANALYSIS

The value chain of the tourism sector is quite distinct from those of other (more traditional agricultural, manufacturing, mining etc.) sectors in that, with the latter, a tangible product is (typically) produced and then exported (or locally utilised). Points of production and consumption tend to be quite distinct. In the case of the tourism sector however, the “customer” must typically come to the place of production to “consume” the product. This consumption of the product is as much about interacting with the physical component of the service, as it is about the experience thereof. This makes for a relatively short and direct value chain for the sector.

#### TOURISM VALUE CHAIN

Two trends are notable with regard to the manner in which the value chain has and is continually evolving. Firstly there has been some backward integration by intermediaries, for example by the acquisition of various forms of suppliers. This may in part explain another trend: the rise of the internet as an end customer tool to access information and conduct transactions related to tourist activities. Supplier websites provide the end customer with the means to choose between and make payments on preferred options for travel and accommodation.

#### AREAS OF OPPORTUNITY

The value chain was analysed in terms of areas within which further value could be added in order to grow the sector, increasing employment and advancing transformation and empowerment. The areas of **distribution, intermediaries and customers** in the value chain can be seen as those areas that can (and should) be targeted in terms of **marketing and promoting** the CKDM to increase the number of tourist visitors. The core role of distribution and intermediaries is to ensure the supply product gets to the market and that the market has the necessary information to make informed purchase decisions.

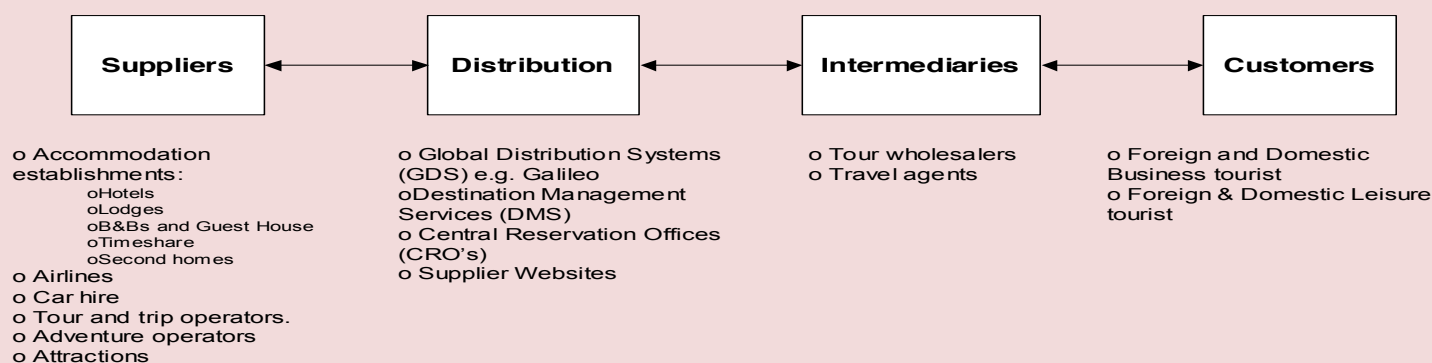


Along with Professional Conference Organisers (PCO's), it is important to encourage the location of such intermediaries within the District. Doing so supports the incentive to attract tourists from outside the district and also to grow internal volumes. There will, however, always be a need to have externally based intermediaries who may be closer to and understand more of potential domestic and international source markets.

The intermediary component of the value chain, comprising tour operators, constitutes a potential area within which **SMME development** can take place; particularly focusing on increasing awareness of products, and its geographic spread within the CKDM. Group affiliation is an important part of accessing business. Role players in the district, including government, private sector supplier groups and community structures, must provide a united and compelling value proposition to influence intermediaries to communicate and sell tourism to customers.

In terms of value adding in the tourism sector, the **supplier component** of the value chain is a core area, with a focus on accommodation facilities. The supplier component greatly determines the ability of the area to attract targeted overnight tourists. Beneficiation in the context of tourism can be understood in terms of rejuvenation of the existing products through repackaging and expansion (through complimentary products). As indicated in the value chain diagrams above, suppliers are made up of accommodation, transport, and trip operators as well as attraction providers. The experience of the tourist hinges on the extent to which these are packaged as a seamless whole and value for money realised. The supplier component of the value chain is another opportunity for potential **SMME development**, especially in the areas of smaller scale accommodation e.g. B&B's, guesthouses and lodges, tour and trip operators and interpreters of historical/heritage sites. SMME access to the market, via distributors and intermediaries, is critical to their long-term success.

There are **4 core** components to the tourism sector value chain. These are shown below with a description of each:



The following **gaps** have been identified in the CKDM tourism value chain, which presents opportunities for the development of this sector:

**Tourism infrastructure** – Infrastructure that has an effect on the tourism sector includes transport infrastructure and linkages, road signage, access to clean water, sanitation and electricity, safety and security, as well as tourism information services. All these elements need to be addressed in order to create an environment which enables tourism to thrive.

**Marketing/branding** – The marketing of the CKDM as a unique tourist destination is crucial in creating a compelling brand or marketing message that will lure tourists to the area. The development of tourist packages from the available products, including attractions, accommodation and transport, should provide tourists with value for money and a pleasant, hassle-free experience.

**Tourism information database** – A database containing information on **all** attractions, accommodation facilities, transport services, tour and trip operators could go a long way in improving the marketing of the area and enabling sufficient information to reach potential markets.

**Encouragement of intermediaries and distributors to operate within the CKDM** – Tourism intermediaries and distributors play an important role in matching up tourism supply to demand, i.e. ensuring information on tourism products reach the potential markets and enabling tourists to make informed decisions. A greater presence of these market players within the CKDM, together with greater cooperation with intermediaries outside the CKDM, could increase tourist volumes. This area of influence provides some opportunities for SMME development.

**Product rejuvenation/innovation** – This element represents the “supply side” of the tourism value chain. By developing, improving and linking the different tourism facilities, including attractions, leisure activities, accommodation and complementary products, a more varied “package” of products can be presented to potential markets. The supply element of the value chain also provides opportunities for SMME development, especially in terms of accommodation, e.g. B & B's, guesthouses.

**Stakeholder relationships** – Relationships and cooperation between the different stakeholders, such as different government departments, the private sector and SMME's is vital in ensuring that the tourism sector will contribute to the local economic development of the Central Karoo Region. This is important, since tourism development is a cross-cutting concern, which includes



government departments such as Agriculture; Culture, Sports and Recreation; Local Government and Housing; Roads and Transport; Safety and Security. Partnerships with the private sector are also crucial in assisting SMME's to gain access to the tourism market.

**Human capital** – The presence of appropriate skills, entrepreneurial abilities and culture of service within the Central Karoo will play an important role in the ability of the area to attract and retain a substantial portion of the tourism market. Facilities that provide training in hospitality and business management could address this issue.

### Conclusion

In order to maximise the benefits that the CKDM can derive from the development of tourism focus should be placed on areas that provide the most potential. Allocation of resources for tourism development in the short to medium term should therefore be focussed on strengthening the existing tourism supply base in the CKDM.

This will allow the area to capitalise on the significance of the region's primary tourism attraction by strengthening the critical mass of existing and complimentary product supply, upgrading access and linkage infrastructure, and improving product standards and service levels.

In terms of development constraints in the tourism sector, the improvement of transport linkages, infrastructure, tourism facilities, information and tourist services, as well as the development and implementation of a strong tourism marketing strategy for the area, are the main factors to be addressed.



## SECTION 5: PROJECT IMPLEMENTATION GUIDELINES

### 5.1 Purpose

This chapter serves as to guide the implementation of the CKDM LED projects identified. The implementation of LED projects is mainly driven by strategic actions and should be carefully planned and executed. Project implementation is not as clear-cut as the strategy documents itself, due to external influences and the consistently changing environment. Strategic thought should therefore occur prior to every project in order to ensure the successful development of CKDM economy.

This section covers the identified projects from the opportunities scan. This is followed by, what the public sector can do in order to bring about a favourable environment for economic growth. Next, various support structures that are necessary for the implementation of LED projects will be explored. Then general guidelines for project implementation will be given with variations for Central Karoo District projects by way of a projects matrix.

### 5.2 General Guidelines

In order to allow the CKDM to plan and implement the LED Strategy in an effective, successful and sustainable manner, it is important that general step-by-step implementation guidelines are provided. The guidelines describe the process to follow toward project implementation from identification to completion. In order to understand the importance of implementing of LED projects it is necessary to give a brief description of what core functions the LED process entails.

#### 5.2.1 PROJECTS FROM POTENTIAL ANALYSIS

In this section, identified opportunities and gaps from the Potential Analysis Phase are broken down into individual LED projects for the Central Karoo District Municipality.

**Table 5.1** shows opportunities identified results in the identified Projects

**TABLE 5.1: CKDM PROJECTS FROM POTENTIAL ANALYSIS**

CKDM PROJECT		
Public Sector	Private Sector	Project Description
AGRICULTURE EXPANSION		
<ul style="list-style-type: none"> <li>• Soya bean production</li> <li>• Organic Seed Production</li> <li>• Organic farming</li> </ul>	<ul style="list-style-type: none"> <li>• Food cluster, with focus on processing, packaging &amp; exporting</li> <li>• Breeding Rare Game Species</li> </ul>	These projects include the introduction of new Agriculture products within the CKDM, with a special focus on small-scale farming and niche products.
AGRICULTURE AND BENEFICATION DEVELOPMENT		
<ul style="list-style-type: none"> <li>• Industrial investment incentive packages</li> <li>• Bicycle Manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>• Production of organic seed and fertilizers for agricultural practices</li> </ul>	Projects has been identified to strengthen backward and forward linkages in the Central Karoo economy and to add value to primary sector products.



### CKDM PROJECT

Public Sector	Private Sector	Project Description
<ul style="list-style-type: none"> <li>Industrial marketing campaign</li> <li>Food development and research centre</li> <li>Industrial development strategy</li> <li></li> </ul>	<ul style="list-style-type: none"> <li>Regional Fresh produce market (including organic)</li> <li>Deciduous Fruit processing and packaging plant</li> <li>Red meat processing facilities</li> <li>Horticulture logistics development (transport, storage, cooling facilities)</li> <li>Warehouse and Milling Operation (Agriculture)</li> <li>Manufacture Agriculture feed equipment, machinery and parts</li> <li>Wool and mohair processing plant</li> <li>Uranium Processing (Nuclear Fuel)</li> <li>Soya oil processing facilities (candle making, Soy based foams, Biodiesel)</li> <li>Manufacture of protective clothing used for skiing/snow (Mohair and wool)</li> </ul>	
<b>WASTE RECYCLING/PROCESSING</b>		
<ul style="list-style-type: none"> <li>Waste Management Systems</li> </ul>	<ul style="list-style-type: none"> <li>Research and Innovation Centre for Waste Recycling/Processing</li> <li>Agriculture Waste-to-energy project</li> </ul>	<p>These Projects is identified to establish the Central Karoo as a centre of innovation in waste processing and recycling.</p>
<b>SMME DEVELOPMENT</b>		
<ul style="list-style-type: none"> <li>Establishment of SMME Command Centre for the CKDM</li> <li>Business support centre</li> <li>SMME procurement/outsourcing database</li> <li>Small business forum</li> </ul>	<ul style="list-style-type: none"> <li>Agri Tourism</li> <li>SMME Catering, cleaning, laundry services</li> <li>Involvement of SMME's in jewellery design/manufacture</li> <li>SMME tour operators</li> </ul>	<p>To promote small business development and establish an "SMME Command Centre" that acts as a coordinating and integrating centre for small business development in the Central Karoo. The main purpose for projects identified include:</p> <ul style="list-style-type: none"> <li>Support, networking and matchmaking</li> <li>SMME Beneficiation and value adding</li> </ul>





### CKDM PROJECT

Public Sector	Private Sector	Project Description
<ul style="list-style-type: none"> <li>linked to Agriculture sector</li> <li>Small business forum linked to manufacturing sector</li> <li>Small business development in accommodation facilities</li> </ul>	<ul style="list-style-type: none"> <li>Call Centre (BPO)</li> <li>Wholesalers (Agriculture produced products)</li> <li>Multipurpose Retail Facility (all local produced products)</li> </ul>	<ul style="list-style-type: none"> <li>activities</li> <li>SMME's in Tourism</li> </ul>
HUMAN RESOURCE DEVELOPMENT		
<ul style="list-style-type: none"> <li>Tertiary training facilities (technical, hospitality, business, agriculture)</li> <li>Identification of skills shortages per economic sector (Community skills surveys)</li> <li>Recruitment database</li> </ul>	<ul style="list-style-type: none"> <li>On-site training facilities/projects</li> </ul>	<p>To facilitate the development of specific skills needed for the local economy to grow. The main purpose for projects identified include:</p> <ul style="list-style-type: none"> <li>Skills matchmaking</li> <li>Training facilities/projects</li> </ul>
TRANSPORT DEVELOPMENT		
<ul style="list-style-type: none"> <li>Upgrading of Railway lines and reopening of railway stations</li> <li>Regional public transport corridor development plan</li> <li>Improvement of transport infrastructure and linkages</li> </ul>	<ul style="list-style-type: none"> <li>Passenger rail transport service between a town centre, and outer suburbs and commuter towns</li> <li>A public transport hub behind the main railway station, to facilitate connections with other modes of transport available</li> <li>Logistic / distribution Centre</li> <li>Freight – Export Contracts, Warehousing shipping</li> <li>Aviation – Medical Evacuation/Medical Tourism (BFW Airport)</li> </ul>	<p>To facilitate the development of transport sector for the local economy to grow. The main purpose for projects identified include:</p> <ul style="list-style-type: none"> <li>Improvement of transport infrastructure and linkages</li> <li>Increase Transport accessibility</li> <li>Transport Corridor Development</li> </ul>
TOURISM DEVELOPMENT		
<ul style="list-style-type: none"> <li>Development and improvement of existing tourist</li> </ul>	<ul style="list-style-type: none"> <li>Urban renewal projects</li> <li>Development of</li> </ul>	<p>To develop the Central Karoo into an integrated tourism zone. The main purpose for projects identified include:</p>



### CKDM PROJECT

Public Sector	Private Sector	Project Description
<ul style="list-style-type: none"> <li>attractions</li> <li>Development of specific tourist routes</li> <li>Tourism database (attractions, accommodation, operators)</li> <li>Tourism forum</li> <li>Provision of training and bursaries in tourism/hospitality training</li> <li>Improvement of signage</li> </ul>	<ul style="list-style-type: none"> <li>tourist packages</li> <li>Provision of on-the-job training opportunities</li> <li>African Cuisine Restaurant (Organic) And Retail Outlet (Multipurpose Centre)</li> <li>Conferencing</li> <li>Tourist Guides</li> <li>Fun Train Project</li> <li>Karoo Astronomy Tourism</li> <li>Heritage and Museum Tourism</li> <li>Nightlife and Entertainment</li> <li>Casino</li> <li>Private Hospital (Medical Tourism)</li> </ul>	<ul style="list-style-type: none"> <li>Marketing of the Central Karoo as a tourism destination</li> <li>Tourism infrastructure and support services</li> <li>Tourism product innovation and expansion</li> <li>Stakeholder relations</li> <li>Tourism skills development</li> </ul>
Other private sector projects under the ISRDP includes:		
<ul style="list-style-type: none"> <li>Uranium mining which is still undergoing feasibility studies</li> <li>Karoo Tourism Gateway</li> <li>Cold Storage Facilities</li> <li>Agriculture Beehive development</li> <li>Hydro production of fresh herbs; and</li> <li>Correctional service facility</li> <li>Karoo Skin Processing</li> </ul>		

### 5.2.2 PUBLIC SECTOR PROJECTS

Within the Potential Analysis, no distinction was made between projects that are implementable by the private sector and those implementable by the public sector. In this part of the report, the projects that can be implemented by the **public sector and what informs that as critical for the enabling environment** are listed as follows:

**Table 5.2** shows the projects to be implemented by the public sector.

**TABLE 5.2: PUBLIC SECTOR PROJECTS AND ENABLING CONDITIONS**

Public Project	Enabling Conditions
AGRICULTURE EXPANSION	
<ul style="list-style-type: none"> <li>Soya bean production</li> <li>Organic Seed Production</li> <li>Organic farming</li> </ul>	<ul style="list-style-type: none"> <li>Projects focussed on the emerging farmers. CKDM should facilitate engagement with the district farmers Association to ensure that projects are introduced to emerging farmers. This can create a niche market, address food</li> </ul>





	insecurity, generate income and equip farmers with skills and training opportunities. A marketing agent is needed.
<b>AGRICULTURE AND BENEFICIATION DEVELOPMENT</b>	
<ul style="list-style-type: none"> <li>Industrial investment incentive packages</li> <li>Bicycle Manufacturing</li> <li>Industrial marketing campaign</li> <li>Food development and research centre</li> <li>Industrial development strategy</li> <li>Tertiary training facility</li> </ul>	<ul style="list-style-type: none"> <li>Incentives on Bulk services will be required to attract investors</li> <li>A marketing campaign to market the area as a industrial destination</li> <li>Land should be available</li> <li>A strategy showing industrial opportunities</li> </ul>
<b>WASTE RECYCLING/PROCESSING</b>	
<ul style="list-style-type: none"> <li>Waste Management Systems</li> </ul>	<ul style="list-style-type: none"> <li>To promote/stimulate waste recycling in the CKDM which relate to the agriculture sector.</li> </ul>
<b>OTHER PROJECTS</b>	
<ul style="list-style-type: none"> <li>Karoo Skin Processing</li> </ul>	<ul style="list-style-type: none"> <li>Skin processing is a water intensive process – water availability is currently limited; Water purification technology will also be required to clean water at the end of the process</li> </ul>
<ul style="list-style-type: none"> <li>Correctional Facility</li> </ul>	<ul style="list-style-type: none"> <li>Land for the facility</li> <li>Buy-in from National Government</li> </ul>
<ul style="list-style-type: none"> <li>Hydroponics Expansion</li> </ul>	<ul style="list-style-type: none"> <li>To expand production, 2 additional greenhouses will be required</li> <li>The delivery fleet must be expanded to 3 trucks</li> <li>A marketing agent to increase sales reach</li> <li>Management capacity to drive business growth</li> <li>Estimated investment required: R4 million</li> </ul>

### 5.3 General Step by Step Guidelines

The following section contains a description of the specific tasks and activities necessary to implement the projects identified for the CKDM.

#### 5.3.1 LED PRIORITISATION AND IDP INTEGRATION

Many projects were identified in the Potential Analysis phase of this report. The District GDS and IDP documents also have recommended economic development projects.

The **municipality IDP** is an important tool in ensuring that the work of local and other spheres of government are co-ordinated to improve the quality of life for all people living in an area. It also set a framework for how land should be used, what infrastructure and services are needed and how the environment should be protected (Education Training Unit Local Government Toolbox, 2009). For this reason the LED Strategy and IDP documents work hand in hand. While the IDP gives the overall picture of development interventions, the LED strategy zooms in on the economic development aspect of development planning. The LED officials at CKDM should ensure that LED projects in the LED strategy are integrated into the District IDP.

However, projects cannot be implemented simultaneously since financial and human resources would not be sufficient. Even if there were sufficient funds, the quality of projects may be compromised by attempting all at once. This leads to the point that LED projects will need to be prioritised.



### 5.3.2 PROJECT PRIORITIZATION

Project prioritisation can be undertaken by engaging with stakeholders in the District. Therefore, **Business Chambers** should be allowed to suggest additional opportunities and to evaluate the projects already identified in the District. The **CKEDA** should also be able to do the same. A representative group would be the **LED forum**. They may decide, taking into account all stakeholders' views, which project(s) would best meet District economic development needs.

The criteria used to prioritise projects include:

1. Does the project provide opportunity for job creation, especially for the previously disadvantaged communities?
  2. Would the project create economic growth in order to continuously meet the ASGISA growth target of 4.5% per annum?
  3. Would the project help diversify the economic base?
  4. Is the project a wealth creating project or only a poverty alleviation project?
  5. Would the project attract new investors to the Greater Central Karoo Area?
- A projects prioritisation matrix is used to assign values to the projects.
  - These values represent the project evaluation.
  - Project evaluations are assigned weightings.
  - The weightings are used to calculate scores for each project.
  - If projects have the same total score, the project that scores highest on the most important criteria is selected as the one that is more important.

See **Table 5.3** for an example of a project prioritisation matrix.

**TABLE 5.3 EXAMPLE OF PROJECT PRIORITISATION MATRIX**

PROJECT	JOB CREATION	ECONOMIC GROWTH	DIVERSIFY ECONOMIC BASE	WEALTH CREATION	ATTRACT INVESTORS	PROJECT EVALUATION			VALUE / SCORE	PRIORITY
						HIGH IMPACT (3)	MEDIUM IMPACT (2)	LOW IMPACT (1)		
Soya Bean Production	4	2	2	3	1	1	5	0	52.6	1
Breeding Rare Game species	2	2	2	2	1	0	5	1	37.2	5
Training Facility	2	2	2	2	2	0	3	3	50.4	3
Organic Seed production/Farming	2	2	2	4	2	1	5	0	50.4	2
Warehouse and milling Operation	2	2	2	2	1	2	3	1	50.0	4
Regional Correctional Facility	3	2	3	5	4	0	6	0	33.2	6

- The prioritisation criteria are in columns
- Projects are listed in rows
- The numbers under the criteria show the evaluation, i.e. does the project have a high, medium or low impact to that criterion
- 'High impact' has been assigned a weighting of 10
- 'Medium impact' has been assigned a weighting of 6
- 'Low impact' has been assigned a weighting of 2
- The value/score is the sum of the values assigned multiplied by the weightings
- Priorities are determined by the scores (There are three projects with the highest score of 40, thus they are all number 1 projects)
- Projects with the same scores need to be further prioritised according to what are considered the most important criteria



### **5.3.3 IDENTIFICATION**

This step refers to those activities pertaining to the identification of potential projects and opportunities that can be developed in the local economy. This is the first practical step to LED. The identification of projects can be brought about through brainstorming and consultation with the local community and the business community. The local municipalities should therefore also take the first step to identify these projects as they are well informed of the dynamics of the area of jurisdiction.

### **5.3.4 IDENTIFICATION OF LOCATION**

Once the project to be implemented has been identified, the next would be to identify where it will be located. These considerations include the municipality to operate in, the city and suburb of choice.

Thereafter, it is important to see whether there is any land available. It should be noted that some land belongs to traditional leaders, while other land has been identified for redistribution under the Land Reform and Restitution Programme. Such land cannot be sold to investors or to the municipality.

The location choice is made by considering:

1. What is the cost of the land?
2. Where is the target market?
3. Where are the inputs sourced from?
4. What resources are available in that area e.g. water, labour-force?
5. Is transport available?
6. Is there a network of access routes?
7. What is the already-existing activity in that area?
8. Is there a possibility of aligning or complementing already-existing programmes?

If the answers to the above questions complement the project, then the location choice is a good one. Sometimes, investors choose a location that may not at face-value, have any benefits. This is because there will be an advantage that outweighs all the negative factors. Therefore, in the end, the choice of location is completely up to the investor or project members.

### **5.3.5 PRE-FEASIBILITY**

A pre-feasibility study is conducted before a feasibility study to help sort out relevant project alternatives. In large projects, a preliminary study undertaken to determine if it would be worthwhile to proceed to the feasibility study stage.

Pre - Feasibility assessments essentially comprise of:

1. A location analysis
2. An initial environmental assessment
3. Market Assessment
4. Propose the potential limits of the project
5. Identify potential alternative
6. Perform a preliminary estimate of project cost
7. Identify lacking information which will be necessary for the *Feasibility Study*.
8. Identify potential financial sources for the project.
9. Prepare the TOR to contract the *Feasibility*

### **5.3.6 DETAILED FEASIBILITY STUDIES**

A feasibility study is an analysis of the viability of an idea.

Feasibility assessments essentially comprise of:

1. A location analysis



2. An initial environmental assessment
3. Market research (which is a demand and supply analysis)
4. Identification and quantification of income streams
5. Identification of potential funding sources.

The development concept is then refined and concrete concept designing and planning is done. An independent consultant may be involved with the pre- and feasibility study, but the CKDM should be involved. This is an opportunity to understand the issues of project development.

### **5.3.7 PARTNERSHIP IDENTIFICATION AND PROJECT MATCH-MAKING**

The purpose of this step will be to identify possible partnerships that can be formed. It will also identify the parties that will be involved with implementing projects. The correct stakeholders, beneficiaries and project leaders need to be identified.

This can be done, as alluded to earlier, by:

1. Hosting an Opportunities Awareness Campaign.  
This campaign will assist the LED agency to find interested parties, who will be willing to run with the project by bringing various quotas of the District population into contact with each other.
2. Project-specific workshops can follow the initial one to ensure that the interested parties identified understand the project. At this stage the training requirements, if any, are identified.
3. The campaigns will also assist to match investors to projects that are already running in the District and also to the identified but not yet implemented projects.

### **5.3.8 DEVELOPMENT OF BUSINESS PLAN**

Business plans are drawn up firstly to map out how a project will be executed and secondly they are required when applying for funding. A business plan should have the following components:

1. Description of the Proposed Development Project
2. Development of an operational plan – to give a concise, clear and understandable description of the input and capital requirements, production, operational and logistical strategies and systems that will be applied by the proposed development.
3. Impact assessment – to assess the project's economic impact on the market as well as potential risks.
4. Development of an organizational, management and staffing plan
5. Development of a financial plan – Analyses envisaged income and expenditure of project
6. Draw up Implementation Action Plan - to provide clear, functional guidelines with respect to implementing the preferred development concept
7. Monitoring, Evaluation and Mitigation framework – This highlights Key Performance Indicators and remedial actions to take should KPI's fail to be achieved.

Business plans give details about the project that give funders the liberty to decide whether or not they want to put their money in the project.

### **5.3.9 MUNICIPALITY BUDGETING AND FUNDING**

Central Karoo District Municipality has a role to play in funding economic development. The District was assigned, among other responsibilities, Integrated Planning for the District, Tourism Development, and Regulation of Passenger Transport, Municipal airports, abattoirs and fresh produce markets.

The role of the Local Municipalities is important. There should be constant dialogue between the LMs and the DM to ensure that all economic development related issues at local level are communicated upwards. This will enable the District Municipality plans to draw up informed budgets for economic development in the District.

By the same token, the District Municipality may need to delegate some responsibilities to the Local Municipalities. This is because the projects will be located within LM borders. These should also be communicated to the LMs in order to the LMs to budget accordingly.



The project feasibility studies are most likely to be undertaken by the District. The financials information from the feasibility and business plan stages will be used to draw up municipal budgets.

### 5.3.9.1 FINANCIAL ASSISTANCE

In order to be able to implement the projects a degree of funding would be needed. It is therefore, important to note that there are constantly new public and private sector funding sources becoming available. The identification of funding sources is part of the process to implement the projects that have been identified. Funding is the backbone of the projects and without it; the successful implementation would be very difficult. Potential funding sources have been identified that could assist in the implementation of the identified projects for the CKDM or other stakeholders. The CKDM must ensure that a database of sources is maintained. The purpose of this section is to identify some of the more prominent sources and provide direction on how to access these funds. Importantly, many (if not all) sources of development finance will require preparatory work on the part of the applicant.

One of the most common challenges faced by entrepreneurs and government departments alike is the access to funding. There are various institutions that have funds allocated specifically to support economic development initiatives.

In obtaining capital from **mainstream banks**, there are many **requirements** such credit-worthiness, entrepreneur's assets, time of operation, viability of the business and so on. Further, banks charge the prime rate plus a margin. These margins vary from bank to bank and they also depend on the entrepreneur's relationship with their bank. Therefore, many new entrepreneurs are not able to source funding from mainstream financial institutions. In this section, we look at possible funding options available for businesses in the formal sector, as well as SMMEs, besides those offered by commercial banks and merchant banks.

Initially, when considering funding sources, the municipality or the entrepreneur needs to look at the project focus. Funding available is normally allocated to strategic industries which assist government to attain goals such as economic development, job-creation, skills enhancement etc. Industries identified to best meet these goals in the South Africa context are Clothing and Textiles; Capital Equipment manufacture and Metals Beneficiation; Chemicals, Pharmaceuticals and Plastic manufacture; and Forestry and downstream industries that flow from it like Paper and Furniture Manufacture (IPAP, 2007).

Secondly, the project leader should determine how much they have and the shortfall they require. A business plan is required in order to convince funders that the project is not a fly-by-night project. Business plans give details about the project that give funders the liberty to decide whether or not they want to put their money in the project. The entrepreneur should have some equity in order to give evidence of their commitment to the project. This can be in the form of personal funds, savings, or capital equipment.

Organisations that may be able to assist entrepreneurs and project leaders in Central Karoo District are:

#### 1. The Central Karoo District Municipality:

The District municipality is the biggest stakeholder in development projects because the more economic activity, the higher the revenue to be earned by the municipality. This revenue, in turn, is used to ensure that the enabling environment remains conducive. Therefore, it is important to budget for District development projects. If the municipality is able to fund most projects, thus being self-sufficient, projects can be implemented faster. Other funding sources require time to:

- Understand the District.
- Understand and also see the opportunity presented
- To decide whether they will fund the project or not
- To allocate funds within their budgets
- To disburse funds to the project

2. The Department of Trade and Industry (DTI) has made available, funding schemes in the effort to 'oil' the wheels of industry in South Africa. These are listed in Annexure A.



3. **The Industrial Development Corporation (IDC)** is a self-financing, national Development Finance Institution (DFI). It was established in 1940 to promote economic growth and industrial development in South Africa. The forms of funding provided by the IDC are shown in Annexure A.
4. **Municipal Infrastructure Grant (MIG)** - MIG<sup>1</sup> was created as a coordinated and integrated funding system for projects that develop infrastructure necessary for municipal services. MIG funds may be used to upgrade and build new infrastructure up to a basic level of service as well as to rehabilitate existing infrastructure, so long as the infrastructure is for basic services for the poor. MIG funds can be used to fund the installation of infrastructure necessary for water, electricity, sanitation, street lighting, refuse removal, roads, schools, clinics, sports facilities and public buildings. MIG funds could be applied for to supplement funding of necessary infrastructural enabling public sector projects. The main criterion for funding is that the project will benefit the poor.
5. **Enterprise Investment Programme:**  
This programme is targeted at manufacturing and tourism businesses which are BEE compliant. Foreign businesses will also be able to obtain funding for relocation of capital equipment in the manufacturing sector. It is calculated as follows:
  - Total Qualifying Investment less than R5 million: benefit calculated at 30% of the qualifying investment, over a three year period
  - Total Qualifying Investment between R5 million and R200 million: benefit calculated on a regressive scale of 30% to 15% of the total qualifying investment, over a two year period
  - The total benefit is limited to a maximum of R30 million over the period of the Incentive term
6. **The Development Bank of Southern Africa (DBSA)** is a development finance institution whose purpose is to accelerate sustainable socio-economic development by funding physical, social and economic infrastructure (DBSA website, 2008). DBSA Development Fund is a section 21 company which supports municipalities in service delivery and local economic development. The Siyenza Manje initiative which provides hands-on support to municipalities by facilitating and fast-tracking infrastructure development and service delivery is supported by the DBSA Development Fund (DBSA website, 2008).
7. **Small and Medium Enterprise Development Programme (SMEDP)** provides grants to small businesses in manufacturing, tourism, agro-processing, IT, arts and crafts, aqua culture and high value agricultures that require training or land, machinery or buildings for expanding existing projects or starting up new ones. Entrepreneurs who will participate in making the agro-processing hub functional will benefit from this fund.
8. **National Treasury** provides funding for infrastructure projects.
9. **DEAT:** The department of environmental affairs and tourism provides funding through various programmes to promote LED and tourism issues.
10. **The Chief Directorate:** Tourism Development has an annual budget for funding projects which help to grow the tourism industry. This growth can be realised in many ways, for example through job creation, training or infrastructure development. Eligibility for funding is limited to a range of entities, such as Section 21 companies or NGOs, which are locally focussed and community-based.
11. **The poverty-relief programme** was established by government to alleviate poverty in South Africa. The tourism branch within the Department of Environmental Affairs and Tourism was allocated funding to support projects of a tourism nature. The fund is aimed at:
  - creating jobs through the development of tourism infrastructure
  - developing new tourism products
  - providing training and capacity-building
  - Ensuring that the projects are sustainable in the long-term.

<sup>1</sup> <http://www.dplg.gov.za/subwebsites/mig/index.html#>





- 12. Tourism Help Desk Funding:** A number of tourism help desks have been set up in various areas of the WC province. The THD filter micro projects. It can be required at the THD in the Central Karoo if projects with merit support under the THD Fund exist.
- 13. Rural Economic Assistance Fund (REAF)** – is aimed at providing local economic role –players access to provincial and non-financial support for LED opportunities for development. This engagement also intends to deliver on the follow up request received by municipalities around the challenges with securing LED funding projects.
- 14. DoA:** The Western Cape Department of Agriculture is a provincial government department that provides a wide range of development, research and support services to the agricultural community in the Western Cape Province.

**Annexure A** gives a comprehensive list of funding sources available to South African businesses.

### 5.3.9.2 SMME's & PPP's

Small to medium enterprises are known for their potential to generate job opportunities. Therefore, the CKDM needs to be in a position to give mentorship to such enterprises or at least to direct them to where they can receive assistance.

- In CKDM, there is a **Red Door** and Plek Plan office in Beaufort West, the administrative node of the District. The Red Door facilitates the establishment of SMMEs, provides business development support services, facilitates and co-ordinates SMME participation in mainstream economic activities.
- **Plek Plan-** In order to accelerate Local Economic Development (LED) across the province, the Provincial Government of the Western Cape, in partnership with the CSIR and Casidra, has developed an innovative intervention called 'Die PLEK Plan'. "DIE PLAaslike EKonomiese PLAN" aims to identify potential local and regional economic opportunities and develop these into REAL BUSINESS OPPORTUNITIES; and to assist local municipalities in defining and formulating realistic LED strategies and implementation plans.
- **The Small Enterprise Development Agency (SEDA)** was established in December 2004 in terms of the National Small Business Amendment Act. A key function of SEDA is to provide information to small enterprises and prospective entrepreneurs that will help and encourage them to start and build sustainable businesses. Information is provided online on the SEDA webpage. There is also a National Information Centre contactable by telephone on 0860 103 703. The SEDA Technology Programme provides support services and incubation facilities to small technology enterprises.
- The **Department of Labour** also provides support to employers including SMMEs by way of legislature that guides employment conditions (Department of Labour website, 2009).
- **Business Partners** is a specialist investment company which provides debt and equity investment, mentorship and property management services to SMEs in South Africa (Business Partners website, 2009).
- **Independent Development Trust (IDT)** is a development agency which supports government in managing the implementation of development programmes that are directed at poverty reduction, employment creation, and local economic development. The IDT also acts as a link between poor communities and government in meeting resource needs and invests in enhancing institutional capacity for programme delivery and for sustainable development.
- The **NAMAC Trust** is an SMME support agency within the DTI which provides advisory and information services to new and existing SMMEs in line with best practices globally.
- **Business Referral and Information Network (BRAIN):** Gives up-to-date information for business owners on everything from guidelines on starting a small business, to where to find finance, locate news on tenders and how to find out about more on drawing up a business plan.



- **Council for Scientific and Industrial Research (CSIR):** Assists business owners who want to improve on or develop a product with market-related research and product testing.
- **The National African Federated Chamber of Commerce (Nafcoc):** Represents the interests of black business and provides networking and lobbying for small business members.
- **The SA Bureau of Standards (SABS):** Assists small business with accreditation of products and services with a 50% subsidy.
- **Small Business Project:** Assists small businesses through their Linkage Programme with link-ups and joint ventures with corporates.

### 5.3.9.3 Economic Enabling Environment and Labour Market

*Local government is not directly responsible for creating jobs. Rather it is responsible for taking active steps to ensure that the overall economic and social conditions of the locality are conducive to the creation of employment opportunities.” - White Paper on Local Government (March 1998).*

In other words, Local government should create an enabling environment for Local economic development to take place.

An enabling environment describes the environment that is external to a business or any other entity which promotes a sustainable trajectory of market development (Porteous D, 2006). While most businesses can control internal matters such as Finance, Human Resources and the bottom line, certain outside factors cannot be changed by private entities. It is therefore critical that the CKDM creates the appropriate enabling environment - that encourages and supports the confidence and growth of private initiative, and also facilitates the development of public-private partnerships. It is belief that if the enabling conditions are in place, private initiative and the organisations of civil society can work successfully, with governments, toward achievement of the vision for the CKDM.

For a business to function well, the population around should be skilled. This can be achieved if there are sufficient schools which benefit entrepreneurs' and employees' children. In the Central Karoo District, there are 28 schools in total, therefore, there is sufficient basic training. The District enrolled 5000 Pre Grade R schools.

The availability of clean water for human consumption and for industry is imperative. The district source 100% of its water needs from its own sources. It has four dams. Each municipality is responsible for the sourcing of their own water. As water resources are scarce within the Central Karoo each municipality are faced with the challenge to research and implement alternative water sources to deal with backlogs that exist particularly in the light of the economic development initiatives envisaged. This refers to residential developments, the uranium mine and Cold Storage facilities. This will require bulk water supply systems. Smaller agricultural projects identified can make use irrigation and ground water.

Hand in hand, with that need is that of good sanitation. The Central Karoo made progress in access to sanitation. The majority of households have access to flush toilets with offsite disposal. Water-borne sanitation systems are known to be the most efficient.

In 2007, the department of water affairs and forestry has allocated R1-billion to eradicate bucket toilets in established settlements by December 2007. Buckets are replaced with ventilated improved pit latrines (VIP). In the CKDM the farming community is worst punished by sanitation problems with a major part of households not adequately serviced. It should be a priority of council to eradicate sanitation problems in rural areas. In Beaufort West sanitation is above basic RDP standards and most toilets in the farming areas are VIP standard. It is argued that the advantage of VIP toilets is that they function without water but they pose serious hygiene problems.

Efficient sanitation systems are required in order to allow for the implementation of the mining projects, the agro-processing hubs, and for the manufacturing of leather goods and farming equipment. The higher the





population density, the more strained sanitation facilities will be. Therefore, Central Karoo District Municipality needs to prepare in advance for the fact that where the new projects located, more people are likely to migrate to such areas in order to be closer to work. These areas of greater concentration, like most urban areas, will require efficient sanitation that is as clean and environmentally friendly as possible.

An environment in which businesses can thrive is one where the road and rail linkages between various towns within a District/Province are efficient. In the Central Karoo, access to road network is the only means of economic survival for the business – starved area. The district is strategically positioned along the N1, which is the main National road linking the region to the North Province, Gauteng and the Free State province. The road network is good; however most of the road is gravel due to the fact that the Central Karoo is a largely rural district. This also is a potential constraint to the district's competitiveness. Transport cost tends to be high where there is no adequate infrastructure.

If a Distribution Hub is to be set up in the District, the standard of the roads must make it easier for trucks, lorries, and people to travel between different nodes in the District. Further, since the upgrade of the airport has been proposed, the airport itself must have runways of a high standard and the road network around the airport must be complementary, or else it will stand as a 'white elephant' – under-utilised and more an expense than a benefit to the District.

It therefore follows that Public Transport systems along those linkage routes also be efficient. This is because firstly, labour needs to be transported from residential areas to places of work. Secondly, goods (inputs and final products) need to be transported between varied locations. The households from the Central Karoo cited unavailability, cost and overloading as the main problems with public transport. These problems reflect the impact of inadequate transport on their livelihoods and have negative implications for the costs associated with travelling to school and job search.

Electricity is one of the basic services that districts and local municipalities must deliver in order to create and enabling environment and to change the standard of living and lives of the people. The Central Karoo buys electricity from the state owned parastatals, Eskom. The majority of the Central Karoo population have access to electricity. In the rural areas the use of paraffin and wood are major sources of energy. This has negative implications for child safety and pollution.

The percentage of people living below RDP standards is relatively low and imminent in farms with usage growing significantly, but the variation would be more significant if we consider alternative energy sources. Proposed projects which will require large electricity usage include the uranium mine and Cold storage facility. Nature also provides human beings with the challenge of countering naturally occurring disasters such as floods and earthquakes. An enabling environment is one which takes such possibilities into consideration. Disaster plans/strategies buffer business from 'natural disaster risk'. Disaster management ought to be a present in every local municipality. There is no disaster management centre in the whole District. To ensure security in the farms, factories and the proposed airport, and for tourism to take off, it is essential to set up Disaster Management in ensuring an optimum enabling environment. Disaster Management and Emergency Services will also depend on the other aspects of an enabling environment have been met, e.g. Good roads, good sanitation and easy access to water.

The CKDM enabling environment is also supported by the presence of Red door and the Plek Plan (DEAT) offices giving access to small business support and funding, including support to prospective entrepreneurs. Plek Plan provides access to LED funding especially through the new launched REAF fund (DEAT).

Some of the constraining factors in terms of the enabling environment regarding LED in the CKDM include:

- Absence of private sector engagements (Lack of confidence by the private sector in the CKDM)
- Absence of investment in the CKDM
- The CKDM's inability to generate their own revenue
- The CKDM lack capacity to steer LED in the CK area.



Besides the constraints mentioned, the CKDM are bound to guiding strategies and initiatives and infrastructure interventions which include delivery of basic and social services that have an impact on LED in the Central Karoo Municipal Area.

For projects to be implemented land should be available and identified. The CKDM SDF serves to guide and inform all decisions made by the municipal council on spatial development and land use management in the area. Land use planning is an important part of social policy, ensuring that land is used efficiently for the benefit of the wider economy and population as well as to protect the environment. Projects like the **Tertiary Training and Correctional Facility** will require adequate land to be implemented.

One of the active roles of local governments with regards to LED includes the creation of an economic enabling environment. The role of the CKDM in providing an active economic enabling environment to promote LED in the CKDM area includes the following:

### Effective Private Sector Engagement to Development in the CKDM

It is believed that sustainable development is only possible when the community is engaged at the grassroots level and is given the ways and the means to take responsibility for its own future. This means building the capacity of civil society institutions as well as tapping into the wellspring of individual initiative that has been part of the CKDM LED vision. It is therefore critical that the CKDM creates the appropriate legal and fiscal framework, the regulatory conditions and stable democratic institutions - in other words, the enabling environment - that encourages and supports the confidence and growth of private initiative, and also facilitates the development of public-private partnerships. The CKDM's growth requires private initiative (both for-profit business and non-profit civil society) to make full and effective use of the region's human potential, generate material resources, and develop a vibrant and robust socio-economic base.

The urgent priorities that require immediate attention and must be fast-tracked, to create an enabling environment for private initiative in the CKDM includes:

- Establishment of a LED forum/Task team with include members of the CKDM, LM's, business owners (business chambers), and local community members.

Improve business confidence through continues business engagements through:

- a monthly municipal newsletter
- Improving access to government through better use of the web site (public opinion poll), to provide feedback on service
- Compile Business Expectations Survey (BES),
- Customer satisfaction surveys.
- Interest Group Note.
- Identify a detailed list of infrastructure projects and related information like funding sources and timetables, so that the public can help ensure that these investments are really put in areas where economic and social returns are high.
- Allow for public participation in the formulation of the CKDM budget and how much of the money is devolved as untied funds to take up works suggested by the public.
- Implement a credible, legitimate and accountable mechanism by which the Council/ private sector decides which works should receive priorities over others.
- Investment in human development by providing decent working conditions with water and sanitation, public transport, crèches for every 1,000 population, and proper schools and primary health centres.

### Attracting Investment

- Identify "lead" LED sectors within the district that can drive development and attract investment
- Identify sectors with potential to attract investment to the area.
- Improve public Safety
- Improving the business climate by reducing unnecessary government regulations/red tape to speed up the development process
- Improving economic and business conditions to attract both domestic and foreign investment
- Providing technical assistance for skills training and improving microeconomic conditions.
- Focus resources on infrastructure development.



- Lobby Provincial, national and international funding
- Became a member of LED network groups (example South African LED network)
- Led Manager should network more
- Identify resource availability (grants available at provincial level, land, infrastructure)
- Maintain strong relationship with the province
- Market the CKDM according to labour availability, cost, skills availability, infrastructure, level of technological development and the presence of strong financial markets.
- Host investment indaba's

### **Generate Revenue**

- Encourage economic development to generate revenue from development fees
- Trough projects implemented by a Special purpose vehicle (CKEDA)
- Central government funds.
- Municipal Land( Hire land to developers etc)

### **Improve Capacity**

- Appoint a LED Manager that will drive LED in the CKDM
- Identify LED Budget
- Encourage inter departmental participation/engagements and awareness into LED
- Align Tourism with LED
- Identify "lead" LED sectors within the district that can drive development
- Engagement with leading sector role-players
- Establish database that records all LED projects in the region, their status and requirements.

### **Business Retention and Expansion**

It is important that the CKDM develop a Business Retention and Expansion Strategy. These strategies should be able to help business leaders and communities work together to identify barriers local businesses face as they try to survive and grow.

A possible suggestion is the use of a business survey. This should include training to Community members to conduct the surveys on small businesses. The results should be analysed and taken up in a report. The resulting report should provide valuable information and ideas to how to invigorate the local economy. These should include:

- Demonstrate to local businesses that the community appreciates their contribution to the local economy;
- Help existing firms solve problems and local concerns;
- Assist local businesses in using local, government programs aimed at helping the firms become more competitive; and
- Develop strategic plans for long range business retention and expansion activities ect.

### **5.3.10 LABOUR MARKET**

#### **• Skills Required**

The Central Karoo is mainly an Agricultural area; in addition, the projects identified will require a sufficient skills base without which the projects cannot take off. Further, existing businesses need to enhance the skills of the current workforce. This part of the report, seeks to highlight ways of ensuring that labour is appropriately skilled.

In South Africa, SETAs (Sectoral Education and Training Authorities) have the mandate to fulfil JIPSA objectives, i.e. to ensure that crucial skills are acquired. They are regulated by the Skills Development Act no.97 of 1998.



There are 27 SETAs in South Africa. However, none present in the Central Karoo. **Table 5.4** below shows identified projects and the skills required are for the projects listed as well as for the already present economic activity within the district. The SETAs expected to be operational in the Central Karoo are also shown in **Table 5.4**. Other stakeholders that may provide further training or advice are also listed.

**TABLE 5.4: SKILLS REQUIREMENTS IN THE CENTRAL KAROO DISTRICT MUNICIPALITY**

PROJECTS	SKILLS REQUIRED	SETA/STAKEHOLDER
<ul style="list-style-type: none"> <li>Organic Seed Production</li> <li>Organic Farming</li> <li>Soya bean production</li> </ul>	<ul style="list-style-type: none"> <li>Irrigation techniques</li> <li>Produce-grading Landscaping</li> <li>Planting Skills</li> <li>Farming Techniques</li> </ul>	<ul style="list-style-type: none"> <li>Agriculture Sector Education and Training Authority (AGISETA)</li> <li>Department of Agriculture</li> <li>Experienced farmers</li> <li>Agriculture Research Council</li> <li>Small Farmers Association</li> </ul>
<ul style="list-style-type: none"> <li>Built a Casino</li> <li>Built a Private Hospital</li> <li>Nightlife and entertainment (Club)</li> <li>Logistic distribution Centre</li> <li>Tertiary Training Facility</li> </ul>	<ul style="list-style-type: none"> <li>Bricklaying</li> <li>Plumbing</li> <li>Civil engineering</li> <li>Surveying skills</li> <li>Health and Safety skills</li> <li>Architectural and design skills</li> </ul>	<ul style="list-style-type: none"> <li>Construction Education and Training Authority (CETA)</li> <li>Department of Health</li> <li>Established construction companies</li> </ul>
<ul style="list-style-type: none"> <li>Deciduous fruit processing and packaging plant</li> <li>Value adding red meat processing facilities</li> <li>Wool and mohair processing</li> <li>Uranium processing</li> <li>Soya oil processing</li> <li>Establish Food Development and Research Centre</li> </ul>	<ul style="list-style-type: none"> <li>Processing Skills</li> <li>Machine Operating Skills</li> <li>Quality Controlling</li> <li>IT Skills</li> <li>Research Science &amp; Technology</li> <li>Food technologists</li> <li>Fitters and turners</li> <li>Electricians</li> </ul>	<ul style="list-style-type: none"> <li>Food and Beverages Manufacturing Industry Sector Education and Training Authority (FOODBEV)</li> <li>South African National Halaal Authority</li> </ul>
<ul style="list-style-type: none"> <li>Regional Fresh produce Market</li> <li>Manufacturing of protective clothing used for skiing/snow( export)</li> <li>Research and innovative centre for waste recycling/processing</li> </ul>	<ul style="list-style-type: none"> <li>Real Agriculture/business know-how, expertise and experience</li> <li>Technical and legal business advice specialists to design the minimum support needs and matching processes.</li> <li>Research and development skills</li> <li>Export Development Skills</li> </ul>	<ul style="list-style-type: none"> <li>Food and Beverages Manufacturing Industry Sector Education and Training Authority (FOODBEV)</li> <li>Clothing, Textiles, Footwear and Leather Sector Education and Training Authority (CTFL)</li> </ul>
<ul style="list-style-type: none"> <li>Industrial Development Strategy</li> <li>Industrial Investment incentive packages</li> <li>Industrial Marketing campaign</li> <li>Distribution Hub</li> <li>Manufacture of agriculture equipment machinery and parts</li> <li>Jewellery production</li> </ul>	<ul style="list-style-type: none"> <li>Research and development skills</li> <li>Report writing skills</li> <li>Artisans</li> <li>Mechanical</li> <li>Chemical engineers</li> </ul>	<ul style="list-style-type: none"> <li>Manufacturing, Engineering and Related Services Sector Education and Training Authority (MERSETA)</li> </ul>
<ul style="list-style-type: none"> <li>SMME command Centre</li> <li>SMME catering, cleaning , laundry Services</li> <li>SMME tour operators</li> <li>Call Centre (BPO)</li> </ul>	<ul style="list-style-type: none"> <li>Business Management Skills</li> <li>Financial Management Skills</li> <li>SMME development</li> </ul>	<ul style="list-style-type: none"> <li>Banking Sector Education and Training Authority(Bank Seta)</li> <li>Reddooor</li> <li>Plek Plan</li> </ul>



PROJECTS	SKILLS REQUIRED	SETA/STAKEHOLDER
<ul style="list-style-type: none"> <li>Multi-purpose retail facility</li> </ul>		<ul style="list-style-type: none"> <li>Business Chambers</li> </ul>
<ul style="list-style-type: none"> <li>Procurement/outsourcing database</li> <li>Tertiary Training facility</li> <li>Recruitment database</li> </ul>	<ul style="list-style-type: none"> <li>Data capturing skills</li> <li>Educators</li> <li>Sector skills planning</li> <li>Teaching skills</li> <li>Curriculum development</li> </ul>	<ul style="list-style-type: none"> <li>Education Training and Development Practices (ETDP SETA)</li> <li>Services Sector Education and Training Authorities</li> <li>CKDM</li> <li>Dept. of education</li> </ul>
<ul style="list-style-type: none"> <li>Regional public transport corridor development plan</li> <li>Upgrading of railway lines and re-opening of railway stations</li> <li>Public transport hub</li> <li>Medical Evacuation</li> </ul>	<ul style="list-style-type: none"> <li>Driving skills (Truck/Bus/Car)</li> <li>Road transport planning</li> <li>Management and administration skills</li> </ul>	<ul style="list-style-type: none"> <li>Transport Education and Training Authority (TETA)</li> <li>Department of Transport</li> <li>South African Civil Aviation Authority</li> <li>Airports Company of South Africa</li> </ul>
<ul style="list-style-type: none"> <li>Development and improvement of existing tourist attractions</li> <li>Development of tourist routes</li> <li>Tourism database</li> <li>African Cuisine Restaurant</li> <li>Karoo Fun train project</li> <li>Karoo Astronomy</li> <li>Casino</li> </ul>	<ul style="list-style-type: none"> <li>Travel Processor</li> <li>Site Guiding</li> <li>Hospitality</li> </ul>	<ul style="list-style-type: none"> <li>The Tourism, Hospitality, Sport education and Training Authority (THETA)</li> <li>DEAT</li> <li>CKDM Tourism</li> </ul>

(Sources: The South African Labour Guide and SETA websites)

### • *Attracting the Skilled*

Just as every company wants the right individuals with the right skills in order to meet the company goals, geographical areas need to have the right brain matter within. As shown in the District Profiling phase, **88.5** percent of the population is literate, while only 13 percent of the 'educated' population have matriculated and/or studied further.

Therefore, there are two options for the District:

1. Train the current population
2. Bringing in skills from outside the District

Option two is what we will explore at this stage.

### • *Why Live Here?*

The factors that most human beings consider when choosing where to live and work are the following:

1. What is the quality of life in that area?
2. What amenities are available?
3. Where do family, spouses, and friends live?
4. Are there employment opportunities?
5. What are the remuneration levels in that area?
6. Cost of living – is it competitive?
7. Is there opportunity for personal growth?
8. Is quality education for children available?
9. Is it safe – i.e. Security?





10. Is the transport network operational and efficient?
11. What hobbies can be pursued there?

Therefore, in order to attract skilled people to the Central Karoo, the good aspects of living there should be advertised, especially those that answer one or more of the concerns listed above. For example, the fact that the Central Karoo District is a quiet, calm District with both the benefits of urban life, and the serenity of rural life, can be used as a marketing tool to attract people there. The rural life attribute will possibly attract people with farming skills and who have found means of living comfortably in rural areas. This is the type of brain power required in the Central Karoo.

### • *Solving the Asymmetric Information Problem*

The main problem in life is asymmetric information. For example, one finds many unemployed graduates who know exactly what they want to do in life but not how and which organisation does that. On the other hand, there are many employers who know the type of people they want in their organisation but cannot find them. This asymmetric information problem is the reason why information remains a winning tool.

Ways of bridging this information gap and thus bring in the right skills to the right place, i.e. Central Karoo District are:

1. Hosting Careers and Employment Expo
2. Publicizing the type of employees sought in the District using media and the internet
3. Producing documentaries/infomercials to show the opportunities within the District
4. Educating learners within the District about the opportunities available to them therein to keep them from migrating

### • *District Municipality's Role in Training Facilitation*

The District Municipality cannot be expected to provide training in all nine economic sectors. However, they do have an important role in mobilising human resources in the District in the following ways:

- **LED Awareness Campaign:** LED is a buzz word among public servants and consultants in the public sector, yet it has not made its way to the general public. Therefore, an awareness campaign would close the dialogue gap between the public and the private sector. The Central Karoo Development Agency and LED unit can do this first at a larger scale to the community at large and then from that level, the LED forum could continue LED discourse for the Central Karoo District.
- **Opportunities Marketing:** This will ensure that the public – both within the District and in South Africa – will know the opportunities that are ready to be exploited within the District. Such publicity will begin the mobilisation of investors and labour into the District.
- **Municipality as Mediator:** The LED officials in the LED unit and the Development agency, having listened to potential investors as well as those already present within the District, will convey training needs to tertiary institutions in the Province.
- **Training PPPs:** At government level, it is more cost effective to offer general training, rather than specialised training, which should really be undertaken by the private sector. However, since this private sector investment in skilling portions of the population is of benefit to the District, they may contribute financial resources and possibly training facilities for specialised private sector training. This partnership will ensure that there are leaders in those sectors in which training is offered. What normally happens is that people will hear of training opportunities and they will attend the training workshops. Yet, thereafter, if there is no leadership in that sector in the form of an entrepreneur/visionary, they fall by the wayside losing the training gained. Therefore, where there is leadership, there is likely to be continued growth.
- **Skills Audit and JIPSA:** Earlier in this report, a skills audit was recommended. This, in conjunction with nationally determined priority skills, will highlight the priority skills for the Central Karoo District Municipality.



**Most importantly:** it still remains the Municipality's responsibility to ensure that there is sufficient basic education and training within the District, distributed so that all children of school going age have access to education. The Department of Education needs to ensure that there are sufficient educators in the District and that resources required by schools are delivered in time.

### 5.3.11 PROJECT HANDOVER AND MENTORING

Initially, the LED unit, in conjunction with the CKEDA will assist with initialising projects as discussed above. The Central Karoo Economic District Development Agency having facilitated implementation needs to communicate deliverables achieved to the LED unit and LED forum. Further deliverables for the project leaders need to be set.

**Project Privatisation** – The idea is that after a year or so, the project should be run independently by the private sector, with continued public sector support where necessary and/or applicable. Therefore, project leaders and the project team should be encouraged to register the project as a business venture. This means that the role of the CKEDA will gradually become a supportive and mentorship role.

Mentorship can also be provided by the support structures discussed in Section 3.2. Established businesses in the private sector can also provide mentorship. The municipalities, local and district, should continue to ensure that they continue to improve the enabling environment to retain existing businesses and to attract investors.

## 5.4 Application Guidelines

This section highlights the projects identified for Central Karoo District according to project groupings. The groupings are useful for understanding the process to be followed for any new projects identified by the CKDM in the future. The projects identified for the CKDM are grouped into five separate groups by project type, as shown in **Table 3.1** below.

### 5.4.1 PROJECT GROUPINGS

The projects identified for the Central Karoo District will be grouped into seven separate groups by project type. This will be done to enable us to show the variations in generic steps listed in the General Guidelines.

**TABLE 5.5: CKDM PROJECT GROUPING**

Project type	List of Projects
HUBS	<ul style="list-style-type: none"> <li>❖ Food Cluster</li> <li>❖ Agro-processing</li> <li>❖ Wool and mohair processing</li> <li>❖ Distribution/Logistic Centre</li> <li>❖ Uranium Processing</li> <li>❖ Horticulture Logistic Development</li> <li>❖ Food Development and research</li> <li>❖ Research and innovative Centre for agriculture waste recycling/processing</li> <li>❖ Public Transport Hub</li> </ul>
STUDIES	<ul style="list-style-type: none"> <li>❖ Industrial Development Strategy</li> <li>❖ Industrial marketing Campaign</li> <li>❖ Industrial Investment Incentive packages</li> <li>❖ Regional Transport corridor development plan</li> </ul>



Project type	List of Projects
<b>FARMING</b>	<ul style="list-style-type: none"> <li>❖ Soya Bean Production</li> <li>❖ Organic seed production</li> <li>❖ Organic Farming</li> <li>❖ Breeding Rare Game species</li> <li>❖ Warehouse and Milling Operation</li> </ul>
<b>MANUFACTURING</b>	<ul style="list-style-type: none"> <li>❖ Nuclear Fuel</li> <li>❖ Protective clothing</li> <li>❖ Agriculture feed Equipment, machinery and parts</li> <li>❖ Soya</li> <li>❖ Bicycle</li> <li>❖ Jewellery</li> </ul>
<b>INFRASTRUCTURE</b>	<ul style="list-style-type: none"> <li>❖ Upgrade roads and railway lines</li> <li>❖ Water-borne Sanitation systems</li> <li>❖ Upgrade roads</li> <li>❖ Improvement of infrastructure and linkages</li> <li>❖ Set-up passenger rail transport</li> </ul>
<b>TOURISM</b>	<ul style="list-style-type: none"> <li>❖ Tourist Guides</li> <li>❖ Tourism Database</li> <li>❖ Improve signage</li> <li>❖ African Cuisine Restaurant</li> <li>❖ Casino</li> <li>❖ Karoo Fun train</li> <li>❖ Karoo Astronomy Tourism</li> <li>❖ Development of specific tourist routes</li> <li>❖ Development and improvement of specific tourist attractions</li> <li>❖ Tourist packages</li> <li>❖ Improvement of signage</li> <li>❖ Heritage and museum tourism</li> <li>❖ Nightlife and entertainment</li> <li>❖ Private Hospital (Medical Tourism)</li> </ul>
<b>OTHER</b>	<ul style="list-style-type: none"> <li>❖ Agriculture Waste to energy projects</li> <li>❖ Waste management systems</li> <li>❖ Regional Fresh produce market</li> <li>❖ Call Centre (BPO)</li> <li>❖ Recruitment database</li> <li>❖ SMME outsourcing/Database</li> <li>❖ Multipurpose retail facility</li> <li>❖ Tertiary Training facility</li> <li>❖ Wholesalers</li> <li>❖ Freight Export contracts/ Warehouse shipping</li> <li>❖ Medical Evacuation</li> </ul>





### 5.4.2 PROJECT MATRIX

**Table 5.6** on the following page shows the variations per project type to the general guidelines given in Section five above.

As shown in **table 5.6**, all projects have to be considered during the project prioritisation stage, i.e. before any projects are to be implemented. The Studies can be carried out from any location, therefore, the identification of location step is not considered. In order to implement the setting up of the hubs, each of the implementation steps must be taken and none can be left out in order to ensure successful implementation and to limit losses.

For the farming projects, multipurpose retail facility and tertiary training facility, it may not be necessary to do pre-feasibility studies a detailed feasibility study should suffice. As can be seen from the projects matrix in **Table 5.6**, public sector may not need business plans if the correct partnerships are forged and there is buy-in from national departments who should assist with funding. Infrastructure projects first need to be planned for, thereafter, an Infrastructure Programme Management Plan (IPMP) needs to be drawn up, followed by an Infrastructure Programme Implementation Plan (IPIP). The project design phase follows these planning stages and it give details of the project. After the project has been designed, the project tender phase can commence, at the completion of tendering and after a contractor has been found, the actual project is then implemented. In total, this is expected to take about four years. However, project design, project tender and initial implementation should all be done within 12 months. This breakdown in steps to be taken was recommended to avoid over budgeting per financial period and which leads to under-expenditure of the Infrastructure allocation from the national budget (National Treasury, 2008).

As part of ensuring that labour is skilled, a tertiary institution should be encouraged. The major planning is done by these institutions, which government assistance, thus a pre-feasibility study and business plan are not seen as obligatory.



# CENTRAL KAROO DISTRICT MUNICIPALITY

## KHULIS'UMNOTHO - LOCAL ECONOMIC DEVELOPMENT

TABLE 5.6: PROJECTS MATRIX – IMPLEMENTATION STEPS TO BE FOLLOWED FOR VARIOUS PROJECT TYPES

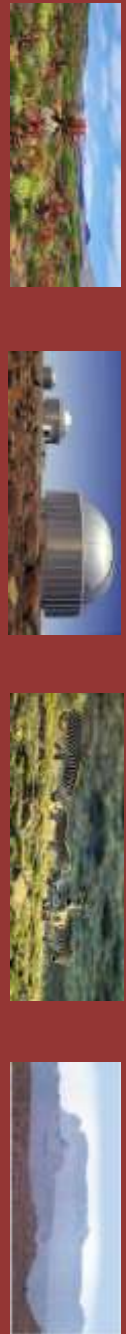
PROJECT TYPES									
	PRIORITISATION	LOCATION IDENTIFICATION	PRE-FEASIBILITY STUDY	FEASIBILITY STUDY	PARTNERSHIP IDENTIFICATION	PROJECT MATCHMAKING	DEVELOP BUSINESS PLAN	ALLOCATE MUNICIPAL FUNDING	PROJECT HANDOVER & MENTORING
Hubs	✓	✓	✓	✓	✓	✓	✓	✓	✓
Studies	✓				✓	✓	✓	✓	✓
Farming	✓	✓		✓	✓	✓	✓	✓	✓
Manufacturing	✓	✓		✓	✓	✓	✓	✓	✓
Infrastructure	✓	✓	✓	✓	✓			✓	✓
Tourism	✓	✓		✓	✓			✓	
Other	Waste to Energy	✓	✓	✓	✓	✓		✓	✓
	Waste management	✓			✓			✓	
	Regional Fresh produce market	✓	✓	✓	✓	✓	✓	✓	✓
	Call Centre	✓	✓		✓	✓		✓	✓
	Recruitment Database	✓	✓		✓	✓		✓	✓
	SMME outsourcing/Dat	✓	✓		✓	✓		✓	✓
	abase								



# CENTRAL KAROO DISTRICT MUNICIPALITY

## KHULIS'UMNOTHO – LOCAL ECONOMIC DEVELOPMENT

	Multipurpose Retail facility	✓	✓		✓		✓	✓	✓	✓
	Tertiary Training facility	✓	✓		✓	✓	✓	✓	✓	✓
	Wholesalers	✓	✓			✓	✓		✓	✓
	Freight    Export Contracts	✓	✓			✓	✓	✓	✓	✓
	Medical Evacuation	✓	✓			✓			✓	✓



**Observations from Table 5.6:**

- All projects have to be considered during the project prioritisation stage, i.e. before any project begins to be implemented.
- The location of projects also need to be considered for all projects as a project needs to be implemented at a specific location i.e. address.
- In order to implement the development of hubs the process should be carried out thoroughly involving each of the implementation steps to ensure successful implementation and to limit losses.
- In terms of the agricultural (farming), projects may not be necessary to do pre-feasibility study, a detailed feasibility study should suffice. A pre-feasibility study is also not required for skills training and development, however a feasibility study is required for the development of training facilities such as Tertiary training institution.
- The public sector may not need business plans, as public sector efforts can work independently, however if the correct partnerships are forged and there is buy-in from national departments assist with funding, project implementation could proceed more efficiently.
- Infrastructure projects and the provision of utilities first need to be planned for, thereafter, an Infrastructure Programme Management Plan (IPMP) needs to be drawn up, followed by an Infrastructure Programme Implementation Plan (IPIP). The project design phases follow these planning stages and give details of the project. After the project has been designed, the project tender phase can commence, at the completion of tendering and after a contractor has been found, the actual project is then implemented. In total, this is expected to take about four years. However, project design, project tender and initial implementation should all be done within 12 months. This breakdown in steps to be taken was recommended to avoid over budgeting per financial period and which leads to under-expenditure of the infrastructure allocation from the national budget (National Treasury, 2008).
- The tourism projects as well as manufacturing projects would generally not require a pre-feasibility report as a detailed feasibility study would suffice.
- In terms of the transport projects it is clear that all of the implementation steps are involved as the success of these projects will be greatly influenced by both the private and public sectors. The locations that need to be identified are a feasibility study that needs to be carried out, followed by a business plan in order to obtain funding.
- As part of ensuring that labour is skilled, a great deal of attention should be paid to skills development and training and the setting up of campuses of already established tertiary institutions should be encouraged. The major planning is done by these institutions, with government assistance, therefore a pre-feasibility study and business plan is not always necessary.

**5.5 Conclusion**

The implementation guidelines phase of this project was to draw a map of the thought processes in planning project implementation. We looked at the projects identified in the Potential Analysis phase, and added some public sector projects to the ones already identified. A look at the Central Karoo Enabling Environment was looked at and it was from that process that the additional projects arose. Thereafter, comprehensive lists of potential sources of funding and small business support services were provided. An overview of the type of skills that will be required in the District, based on current economic activity as well as on the projects identified was given and the chapter ended with practical step by step instructions of processes to be completed in project implementation.



## ***Section 6: Strategic Alignment & Institutional Framework***

### **6.1 Purpose of Section**

The implementation of an LED Strategy is mainly driven by strategic actions and should be carefully planned and executed. Strategy implementation is not as clear-cut as the strategy documents itself, due to external influences and the consistently changing environment. Strategic thought should therefore occur prior to every project in order to ensure the successful development of the Central Karoo's local economy.

This section covers the institutional arrangements that are required to support LED initiatives in the CKDM. The purpose of this section is to assess the capacity of the CKDM LED structure; to provide practical recommendations to attract investment; and to guide successful implementation & M&E of LED projects.

### **6.2 Contents of the Section**

The remainder of the document is structured in such a way as to best interpret the strategic framework that will guide economic development within the CKDM.

<b>Sections</b>		<b>Purpose</b>
<b>1</b>	Project overview (this section)	Provides an overview of the section and the purpose of this document
<b>2</b>	Status of LED in Municipal Structure	This section illustrates the purpose of the LED unit within the CKDM municipal structure
<b>3</b>	LED Institutional Structure Revisited and Recommendations	This section provides overview of the role of different types of structures to support LED and provide recommendations on the ideal implementation vehicle for the CKDM given the nature of projects and opportunities identified.
<b>4</b>	Relationships and Mentorships	This section provides the current status of the relationship of the CKDM with other spheres of government and the management of and benefits of structures that could be utilized or created to normalize the relationships.
<b>5</b>	Place Marketing and LED Promotion	This section refers to the marketing the CKDM by highlighting the positive aspects of the area to attract Investment into the CKDM.
<b>6</b>	Development Facilitation	The purpose of this section is to illustrate the factors “that makes LED work”. This section highlights the important role that the CKDM should take in creating an enabling environment for economic development to take place.
<b>7</b>	Integrated Programming of Projects and Action Plan	In this section the institutional drivers that need to be identified with the accompanied political ambition and ownership of the programmes with the implementation of the LED strategy is identified.
<b>8</b>	Monitoring and Evaluation	This section focus on the M&E technique which include the measures to assess whether the implementation is taking place and measures to access weather the outcomes are achieved once programme activities are planned for in the CKDM.



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### 6.3 Status of LED in Municipal Structures

The purpose of this section is to provide a profile of the Central Karoo District Municipality in terms of the administration of their structure and functions in terms of LED. It is important to understand the structure and capacity of the municipality to implement the LED strategy and facilitating LED in the region. The CKDM has an LED Strategy Framework. This strategy is very outdated (2005) and very incomplete. The Strategy does not provide socio-economic profile of the area or any key LED objectives. The LED merely states certain identified initiatives. The Districts' Integrated Development Plan (IDP) of 2007-2011 does, however provide some socio-economic data (which is outdated) and lists some LED objectives. Thus, while a single LED document is still required, this document serves to replace the existing LED Strategy Framework as well as the LED component of the IDP.

This project was conceptualised by DTI in order to assist the CKDM to develop a credible Local Economic Development Strategy which integrate seamlessly with their IDP.

As stated in the above it is important that the CKDM LED strategy should be in alignment with the IDP Framework, which is also the strategic development plan of the CK. Thus it is important to incorporate the development planning initiatives in the IDP. The Integrated Development Plan (IDP) is a process by which municipalities prepare strategic plans in consultation with communities and stakeholders. These plans seek to promote integration through planning within social, economic and ecological pillars of sustainability without compromising the institutional capacity required in the implementation, and by co-coordinating actions across sectors and spheres of government.

In terms of the guidelines issued by the Department of Traditional and Local Government Affairs, an LED Strategy is a sector plan to form part of the IDP process. From a strategic perspective, the LED Strategy itself must provide a framework that can be incorporated into the IDP, providing a strategic, yet meaningful guideline in terms of where the municipality should focus its LED initiatives. The LED Strategy should also provide a list of prioritized projects in various sectors, thereby enabling the identification of strategic projects to be fed into the IDP project register. Budgetary requirements of LED projects included in the IDP register must be included in the IDP budgeting process.

The IDP process is prepared as a five-year strategic plan and is reviewed annually. Therefore it is important that the LED Strategy be reviewed annually, so as to update the project register, budgeting requirements and sector plan to be adjusted in the annual review of the IDP.

### 6.4 Current Municipal Structure of CKDM

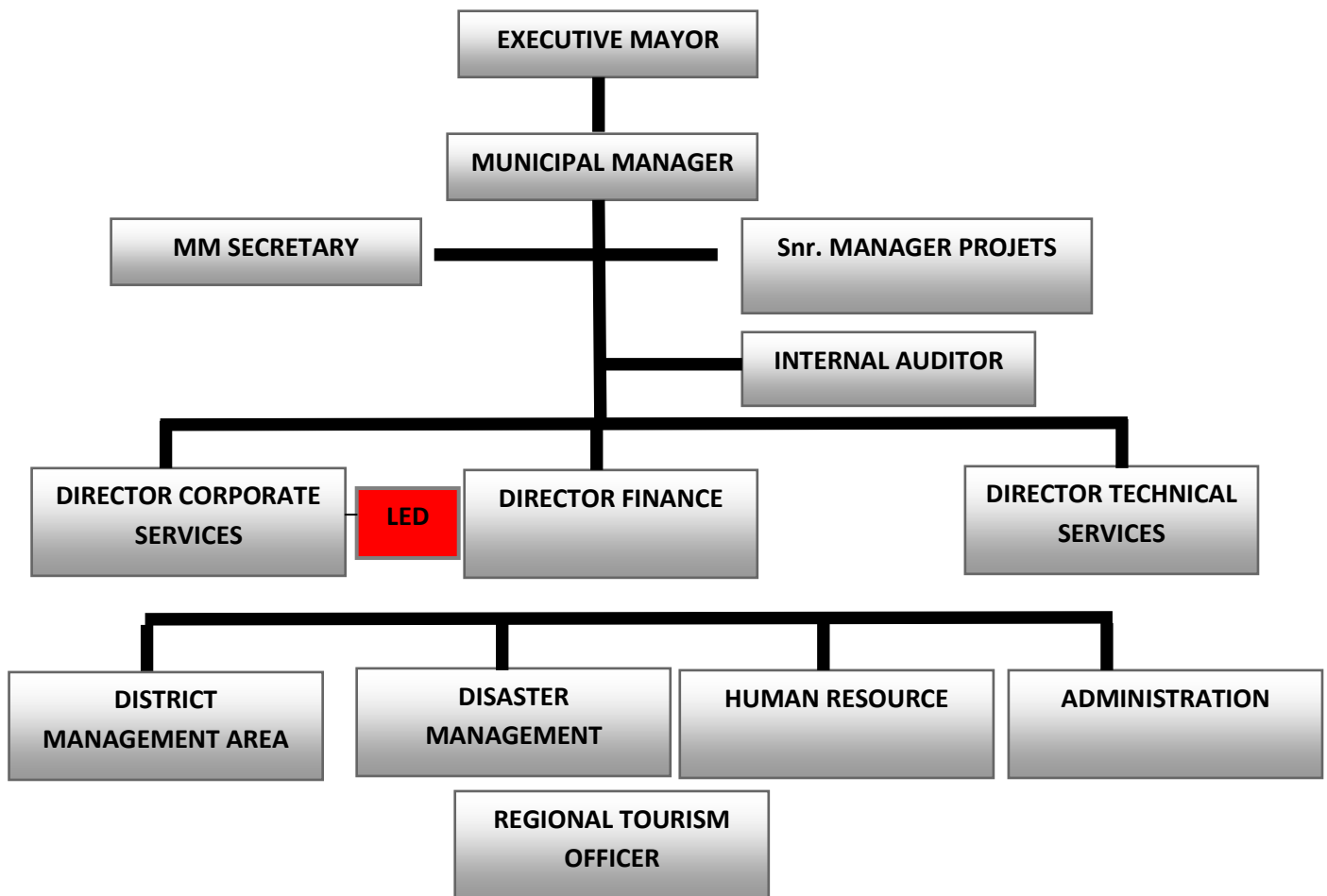
The Central Karoo Municipality's organisational structure is designed in such a way as to ensure optimum efficiency with the limited human resources currently available within the DM. As illustrated in **Figure 6.1** the Central Karoo DM has clustered its administration into three main directives: Corporate services, Finance, and Technical services. The sub directive of LED is currently classified under the directive of Corporate Services.



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FIGURE 6.1: CKDM ORGANISATIONAL STRUCTURE



(Source: Economic Profile of the poverty Nodes, 2006)

**Figure 6.1** illustrates that LED is regarded as a function within the Corporate Service Delivery directive. Moreover, this figure indicates that the current LED department has practically no support staff and capacity with the exception of the Regional Tourism Officer assistance.

The tourism manager has undergone LED training through the IDC LED learnerships. Therefore, in building capacity it is of importance that the CKDM employ officials that are trained in LED. Understanding of the policies relating to LED is important issues that district councillors and officials need to be aware of to support LED. The CKDM council have to annually review the needs priorities and participatory mechanisms of the communities they serve while also reviewing their own delivery mechanisms and performance in meeting their constitutional objectives.

Technical professionals need to be employed who can undertake key responsibilities in urban and regional planning and studies in working out the competitive advantages of local economies. In cases where such experts do not exist, researchers and planners with the appropriate skills can be contracted.

### 6.5 Ideal CKDM LED Structure

The CKDM LED unit does not retain the required support staff and capacity to influence and effectively carry out responsibilities and tasks relating to LED in the CKDM. The CKDM led unit is technically nonexistent, after the former LED manager resigned 3 years ago. The LED Structure for the CKDM should include:

- **LED unit and resources:** staff (LED Manager, officers etc.); offices and related equipment; funds/ LED budget





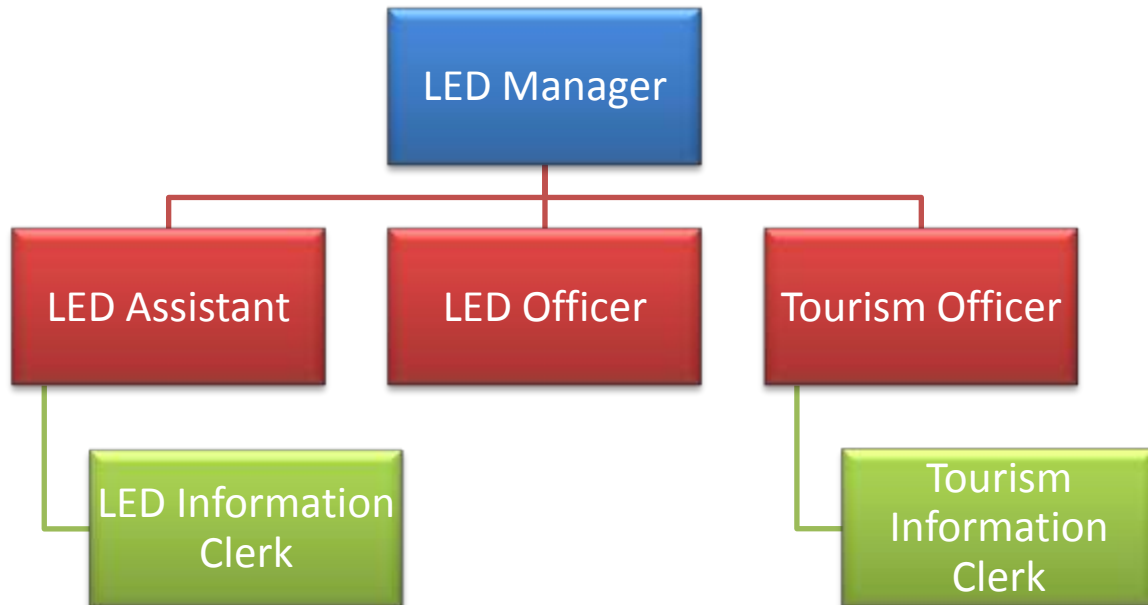
# CENTRAL KAROO DISTRICT MUNICIPALITY

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- **Additional LED stakeholders:** Finance; Human Resources; Mayor's office; Funders; project/sector role players; community members
- **Good HR practices** that is fair, valid, reliable and practicable.

Figure 6.2 provides the organogram of the CKDM LED Unit.

**FIGURE 6.2: CKDM LED UNIT ORGANOGRAM**



One of the outcomes of the National Framework for LED is that all districts have a credible LED strategy which is being effectively implemented by a dedicated LED unit or similar entity. For the CKDM the implementation of a LED Unit will allow for the implementation of the opportunities identified in the Opportunity Analysis of this report. The opportunities identified provide positive impacts for the economic development in the Central Karoo District, but also come attached with certain challenges.

It is important that the LED unit be **capacitated to steer** these different projects in order to manage the challenges and implement the projects to unlock the positive impacts on the economy. Possible solution to capacity problem within the LED Unit is to establish a Local Economic Resource Development training programme. The programme should comprise of government staff, representatives of the private sector and project representatives of the relevant project trusts from the different local areas in the CKDM. It is acknowledge that some identified projects under the different thrust are economic products with a certain potential for national and international markets. The representatives should be identified under the different thrusts and be responsible for the project implementation of the thrusts. They should be involved from identification to implementation phase.

The training should aim at a concrete final product. Participants will receive training with specific emphasis on the CKDM institutional structure, function and skills for marketing and export, knowledge, product and technology development attracting direct investments and small enterprise development. For all these aspects the roles of government (national, provincial and local) and the private sector (business community) will be utilised.

It is recommended that the programme be followed up regularly to monitor the dissemination and implementation of the action plans and to identify the eventual need for further support. **Possible responsible stakeholders should include:** CKDM, Red Door, Plek Plan, IDC, LGSEDA LED Learnership/ Partnering Universities and DTI.





### 6.6 How to Optimize Existing Capacity

With regards to LED the CKDM are to play a connector role in LED mobilising resources from national government departments. In the case of the constrained capacity in the CKDM LED unit capacity could be optimised with training to improve the skills of the DM or to make use of a capacity building programs. For Example Local Government SETA provides the following two programmes in order to educate and update the knowledge and skills of LED Unit's in South Africa:

- **Governance Programme:** This programme aims to bring about a more effective process of co-ordination, capacity building and skills development initiatives between governments departments and all stakeholders of society with can contribute to LED. Furthermore this programme aims to create synergies between different elements of the development project, by promoting leadership, skills development programmes and other educational interventions that will enhance the efficiency and effectiveness of the LED Unit and the provision of basic services from this department.
- **Learnerships Programme:** This programme aims to educate prospective LED Unit members by providing National Qualification Framework (level 4, 5, 6) educational opportunities. *Further detail is available on Local Government SETA website.*

Capacity Building Programmes:

- Urban-Econ has provided officials of the CKDM with a range of Capacity Building Workshops relating to the Khulis'umnotho Project. The Capacity Building programmes included the following:
  - a. Data Profiling Capacity Building Workshop (How to conduct a Data Profile and the main findings of the Data Profile) held on the 1<sup>st</sup> and 2<sup>nd</sup> of June 2008
  - b. Opportunity Analysis Capacity Building Workshop ( How to conduct a Opportunity Analysis and the main findings of the Opportunity Analysis)held on the 6<sup>th</sup> of October 2008
  - c. Final Capacity Building Workshop (Overview of the LED Strategy and main findings of the Strategic Alignment and Institutional Framework of CKDM) held on the 8<sup>th</sup> of July 2009

The main constraints regarding these capacity building programmes were that all role players such as Local private sector representatives were not always present. A possible solution to this constraint includes the implementation of the LERD training and capacity building programme mentioned above. The long term objectives of the programme are to contribute to the development of an institutional capacity for LED in the region from which local government officials will participate. The programme aims at clarifying what the minimum requirements in the institutional environment are in terms of possible roles of different stakeholders, functions, capacities and resources to initiate a focussed LED strategy. Participants of the programme are expected to act as initiators of a LED practise in the region. Therefore they need to have a clear vision on the constraints and potentials existing in the CKDM and on ways to overcome the constraints. They need to be able to mobilise stakeholders and other resources.

A capacity building programme should aim at the following:

- Building sustainable partnerships between the relevant stakeholders
- Promote exchange of knowledge and learning
- Establish effective, innovative and highly adaptable LED management functions for the municipal area
- Establish a baseline for enabling environment through training and skills development

Initiative that work well during capacitating processes are:

- Mentoring (e.g. LED manger, LGSEDA LED Learnerships/ Partnering University professors)
- Training Programmes



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- Seminars and Lectures
- Networking
- Marketing and Communication

### 6.7 Institutional Structure Revisited & Recommendations

The purpose of this sub-section is to provide an overview of the current LED Institutional structure and provide recommendations for possible structures which would help optimise the LED functions of the CKDM. The Sub-section is divided into the following parts:

- Role and Structure of the LED Forum
- Relationships with external implementation agencies
- SMME Support Structures
- Cooperatives
- Other Dedicated Vehicles

### 6.8 Role & Structure of the LED Forums

It is important that the CKDM acknowledge the major challenges facing Local Economic Development (LED) in the region. The central role of local government is to facilitate LED therefore there are a number of different institutions and agencies that should be involved in LED.

Since LED is very limited in the CKDM the presence of LED stakeholders in the form of a LED forum is absent. A LED forum can be seen as a crucial structure to ensure strategic focus in achieving balanced development and growth across the region's economy. At the beginning of the Khulis'umnotho credible LED process a steering committee was established to evaluate the process and success of the Credible LED work plan/process. The role of Steering Committee member was to participate, give inputs, prioritise and give feedback on the credible LED process. It is therefore recommended that this steering Committee be expanded to a LED forum. The reason for establishing a functional LED Forum is to expand the scale and scope of LED initiatives, by systematically leveraging support from partners in LED. The LED Forum provides an opportunity for interactions with privates sector, organised business, sector development organisations, educational institutions and a multitude of support institutions that are rich in expertise, resources, relational capital and networks.

It is therefore important that the forum comprise of the following composition:

- Mayor
- Executive committee of the District council
- Ward representatives
- CKDM LED Manager - Chairperson
- Organised labour
- Civil society
- Organised business/ business chambers
- Government department(Sector representatives)
- Education and Training Colleges
- SETAs
- LED managers LM's
- NGOs
- CBOs
- Public Institutions
- Services Sector (e.g. banks)



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The **role** of the LED Forum is as follows:

- Vehicle to improve integrated planning of economic development (Public and Private Sector Representatives)
- Co-ordinating access to funding and finance for LED and the creation of multi-sourced funding streams
- Assisting local municipalities in identifying and capitalising on local competitive advantages for economic and social development
- Improving sustainable access to investment finance necessary to unlock identified opportunities
- Ensuring the participation of local communities
- Identifying overlaps, duplication and misalignment of National, Provincial, District and Local strategies

### 6.8.1 LED Forum Operating Mechanism

It is recommended that the LED forum operate under a TOR with special emphasis on the participation of the private sector, civil society, the community under regular and structured interaction. The TOR should be effective once accepted by the CKDM council.

### 6.8.2 Coordination of Meetings

The CKDM LED Forum should meet on a quarterly basis or when need arises. The provincial department must ensure that the District forum are operational and achieve the set objectives set out in the TOR. Once set up the District LED manager/unit is however, responsible for coordinating quarterly meetings and communicating with stakeholders. The District is also responsible for facilitating the meetings and compiling reports/minutes of meetings.

The District Forum meetings will be held in the various Local Municipalities in the CKDM. The hosting Municipality will identify the venue and carry the costs of the catering on that day. Forum meetings should only last half a day. Members of the forum should be notified of the meetings at least three weeks in advance and send apologies accordingly for non-attendance. An agenda should be drawn up and will help to achieve consistency. Meeting minutes should be kept and circulated to all members to ensure that all decisions which were taken are recorded. **Consistency** in the meetings is very important for the purposes of process.

### 6.8.3 Decision Making

Relevant issues will be discussed and debated at forum meetings according to the set agenda, after which consensus must be reached on a particular issue and a decision made. Decisions made at forum meetings must be integrated with the planning activities of municipalities, through the involvement of municipal LED managers with decision making powers. The relevant LED managers must therefore ensure that decisions of the LED Forum are implemented and must report back to the forum.

## 6.9 Relationship with External Implementation Agencies

The South African Constitution and various pieces of local government legislation give municipalities a mandate to act as a catalyst for sustainable economic development. One of the important vehicles to assist in the delivery of these objectives is Economic Development Agencies. EDA's are established to drive economic growth initiatives in defined geographical space such as Provinces, Districts and Local Municipality areas (The South African LED Network, 2009).

The CKDM is in the process of establishing a Regional Economic Development Agency. The Central Karoo is faced with numerous development challenges. The concept of establishing an EDA has been introduced to address the developmental challenges faced by the Central Karoo. The concept of the Agency has been introduced to council and consensus was reached amongst the CKDM and CKDM Council to implement the agency concept in the Central Karoo District.



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The purpose of the CKEDA is to implement economic development projects within the Central Karoo as very few initiatives are implemented. Implementation of economic projects is not within the role of the municipality and capacity prohibits LED to a focus point in local and regional government. The CKEDA is a delivery mechanism that bridges the gap between the private and (local) public sector.

It is not the agency's intention to replace the LED department but only **strengthening the capacity** of current LED systems and resources in place within a municipal area, by using a semi-external body. Therefore the **Agency only serves as extension of municipality's role.**

### 6.9.1 IDC Involvement

The IDC has a dedicated unit that support municipalities with financial resources and technical expertise, namely Agency Development Support. The IDC has set aside funding to help municipalities set up agencies. Assistance from the IDC comes in the form of three grants, totalling R18,5 million. **Table 6.1** shows the different funding phases of the IDC to establish EDA's.

**TABLE 6.1: IDC FUNDING**

<b>Phase 1:</b>	<b>Pre-funding phase</b>	<b>R 800 000</b>	<b>Acceptance of "agency concept &amp; resolution by governing body</b>
<b>Phase 2:</b>	Pre-Establishment phase	R 2,5 m	Pre-feasibility study, interim business plan and appointment of CEO
<b>Phase 3:</b>	Establishment phase	R 5 m pa (3 years)	Work plan, performance management system, 3-year business plan and packaging of bankable projects
<b>Phase 4:</b>	Operational phase	Project funding	Launch projects, pursue investment and oversee implementation
<b>Phase 5:</b>	Exit Phase	Normal Project funding	IDC exists development agency, normal funding programmes apply for projects

(Source: IDC, 2009)

### 6.9.2 Central Karoo Development Agency Establishment process

The IDC has been approached by the CKEDA to help fund the process of establishing the CK development agency. The CKEDA determined a set of bankable projects which have been scoped for viability, for which funding are sourced.

#### 6.9.2.1 Approach to a LEDA

The DA Establishment process needs to adhere to specific legal procedure to be valid according to the MFMA and MSA.

Based on the amount of work already completed by the CKDM and the service providers on the project, the following can be noted as achievements to date: This work complies with the IDC approach and methodology to establish a DA.

- 1) A Shift-Impact Assessment Report has been compiled to investigate the feasibility of a Regional Development Agency for the Central Karoo District Municipality and to evaluate service delivery options available to the municipality.



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- 2) The concept and principles of the CKEDA is widely supported by the public sector representatives (as was indicated at a number of workshops). Consequently, a Council Resolution was taken to promote the establishment of the agency. (90 Day comment period)
- 3) A Feasibility Assessment has been undertaken to determine the feasibility of an external delivery mechanism for economic service delivery in the CKDM.
- 4) The project driver has been appointed
- 5) It has been decided that the legal structure of the Agency will take the form of a Private Company
- 6) Requests have been submitted to Council to provide input in the assets and resources that could be transferred to the agency
- 7) The Concept document has been submitted to IDC that serves as application for Pre –Establishment funding for the CKEDA. The concept document can be seen as a practical plan of how the agency would operate. The IDC has set out clear guidelines/requirements which potential development Agencies needs to comply with for the application of pre-establishment funding. These requirements include:

1. Appoint driver (Council Resolution)	2. Establish legal entity (Register Entity)
<b>3. Appoint Board &amp; Audit Committee</b> <ul style="list-style-type: none"> <li>• Draft TOR for Board</li> <li>• Advertise</li> <li>• Call for nominations</li> <li>• Selection/adjudication</li> <li>• Council resolution</li> <li>• Letters of appointment</li> </ul>	<b>4. Office</b> <ul style="list-style-type: none"> <li>• Secure office space</li> <li>• Purchase of assets</li> <li>• Compile Fixed asset register</li> </ul>
<b>5. Policies and Procedures (Define Mandate &amp; Operational systems before agency is set up)</b> <ul style="list-style-type: none"> <li>• Agency Master Plan</li> <li>• Human resources</li> <li>• Procurement policy in line with the municipality's and Supply Chain Management Policy</li> <li>• Implementation of sound corporate governance practices</li> <li>• Establish sound Financial systems</li> <li>• Communication plan</li> <li>• Sustainability plan</li> <li>• Develop job descriptions</li> <li>• Develop staff contracts</li> </ul>	<b>6. Project Development (Focus on specific and bankable projects in target sectors)</b> <ul style="list-style-type: none"> <li>• Develop scooping of approved concept projects</li> <li>• Develop a strategic plan both long term and for next phases application</li> <li>• Develop SLA for each project</li> <li>• Submit strategic plan to the shareholder and the IDC.</li> </ul>
<b>7. Preparation for next phase</b> <ul style="list-style-type: none"> <li>• Have financial audit done</li> <li>• Have milestone audit done by the ADS</li> <li>• Initiate appointment of the CEO</li> <li>• Submit application for Establishment Phase funding to the ADS</li> </ul>	

### 6.9.2.2 Role and Function of the CKDA

#### The role and function of the CKEDA

Give the development status and need in the Central Karoo, the CKEDA will **focus** on the following areas

1. Agriculture development
2. SMME/ Business Promotion
3. Investment for Project Implementation
4. Tourism Development
5. Creating favourable conditions for private sector investment



In addressing these focus areas, the Agency will be responsible for the identification, planning, conceptualisation, packaging, facilitation, development and monitoring of economic projects and initiatives that are commercially viable and sustainable. These projects refer to any sectoral spatial, community – based or industry – specific project or any other focused initiatives that will achieve the strategic objectives forward for the agency.

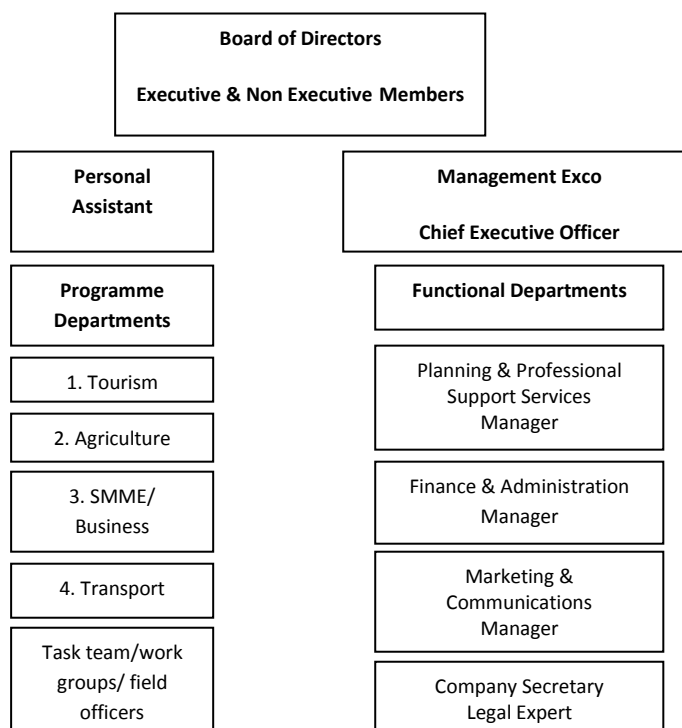
The **Functions** of the Agency include:

- ❖ Stimulating, developing, promoting and supporting catalytic and turn key projects that will contribute to economic growth and diversification;
- ❖ Facilitation and management of area-based and sectoral regeneration initiatives;
- ❖ Promotion and initiation of economic projects that will specifically create employment and direct invest opportunities;
- ❖ Harnessing of available, but dormant public and private resources and assets;
- ❖ The application of sound corporate governance principles;
- ❖ The attraction of new business and the promotion of investment in all sectors of the Central Karoo economy;
- ❖ To promote business retention and renewal, especially in terms of area-specific and relevant initiatives;
- ❖ To provide development support to all tiers of business for example SMME and large businesses – with a special focus on priority sectors as identified by the various regional, and provincial growth and development documents;
- ❖ The implementation and manage projects directed through the Agency as a SPV for nation and provincial government programmes such as the provincial MEDS Strategy etc.

### 6.9.2.3 CKEDA Organizational Structure and Agency Focus

The organisational structure of the Central Karoo Economic Development Agency is indicated in **Figure 6.3**. This organogram indicates the mature structure that will be achieved over a period of 4 to 6 years. *The structure is seen as the most efficient option, given the expected mandate and tasks allocated to the CKEDA (as discussed in Section 3) and the envisaged focus areas.* The structure allows for the following:

**Figure 6.3** – Organogram for Central Karoo Economic Development Agency





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The CKEDA will be owned by the Central Karoo District Municipality. It will have an independent Board of Directors appointed by the Council of the CKDM, which will remain accountable to the CKDM in terms of its mandate and strategic targets.

### 6.10 Summary

It should be noted that the CKEDA is not a solution to all the local economic development challenges of the LED unit as it is only involved with the physical implementation of projects, marketing of the CKDM or attracting investment to the CKDM. All municipal functions other than these applications cannot be effectively rendered by the CK Development Agencies. The CKEDA is therefore just the implementation extension of functions the municipality could also undertake, but due to capacity constraints are not able to.

### 6.11 SMME Support Structures

The CKDM currently have a SMME support structures in the form of Red Door. Red door aims to harness the entrepreneurial drive of unemployed and self-employed South Africans. The concept is supported by international research revealing the power of the small business sector to reduce unemployment. The RED Door is a one-stop shop for new and existing businesses looking for help and advice, from the most basic to the most sophisticated.

Business mentors and advisers speaking Afrikaans, English and isiXhosa offer a range of support, including help with the following:

- writing a business plan
- identifying weak areas in a business
- accessing finance
- finding accountants and lawyers
- taking advantage of government incentives and tenders
- Improving general business skills
- Learning how to import and export.

Going through the RED Door also means getting access to the internet, to a growing network of business service providers, and occasional use of small conference facilities.

It is important that the CKDM plays a partnership and mentoring role with Red door, for the emerging SMME's. This includes directing the potential individuals to the right resources to provide them with assistance. The SMME Support Programme (Red Door) is good initiative to which the individuals could be guided in their business drive.

Thus the idea is to establish a SMME help desk and aftercare centre for the SMME's in the CKDM in partnership with Red Door. It is important that the CKDM does not duplicate the services provided by Red Door, but rather complement these services in their Support Programme.

### 6.12 Cooperatives

A general definition for a cooperative is an **“autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.”** Therefore a cooperative indicates an association where members join voluntarily; there is a dependency between partners, joint ownership and management on the basis of democratic principles.

In this sense it can be said that a cooperative is simply a stokvel that is legalised and enjoys the protection of government and the law. To ensure that the rights of interests of all members a protected, a cooperative must



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adhere to certain legal requirements and in return has certain obligations.

A cooperative is in many ways the same as a business, but important to note that the following are the main distinguishes between a cooperative and a business:

- They are owned and democratically controlled by their members-the people who use the co-op's services or buy its goods-not by outside investors; Co-op members elect their board of director from within the membership.
- Return surplus revenues (income over expenses and investment) to members proportionate to their use of the cooperative, not proportionate to their "investment" or ownership share.
- Are motivated not by profit, but by service-to meet their members' needs for affordable and high quality goods or services;
- Exist solely to serve their members.
- Pay taxes on income kept within the co-op for investment and reserves. Surplus revenues from the co-op are returned to individual members who pay taxes on that income.

According to the Cooperatives Act of 2005 the different kinds of Cooperatives that can be established are the following:

- housing co-operative;
- worker co-operative;
- social co-operative;
- agricultural co-operative;
- co-operative burial society;
- financial services co-operative;
- consumer co-operative;
- marketing and supply co-operative; and
- service co-operative

The highlighted cooperatives would be the most important types of cooperatives for the CKDM.

Co-ops are formed by their members when the marketplace fails to provide needed goods or services at affordable prices and acceptable quality. Cooperatives empower people to improve their quality of life and enhance their economic opportunities through self-help. Throughout the world, cooperatives are providing co-op members with financial services, utilities, consumer goods, affordable housing, and other services that would otherwise not be available to them.

The implication for the CKDM would be to facilitate the formation of dedicated Cooperatives and the CKDM should aim to develop a cooperative support policy and training. Coops training must skill members in entrepreneurship, coops values and principles, responsibility to communities. SEDA has a comprehensive training programme for SMME's and Cooperatives. The CKDM should enrol in partnership with SEDA in creating an awareness campaign of cooperatives which include training programmes. This role can also be fulfilled by Red Door. It should also be acknowledged that the Umsobomvu Youth Fund provides comprehensive cooperative training support for women and Youth. The Cooperatives programme is specifically an intervention that is targeting youth cooperatives from all backgrounds to register with the UYF Skills Development Programme.

It is recommended that the education and training for cooperatives in the CKDM should include the following

- Build and strengthen outreach systems
- Member education should go with member empowerment and entrepreneurship development





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- More efforts need to be invested in co-operative education and training, funded by the co-operative movement itself.
- The training programme must be demand led
- Training should be customized to the needs of the type of Co-operative.
- Study tours nationally and internationally be promoted as part of training (capture good practice)
- Budget for education and training of Cooperatives must be established
- Networks of trainers should be formed in all the areas

### 6.12.1 Finances External to a Co-operative

There are a number financial programs directed at co-op development. These include:

- **Grants and Donations:** Some co-operatives try to raise additional funds from donor and development agencies, NGOs or governmental sources. Occasionally some of these institutions set aside funds to support co-operative development. Grants and donations available to co-operatives can be researched by looking at the various corporate social investment schemes offered by private companies, parastatals, and government departments.
- **Loans:** Most small business enterprises in the world obtain funding through the lending cycle. Applying for loans is an important way for co-operatives to access the capital needed to purchase equipment and pay for training of co-operative members. The drawback to this form of funding is the limited access many poor South Africans have to financial institutions as well as the high interest rates and services fees charged to people. The CKDM should play a facilitator role in this regards.

In SA the following institutions play an important role in providing loans through the lending cycle:

- a. Loans from Commercial Banks
- b. Loans from State Owned Development Banks and Agencies

State owned institutions are also market driven. These institutions often have a focus for lending to small, medium and micro enterprises (SMMEs). Emerging businesses often find that these institutions offer services that are not available to them by commercial banks. The following provides a brief description of these agencies:

- **The Land Bank:** provides finance to all sectors of the agricultural economy and agri-business. Co-operatives that are involved in these activities are entitled to apply for finance. For more information on services visit the Land Bank website [www.landbank.co.za](http://www.landbank.co.za) or call the toll free queries number: 0800 00 52 59.
- **The Development Bank of Southern Africa (DBSA):** provides finances to projects related to the development of infrastructure. Co-operatives whose work focuses on development of infrastructure are entitled to apply for funds from this bank. The operations office can be contacted at 011 313 3911
- **Department of Trade and Industry's Industrial Development Corporation:** the IDC finances initiatives in different sectors, such as: manufacturing, small scale mining, agriculture, transport, tourism, fishing, information and communication technology, business services, etc. Clients of this loan must show assets and/or a certain amount of savings. This is a drawback for many emerging co-operatives that are just beginning. The IDC can be contacted at [www.idc.co.za](http://www.idc.co.za)
- **Department of Trade and Industry's Khula Enterprise Finance Ltd:** Khula provides loans for smaller enterprises that do not qualify for IDC loans. Khula works through Retail Financial Intermediaries to disperse the loans. One way in which co-operatives can access these loans is through a SACCO (Savings and Credit Co-operative) that can act as an RFI. More information on the Khula project can be accessed at [www.khula.org.za](http://www.khula.org.za)
- **DTI CIS:** The Co-operative Incentive Scheme (CIS) aims to reinforce the initiatives of government towards the development and promotion of co-operatives as a viable form of enterprise in South Africa. The CIS is one of the government support measures towards realising the 2004-2014 objectives presented in the Government's Co-operatives Development Strategy. The incentive scheme targets registered co-operatives operating in the emerging economy. It covers the whole country and makes use of appointed



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field officials to reach co-operative enterprises. Ideally, one field officer could be responsible for coordinating projects in two designated provinces. CIS is offered as a 90% matching grant towards the qualifying expenditure incurred/to be incurred by the co-operative. The incentive scheme has been extended for a period of five years, 2009- 2014. A co-operative is eligible for a total grant not exceeding R300 000-00.

It is important that the CKDM acknowledge that Coops need an environment free of political interference.

### 6.13 Recommendations

Taking cognisance of the nature of projects and alignment to provincial policy it is clear that the establishment and support of cooperatives should be highest priority in order for local business to gain agglomeration advantages. This will increase their competitiveness and enable these businesses to compete with larger businesses and corporations that currently have the market monopoly.

The Cooperative model for organizing a business or an enterprise at grassroots level has generated a lot of interest and excitement within communities, donors and government agencies lately. All these groups of people are looking for practicable programmes that can support the unemployed, underemployed or working poor to improve their financial or economic conditions. In South Africa Cooperatives can potentially overcome many of the problems associated with attempts to establish more conventional enterprises in previously disadvantaged communities; however it has been realised that many of these institutions that are often run/managed by young people are operating in the informal economy and are unable to meet some of their development needs. The urge to register with a Skills Programme is a stepping stone to formalization of informal coops and a great capacity building intervention to coops that are already in business.

In the CKDM SMME's, emerging farmers, craftsmen and -women are affected by deep social and economic changes. Despite efforts of the Government the majority still lack adequate access to support and services for sustainable livelihoods and enterprise development, as well as sustainable access to financial services (savings, credit, insurance, and housing).

This situation calls for a much stronger emphasis on mutual self-help and reliance on own resources of people especially in rural and semi-urban areas and a reduced expectation that Government intervenes to assist them. Entrepreneurship at grassroots level and thus small and medium enterprise development could be strengthened through the creation and development of co-operative organisations in the CKDM.

### 6.14 Relationship & Mentorship

The CKDM is in a better position to provide a coordinating and supportive role in terms of LED to the three Local Municipalities within its region. As stated, the CKDM have specific responsibilities towards LED implementation, but the Local Municipalities also have their role to play in the LED environment. The main difference with regards to the responsibilities mandated to the District and the Local Municipalities is that the District should provide a more strategic supportive role and the Local Municipalities are more involved in the physical implementation of the LED projects. Thus it is important for the CKDM to maintain good relationship with all the Local Municipalities within its region.

The main challenges regarding these relationships are interaction and communication between the different role players. CKDM and the Local Municipalities meet on a regular basis, through the CKDM IDP process. Since the CKDM does not have an active LED Unit and since LED is a sub-directive of the IDP process role players involved within the different municipal areas are always certain what other role players are doing regarding LED. Since the Beaufort West Municipality are situated within the area of the CKDM, role players of the other municipalities feels that with regards to LED Beaufort West always get preference over the other LM's. This is also the case with the potential establishment of the CKEDA which will be hosted in Beaufort West LM.



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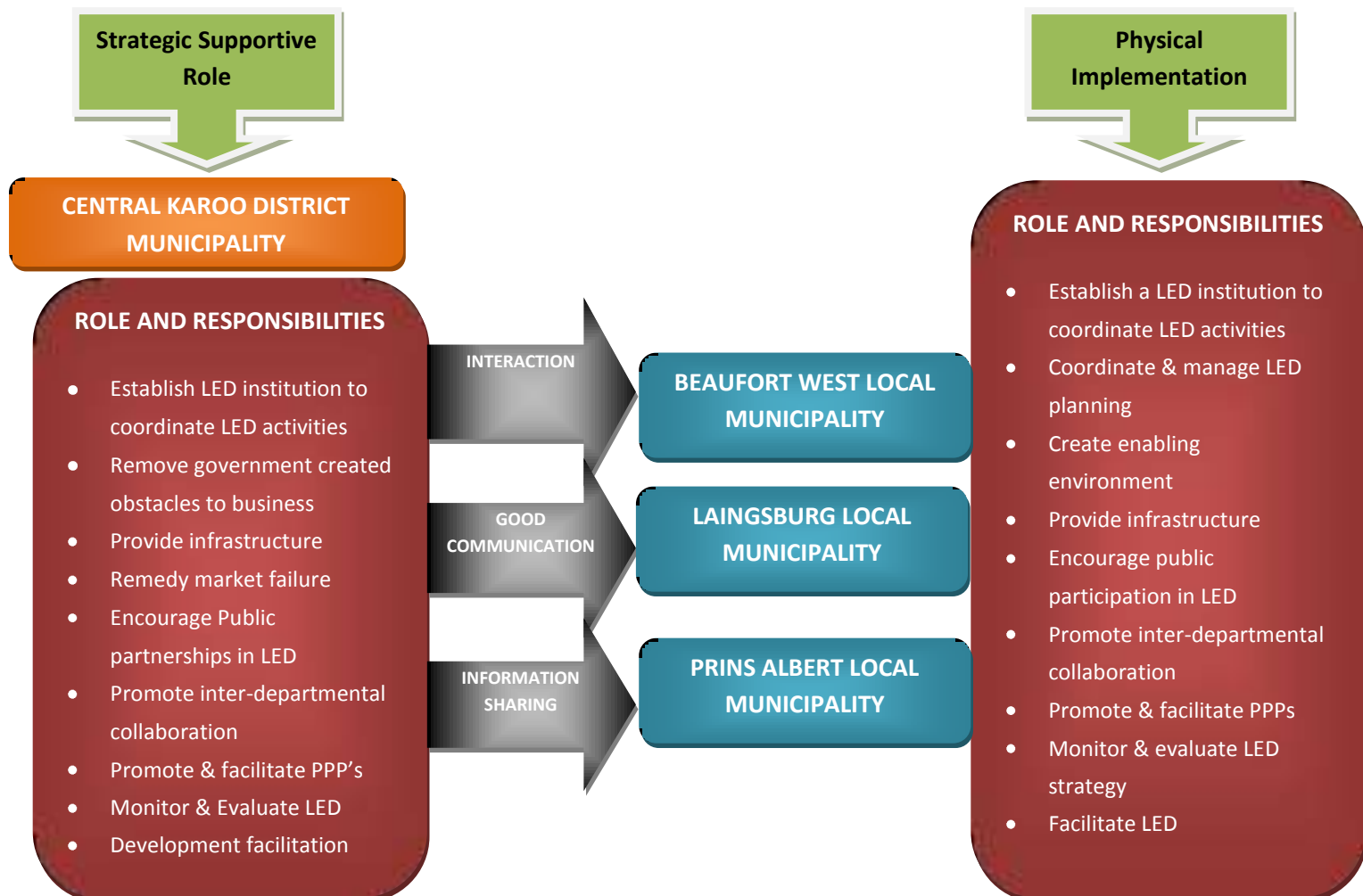
## *KHULIS'UMNOTHO – LOCAL ECONOMIC DEVELOPMENT*

If good communication systems are in place it would create an opportunity for various role player to share experiences (positive or negative) and establish good networking basis. In order to strengthen the relationships between the CKDM and Local Municipalities it is recommended that good practice guidelines are implemented to regulate the relationships and communication channels in the following manner:

- Interaction between the CKDM and Local Municipality on a regular basis, through the use of meetings, conferences and workshops
- Good Communication Systems through the use of websites, emails, regional newsletter and faxes (the CKDM needs to be informed about activities happening in the Local Municipalities and vice versa)
- Sharing of Information between the CKDM and Local Municipalities (all role players should have access to information. The idea is that the CKDM and Local Municipalities work together in order to achieve economic development within the region as a whole)
- The role of the different government spheres should be clear to all role players
- Good communication systems by the MM's and mayors through the IDP function

From the above it is clear to see the importance of the relationship between the CKDM and Local Municipalities with regards to the economic development of the region as a whole. **Figure 6.4** illustrates the ideal structure of the relationship between CKDM and the four Local Municipalities within its borders.

**FIGURE 6.4: IDEAL RELATIONSHIP STRUCTURE BETWEEN CKDM AND LM'S**



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### 6.15 Alignment with the IDP and SDF

#### 6.15.1 CKDM IDP

All municipalities should establish an IDP co-ordinating function to play the role of co-ordinating LED strategies and activities with the rest of the function of the municipality.

As stated in **Section 6.3** of this report the LED Strategy should form part of the IDP process and therefore the projects identified within the LED Strategy should be included in the IDP. It is also important that the objectives of the IDP and the objectives (Trusts) identified in the LED are aligned so that both the IDP and LED prioritise the same growth potential within the CKDM.

The IDP will highlight the need for co-ordination of municipal activities to meet LED objectives. Including budget and administrative support will be identified for LED. The CKDM IDP currently recognises the importance of the main Local Economic Development (LED) initiatives of adding value to products through agro-processing. It would be important for the next review of the IDP to take note that the Thrusts of the LED should more prominently be represented in the IDP.

Currently the **CKDM budget** does make provision for LED projects which is very important for the implementation of LED. It is important that with the next review of the IDP, the LED Manager should once again ensure that LED is prioritised during the CKDM budget process.

#### Current Inventory of LED projects in the CKDM IDP

The projects/ led initiatives that are currently underway in the CKDM are listed below. These projects are listed in the five-year strategic plan (IDP) of the district and the local municipalities and in the CKDM GDS. **Table 6.2** shows the current inventory of LED projects in the CKDM.

**TABLE 6.2: CKDM LED PROJECTS**

Project	Description	Estimate Budgets	Proposed Partners
Tourism Gateway Development	<b>Promote tourism and create job opportunities</b>	<b>R2 400 000</b>	<b>DEAT, CTRU</b>
Establishment of EDA	Feasibility study developed B/plan and funding application	R92 000	<b>Urban Econ, CKDM</b>
The establishment of PPP with Score supermarket & PEP to locate in Murraysburg	To expand the Economic Base and create Employment opportunities	R500 000 ( feasibility study) R 5 m	CKDM, DEADP  Investors
B/West Airport expansion	Engage with B/west on type of support needed. Source Funding	R50 m	BEAUFORT WEST, CKDM, Plek Plan
Establishment of Cold Storage /agri processing facilities in L/Burg & Prins Albert	Feasibility done for Prins Albert Support to source funding	R 4 505 000	CKDM, LAINGSBURG, PRINCE ALBERT, Plek Plan, DEDT
Feasibility :Agriculture beehive (Beaufort West)	Support, Source funding for implementation	R200 000 (feasibility study) R4m( implementation	Beaufort West  Investors
	Transport logistics hub	R200 000 (feasibility)	B/WEST, DEATP



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Feasibility: Freight village/inland port	for transport companies. Halfway between J/burg and Cape town on the N1	R5 million implementation	Investors
Regional correctional facility	A correctional facility to be built in the area of Beaufort West. Feasibility Study Needed	R200 000 Feasibility R50 million	BFW, DEADP

### **6.15.2 SDF**

It is important for the economic development objectives of the LED be aligned with the spatial development perspectives of the SDF in order to ensure that development within the CKDM is focused.

The vision and objectives of the CKDM draft IDP (2007-2011) is adopted but altered slightly to express the same vision and objectives in a spatial sense. The CKDM SDF have been developed to indicate desired patterns of land use, to address spatial reconstruction and to provide guidance in respect of the location and nature of future development.

Since the draft IDP for the CKDM has been developed prior to the SDF, the development strategies and projects for the development of land (as identified in the IDP) has been assessed, commented on and spatially placed as part of the SDF. There is a scope for GIS work in the CKDM which can add value to the SDF and assists in decision making through spatially mapping LED projects and socio economic statistics.



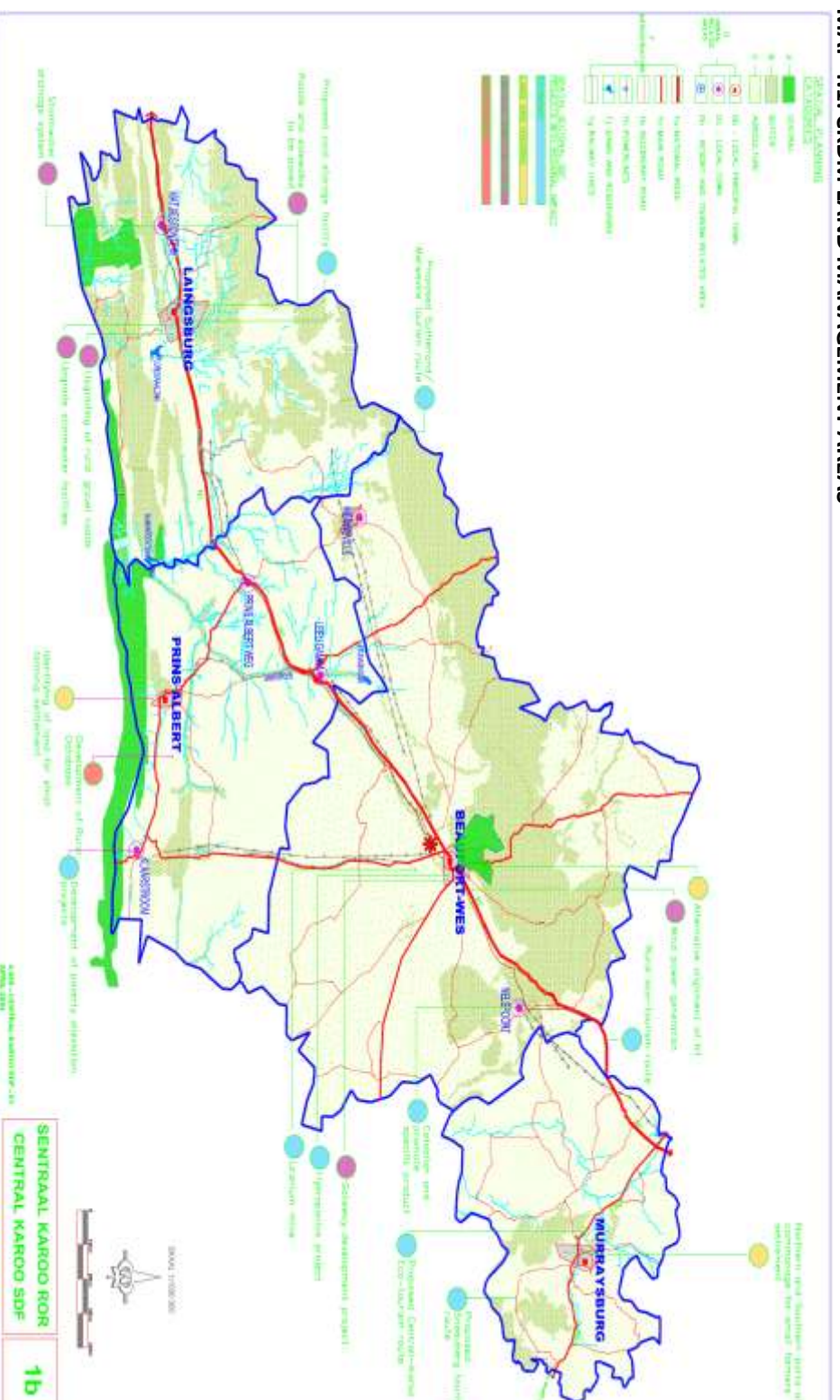


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Map 4.1 shows the land management areas for the CKDM identifies in the CKDM SDF.

MAP 4.1: CKDM LAND MANAGEMENT AREAS



### 6.16 Coordination with National and Provincial Initiatives

The Central Karoo was declared a presidential node in 2001, in terms of the **Integrated Sustainable Rural Development Strategy**. This strategy promotes co-operation between national, provincial and local governments. The strategy is driven by the Central Karoo District Municipality. Government spending within the district has increased dramatically because of this initiative.

The **Local Economic Regeneration Programme (LERP)** forms part of the government's LED Programme and is intended to enable municipalities undertake studies so as to identify economic development opportunities and viable projects for implementation. The fundamental objectives of the LERP specifically within the context of rural development nodes are as follows

- Undertake Nodal District Economic Development Strategy;
- Maximising the impact and capitalising on the Integrated Sustainable Rural Development Programme;
- Strengthening the municipal Integrated Development Plans;
- Furthering municipal efforts in Local Economic Development and facilitate Black Economic Empowerment initiatives.

It is imperative that the LERP find synergies in other programmes such as the IDP, Urban Renewal, Rural Nodes, etc. In the regeneration process a value adding impact on other initiatives would represent a critical milestone by the programme. This CKDM is part of this programme.

In order to accelerate Local Economic Development (LED) across the province, the Provincial Government of the Western Cape, in partnership with the CSIR and Casidra, has developed an innovative intervention called '**Die PLEK Plan**'. "DIE PLAaslike EKonomiese PLAN" aims to identify potential local and regional economic opportunities and develop these into REAL BUSINESS OPPORTUNITIES; and to assist local municipalities in defining and formulating realistic LED strategies and implementation plans. To deliver on this programme, fully trained staff is placed in the 5 regions of the Western Cape with full 'head office' support (from provincial government and its service providers) to implement high quality LED initiatives at all municipalities. The CKDM is host to a Plek Plan office situated in BW.

- Corporate governance is a key element of success when it comes to supporting economic development. DEAT recently launched two LED initiatives for the participating of the Central Karoo economic role-players and stakeholders at impacting on economic development in the region. This initiatives include
  - **Red Networking Club** – The aim of this club is to create a platform for Red Door Clients and stakeholders in the region to strengthen, maintain and develop relationships.
  - **Rural Economic Assistance Fund (REAF)** – is aimed at providing local economic role –player's access to provincial and non-financial support for LED opportunities for development. This engagement also intends to deliver on the follow up request received by municipalities around the challenges with securing LED funding projects.

It is important that the CKDM LED manager be aware of these initiatives in the CKDM. As well as continuously engage with the plek plan manager and build a firm relationship. This will assist in gaining funding and provincial support for LED initiatives as the PLEK plan managers report to province.

### 6.17 Place Marketing and LED Promotion

It is vitally important for the CKDM to have access to a focused marketing plan, as this is the mechanism used to inform and communicate the LED message to key investors and stakeholders. A focused marketing plan will provides the CKDM with a pro-active approach towards gaining investors. More specific will be the discussion around the marketing of a specific location or place i.e. place marketing. The degree of success with which local authorities will adapt to an ever changing economic environment is influenced by their ability to spread information of their town on the local, regional and national level.



Place marketing means designing a place to satisfy the needs of its target markets. It succeeds when citizens and businesses are pleased with their community, and the expectations of visitors and investors are met (Kotler et al. 2002a in Rainisto, S.K., 2003).

Place marketing is imperative to make potential investors aware of business perspectives in the Central Karoo District Municipality. This also increases knowledge of the area and would increase the effectiveness of an investment promotion programme. Three methods often used in place marketing include branding, promotional material and collaborative marketing initiatives.

The CKDM has no formal market plan in place. Since LED is nonexistent within the municipality no marketing approaches in followed to promote and market LED. Tourism within the district is well market. Marketing tools for tourism in the district includes:

- Regional Tourism DVD
- Website: [www.tourismcentralkaroo.co.za](http://www.tourismcentralkaroo.co.za)
- Advertisements include the Travel Companion pocket book
- Yearly shows: Indaba Travel and Trade Show  
Karoo Heart Festival

### 6.18 Doing Business in the DM

It is important that the CKDM are marketed according to expectations of visitors and investors. Therefore the CKDM needs to be aware of the criteria investors will take into account in assessing the development potential prior to investing in a specific area. Thus, it is important for the CKDM to promote the area to potential investors by highlighting the positive aspects of the CKDM. The following aspects would be regarded as important when marketing the CKDM to potential investors:

#### Transportation

- There are 409 km of tarred main roads and 355 km of national road in the district.
- There are 31 railway stations, many of which are no longer operational.
- The N1 and N12 national highways join in Beaufort West.

#### Terrain and natural resources

- Central Karoo forms part of the Great Karoo and is classified as a unique arid zone.
- The Karoo plateau is the largest of its kind outside Asia.
- The land is rich in fossils, and is home to the largest variety of succulents in the world.
- Several mountain ranges border the district.

Besides the well-developed road infrastructure, the CKDM is poised to be a distribution centre for road freight. This is reflected in the prominence of the Transport and Communications sector. Approximately 7000 vehicles pass through Beaufort West per day, and this doubles during peak holiday periods. In addition, there is a railway line that runs parallel to the **N1 highway**, and this railway is the lifeblood of towns such as Matjiesfontein, Laingsburg, Prince Albert, Leeu-Gamka and Nelspoort.

The CKDM is also a major supplier for **Cape Mohair** for Export market. CKDM hosts one of 20 parks belonging to the South African National Parks (SANParks)

Place marketing should focus on the on the specific comparative advantages of the CKDM and should focus on specific types of funding sources/investors that could be attracted to the region. Marketing creates an awareness of an area that would otherwise not have existed or only might have developed over time.





The marketing strategy is in essence the marketing of CKDM as an **attractive development destination**. The marketing effort should be directed towards the broader public and those who are new in the area (tourists, international investors, etc).

### 6.19 Creating and Maintaining a Economic Information System

An economic information system indicates a comprehensive data basis of information relating to among other economic growth, GDP, production, inflation, capital flow, foreign and local direct investment. Economic information is essential to analyse economic performance and identify and monitor sectors with high sustained growth and development potential. This information is valuable to attract potential investors and could also be of assistance to existing stakeholders in the District.

Data that should be available within the economic data basis include the following:

- Number of businesses (sector, contact details)
- Available labour and skills
- Infrastructure and development opportunities
- List of community stakeholders
- GDP per sector and specific comparative advantages
- District imports and Exports
- Available land for development
- socioeconomic data sources
- LED Project Information

Some of the economic information is already available in a usable format from sources such as Statistics South Africa; however other economic data is not area specific and can only be obtained with primary research. To obtain these types of information a consultant economic research company can be appointed to conduct the analysis and obtain relevant economic data. The economic data should be updated on a regular timely basis to ensure data is recent and relevant. This is very important for the CKDM in terms of infrastructure and service planning. Implications for the CKDM are that census is outdated and funds should be secured to do sample household surveys etc.

The system should include the use of modern information technology and the development of a structure (database) within the Municipality, through Internet access. Data management should be done through Microsort access. This is a database management programme used to build powerfull, custimize organisational data.

The system will be used by Small and medium enterprises, community organizations, minority businesses, women, owned businesses, environmentalists, investore ect. Thus, they will be able to access detailed demographic, consumer and workforce data that through the internet programme. Therefore, this information should be available via a web portal on the CKDM website so B municipalities can also access it.

The database should be maintained by professional staffs that have the capacity to analyze the information. This staff should part of the Municipalities IT network.

### 6.20 Making use of Business Chambers and Organised Bodies

Business chambers and other organised business bodies could be utilised to promote LED initiatives. By establishing common LED goals, beneficial to the District as a whole but also benefit each of these business stakeholders, progress can be made to promote Local Economic development.

A business chamber, often also referred to as a chamber of commerce or board of trade, indicates towards an association of businessmen that establish a business network with the purpose to protect and promote certain business interests in a specific area on a national, provincial or local level. These chambers can relate to a specific industry such as metal manufacturing, a sector such as agriculture e.g. farmers union or a geographic area such as a specific town or district.

Currently there are formal business bodies or business chambers in the CKDM. For this reason the Municipality should motivate members of the LED forum or influential community members to ensure a network of business chambers in the District that could assist with the promotion of local economic development.



The challenge for the municipality is that there is a lack of trust from business chambers in the CKDM. The CKDM therefore have to acknowledge that the function of network patterns with Business and civil society is highly dependent on good governance and that these network patterns require a certain amount of social trust. Therefore the CKDM should focus on providing good local governance, reliable and effective services and sound administration. Possible solutions to fill this gap and get private sector involvement and trust in the CKDM are identified in the previous chapter.

The case study below illustrates a successful participatory process followed in Prince Albert to engage in LED planning. The CKDM should follow in this example:

In Prince Albert, one of the LM's within the CKDM, the municipality set aside a week for planning and consultation. The purpose is to gain a wide variety of opinions on the needs, opportunities and constraints for development in the town. The desired outcome is to come up with an agreed set of development priorities by the end of the week, which would inform the LED strategy to be followed.

In order to ensure broad participation, a wide variety of stakeholders is represented. These included:

- hospitals
- clinics
- doctors
- youth
- schools
- churches
- crèches
- government departments
- women's organisations
- political organisations
- farm workers' association
- local businesses
- welfare groups
- sport and recreation groups
- municipality
- civics
- tourism committee
- farmers' association
- rate payers association
- ABET groups
- Local elderly centre.

The stakeholders participate in a series of workshops on the following topics:

- Developments in community-based welfare services
- Priorities for social and community development
- Putting Prince Albert on the Tourism Map
- Expanding economic and employment opportunities in business
- Promoting innovations in agriculture
- Youth development – needs and opportunities
- Organisation structures for effective development
- Planning the way ahead

The business chambers and organised business bodies could be most effectively utilised by identifying and assigning a strategic partner for each catalytic projects. It is imperative that these strategic partners retain the required skill and resources to assist the facilitation of the catalytic projects they have been assigned to. In some cases it will be essential to assign broad target groups for the implementation of large scale projects such as a broad base infrastructure development.

### 6.21 Utilizing Marketing Opportunities to Promote LED

As indicated above the CKDM, businesses and community stakeholders forms the core of the planning group to market an area. Other factors such as infrastructure, attractions, the people, image and quality of life etc. are part of the marketing tools that can be used to market the CKDM. There are different types of marketing tools that can be used to market a destination. **Table 6.3** shows the different options of supportive media available to municipalities. Each of the methods that will be mentioned in **Table 6.3** has a certain target market and therefore the layout and communication style would differ for each method. The advantages and disadvantages of the methods are also included for discussion.



### 6.21.1 Marketing methods

**TABLE 6.3: CKDM Marketing Methods**

Media Type	Purpose	Contents	Advantages	Disadvantages
<b>Printed Media</b>				
Introductory brochure	The purpose of an introductory brochure is to provide social and economic information about the CKDM. A high quality attractive brochure is the first step in showing potential investors government's dedication in pro-active approach to business development.	<p>Map and location of CKDM</p> <ul style="list-style-type: none"> <li>Background to the area</li> <li>Geographical information e.g. size, climate and natural resources</li> <li>Demographic and Economic background</li> <li>Infrastructural overview</li> <li>Tourism overview</li> <li>Existing institutions e.g. education, business support, non-government organisations</li> <li>Incentives available for business promotion</li> </ul>	<ul style="list-style-type: none"> <li>Target market within a Geographic area</li> <li>Size and shape</li> <li>Colour</li> <li>Presentation</li> <li>High accessibility</li> <li>Can provide in-depth information</li> <li>Wide variety of distribution methods</li> <li>Discussion reference</li> <li>Provides in-depth information to interested prospects. Can be kept for reference after sales discussion, or as follow-up to ads, telemarketing, etc</li> <li>The ad has size and shape, and can be as large as necessary to communicate as much of a story as you care to tell. Free help is usually available to create and publish your ad.</li> <li>Fast closings:</li> </ul>	<ul style="list-style-type: none"> <li>Presentation could be potentially poor Short lifespan</li> <li>Expensive</li> <li>High competition</li> <li>Regular updating is costly</li> <li>Can be expensive and unnecessary if distributed to people who haven't expressed interest. Can require vigilance to continually update its look and feel, pricing and product information.</li> <li>Clutter:</li> <li>Your ad has to compete for attention against large ads run by supermarkets, etc.</li> <li>Poor photo reproduction limits creativity.</li> <li>A price-orientated medium.</li> <li>Short-shelf life: The day after a newspaper appears it is history.</li> </ul>
Business portfolio	This portfolio is designed to supply information on quality investment and partner CKDM. It is used to market the area to the investors. The business opportunity portfolio serves as a preliminary business plan that can be given to an investor to indicate the local opportunities with regard to specific industries and	A collection of brief profiles of business prospects in the CKDM for each priority industry.		



	businesses.		If you decide to run an ad today it can be in the customers' hands two days from now.	
Business Directory brochure	The purpose of this brochure is to provide a detailed directory of local businesses, imposing business networking of existing companies in the area. The target market of the brochure should mainly be businesses that plan to expand or establish a new company in the area, and therefore, need to identify suppliers and buyers, as well as to know their competitors. The brochure should be updated on regularly.	<ul style="list-style-type: none"><li>• A brief introduction of the CKDM and 3 LM's</li><li>• Regional road and local street maps</li><li>• Sector and resources allocation map indicating spatial distribution of economic sectors and location of natural resources</li><li>• Details of the local businesses:  (e.g.) postal and physical address, e-mail, website, contact numbers, operating hours and product offered.</li></ul>		
Newspapers	The distribution of the message can be limited to your geographic area.	Clutter: <ul style="list-style-type: none"><li>• Ads have to compete for attention against large ads run by supermarkets, etc.</li><li>• Poor photo reproduction limits creativity.</li><li>• A price-orientated medium.</li><li>• Short-shelf life: The day after a newspaper appears it is history.</li></ul>		
Electronic Media				
Website	The website could also be used for communication with potential investors	<ul style="list-style-type: none"><li>• Introductory brochure (summary )</li><li>• Extracts from sector studies</li><li>• Database of local</li></ul>	<ul style="list-style-type: none"><li>• Ability to be creative</li><li>• Interactivity with client</li><li>• Global</li></ul>	<ul style="list-style-type: none"><li>• Difficulty to access</li><li>• Unawareness by general public</li><li>• Difficulty</li></ul>



	requesting them to submit their enquiries. A website will need to be manned by a person from the Municipality	businesses	<ul style="list-style-type: none"> <li>• medium Easy to update/change</li> </ul>	to attract repeated visits
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**Other marketing tools which can be include for the CKDM:**

- **Business Chambers (BW Chamber of Commerce)**
  - Business Chambers could be used to promote LED initiative within the businesses belonging to the Business Chamber. It would be important that the CKDM LED Unit have a representative on the Business Chamber in order to have regular updates on what is going on in the business environment and also for the businesses to have regular update of the happenings within the CKDM.
- **Expo's, Indaba's and Conferences**
  - The CKDM LED Unit could make use of these initiatives to market the CKDM as an investment destination. This can be promoted through the SALED network.

## 6.22 Development Facilitation

As indicated in previous chapters the workforce in the Central Karoo is generally less skilled in comparison to other regions and the rest of the province.

The CKDM should therefore commit them in creating a skilled and suitably trained workforce. The following section provides information on the approach the CKDM could undertake to ensure that the population attains the required skills.

## 6.23 Assess the Level of Skill of the Local Population

As a starting point the status quo level of education and skill needs to be determined. This could involve secondary data from sources such as Statistics South Africa. However this information is already available in the IDP and the CKDM: Social Economic profile (2007), conducted by province and treasury. However, the best sought after scenario would involve surveys to assess the exact skill level and provide a recent and accurate profile. This survey should include current skills, desired skills etc.

The CKDM CDW's could be employed to conduct such research as they have direct connections with local communities within the CK area. It is important that the CKDM maintain a database of the captured survey and update it on a regular basis.

### 6.23.1 Scan existing economic activities

A detailed scan of existing economic activities would involve actions to audit all of the existing businesses and economic activities within the value chain of the CKDM economy. The purpose of this step is to understand the current employment situation in terms of the labour requirements of the existing businesses.

### 6.23.2 Economic activities to be generated by LED projects

This step would involve projections of the future economic activities to be developed in the CKDM due to LED intervention or market growth, economic stimulation and development within the CKDM.



### 6.23.3 Skills requirement assessment

The skills requirement assessment relates to analysis based on the existing and projected economic activities in the District to determine the skills needed to suitably provide adequate labour for the employment opportunities evident. The skills already available in the CKDM area then needs to be compared to the skills required in order to determine the skills gap which exists. This information would create an opportunity for the CKDM to implement a **structured skills development plan** where the CKDM would need to provide structured steps by which they would address the skills gap in the CKDM. The result of a skills gap would be the sourcing of skills from other areas which would be negative for the already unemployed individuals in the CKDM which need to benefit from the economic development opportunities in the area.

### 6.23.4 Sources of skills & training

In this step the municipality, taking cognisance of the exact skills requirements of the District, should aim to identify partners in skills development and training to provide the necessary skills training in terms of workshops and courses.

### 6.23.5 Organisation of skill acquisition

In this final concluding step the municipality should play the facilitating role to ensure the local population gains access to skills training and development.

## 6.24 Infrastructure Development

The creation of an enabling infrastructure environment is one of the key building blocks in the establishment of the CKDM LED Society. It is recognized that to maximize the social, economic and environmental benefits of the CKDM, government needs to invest in providing infrastructure and services. This is regarded as one of the key ingredients towards development as it is enabling factors and is part of the municipality's mandate.

Providing LED role-players with the infrastructure and services to regulate the sector effectively and efficiently can boost investment, promote innovation and build confidence in the CKDM markets.

The CKDM should therefore ensure that the following infrastructure is available and in good working condition:

**Water:** The availability of clean water for human consumption and for industry is imperative. The district source 100% of its water needs from its own sources. It has four dams. Each municipality is responsible for the sourcing of their own water. As water resources are scarce within the Central Karoo each municipality are faced with the challenge to research and implement alternative water sources to deal with backlogs that exist particularly in the light of the economic development initiatives envisaged. It is also important to ensure that there is sufficient water for business development specifically in the industrial and agricultural industries identified as potential projects.

CKDM need to work in partnership with the Department of Water Affairs and Forestry (DWAF) in order to source sufficient water sources and increase the availability of industrial and potable water. The DWAF can assist the CKDM in research and the implement alternative water sources.

**Sanitation:** Hand in hand, with water need is that of good sanitation. The Central Karoo made progress in access to sanitation. The majority of households have access to flush toilets with offsite disposal.

In the CKDM the farming community is worst punished by sanitation problems with a major part of households not adequately serviced. It should be a priority of council to eradicate sanitation problems in rural areas. In 2007, the department of water affairs and forestry has allocated R1-billion to eradicate bucket toilets in established settlements by December 2007. Buckets are replaced with ventilated improved pit latrines (VIP). The DWAF provide many water and sanitation related projects and programmes which the CKDM can enrol in. This includes:

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- 2020 VISION FOR WATER AND SANITATION EDUCATION PROGRAMME (VFWSEP):

2020 VfwSEP currently runs three projects, namely **Curriculum Support**, the **Baswa Le Meetse Awards** and the **South African Youth Water Prize**.

#### **Curriculum Support**

The **Curriculum Support** component of 2020 VfwSEP is the core project of the programme. Curriculum aligned educational resource materials related to water and sanitation have been developed for grades R-9. These materials are the tools which enable educators to implement water and sanitation activities within the school curriculum.

The DWAF provides ongoing support through workshops conducted jointly with the Department of Education (DOE). The **Curriculum Support** component of 2020 VfwSEP has a practical focus that encompasses action projects. The educators and the learners identify problems related to water, sanitation, forestry, health and hygiene and thereafter develop a plan of action to solve the problems and later engage in various projects aimed at solving the problems. The schools participate for a period of four years and thereafter an impact assessment is conducted.

#### **Transport Infrastructure**

An environment in which businesses can thrive is one where the road and rail linkages between various towns within a District/Province are efficient. In the Central Karoo, access to road network is the only means of economic survival for the business – starved area. The district is strategically positioned along the N1, which is the main National road linking the region to the North Province, Gauteng and the Free State province. The road network is good; however most of the road is gravel due to the fact that the Central Karoo is a largely rural district. This also is a potential constraint to the district's competitiveness. Transport cost tends to be high where there is no adequate infrastructure.

The CKDM should enrol into partnership with the District Public works department to address the challenges relating to road infrastructure.

**Electricity** is one of the basic services that districts and local municipalities must deliver in order to create and enabling environment and to change the standard of living and lives of the people. The Central Karoo buys electricity from the state owned parastatal, Eskom. The majority of the Central Karoo population have access to electricity. In the rural areas the use of paraffin and wood are major sources of energy. This has negative implications for child safety and pollution.

The percentage of people living below RDP standards is relatively low and imminent in farms with usage growing significantly, but the variation would be more significant if alternative energy sources are considered. The recent 60% tariff increase by ESKOM boosts a major challenge for the CKDM in providing electricity and the CKDM community electricity affordability. This is especially the case for the poorer communities. To address this challenge the municipality should consider alternative electricity sources and encourage local communities to save in electricity usage. A recommendation include the CKDM encourage with the wind generation in BW as alternative source of electricity and awareness campaigns on how to save electricity usage in the region. This process should be driven by the LED manager/ Unit.

### **6.25 Rural Development**

Former President Thabo Mbeki announced the Integrated Sustainable Rural Development Programme (isrdp) and the Urban Renewal Programme (urp) in February 2001, during the State of the Nation Address.

The aim of these programmes was articulated as being:

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“To conduct a sustained campaign against rural and urban poverty and underdevelopment, bringing in the resources of all three spheres of government in a coordinated manner”.

Cabinet mandated the Department of Provincial and Local Government (dplg) as the national coordinating institution for the ISRDP/URP, but the successful implementation of the programmes relies on the involvement of all the stakeholders.

The Central Karoo is one of the earmarked areas for intervention by the former president through the ISRDP. The interventions resulted to the proposal of key investment projects in the Central Karoo including:

- Uranium Mine which is still undergoing feasibility studies.
- Karoo Tourism Gateway
- Cold Storage facilities
- Agriculture Beehive development
- Hydro production of fresh herbs (Expansion); and
- Correctional Services Facilities

At present the probability of securing a job in areas such as the CKDM is limited compared to areas such as Cape Town, Eden District and Cape Winelands. The common factor among these areas is the well developed infrastructure and easy access to markets.

Infrastructure has a crowding effect on investment. Unless government invest in the region, there is no way that the private sector would be interested. In the current state of affairs, there are no guarantees that the proposed investments would be sustainable without infrastructure deepening in the area. The quality of the roads would attract tourist to the Karoo National Park, and also contribute in bringing down costs of transporting the agricultural produce.

### **6.26 Integrated Programming of Projects and Action Plan**

As stakeholders plan for LED, needs and priorities are likely to arise in various areas and joint decisions will need to be made around short term priorities and areas can be deferred to other planning periods. Programmes will probably include:

- Infrastructure development to increase access for businesses and households;
- Business support programmes to retain existing businesses and encourage start-up or relocating businesses to enter the area;
- Spatial planning to promote land acquisition and property development for businesses and households;
- Skills programmes to respond to business and government for greater productivity and efficiency; and
- Social development programmes to increase participation in the local economy and build better lifestyles for the community.

In each area of possible programme activity, there are a range of projects which aroused.

#### **6.26.1 Local Economic Development Thrusts**

From a strategic development facilitation point of view, it is necessary to ensure that the appropriate linkages and interactions between programmes and projects be established. Such an integrated approach is needed to ensure the optimal rate of implementation and economic development in the CKDM. Projects identified from the programme activities are grouped into trusts.





Within these thrusts, numerous programmes have been identified which concentrate the attention on specific areas of development, which support the overall goals set by the thrusts. Each programme further comprises specific development projects, as well as the facilitation issues that need to be addressed. The projects and facilitation actions are aimed at enabling the municipality to achieve the targets set by the development programmes and thrusts. This section, therefore, provides the framework as a set of thrusts, programmes for development, projects and development facilitation requirements identified in order to allow the expansion and growth of the municipality's economy.

A Thrust is defined as: **“Planned actions aimed at creating impetus and a critical mass in the local economic environment in order to generate momentum in the economy”**.

All of the programmes and projects that are to be implemented must be guided by employment creation and labour intensity as their ultimate goal. The programmes were also designed with the aim of aiding the improvement of income distribution in the municipality. The economic as well as the social and environmental impacts of development need to be taken into account. Accurate assessment of these impacts prior to the implementation of any programme must be undertaken to limit the irresponsible application of resources, both financial and environmental. **Table 6.4** provide the thrusts and projects it is comprised of.

**TABLE 6.4: CKDM PROJECT THRUSTS**

THRUST	PUBLIC SECTOR PROJECT
AGRICULTURE EXPANSION	<ul style="list-style-type: none"> <li>• Soya bean production</li> <li>• Organic Seed Production</li> <li>• Organic farming</li> </ul>
AGRICULTURE AND BENEFICATION DEVELOPMENT	<ul style="list-style-type: none"> <li>• Industrial investment incentive packages</li> <li>• Bicycle Manufacturing</li> <li>• Industrial marketing campaign</li> <li>• Food development and research centre</li> <li>• Industrial development strategy</li> </ul>
WASTE RECYCLING/PROCESSING	<ul style="list-style-type: none"> <li>• Waste Management Systems</li> </ul>
SMME DEVELOPMENT	<ul style="list-style-type: none"> <li>• Establishment of SMME Command Centre for the CKDM</li> <li>• Business support centre</li> <li>• SMME procurement/outourcing database</li> <li>• Small business forum linked to Agriculture sector</li> <li>• Small business forum linked to manufacturing sector</li> <li>• Small business development in accommodation facilities</li> </ul>
HUMAN RESOURCE DEVELOPMENT	<ul style="list-style-type: none"> <li>• Tertiary training facilities (technical, hospitality, business, agriculture)</li> <li>• Identification of skills shortages per economic sector</li> <li>• On-site training facilities/projects</li> <li>• Recruitment database</li> </ul>
TRANSPORT DEVELOPMENT	<ul style="list-style-type: none"> <li>• Upgrading of Railway lines and reopening of railway stations</li> </ul>



	<ul style="list-style-type: none"> <li>Regional public transport corridor development plan</li> <li>Improvement of transport infrastructure and linkages</li> </ul>
<b>TOURISM DEVELOPMENT</b>	<ul style="list-style-type: none"> <li>Development and improvement of existing tourist attractions</li> <li>Development of specific tourist routes</li> <li>Tourism database (attractions, accommodation, operators)</li> <li>Tourism forum</li> <li>Provision of training and bursaries in tourism/hospitality training</li> <li>Improvement of signage</li> </ul>

### 6.27 Timing of the Action Plan

One of the things which should be included in LED action plans includes a realistic delivery timetable. Therefore, the above Thrusts and projects need to organise into an action plan in terms of a timeframe. Projects can be implemented in the short term and that result in “early wins” play an important role in building credibility and stakeholder confidence. Other projects will have a medium to long term timeframe.

The implementation of the various projects is categorised according to the three timeframes named above:

- Immediate:** Projects categorised under this category needs to be implemented as a matter of urgency. The implementation of these project are important for the implementation of other projects
- Medium Term:** projects categorised under this category are projects that would be implemented over a short term and does not require in depth research.
- Long Term:** Project categorised under this category are projects that would require in depth research and significant amounts of funding. These projects would also need more time to be implemented effectively

**Table 6.5** illustrates the Implementation Plan for CKDM LED Projects

**TABLE 6.5: CKDM PROJECT TIMEFRAME ACTION PLAN**

Thrust	Project	Timeframe	Guiding Action	Role Players
<b>AGRICULTURE EXPANSION</b>	<ul style="list-style-type: none"> <li>Soya bean production</li> </ul>	Long Term	<ul style="list-style-type: none"> <li>Draft TOR</li> <li>Organise meetings with district farmers Association</li> <li>Identify Partners hips</li> </ul>	<ul style="list-style-type: none"> <li>LED Unit</li> <li>Dept. of Agriculture</li> <li>Local farmers</li> <li>Cooperatives CSIR/ARC</li> </ul>
	<ul style="list-style-type: none"> <li>Organic Seed Production</li> </ul>	Long Term		
	<ul style="list-style-type: none"> <li>Organic farming</li> </ul>	Long Term		



Thrust	Project	Timeframe	Guiding Action	Role Players
<b>AGRICULTURE AND BENEFICATION DEVELOPMENT</b>	<ul style="list-style-type: none"> <li>Industrial investment incentive packages</li> </ul>	Immediate	<ul style="list-style-type: none"> <li>Arrange meetings</li> <li>Identify Location</li> <li>Identify Partners</li> <li>Allocate Municipal Funding</li> </ul>	<ul style="list-style-type: none"> <li>LED Unit</li> <li>Local farmers</li> <li>Cooperatives</li> <li>CSIR/ARC</li> <li>CKDA</li> <li>Mining</li> <li>DTI</li> <li>Organised business</li> </ul>
	<ul style="list-style-type: none"> <li>Bicycle Manufacturing</li> </ul>	Medium Term		
	<ul style="list-style-type: none"> <li>Industrial marketing campaign</li> </ul>	Immediate		
	<ul style="list-style-type: none"> <li>Food development and research centre</li> </ul>	Long Term		
	<ul style="list-style-type: none"> <li>Industrial development strategy</li> </ul>	Medium Term		
<b>WASTE RECYCLING/PROCESSING</b>	<ul style="list-style-type: none"> <li>Waste management Systems</li> </ul>	Long Term	<ul style="list-style-type: none"> <li>Identify Location</li> <li>Conduct Feasibility</li> <li>Identify Partnerships</li> <li>Develop Business plan</li> </ul>	<ul style="list-style-type: none"> <li>LED Unit</li> <li>CKDA</li> <li>CSIR</li> <li>Agriculture houses</li> </ul>
<b>SMME DEVELOPMENT</b>	<ul style="list-style-type: none"> <li>Establishment of SMME Command Centre for the CKDM</li> </ul>	Long Term	<ul style="list-style-type: none"> <li>Organise Meetings</li> <li>Allocate Municipal Funding</li> <li>Draft TOR</li> </ul>	<ul style="list-style-type: none"> <li>LED Unit</li> <li>DTI</li> <li>Local SMME's</li> <li>Organised business</li> <li>Red Door</li> <li>SEDA</li> </ul>
	<ul style="list-style-type: none"> <li>Business support centre</li> </ul>	Medium Term		
	<ul style="list-style-type: none"> <li>SMME procurement/outsourcing database</li> </ul>	Medium Term		
	<ul style="list-style-type: none"> <li>Small business forum linked to Agriculture sector</li> </ul>	Immediate		
	<ul style="list-style-type: none"> <li>Small business forum linked to manufacturing sector</li> </ul>	Immediate		
	<ul style="list-style-type: none"> <li>Small business development in accommodation facilities</li> </ul>	Medium Term		
<b>HUMAN RESOURCE DEVELOPMENT</b>	<ul style="list-style-type: none"> <li>Tertiary training facilities (technical, hospitality, business, agriculture)</li> </ul>	Long Term	<ul style="list-style-type: none"> <li>Organise Meetings</li> <li>Identify Location</li> <li>Conduct</li> </ul>	<ul style="list-style-type: none"> <li>LED Unit</li> <li>Organised business</li> <li>Dept. of</li> </ul>
	<ul style="list-style-type: none"> <li>Identification of skills shortages</li> </ul>	Immediate		



Thrust	Project	Timeframe	Guiding Action	Role Players
	economic sector		Feasibility Study • Develop Business plan • Identify Partnerships • Allocate Municipal funding	Education • DTI • Organised business • SETA • DPLAG
	• On-site training facilities/projects	Long Term		
	• Recruitment database	Immediate		
<b>TRANSPORT DEVELOPMENT</b>	• Upgrading of Railway lines and reopening of railway stations	Long Term	• Organise meetings • Conduct feasibility Study • Identify Partnerships • Allocate Municipal funding	• LED Unit • Organised Transport business • CKDM Transport • Dept. of Transport • Spoornet • Metro Rail • Car Hire Agencies
	• Regional public transport corridor development plan	Immediate		
	• Improvement of transport infrastructure and linkages	Medium Term		
<b>TOURISM</b>	• Development and improvement of existing tourist attractions	Medium Term	• Draft TOR • Organise Meetings • Identify Partnerships • Allocate Municipal funding	• CKDM Tourism unit • Local tourism role-players • Dept. of Transport • DEAT
	• Development of specific tourist routes	Long Term		
	• Tourism database (attractions, accommodation, operators)	Medium Term		
	• Tourism forum	Immediate		
	• Provision of training and bursaries in tourism/hospitality training	Medium Term		
	• Improvement of signage	Medium term		



## 6.28 Process and programming

Decisions about how led programmes are to be monitored starts at the planning stage, where stakeholders decide what outcomes they wish to achieve. Planning of programmes is therefore often concerned with assessing which activities will achieve the desired outcomes. Once programme activities are planned each one should be accompanied by measures to assess whether the implementation is taking place and measures to access weather the outcomes are achieved. This technique is known as M&E.

As there can be considerable investment in LED programmes, M&E is critical to ensure timely implementation and progress towards outcomes. This review process is essential in reflecting on returns on investment and to ask weather social and economic change is actually occurring. It will be useful for the CKDM establish the criteria and processes for M&E at the planning stage.

## 6.29 Monitoring and Evaluation Framework

Monitoring and evaluation (M&E) is essential to the management of all development activities (projects, programs, organisations). If activities are to be adaptively managed, responding to changes as they occur, feedback is needed. In the CKDM this is true for farmers, local project workers, and staff of research institutes and development organisations, both government and non-government. In relation to the CKDM, M&E enables the document and evaluate progress under the different thrusts. Indeed, M&E is an integral part of participatory research, though in the CKDM, it has not always been given sufficient attention.

Monitoring and Evaluation are distinct activities related to project cycles. Having identified, planned and initiated project under the different thrusts, the CKDM need to monitor the implementation and evaluate its achievements. Thus **monitoring** refers to the on-going examination of whether implementation activities are occurring as planned. Monitoring is part of project management and occurs during the life of the project, whereas **Evaluation** is the comparison of the actual impacts of the project against the agreed targets (objectives). Evaluation, while it may begin during the project, will extend beyond the project's life and focus area.

### 6.29.1 Strategic thrusts

The purpose of utilising thrusts is to align actions and achieve the desired objectives of job creation, economic diversification, linkage development and an improved business environment. Seven general thrusts to be utilised in Local Economic Development in CKDM includes the following:

1. Agriculture Expansion
2. Agriculture and beneficiation development
3. Waste recycling/processing
4. SMME development
5. Human Resource Development
6. Transport Development
7. Tourism

As time and resources are limited, the CKDM have to be selective in what they try to measure, how they measure it, and whom to involve in the process.

The scope for M&E activities in the different thrusts is potentially enormous:

- As stated in the section above, there are many possible effects of the project, some of them immediate (e.g. formation of thrusts groups), some intermediate (e.g. adoption of technologies), and some longer term (e.g. improvement in production and income). These effects not only appear over different time-frames but form part of a complex causal sequence.
- At any one time there are many different processes underway — all of which are impacts or potential impacts of the project.



- There are many different actors or 'stakeholders' — e.g., farmers, development workers, local business owners, project leaders, government departments— each with their own information needs and perspectives. The current emphasis on 'participation' encourages the CKDM to involve everyone in M&E activities.
- There are many tools and methodologies available — 'participatory' — including structured and semi-structured interviews, community resource mapping, wealth ranking, storytelling, and so on.

### 6.29.2 Participatory Monitoring and Evaluation

It is recommended that the CKDM make use of Participatory Monitoring and Evaluation. Participatory approaches to M&E entail the active involvement of local people (local community, field staff, and other local stakeholders) in the design, elicitation, analysis, and utilisation of M&E information. PM&E is motivated by functional concerns, i.e. to improve the effectiveness of M&E, as well as by concerns for the empowerment of disadvantaged groups. **Table 6.6** summarises participatory evaluation.

**TABLE 6.6: PARTICIPATORY M&E**

Participatory M&E	
<b>Who</b>	Local Community, project staff, facilitators, departmental heads, mayors, businessmen
<b>What</b>	People identify own indicators of success
<b>How</b>	Self-evaluation; simple methods adapted to local culture; open, immediate sharing of results through local involvement in evaluation processes
<b>When</b>	Merging of monitoring and evaluation, hence frequent small-scale evaluations
<b>Why</b>	To empower local people to initiate, control and take corrective action

Four general principles or characteristics of PM&E include:

- **Participation:** There are two main ways to encourage participation in M&E — by whom it is initiated and conducted; and whose perspectives are particularly emphasised (all major stakeholders, beneficiaries, or marginalised groups).
- **Learning:** The emphasis is on practical or action-oriented learning. PM&E is also seen as a means of local capacity-building.
- **Negotiation:** PM&E is a social process for negotiating between people's different needs, expectations and views. It is also a political process which can empower and disempower different stakeholders. Negotiation results in the selective involvement of stakeholders in the design, implementation, reporting, and use of M&E.
- **Flexibility:** PM&E emphasises flexibility and experimentation; there is no blueprint.

### 6.29.3 How to develop a monitoring and evaluation plan

M&E is a complex process in its own right with several distinct aspects. Four major steps in applying participatory M&E include:

- Planning or establishing the framework for a PM&E process, including identification of objectives and indicators
- Gathering data
- Data analysis
- Documentation, reporting, and sharing of information.



The first of these steps is clearly critical. To be effective, M&E needs to be carefully planned. Ideally, this planning should take place at the start of the project as part of the whole process of problem diagnosis and development of project activities. In practice, the M&E plan will need to be re-visited several times as the project evolves and as participants become clearer about the key indicators to measure and the feasibility of measuring them.

M&E needs to be carefully planned. Constructing an M&E Matrix ensures that the right issues are addressed.

**Table 6.7** provides an example of an M&E framework for 2009 to 2013.

**TABLE 6.7: M&E MATRIX**

Index	Proxy Indicators	Baseline (2009)	2009/2010	2010/2011	2011/2012	2012/2013
Agriculture Expansion	Agriculture GGP					
	Agriculture Employment					
	Number of Agricultural Businesses					
	Value of Agriculture Imports					
	Value of Agriculture Exports					
Agriculture and beneficiation development	Manufacturing GGP					
	Manufacturing Employment					
	Number of Manufacturing Businesses					
	Agro processing GDP					
	Agro Processing Employment					
	Value of Manufacturing Imports					
	Value of Manufacturing Exports					
Agriculture Waste Recycling/ Processing	Number of operational waste treatment facilities within the CKDM					
	Number of recycling plants					
	Number of licenses granted for hazardous waste disposal					
	Number of waste management partnerships established (Waste management partnerships involve bringing together waste producers and product manufacturers, where the waste can be utilized as an input in					





Index	Proxy Indicators	Baseline (2009)	2009/2010	2010/2011	2011/2012	2012/2013
	manufacturing).					
	Employment within the waste processing sector					
SMME Development						
	Number of SMME's on the FBDM Database					
	Number of projects awarded to SMME's on the FBDM Database					
	Employment opportunities created through SMME					
Human Resource development	Number of students enrolled					
	Number of tertiary training facilities					
	Number of training related jobs created					
	Level of education statistics					
	Number of matriculates					
Transport Development	Transport GGP					
	Transport Employment					
	Number of Transport Businesses					
	Transport Exports					
Tourism Development	Number of Domestic Tourists					
	Number of International Tourists					
	Average money spent					
	Average nights stay					
	Number of accommodation facilities					
	Number of accredited accommodation facilities					
	Number of attraction					
	Number of visitors to each attraction					





**6.30 Conclusion and Way Forward**

A critically important aspect for the successful implementation of the LED Strategy is the need to ensure that all stakeholders and parties involved in the LED process take ownership of the programmes and projects identified.

Based on the formulation of the strategy with the numerous potential products and projects, the following is recommended to achieve optimal sustainable local economic development, employment creation, and improvement in living conditions and standards, as well as human resource development:

- Start focusing on the sectors with the highest development potential, followed by the sectors with less potential. Ensure balanced stimulation of growth and development within all sectors by not focusing solely on one sector
- Before embarking on the implementation of specific projects, ensure that adequate funding sources and management capacity are in place
- Start implementing projects with the highest potential for stimulating economic growth and development
- Make sure that the projects that stimulate economic growth do not adversely affect the environment or human living conditions
- Set reasonable time frames for implementation and ensure effective and continuous monitoring of project progress and impacts

The role of CKDM should be focused on creating an LED unit to coordinating and integrating all LED initiatives within the district, as well as facilitating stakeholder participation and the formation of public-private partnerships. The District LED Unit is, however, not responsible for implementation, running of projects, compilation of business plans, etc. The CKDM is therefore in need of a special purpose vehicle to act as the implementation arm for LED within the area. This role can be fulfilled by the Central Karoo Economic Development Agency (CKEDA).

The District LED Unit needs to be capacitated to steer local economic development in the CKDM. This could be done by doing a skills audit to ascertain the capacity requirements. The LED department, the Central Karoo Economic Development Agency and the LED forum need to clarify the segregation of duties. This will prevent duplication of effort and ensure that good outcomes are achieved in spite of limited human and financial resources.

Incentives need to be created to attract the private sector to invest in the Central Karoo region. The achievement of local economic development will be made easier when there is participation from all sectors within the CKDM.

For LED to function fully LED role-players should receive constant training. There are various ways in which the Staff members can be trained and be capacitated to do LED. Firstly, training can be done by using in-house training material and on the job training, secondly, by attending courses at universities/colleges in CKDM, WC Province or South Africa.

It is also important that the monitoring and evaluation elements of the Strategy are incorporated into the performance management system of the Central Karoo District Municipality. This will ensure accountability and responsibility for the implementation of the LED Strategy and its programmes, and will eradicate potential conflicts.



# CENTRAL KAROO DISTRICT MUNICIPALITY

## KHULIS'UMNOTHO – LOCAL ECONOMIC DEVELOPMENT

### ANNEXURE A: SOURCES OF FUNDING

ORGANISATION	FUND	DESCRIPTION	APPLICATION IN LDM
DTI	1. DANIDA BUSINESS TO BUSINESS PROGRAMME, CREDIT GUARANTEE SCHEME	Covers expenses connected with the transfer of management, business skills and technology from Danish to South African companies and provides access to financing for South African companies	Precious metals beneficiation to make components such as computer or cellular phones electronic chips opportunities may be marketed to Danish companies such as BB Electronics or similar manufacturers
	2. STANDARD SCHEME, CREDIT GUARANTEE SCHEME	Scheme provides cover up to R1m of the bank facility at 80%, with the fee payable at 3% p.a. in advance. The duration of the scheme is 36 months initially, but can be extended twice for periods of 12 months each time	Applicable to all identified and future projects for CKDM
	3. EMPOWERMENT SCHEME, CREDIT GUARANTEE SCHEME	Provides cover up to R5m of bank facility at 60%, with the fee payable at 2.5% p.a. in advance. Duration is 36 months initially but can be extended twice for a period of 12 months each time. Applicants must have one of the following qualifying criteria in relation to the nature, purpose for the business or its effect on SMME's: <ul style="list-style-type: none"> <li>➤ Substantial job creation in an area where very little economic activity takes place.</li> <li>➤ Labour intensive projects.</li> <li>➤ An economic empowerment transaction which entitles the borrower to acquire a controlling interest in the SMME within a period of two years from the date the facility is granted by the bank.</li> <li>➤ Management buy-out which entitles the borrower to acquire a controlling interest in the SMME within a period of two years from the date the facility is granted by the bank.</li> <li>➤ Sub - contracting</li> </ul>	Investors in the Distribution Hub and the agro-processing industries may be able to qualify for this scheme



# CENTRAL KAROO DISTRICT MUNICIPALITY

## KHULIS'UMNOTHO – LOCAL ECONOMIC DEVELOPMENT

ORGANISATION	FUND	DESCRIPTION	APPLICATION IN LDM
		<ul style="list-style-type: none"> <li>➢ Outsourcing transactions or</li> <li>➢ Any similar economic empowerment venture</li> </ul>	
	4. EMERGING SCHEME, CREDIT SCHEME, ENTREPRENEUR GUARANTEE SCHEME	Provides up to R100 000 with the fee payable at 4% p.a. in advance. The duration is 24 months initially but can be extended three times for periods of 12 months each time. The conditions are mentorship of the loan	Small farmers under mentorship of established farmers that undertake in soya production and Organic technique of farming may obtain this form of funding
	5. BLACK BUSINESS DEVELOPMENT GRANT (BBDP) SUPPLIER PROGRAMME	<ul style="list-style-type: none"> <li>An 80:20 cost-sharing grant which offers support (business development services, improvement of core competencies, restructuring of processes) to black-owned enterprises in South Africa.</li> <li>The maximum grant amount that a single enterprise can qualify for is limited to R100 000.</li> <li>The requested amount should not exceed 25% of the entity's previous year's turnover.</li> </ul>	Black entrepreneurs, who exploit projects identified in the District, will be able to qualify for this grant.
	6. THE CO-OPERATIVE INCENTIVE SCHEME (CIS)	<ul style="list-style-type: none"> <li>A 90:10 matching cash grant for registered co-operatives.</li> <li>Maximum grant that can be offered to one co-operative entity under the scheme is R300 000.</li> </ul>	The organic seed farming can be undertaken by such co-operatives who would then seek finance from the CIS.
	7. EXPORT MARKETING & INVESTMENT ASSISTANCE SCHEME (EMIA)	To partially compensate exporters for costs incurred in respect of activities aimed at developing export markets for South African products and services and to recruit new foreign direct investment into South Africa.	This funding is applicable for the products that will be exported from the Agro-processing hub projects.
	8. THE GODISA TRUST	<ul style="list-style-type: none"> <li>Provides funding to qualifying technology centres</li> <li>Helps South Africans to cultivate their innovations and business ideas</li> </ul>	The District Research and Development Centre, which should be able to conduct multi-sectoral researches, would require funding of this nature in order to carry out thorough and detailed research that will assist government and the private sector to make informed decisions pertaining to future



# CENTRAL KAROO DISTRICT MUNICIPALITY

## KHULIS'UMNOTHO – LOCAL ECONOMIC DEVELOPMENT

ORGANISATION	FUND	DESCRIPTION	APPLICATION IN LDM
			investments  <i>Source: DTI website, 2009</i>
<b>IDC</b>	<b>1. RISK CAPITAL FACILITY SBU</b> Manages funds sourced from both foreign donors and the IDC's internal funds, these include the Risk Capital Facility (RCF), the W.K. Kellogg Foundation, the IDC Development Fund and the IDC Foundation Fund.	Funds are used to facilitate BEE investments in the SME sector.	Projects such as the extraction of energy from agricultural waste, the mining of uranium, the farming and production of soya oils and jewellery production may be undertaken by HDI and small sector businesses for eligibility for this fund.
	<b>2. SUPPORT PROGRAMME FOR INDUSTRIAL INNOVATION (SPII)</b>	<ul style="list-style-type: none"> <li>Provides financial assistance for projects that develop innovative products and/or processes.</li> <li>Is focussed specifically on the phase that begins at the conclusion of basic research (at the stage of proof of concept) and ends at the point where a pre-production prototype has been produced.</li> </ul>	The manufacturing projects may obtain funding from this programme, providing new processes are identified for food processing, soya processing, manufacture of agriculture Feed & farming equipment, meat processing and jewellery fabrication.
	<b>3. METAL, TRANSPORT AND MACHINERY STRATEGIC BUSINESS UNIT (SBU)</b>	<p>Finance is provided in the following focus areas:</p> <ul style="list-style-type: none"> <li>Basic iron, steel and non-ferrous fabricated metal products</li> <li>Plant, machinery and equipment</li> <li>Motor vehicles, components and accessories</li> <li>Diverse transport products such as boats, planes and trains</li> </ul>	The first two on the above list apply to Central Karoo District for the agriculture feed and farming equipment manufacture project.
	<b>4. CHEMICALS, TEXTILE AND ALLIED INDUSTRIES SBU</b>	<p>Finance is provided in the following areas:</p> <ul style="list-style-type: none"> <li>Ceramics, concrete and stone products</li> <li>Glass products</li> <li>Leather and footwear</li> <li>The conversion of natural fibres into fabrics</li> <li>The conversion of fabrics into clothing</li> <li>Primary and secondary chemical manufacturing</li> <li>Plastic and rubber conversion</li> </ul>	Investors who take up leadership in running with the wool and mohair processing and the manufacturing of protective clothing in the Central Karoo will be able to benefit from this SBU.



# CENTRAL KAROO DISTRICT MUNICIPALITY

## KHULIS'UMNOTHO – LOCAL ECONOMIC DEVELOPMENT

ORGANISATION	FUND	DESCRIPTION	APPLICATION IN LDM
		<ul style="list-style-type: none"> <li>• Waste purification</li> <li>• Water recycling</li> </ul>	
	5. WOOD, PAPER AND OTHER INDUSTRIES SBU	<p>Finances projects and investments in the following industries:</p> <ul style="list-style-type: none"> <li>• Forestry</li> <li>• Pulp &amp; paper</li> <li>• Furniture</li> <li>• Sawmilling, board production, etc</li> <li>• Renewable energy industries</li> </ul>	Implementers of the agriculture waste to Energy projects should be able to apply for this funding.
	6. FOOD, BEVERAGE AND AGRO INDUSTRIES SBU	<p>Focus areas financed:</p> <ul style="list-style-type: none"> <li>• Horticulture primary agricultural sector</li> <li>• Food processing sector</li> <li>• Agro-industrial sector</li> <li>• Beverage sector</li> <li>• Fishing and aquaculture sectors</li> </ul>	The Food and Beverage sector is potentially the one in which there will be the most economic activity with the potential to create many jobs. This SBU should be able to make funding available for CKDM's agro-processing hub.
	7. TECHNO INDUSTRIES	<p>Focuses on funding projects in the following areas:</p> <ul style="list-style-type: none"> <li>• Information technology</li> <li>• Telecommunications</li> <li>• Electronics</li> <li>• Electrical services</li> </ul>	
	8. TOURISM	<p>This SBU seeks to:</p> <ul style="list-style-type: none"> <li>• Contribute to government's strategy for the tourism industry</li> <li>• Participate in the establishment of good quality hotels in South Africa and the rest of Africa</li> <li>• Diversify its portfolio into other subsectors such as cultural and heritage products, arts and crafts and business tourism.</li> </ul>	Investors in the tourism sector can approach the IDC Tourism SBU in order to find the funding packages available within this sector.

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# CENTRAL KAROO DISTRICT MUNICIPALITY

## KHULIS'UMNOTHO – LOCAL ECONOMIC DEVELOPMENT

ORGANISATION	FUND	DESCRIPTION	APPLICATION IN LDM
		<ul style="list-style-type: none"> <li>Support BEE projects with significant development impact in townships and rural areas whilst adhering to the Tourism BEE Charter requirements</li> <li>Increase participation in projects related to the 2010 Soccer World Cup</li> </ul>	
	9. TRANSPORTATION, AND FINANCIAL SERVICES	<p>The projects that are funded include:</p> <ul style="list-style-type: none"> <li>Transport services (road freight, logistics, maritime, aviation and bus sector)</li> <li>Financial services (retail banking acquisitions and commercial micro-finance)</li> </ul>	<p>The IDC SBU can also be approached for funding of projects in the transport service sector to increase the rail network and to improve the standard of roads in the District.</p>
	10. MINING AND BENEFICIATION	<p>The projects that are financed by this SBU are:</p> <ul style="list-style-type: none"> <li>Development of mining, beneficiation and metals projects in South Africa and the rest of the continent</li> <li>Junior and emerging mining houses and mining-related activities such as contract mining</li> <li>Facilitating the acquisition of mining assets by historically disadvantaged persons (HDPs)</li> <li>Developing the South African jewellery manufacturing industry and optimising value-addition beneficiation opportunities</li> </ul>	<p>Jewellery production and uranium mining projects should be able to obtain funding from the Mining and Beneficiation SBU. The funding may be released faster, if there is partnership between big mining companies and small scale miners preferably HDPs. This partnership should allow skills transfer and eventually part ownership by the HDPs of the mining operation.</p>
	11. PUBLIC-PRIVATE PARTNERSHIPS	<p>The unit focuses on facilitating the provision of electricity, water, transport and telecommunications through projects in the following sectors:</p> <ul style="list-style-type: none"> <li>Energy</li> <li>Telecommunications and IT</li> <li>Transportation</li> <li>Bulk water and solid waste management</li> <li>e-Government</li> </ul>	<p>The public sector projects identified will all require funding and what better way of ensuring that the job is done, than by way of Public-private partnerships. That way, funding from the PPP SBU may be obtained in addition to the previously mentioned advantages of combining efforts from both the public and the private sector.</p> <p>Source: <a href="http://www.idc.co.za">www.idc.co.za</a></p>



# CENTRAL KAROO DISTRICT MUNICIPALITY

## KHULIS'UMNOTHO – LOCAL ECONOMIC DEVELOPMENT

ORGANISATION	FUND	DESCRIPTION	APPLICATION IN LDM
ARTPAC Lending Services Association		Financial capacity support for small contractors and artisans	
Business Partners		Funding for SMMEs	
DOL		Provides funding for skills support programmes	
DPLG		Social plans funding	
DWAF		Funds working for water programmes	
ECIC		Underwrites bank loans outside South Africa for foreign buyers to purchase SA capital goods	
Emia		Provides funding to small business exporters	
Khethani Business Finance		A non-profit organisation that assists with finance small businesses whose loan applications would normally be turned down by the banks.	
Khula Enterprise Finance Ltd		Financial institution for SMEs	
NEF		Provides funding to BBBEE businesses	
National Productivity Institute (NPI)		Project management funding	

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# CENTRAL KAROO DISTRICT MUNICIPALITY

## KHULIS'UMNOTHO – LOCAL ECONOMIC DEVELOPMENT

ORGANISATION	FUND	DESCRIPTION	APPLICATION IN LDM
<b>Ntsika</b>		Funding for SMMEs	
<b>South African Micro-finance Apex Fund (SAMAF)</b>		Provides funding to SMEs	
<b>South Africa International Business Linkages (Saibl)</b>		American government-sponsored fund to assist historically-disadvantaged South African small businesses to grow and links them up with trade and investment partnerships both in the country and abroad.	
<b>Sizanani</b>		Arrange guarantees for small businesses with little or no collateral, while providing mentoring services to go hand-in-hand with the bank guarantees.	
<b>Technology and Human Resources for Industry Programme (Thrip)</b>	THRIP is a partnership programme between the DTI and the National Research Foundation, which challenges companies to match government funding for innovative research and development in the country.	Provides incentive funding for research and technological advancement of a firm to a business owner.	Players in all sectors would benefit from this programme.
<b>Umsobumvu Youth Fund</b>		Provides various subsidized business services to young entrepreneurs between 18 and 35.	
<b>Zimele Trust</b>		Provides funding through loan and equity finance to junior mining companies	

### KHULIS'UMNOTHO LED 2008





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# ANNEXURE K

**TITLE** : Central Karoo District Municipality Spatial Development Framework: Status Quo Report

**PROJECT TEAM** : AECOM SA (Western & Eastern Region)

**CLIENT** : Department of Rural Development and Land Reform

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***For AECOM SA (Pty) Ltd***

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## Annexures

## GLOSSARY OF TERMS

The following is a list of abbreviations used in the report:

B&B	Bed and Breakfast
BSP	Biodiversity Sector Plan
BPF	Bioregional Planning Framework
BNGHP	Breaking New Ground Housing Policy
C.A.P.E.	Cape Action Plan for the Environment
CBD	Central Business District
CBA	Critical Biodiversity Area
CESA	Critical Ecological Support Area
CKDM	Central Karoo District Municipality
CKDM SDF	Central Karoo District Municipality Spatial Development Framework
CNC	Cape Nature Conservation
DEA&DP	Department of Environmental Affairs and Development Planning
DWA	Department of Water Affairs
DMA	District Management Area
DRC	Dutch Reformed Church
ESA	Ecological Support Area
EIA	Ecological Support Area
EMF	Environmental Management Framework
EMP	Environmental Management Plan
FSP	Fine Scale Biodiversity Planning
IDP	Integrated Development Framework
IAP's	Interested and Affected Parties
LUPO	Land Use Planning Ordinance, 15 of 1985



LED	Local Economic Development
MIG	Municipal Infrastructure Grant
MSA	Municipal Systems Act, 32 of 2000
NEMA	National Environmental Management Act
NSPD	National Spatial Development Perspective
NWA	National Water Act
OESA	Other Ecological Support Area
PA	Protected Area
PAWC	Provincial Administration Western Cape
PGWC	Provincial Government Western Cape
PGDP	Provincial Growth and Development Plan
PGDS	Provincial Growth and Development Strategy
PSDF	Provincial Spatial Development Framework
PPP	Public Participation Process
RDP	Reconstruction and Development Programme
SAHRA	South African Heritage Resources Agency
SANBI	South African National Biodiversity Institute
SDF	Spatial Development Framework
SDP	Spatial Development Plan
SEA	Strategic Environmental Assessment
SKEP	Succulent Karoo Ecosystem Plan
SMME	Small Medium and Micro Enterprises
SPC	Spatial Planning Category
SMA	Special Management Area
WC	Western Cape
WWTW	Waste Water Treatment Works

The following definitions, extracted from relevant national and provincial policy guidelines, apply to this document:

**Activity corridor** means a linear zone of development flanked by a public transport route with a variety of commercial and high-density residential uses focused on it.

**Activity spine** means the core of the activity corridor being a main road on which most of the activities are focused, with high-density development adjacent to the road for about half a block on both sides. It should connect the local nodes, mixed use areas and community activities.

**Activity Street** means a local road that displays the same principles of linearity and accessibility as an activity spine, but at lower levels of intensity, opportunity and market thresholds. It should similarly connect local nodes and reinforce them.

**Buffer Areas** are made up of remaining natural habitat in endangered, vulnerable and least threatened ecosystems, including remnant (determined by Cape Nature and/or SANBI (South African National Biodiversity Institute)) in accordance with the National Spatial Biodiversity Assessment and \ or applicable fine-scale biodiversity plans. Extensive agriculture occurs as an overlay zone because of the close relationship between dry land grazing and veld quality (biodiversity). There are two types of Buffer Areas: Buffer 1 in which land may be converted to other uses if satisfactory offsets are provided and Buffer 2 where no such offsets will be necessary.

Biological Diversity or Biodiversity is defined as the variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within, between species and of ecosystems.

**Biome** means a group of ecosystems which may differ considerably in the species that contain, but function in ecologically similar ways. In practice, although biomes contain both plants and animals, for purpose of identifying biomes and mapping them, the vegetation type is used to define the biome boundaries.

**Bioregional Planning** defined by PGWC as an internationally recognised planning concept aimed at achieving sustainable development.

**Client** refers to the Central Karoo District Municipality

**Core Areas** are terrestrial, aquatic and marine areas of high conservation importance (highly irreplaceable) that must be protected from change or restored to their former level of functioning. Both public and private ownership is permitted in Core Areas. Privately owned land should be designated in some way, either as private nature reserves or under the stewardship regulations. There are two types of Core Areas, namely Core 1 which currently enjoys a level of statutory proclamation or designation and Core 2 areas, which should be brought up to Core 1 area status.

**Development** in relation to place means any process initiated by a person or body to change the use, physical nature or appearance of that place and without limitation includes:

- a) the construction, erection, alteration, demolition or removal of structure or building for which building-plan approval is required;
- b) change of actual land use;
- c) up- or downgrading of development rights, including the subdivision or consolidation of land;
- d) the preparation, surveying or advertising of land in anticipation of approval of amended rights or in a way as to suggest possible approval;
- e) the installation of infrastructure or the preparation of land therefore;
- f) changes to the existing or natural topography of land;
- g) the destruction or removal of vegetation, and
- h) any other physical change being brought about in respect of land, buildings, infrastructure or other structures;

**Ecological Corridors** are spatially defined (or demarcated) areas necessary for the maintenance of ecological integrity and persistence of ecological processes. Ecological Corridors designated Core 2 areas link the Core 1 areas so that they create a continuous network throughout the province. They differ from Core 1 areas in that they can contain land currently designated to the Buffer, intensive agriculture or urban development. Urban development, intensive and extensive agriculture should be discouraged within these corridors.

**Ecotourism** is responsible travel to fragile, pristine, and usually protected areas that strives to be of low impact and (often) small scale. It purports to educate the traveller; provide funds for conservation; directly benefit the economic development and political empowerment of local communities; and foster respect for different cultures and for human rights.

**Extensive Agriculture** refers stock farming on natural veld.

**Growth potential** means the attributes of both high economic growth prospects and a concentration of human need within a particular locality.

**High density residential** promotes densities of 25 units per hectare or higher and are normally accommodated in the medium to low income areas

**Inclusionary Housing**, also referred to as mixed-income housing, is a government driven program to promote mixed-income housing delivery through regulations and/or incentives that require or encourage developers to include a portion of housing units for low and moderate income households into their developments

**Integrated development** has the same meaning as inclusionary housing and promotes mixed-income housing delivery, single residential, general residential and subsidy units.

**Intensive Agriculture** land with crop farming or forestry potential or existing agricultural activity or has been ploughed within the previous 10 years.

**Low density residential** accommodates developments in high-income areas of 10-15 units per hectare

**Medium density residential** accommodates developments in medium to high income areas of 15-25 units per hectare

**Medium Term Urban Edge** the Urban Edge drawn up in the SDF delineation process.

**Mixed uses** imply the horizontal and vertical integration of suitable and compatible residential and non-residential land uses within the same area or on the same land parcel.

**Rehabilitation area** includes a damaged ecosystem of population to be retained to its original status.

**Spatial Integration** is a strategy to address the spatial fragmentation legacy of former spatial planning approaches and land use management, associated with acts such as the Group Areas Act, Urban Areas Act, Physical Planning Act and the Homelands Act, etc. The strategy engages issues of urban restructuring, settlement location and property development to reduce urban sprawl, integrating different communities (mixed income and mixed tenure), land use activities (mixed use: commercial, retail, recreational, transport, residential, social service, etc.) and the shift from a single motor car urban design concept to a new urban design concept based on public transport.

**Sustainable Development** is development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

**Urban Edge** to ensure a target of an average gross 25 dwelling units per hectare within 5-10 years and/or meaningful consolidation of apartheid town element; it is defined as medium term to acknowledge that average gross densities in rapidly growing settlements could achieve the desired average gross density fairly quickly (5 – 10 years) after which the urban edge and growth management policies should be reviewed. Note: to ensure security of investment for agriculture, the medium term edge should remain fixed for at least 10 to 15 years.

**Urban restructuring** is a strategy to increase urban quality of life and urban citizenship through integrated transport-led land reform (densification, infill and development of strategically located public brown/greenfield sites) within a demarcated urban edge, and upgrade of (previously) degraded areas and new developments.

# 1. Introduction

The purpose of this report is to provide the relevant, up to date background information for the Central Karoo District Municipal (CKDM) area which include the 26 key sectors which is grouped into the *Bio-physical, Socio-Economic and Built Environment* and more specific the policy framework that need to be taken up in the proposals made in the Spatial Development Framework of the CKDM.

## 1.1 The Need for a Spatial Development Framework

This document represents the Spatial Development Framework for the Central Karoo District Area. The document is prepared and submitted in fulfilment of the District Municipality's legal obligation in terms of the relevant sections of the Local Government : Municipality Systems Act , Act 32 of 2000 and specifically Section 4 of the Local Government : Municipal Planning and Performance Management Regulations, 2000.

The White Paper on Spatial Planning and Land Use Management (2001), defined Spatial Planning as a *“process that is inherently integrative and strategic and which takes into account a wide range of aspects and how these should be arranged on land”*.

The growth of urban and rural environments in South Africa and its impact on resources over time has previously been managed in terms of spatial planning by municipalities with the key focus on development within certain areas. These known as master plans, have been seen to be developed in a narrow- minded environment.

The spatial development challenges were faced with the new challenges of a dysfunctional spatial fabric informed mainly by the apartheid era and its planning laws. Therefore besides the need for multi-disciplinary and multi-sectoral integration, certain desired elements of the successful integration of land uses within areas of development remained lacking, particularly with respect to the integration of issues to be focussed on such as the provision of Housing, Health; Infrastructure Provision and Maintenance; Environmental Conservation; Disaster Management plans; Agriculture and Mining.

Post 1994 a new system of Spatial Planning, as prescribed through the Development Facilitation Act (DFA), Act No. 67 of 1995 and the Municipal Systems Act (MSA), Act No. 32 of 2000, was adopted and rolled out. This included, firstly, a Spatial Development Framework Plan (SDF) which showed desired land use, directions for future growth and alignment with other areas of development.

The second component was a Land Use Management System (LUMS). The White Paper on Spatial Planning and Land Use Management (2001) clearly defines a Land Use Management System as a mechanism that includes a full spectrum of land use management mechanisms such as zoning regulations – zoning schemes, management tools, building plan approval systems, law enforcement, bylaws and procedural matters, institutional arrangements, etc. These all are applicable to the development rights on a specific land unit, erf or property, which can be changed by way of land use applications submitted and processed known as Rezoning, Special Consent, Subdivision, etc. These changes in land use are often guided by the Spatial Development Framework Plan, which functions as a guide to current and future land uses trends within a specific area.

Since then, the Spatial Planning and Land Use Management Bill 2011 was developed to provide a framework for Spatial Planning and Land Use Management in South Africa. Its main focus is to specify the relationship between the Spatial Planning and the Land Use Management Systems, together with other kinds of planning, and to:

- provide for the inclusive, developmental, equitable, and efficient spatial forward planning at the different spheres of Government across different geographic scales;
- provide a framework for the monitoring, coordination and review of the Spatial Planning and Land Use Management System;

- provide for policies, principles, norms and standards for Spatial Development Planning and Land Use Management;
- coordinate different land development processes and reduce duplication of procedures relevant to land development;
- address past spatial and regulatory imbalances;
- promote greater consistency and uniformity in application procedures and decision-making structures for provincial and municipal authorities responsible for land use decisions and development applications and for appeal procedures;
- provide for the establishment, functions and operations of Provincial Planning Tribunals and Municipal Planning tribunals; and
- provide for the control and enforcement of land use and development measures; and to provide for matters connected therewith.

It is thus clear from the above that the Spatial Development Framework forms part of the planning and development of a specific area, specifically focussed to be a guide plan to achieve the desired state of future and existing land uses and the optimisation of its specific role in context with the planned environment it function in.

The Central Karoo District Spatial Development Framework will mainly focus on the following:

- The structure and roles of settlements, transport and regional services infrastructure across and between the local municipalities within the District area;
- Clear definition of linkages and corridors between the settlements;
- Identification of the growth nodes, priority investment areas and areas of rural decay with the District area;
- Indication of areas of protection and conservation known as protected areas, threatened ecosystems, critically biodiversity areas, valuable agricultural land, water catchment areas and resources of the District area;
- Resolution of contradictions with planning visions of the various local municipalities;
- Description of general urban design principles to be applied in all settlements located in the District area.

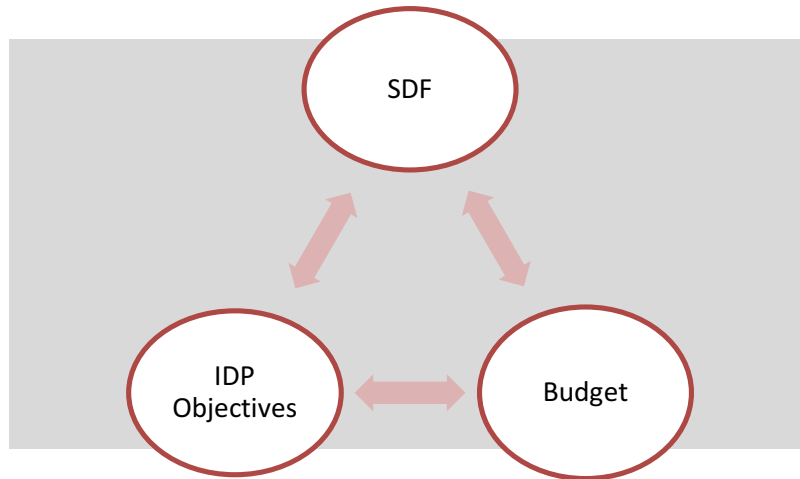
In closure, the need for preparing the Central Karoo District Development Framework is summarised as follow:

- The legislative requirement as per the Local Government Municipal Systems Act, Act No. 32 of 2000 and its Regulations that all District Authorities shall prepare a Spatial Development Framework;
- The CKDM SDF forms a legally binding component of the Central Karoo Integrated Development Plan (IDP), 2012 and refinement of the spatial framework guidelines as contained in the CKDM IDP;
- The need to formulate and implement spatial planning guidelines and policies;
- The need to implement and maintain sustainability of the natural and built environment.

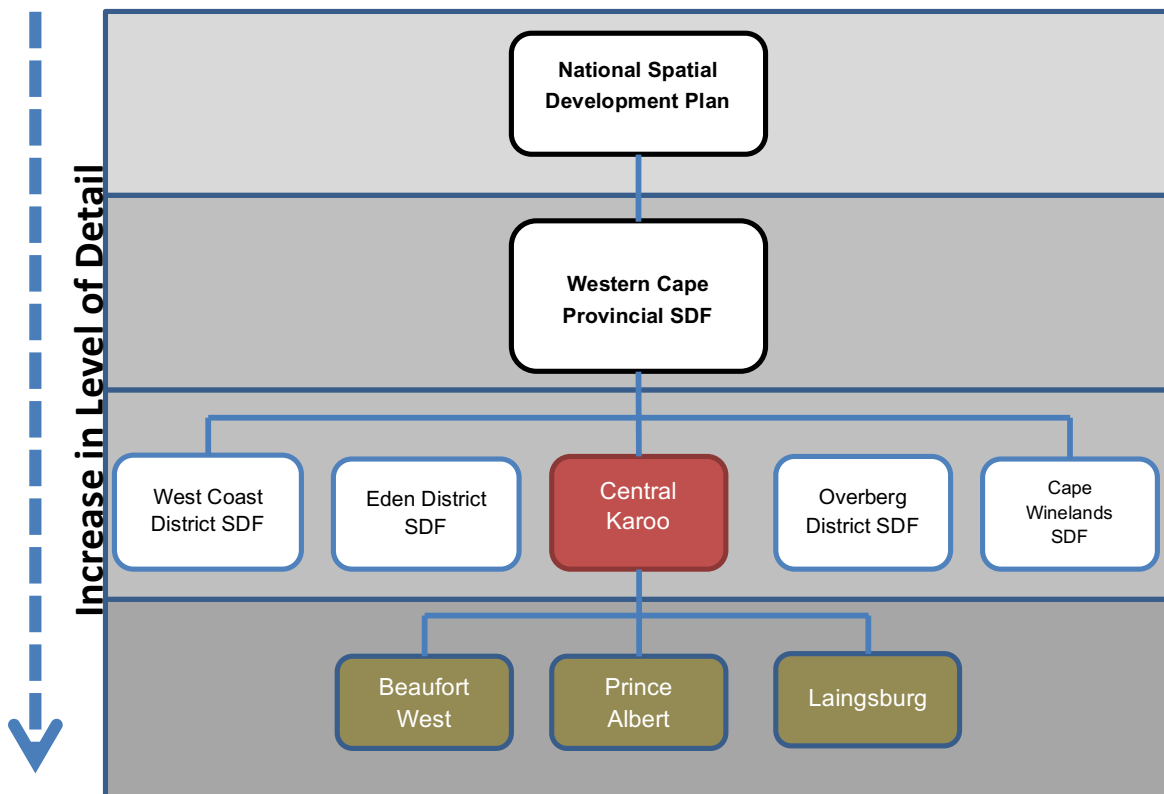
## 1.2 Integration with other Plans

The Spatial Development Framework Plan is a spatial representation, or map, of the Integrated Development Plan (IDP)'s objectives which is linked to funded projects through the budget of the District Municipality.

The link between the SDF, IDP and Budget is shown in Figure 1-1 below:

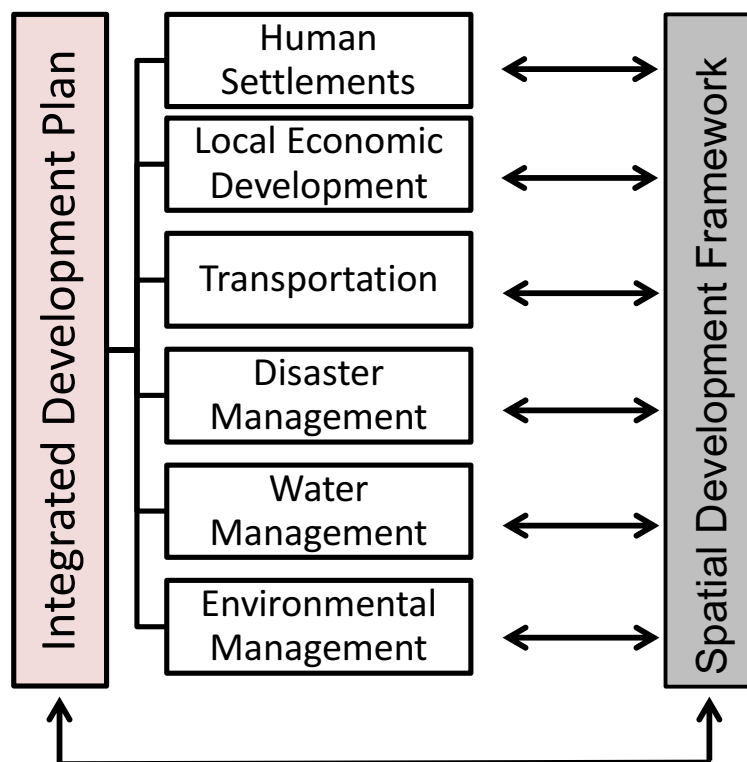
**Figure 1-1: Relationship between SDF, IDP and Budget**

The Central Karoo District SDF is further linked to various spatial policies at different levels of jurisdiction. This includes National Policies such as the National Spatial Development Perspective (NSDP) which provide overarching national objectives, goals and strategies for development. The NSDP further informs the Provincial policies as demonstrated in the following figure.

**Figure 1-2: Conceptual Level of Detail in SDF Plans**

The SDF should give guidance to all Municipal Departments and consider the impacts of the built environment, such as natural environment, socio- economic issues, infrastructure and services, housing development and any other related aspects. The integration of the sector plans, which form part of the IDP, from the various service departments is a very important that these sector plans inform the SDF and thus inform the plans and objectives as rolled out by the various departments within the respective District Municipality. Figure 3 below shows how this relationship of informants should be implemented.

**Figure 1-3: Relationship of SDF with IDP Sector Plans**



It should be noted that the various sector plans focus on specific direct needs which in turn is combined and co-ordinated by the overarching Spatial Development Framework and its implementation within the CKDM area.



### 1.3 The Central Karoo District Municipal Study Area & its Main Functions

The Central Karoo District Municipality (CKDM) is one of the five Category C District municipalities in the Western Cape Province. The N1 (National road) runs through the District Municipal area, connecting the area to Cape Town (300km south west) and Johannesburg (1200km) towards the north east. Refer to the attached regional locality plan, **Plan 1**.

The CKDM covers a total area of 38 852km<sup>2</sup>, making it the largest district municipality in the province. It includes the Beaufort West, Laingsburg and Prince Albert Municipalities.

The Eden District Municipality, Namakwa Local Municipality, the Cacadu District Municipality as well as the Pixley-ka-Seme District Municipality are all located on the boundaries of the Central Karoo District Municipality..

Main functions of a District Municipality as prescribed in the Constitution include:

- To plan for the development of the District Municipality as a whole.
- Supply of bulk water, sewer and electricity provision for a large portion of the local municipalities within the district.
- Provide for waste disposal sites for the District area.
- Regulate passenger transport services for the District area.
- Municipal Health Services provision for the District area.
- Firefighting Services for the District area.
- Control of cemeteries within the District area.
- Control of the fresh produce markets in the District area (if any).
- Promoting local tourism for the District area.
- Municipal Public Works services for the District area.



**PLAN 1**  
**OCTOBER 2013**

## 1.4 Planning Process

### 1.4.1 Methodology and Approach

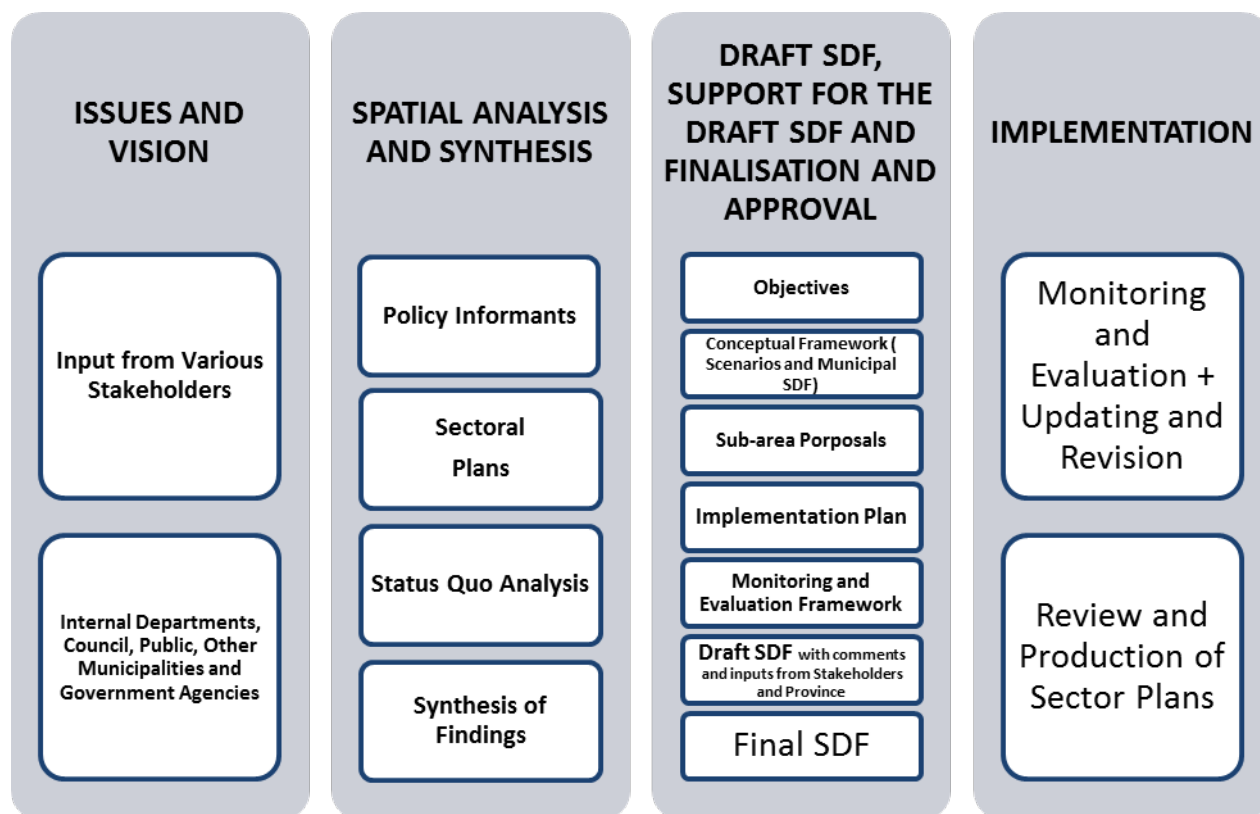
The methodology and approach takes on the needs and requirements of the Client into consideration and is based on the Draft Guidelines for the Formulation of Spatial Development Frameworks August 2011, as issued by the Department of Rural Development and Land Reform, as well as the Western Cape Department of Environmental Affairs and Development Planning Spatial Development Framework Guidelines.

It should be noted that the phased approach includes the relevant phases mentioned as critical milestones in the Terms of Reference, as well as those indicated in the abovementioned Draft Guidelines.

### 1.4.2 Phased Approach (Planning Process)

The various Phases are illustrated in the figure below.

**Figure 1-4: Phases in the Development of the CKDM SDF**



### 1.4.3 Main Stakeholder meetings

The Joint Technical Team and Project Steering Committee have been established to give guidance and technical input to the project. The meetings take place in line with the project programme and SDF phases when and where certain milestones are achieved. The steering committee consists of nominated officials of the Central Karoo District Municipality (the Client) as well as the consultant team.

#### 1.4.4 Public Participation

The Municipal Systems Act, Act No. 32 of 2000 prescribes that a structured public participation process should be followed as part of the IDP process and would therefore also apply to the review of the SDF.

Each of the SDF phases, i.e. analysis, vision and planning principles, land use management guidelines, spatial development strategies and implementation are based on public and stakeholder input with a strong technical basis. The Spatial Development Framework forms part of the Integrated Development Plan as one of its operational strategies. The vision, priorities, objectives and strategies as identified as part of the IDP process will be incorporated into the SDF. The Central Karoo District IDP 2012/2017 has been based on an extensive public and stakeholder input process. The purpose of the Spatial Development Framework is not to regenerate these objectives and strategies. However, the SDF will rather enhance and expand on the spatial aspects thereof.

As part of the preparation of the SDF, two rounds of public participation are included, the first being feedback on the status quo report followed by the second round with the commenting on the draft SDF.

Previous experience has shown that the broader community does not always attend general open house meetings. It was therefore decided to have separate structured meetings, targeting active institutions representing the community, as well open house meetings.

**Picture 1: Preparation for 1st Stakeholder workshop in Beaufort West**



### 1.5 Monitoring and Review

Monitoring and review of the Spatial Development Framework should be done on an on-going basis. However, the SDF review process can coincide with the IDP review process to include any objectives or development proposals coming forth from the latter. It will be ideal if the SDF could be reviewed at the same time as the IDP process in order to update the framework with any new spatial development that came forth from the IDP review.

## 2. Legislative and Policy Context

### Chapter 2

A number of policies, acts and guidelines need to be considered when drafting a SDF. This section provides a list of legislation which has a direct influence on the drafting of the Central Karoo District Spatial Development Framework and the implications on spatial planning and development within the District.

#### NATIONAL LEGISLATION

Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996)

Municipal Systems Act, 2000 (Act 32 of 2000)

Spatial Planning and Land Use Management Bill, 2012 (Bill 14 of 2012)

Development Facilitation Act, 1995 (Act 67 of 1995)

National Environmental Management Act, 1998 (Act 107 of 1998)

National Heritage Resources Act (Act 25 of 1999)

National Spatial Development Perspective (March 2003)

National Environmental Management: Biodiversity Bill (2003)

#### PROVINCIAL LEGISLATION & POLICY

Western Cape Provincial Spatial Development Framework (November 2009)

Western Cape Planning and Development Act, 1999 (Act 7 of 1999)

Land Use Planning Ordinance (Ordinance 15 of 1985)

Provincial Urban Edge Guideline (DEA&DP, December 2005)

Growth Potential of Towns in the Western Cape (DEA&DP, 2004)

Bioregional Planning Framework for the Western Cape (October 2005)

Provincial Land Transport Framework, Provincial Government Western Cape, Department of Transport & Public Works, April 2011

**DISTRICT POLICY**

Central Karoo District Local Economic Development (LED), 2009

Central Karoo Integrated Development Plan (IDP), 2012

Central Karoo Environmental Management Framework, 2011

**MUNICIPAL POLICY**

Laingsburg Spatial Development Framework

Beaufort West Spatial Development Framework

Prince Albert Spatial Development Framework

## 2.1 National Legislation and Policy

NATIONAL LEGISLATION			
	OBJECTIVES, PRINCIPLES & DIRECTIVENESS	IMPLICATIONS/ALIGNMENT OF THE SDF WITH THIS LEGISLATION	PLAN/DOC REFERENCE
Municipal Systems Act, 2000 (Act 32 of 2000).	<p>The MSA formally introduced IDPs as a form of planning to be adopted by metropolitan, district and local municipalities.</p> <p>The intention is that spatial plans will:</p> <ul style="list-style-type: none"> <li>spatially integrate sectoral strategies of an IDP; and</li> <li>include the provision of basic guidelines for a land use management system.</li> </ul> <p>It specifies that municipal planning must be aligned with and complement the development plans and strategies of other affected municipalities and other State Organs/Government Departments and alignment being the responsibility of all spheres of Government.</p>	<p>The spatial projects listed in the IDP document will be aligned with the SDF document and spatially addressed &amp; illustrated.</p>	Refer to Plan 20 and Chapter 7.
Spatial Planning and Land Use Management Bill, 2012	<p>The Bill seeks to provide:</p> <ul style="list-style-type: none"> <li>a framework for spatial planning and land use management in the Republic.</li> <li>specify the relationship between the spatial planning and the land use management system and other kinds of planning;</li> <li>for the inclusive, developmental, equitable, and efficient spatial planning at the different spheres of the Government;</li> <li>a framework for the monitoring, co-ordination and review of the spatial planning and land use management system; to allow for policies, principles, norms and standards for spatial development planning and land use management;</li> <li>address past spatial and regulatory imbalances; to</li> </ul>	<p>In terms of the Bill, the spatial development frameworks prepared by different spheres of government must be co-ordinated, aligned and be in harmony with each other.</p> <p>The CKDM SDF will clearly indicate the alignment of the SDF with the local municipal SDF's in the area and provide the broader framework for development within the District Area ; and</p> <p>Provide basic guidelines for spatial planning, land development &amp; land use management within the district area.</p>	Refer to Linkages with Local Municipalities, point 6.7.

## NATIONAL LEGISLATION

promote greater consistency and uniformity in the application procedures and decision-making by authorities responsible for land use decisions and development applications;

- provide for the establishment, functions and operations of Municipal Planning Tribunals; to provide for the facilitation and enforcement of land use and development measures; and to provide for matters connected therewith.

The Bill advances the following development principles which applies to spatial planning, land use management and land development:

### **Principle of Spatial Justice**

- Improve access to and use of land
- Include persons and areas previously excluded (informal settlements, former homelands, areas of poverty, etc.)
- Enable redress in access to land by disadvantaged communities and people
- Flexible and appropriate land use management systems for disadvantaged areas, informal areas and former homeland areas
- Access to secure tenure and incremental upgrading of informal areas
- Land value to not affect the decision of a Municipal Planning Tribunal when considering an application.

### **Principle of Spatial Sustainability**

- Promote land development in the Republic
- Protect prime and unique agricultural land



## NATIONAL LEGISLATION

- Uphold environmental management instruments
- Promote and stimulate land markets
- Consider current and future costs when providing infrastructure and social services
- Limit urban sprawl and promote sustainable land development
- Create viable communities

### Principle of Efficiency

- Optimally use existing resources and infrastructure
- Decision-making procedures to minimise negative financial, social, economic and environmental impacts
- Efficient development application procedures to be streamlined and all parties adhere to timeframes

### Principle of Spatial Resilience

- Flexible spatial plans, policies and land use management systems to accommodate sustainable livelihoods in communities vulnerable to economic and environmental shocks.

### Principle of Good Administration

- Integrated approach to land use and land development across all spheres of government
- All departments to provide their inputs during the preparation of a spatial development framework (SDF)
- Requirements of land development laws to be met timeously
- Transparent public participation processes when

## NATIONAL LEGISLATION

	<p>preparing or amending spatial plans, policies and land use schemes</p> <ul style="list-style-type: none"> <li>Clearly set policies, legislation and procedures to inform and empower the public</li> </ul>		
Development Facilitation Act (DFA), 1995 (Act 67 OF 1995).	<p>The DFA contains general principles relating to land development and conflict resolution. It serves as a guideline to the administrator for decision making of land use applications.</p> <p>The act highlight the general principle to promote efficient and integrated land development:</p> <ul style="list-style-type: none"> <li>Integrate social, economic, institutional and physical aspects of land development;</li> <li>Integrate land development in rural and urban areas;</li> <li>Promote availability of residential and employment opportunities in close proximity to each other;</li> <li>Promote availability of residential and employment opportunities in close proximity to each other;</li> <li>Discourage the phenomenon of urban sprawl and contribute to development of more compact towns and cities;</li> <li>Contribute to the correction of historically distorted spatial patterns of settlement in Republic; and</li> <li>Encourage environmentally sustainable land development (practices and processes)</li> </ul>	<p>The spatial projects listed in the IDP document to be aligned with the SDF Document and spatially illustrated on the spatial plans.</p> <p>Clearly define linkages in between settlements in the district area, especially in terms of public transportation to improve access to employment opportunities &amp; correct distorted spatial patterns/urban sprawl.</p>	<p>Economic Linkages illustrated on plan 19. The mobility strategy section is included in the document under chapter 3.3.2 discussing accessibility and mobility in the district area.</p>
National Development Plan, 2030	<p>The NDP aims to eliminate poverty and reduce inequality by 2030. According to the plan, South Africa can realise these goals by drawing on the energies of its people, growing an inclusive economy, building capabilities, enhancing the capacity of the state, and promoting leadership and partnerships throughout society.</p> <p>While the achievement of the objectives of the National</p>	<p>In line with the actions of the NDP, the CKDM will aim to:</p> <ul style="list-style-type: none"> <li>Address the constraints on job creation factors in the District area, such as ensuring that more people live closer to their place of work and</li> </ul>	<p>Chapter 6 lists constraints in terms of adequate transport facilities which is seen as a spatial challenge in the district area.</p> <p>Chapter 7 discuss the protection and conservation of biodiversity areas.</p>

## NATIONAL LEGISLATION

	<p>Development Plan requires progress on a broad front, three priorities stand out:</p> <ul style="list-style-type: none"> <li>• Raising employment through faster economic growth</li> <li>• Improving the quality of education, skills development and innovation</li> <li>• Building the capability of the state to play a developmental, transformative role.</li> </ul>	<p>that public transport facilities are available to work opportunities</p> <ul style="list-style-type: none"> <li>• to ensure the conservation and restoration of protected areas, to be in line with the proposed regulatory framework proposed by the NDP.</li> </ul>	
National Environmental Management Act, 1998 (Act 107 of 1998).	<p>Environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably.</p> <p>Development must be socially, environmentally and economically sustainable, including:</p> <ul style="list-style-type: none"> <li>• Avoiding the disturbance of ecosystems or loss of biodiversity (or, where it cannot be avoided, minimised or remedied);</li> <li>• Avoiding the disturbance of landscapes and sites that constitute the nation's cultural heritage (or, where it cannot be avoided, minimised or remedied);</li> <li>• Responsible use and exploitation of non-renewable resources;</li> <li>• Applying a risk-averse and cautious approach; and</li> <li>• Anticipating and preventing negative impacts on people's environmental rights.</li> </ul> <p>Environmental management must be integrated, acknowledging that all elements of the environment are linked and interrelated and taking into account the effects of decisions on all aspects of the environment and people in the environment by pursuing the selection of the best practical environmental option.</p>	<p>General land use management guidelines for rural areas to be included in the SDF document. The biodiversity plans will highlighting the sensitive land to be protected.</p>	<p>SPC Guidelines, Chapter 6.</p> <p>The Protected areas are illustrated on plan 12.1 and SPC categories illustrated on Plan 20.</p>

## NATIONAL LEGISLATION

<p>National Heritage Resources Act (Act 25 of 1999).</p>	<p>Provincial Heritage Resources Authorities have been given the task of compiling and maintaining a heritage register. This is a listing of the heritage resource in their province which is considered to be conservation-worthy in terms of the assessment criteria set out in Section 3 (3) of the National Heritage Resources Act (Act 25 of 1999).</p> <p>According to Section 31 (1) of the Act "A planning authority must at the time of compilation of a town or regional planning scheme, or the compilation or revision of a spatial plan, or at the initiative of the provincial heritage authority where in the opinion of the provincial heritage resources authority the need exists, investigate the need for the designation of heritage areas to protect any place of environmental or cultural interest". Those heritage resources, which fulfil the assessment criteria, will then be listed in the heritage register.</p> <p>In order to help local municipalities with heritage issues, Heritage Western Cape was established to give assistance in identifying assets to be added to the heritage register.</p>	<p>Heritage sites should be spatially illustrated with restrictions to provide clear guidelines of acceptable level in these areas.</p>	<p>The heritage sites for each town in the District area is discussed in the local SDF of Prins Albert, Laingsburg and Beaufort-west.</p>
<p>National Spatial Development Perspective (March 2003).</p>	<p>The National Spatial Development Perspective (NSDP) was published by the President's Office in 2003, which suggest inter alia that Provinces determine the potential for economic growth and human need in towns. The Growth Potential of Towns in the Western Cape research study (2004) was undertaken as part of this initiative and is to be discussed in detail in terms of the development potential of each town.</p> <p>The main purpose of the NSDP is to guide the alignment of investment in social and economic infrastructure across department and spheres of Government in order to tackle</p>	<p>Investigate the growth potential of towns within the district area to determine which towns have a low economic growth potential and should only receive human development programs and which towns have a high economic growth potential to receive human development programs and infrastructure investment &amp; identifying growth nodes &amp; priority investment areas on a district level.</p>	<p>The hierarchy and roles of settlements are discussed under point 3.3.1 and illustrated on plan 17.</p>

## NATIONAL LEGISLATION

	development challenges effectively. It also provides national objectives for spatial development and addresses the changing spatial economy and its impact on commitment to social reconstruction, sustainable growth, social justice and environmental integrity. Lastly, it responds to spatial trends in terms of the impact on infrastructure investment and development spending.		
National Environmental Management: Biodiversity Bill (2003).	<p>The objectives of this legislation, as extracted from the Bill itself, are to provide, within the framework of the National Environmental Management Act, for:</p> <ul style="list-style-type: none"> <li>• The management and conservation of biological diversity within the Republic;</li> <li>• The use of indigenous biological resources in a sustainable manner;</li> <li>• The fair and equitable sharing of benefits arising from the commercialization through bio-prospecting of traditional uses and knowledge of genetic resources;</li> <li>• To give effect to international agreements relating to biodiversity which are binding on the Republic;</li> <li>• To provide for co-operative governance in biodiversity management and conservation; and</li> <li>• To provide for a National Biodiversity Institute to assist in achieving the above objectives.</li> </ul>	<p>The document includes the most updated information on Bioregional Framework Planning, guiding spatial planning in the Western Cape and of specific reference to the Central Karoo District Area.</p> <p>The included Biodiversity plan gives a clear indication of the land category and the permissible land uses for such category in order to protect and manage the sensitive land in the area.</p>	Plans 11 and 15. The biophysical and Environmental included in the document under chapter 3, point 3.1.5.

### 2.2 Provincial Policy and Legislation

## PROVINCIAL POLICY AND LEGISLATION

Western Cape Provincial Spatial Development Framework, WC	The policy provides direction and guidance in terms of spatial development within the province. It further	CKDM should take note of spatial challenges relevant to the Western Cape	The spatial challenges in the district area are discussed
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## PROVINCIAL POLICY AND LEGISLATION

<p>PSDF, 2009.</p>	<p>provides proposals for social economic development, urban restructuring and environmental sustainability.</p> <p>The policy underpins the following objectives:</p> <ul style="list-style-type: none"> <li>• Objective 1: Align the future settlement pattern of the province with the location of environmental resources for economic opportunities</li> <li>• Objective 2: Deliver human development and basic need programs wherever they may be required</li> <li>• Objective 3: Strategically invest scarce public sector resources where they will generate the highest socio-economic returns</li> <li>• Objective 4: Support land reform</li> <li>• Objective 5: Confirm and strengthen the sense of place of important cultural landscapes, artefacts and buildings</li> <li>• Objective 6: Heal the apartheid structure of urban settlements</li> <li>• Objective 7: Conveniently locate urban activities and promote public</li> <li>• and non-motorised transport</li> <li>• Objective 8: Protect biodiversity and agricultural resources</li> <li>• Objective 9: Minimize the consumption of scarce environmental resources particularly water, fuel, burning materials, mineral resources, electricity and land.</li> </ul> <p>The WCPSPDF composite map indicates the broad spatial planning categories derived from the approach to bioregional planning. The five broad spatial categories provide policies for development and activities in the:</p> <ul style="list-style-type: none"> <li>• Core areas;</li> <li>• Buffer areas;</li> <li>• Intensive agriculture areas;</li> </ul>	<p>Provincial Government and engage in strategies that compliment, not counteract, efforts to eliminate them.</p> <p>Highlight the growth potential of towns (with a high social need) that should be focussed on (e.g Matjiesfontein, Murraysburg have very high social needs).</p> <p>The river corridors, conservancies, natural protected areas as illustrated on plan 11 should be promoted as core areas.</p> <p>The District SDF should indicate areas of protection &amp; highlight relevant conservation guidelines.</p>	<p>under point 6.1.1.</p> <p>The conservation guidelines, in line with the PSDF guidelines are discussed under chapter 6.2.</p>
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## PROVINCIAL POLICY AND LEGISLATION

	<ul style="list-style-type: none"> <li>Urban development; and,</li> <li>The Urban Edge.</li> </ul>		
Western Cape Planning and Development Act, 1999 (Act 7 of 1999).	<p>Indicate where public and private land development and infrastructure investment should take place.</p> <p>Indicate the desired or undesired utilisation of land.</p> <p>Delineate the urban edge.</p> <p>Identify areas where strategic intervention is required.</p> <p>Identify areas where priority spending is required.</p>	<p>The Urban Edge Delineation for each town is illustrated on the spatial proposals plans of each town (refer to municipal linkages section of the document).</p> <p>The spatial proposals indicate the desired utilisation of the available land in each area.</p>	Refer to plan 19 and Chapter 6, point 6.7.
growth Potential of Towns in the Western Cape (DEA&DP, 2004).	<p>This study is part of the National Spatial Development Perspective and provides for the following:</p> <ul style="list-style-type: none"> <li>The leading growth criteria and indicators for urban development;</li> <li>The growth performance of rural towns in the Western Cape;</li> <li>Evaluation of towns in terms of their development potential and human needs;</li> <li>Comprehending the observed growth dynamic, economic base and place of identity of towns; and</li> <li>Investment opportunities available for each town.</li> </ul> <p>Each town within the CKDM area are evaluated and classified in terms of its Development Potential (DP) and the current Human Needs (HN) of the community.</p>	<p>The focus should be on developing the towns with high development potential (Prins Albert and Leeu Gamka) while addressing the social needs in areas where it is most critical.</p> <p>CKDM towns identified with low development potential require various types of investment structures/types i.e. infrastructural Investment, Social (people) investment. This investment structures can be addressed through LED.</p>	Refer to Chapter 6 and plans 17 & 19.
iKapa Elihlumayo: Towards a Provincial Growth & Development Strategy.	<p>Ikapa Elihlumayo comprises of a system of strategies enabling the formation of a framework to the assist the sustainable growth and development of the Western Cape.</p> <p>The goal of these programs is to:</p> <ul style="list-style-type: none"> <li>Increase economic growth, employment and economic participation;</li> <li>Reduce geographic and socio-economic inequality;</li> </ul>	<p>The aim of this program is to increase economic growth, employment and economic participation. The document lists the LED objectives and strategies and will include broad spatial proposals for industrial and business uses to ensure economic growth and local economic development.</p>	<p>Spatial proposals plan for each town (Plan 20).</p> <p>It is necessary for the CKDM to work in conjunction with the Western Cape Provincial government to vertically align goals of local IDP's (and subsequently LED</p>

## PROVINCIAL POLICY AND LEGISLATION

	<p>and</p> <ul style="list-style-type: none"> <li>• Provide a sustainable social safety net.</li> </ul>		frameworks) with the iKapa Elihlumayo. This creates ample opportunity and scope for integrand intra-governmental integration, co-ordination and cooperation between spheres to focus resources on agreed upon priority areas (PSC meetings).
Breaking New Ground Housing Plan, 2005.	<p>This is a National Plan for the delivery of homes and the development of human settlements.</p> <p>The main objective is to ensure integrated and sustainable human settlements by redressing the legacy of racial and social divisions, combating urban sprawl, ensuring accessibility/centrality for the poor and creating empowered and vibrant communities through social capital formation.</p> <p>Key aspects of the Plan include:</p> <ul style="list-style-type: none"> <li>• The integration and buildings of secure communities;</li> <li>• A three tier categorizing of housing beneficiaries; and</li> <li>• Redefining the role of Government in the housing market.</li> </ul>	<p>Each town identifies land for future expansion ensuring the delivery of homes and development of human settlement.</p> <p>The integration of communities to be addressed per town with the aim to integrate the existing towns within the CKDM area.</p>	Spatial proposals plan, plan 20.
Bioregional Planning Framework for the Western Cape (October 2005).	<p>The Bioregional Planning Framework aims to:</p> <ul style="list-style-type: none"> <li>• Provide a framework to enable planners in the Western Cape to reach consensus with respect to the management of resources in a sustainable manner;</li> <li>• Support Category B and C municipalities in the preparation of development plans and sectoral plans as described in Act 7 of 1999 and to promote</li> </ul>	<p>In terms of the policy the aim for CKDM would be to evaluation of site specific applications in order to maintain:</p> <ul style="list-style-type: none"> <li>• an sustainable environment, both natural and cultural;</li> <li>• Unfolding settlements in a manner to continuously promote a high quality environment to enhance both the quality</li> </ul>	Plans 11 & 19.



## PROVINCIAL POLICY AND LEGISLATION

	<p>cross border co-ordination in respect of bioregional planning and management;</p> <ul style="list-style-type: none"> <li>• Serve as a framework for the demarcation of bioregions, in accordance with bioregional planning principles, within the Western Cape; and</li> <li>• Provide guidelines for land-use classification of the total land area included in Western Cape Province according to Spatial Planning Categories (SPCs), based on a broad spectrum of environmental parameters.</li> </ul>	<p>of life for each town and its community as well as tourists to the area</p>	
<p>Provincial Land Transport Framework, Provincial Government Western Cape, Department of Transport &amp; Public Works, April 2011</p>	<p>The National Land Transport Act (Act 5 of 2009) requires that the Provincial Land Transport Framework (PLTF) be updated every two years</p> <p>The long term vision of the PLTF envisaged that by 2050, the transport system of the Western Cape will be developed along and defined by the following pillars, which will guide the future development of the transport system:</p> <ul style="list-style-type: none"> <li>• Sustainability;</li> <li>• Equity;</li> <li>• Access to opportunity in an economically efficient manner; and</li> <li>• Safety.</li> </ul> <p>By 2050, the Transport System in the Western Cape will be defined by the following elements:</p> <ul style="list-style-type: none"> <li>• Fully Integrated Rapid Public Transport Networks (IRPTN) in the higher-order urban regions of the Province.</li> </ul>	<p>The low population density, high poverty and very low economic opportunities in this district make public transport not to be economically viable. Beaufort West being the main economic hub for the district is the only area with regular public transport services.</p> <p>There are no commuter rail services in the Central Karoo</p>	<p>Refer to Chapter 3, point 3.3.2 and plan 18.</p>

## PROVINCIAL POLICY AND LEGISLATION

	<ul style="list-style-type: none"> <li>Fully Integrated Public Transport Networks (IPTN) in the rural regions of the Province</li> <li>A Safe Public Transport System</li> <li>A Well Maintained Road Network</li> <li>A Sustainable, Efficient High Speed Rail Long Distance Public and Freight Transport Network</li> <li>An efficient International Airport that links the rest of the World to the choice gateway of the African Continent</li> <li>International-standard Ports and Logistics Systems</li> <li>A Transport System that is resilient to peak oil</li> </ul>		
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### 2.3 District Policy

## DISTRICT POLICY

Guidelines for Assessing Land Use Management Applications In Rural Areas (2006 Draft).	<p>The focus of the document is on assessing and guiding development applications so as to protect and enhance the landscape character.</p> <p>Thus, the document is concerned with the tools available to municipalities to achieve this.</p> <p>These include forward planning tools, such as the IDP and particularly the SDF and land use management tools such as Zoning Schemes and Council Policies.</p>	<p>Land Use Management Guidelines for Rural Areas includes:</p> <ul style="list-style-type: none"> <li>Guidelines for management of Land Use Change</li> <li>Management of holiday accommodation</li> <li>Management of Rural Resorts, Golf Course, Polo fields and Polo estates</li> <li>On-farm settlements of farm workers</li> <li>Tourist &amp; Recreational facilities</li> </ul>	Refer to chapter 5.
Central Karoo Integrated	The key action areas identified by the ISRDP are as	The CKDM should ensure that internal	Refer to Chapter 7.

## DISTRICT POLICY

Sustainable Rural Development Strategy, 2003	<p>follows:</p> <ul style="list-style-type: none"> <li>• Strengthen &amp; focus existing rural development programmes,</li> <li>• Re-align national &amp; provincial budget through IDP's</li> <li>• Match economic potential &amp; social needs in the basket of services</li> <li>• Build local institutional capacity</li> <li>• Mobilise communities to influence process &amp; outcomes; and</li> <li>• Mobilise stakeholders &amp; strategy partners</li> </ul>	<p>capacity be attained to transform the node into an economically viable, socially stable and harmonious functioning entity. Continuously include communities and stakeholders into project inputs to ensure satisfactory outcome in line with community needs.</p>	
Central Karoo Growth and Development Strategy	<p>The Central Karoo GDS is the overarching development strategy for the CK aimed at promoting and revealing sustainable economic growth and development potential. The GDS is the long term mechanism promoting development and initiating growth potential within the CK.</p> <p>Growth and development targets for the CK include:</p> <ul style="list-style-type: none"> <li>• Economic growth targets</li> <li>• Social development targets</li> <li>• Spatial development targets</li> <li>• Strategic Infrastructure development targets</li> <li>• Targets for sustainable development of municipal Institution</li> </ul> <p>The Strategy further proposed the following for the District area:</p> <ul style="list-style-type: none"> <li>• Wind power generation project;</li> <li>• Cold storage facility project;</li> <li>• Water demand management strategy;</li> <li>• Economic development agency;</li> <li>• GAP housing development project;</li> <li>• Uranium mine;</li> <li>• Desert knowledge, research and development hub;</li> </ul>	<p>The Growth and Development strategy offers guidance to the CKDM with regard to developmental issues in the region. Central Karoo is faced with various unique and limiting regional challenges. These challenges have to be addressed in a proactive manner to ensure that they do not restrict growth and development in the Central Karoo.</p>	<p>Refer to strategic challenges listed under chapters 5-7 and Plan 20.</p>

## DISTRICT POLICY

- and,
- Tourism expansion project.

### 2.4 Local Municipality Policy

## LOCAL MUNICIPALITY POLICY

Central Karoo IDP	<p>The IDP has the following vision for the district is: Working Together In Development and Growth.</p> <p>The above vision is supported by the following mission: Ensuring future growth to improve the quality of life in the region with the desire to:</p> <ul style="list-style-type: none"> <li>• be financial sustainable</li> <li>• maintain the rural character</li> <li>• create healthy communities by facilitating economic growth</li> <li>• improving infrastructure and the green energy opportunities</li> <li>• providing and supporting alternative modes of delivery (shared services),</li> <li>• improve marketing, branding and communication with all stakeholders,</li> <li>• provide excellent disaster and risk management services</li> <li>• maintaining housing choices for a range of income levels.</li> </ul> <p>The IDP lists the following objectives:</p> <ul style="list-style-type: none"> <li>• To improve and maintain our roads and promote</li> </ul>	<p>The spatial projects highlighted in the IDP document should be incorporated and addressed in the District SDF</p>	<p>Spatial Projects and Proposals, Chapter 7 and plan 20.</p>
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## LOCAL MUNICIPALITY POLICY

	<p>effective and save transport for all</p> <ul style="list-style-type: none"> <li>• To deliver sound administrative and financial services, to ensure good governance and viability</li> <li>• To effectively plan to minimise the impact of disasters on the community, visitors, infrastructure and environment</li> <li>• To promote a safe, healthy environment and social viability of residents through the delivery of a responsible environmental health service.</li> <li>• To establish an inclusive tourism industry through sustainable development and marketing which is public sector led, private sector driven and community based.</li> <li>• To ensure a united integrated development path in a safe and sustainable environment.</li> <li>• To pursue economic growth opportunities that will create descent work.</li> <li>• To facilitate effective stakeholder participation.</li> </ul>		
Laingsburg/Matjiesfontein SDF	<p>The Laingsburg/Matjiesfontein SDF was compiled in 2011. The SDF highlights the following spatial strategies:</p> <ul style="list-style-type: none"> <li>• Urban, rural linkages between urban and rural</li> <li>• Walking distances</li> <li>• Functional integration</li> <li>• Socio-economic integration</li> <li>• Protect sensitive elements(such as rivers and wetlands)</li> <li>• Ensure basic services to all residents</li> <li>• Appropriate densification</li> <li>• Land use management (Spatial Planning Categories and Zoning Schemes)</li> </ul>	<p>Address linkages between towns especially linkages between urban and rural areas/towns.</p> <p>Ensure socio-economic integration of towns in the district area.</p> <p>Clearly define linkages and corridors between settlements.</p>	<p>Municipal linkages added under chapter 6.</p>

## LOCAL MUNICIPALITY POLICY

Beaufort West SDF	The relevant Beaufort-West SDF document was compiled in 2008. The credible SDF document for the town is underway and liaison will be undertaken between the two appointed consultants 9CNDV and AECOM) to ensure that the latest projects and information in for the area be contained in the district SDF.	To be aligned with the SKDM SDF document/proposals	Municipal linkages added under chapter 6.
Prince Albert SDF	The relevant Prince Albert SDF document was compiled in 2008. The credible SDF document for the town is underway and liaison will be undertaken between the two appointed consultants CNDV and AECOM) to ensure that the latest projects and information in for the area be contained in the district SDF.	To be aligned with the CKDM SDF document/proposals	Municipal linkages added under chapter 6.

### 2.5 Adjacent District Policy

## ADJACENT DISTRICT POLICY

Namakwa District Spatial Development Framework (2012)	The northern boundary of the Western Cape abuts the Namakwa District Municipality. The WC PSDF identified Core Areas (2: Ecological Corridors) and Transport Corridors that link the Namakwa District and the Western Cape Province.	The Karoo Hoogland Spatial Development Framework highlights the following that should be taken into account: <ul style="list-style-type: none"> <li>Calvinia – Williston – Carnarvon and Sutherland Matjiesfontein N1 routes are identified as transport corridors.</li> </ul>	Economic and Transport Linkages highlighted on plan 19.
Cape Winelands District Municipality, SDF	The Cape Winelands SDF provides high order spatial planning policy for the District. Broad spatial planning categories are defined as well as 3 bioregional clusters (A, B & C). The C cluster adjacent to CKDM is under consideration for renewable energy initiatives and the implementation of rural development programmes	Breede Valley Municipality proposes starter land reform projects such as olive farming in the Touwsriver area adjacent to CKDM. LED initiatives that pulls economic activity from the N1 corridor is proposed.	Economic and Transport Linkages highlighted on plan 19.
Eden District Municipality SDF,	Eden District is in the Western Cape and located on the	Spatial Proposals for the CKDM to be	Economic and Transport

## ADJACENT DISTRICT POLICY

2009	<p>southern boundary of Central Karoo District Municipality.</p> <p>The Eden District Municipal Integrated Development Plan 2007 – 2011 establishes the following objectives for the Eden District Municipality.</p> <ul style="list-style-type: none"> <li>• Conservation of natural resources and assets</li> <li>• Sustainable resource management</li> <li>• Promotion of sustainable agricultural practices</li> <li>• Good rural and urban design and land use practices</li> <li>• Supporting and developing projects to enable people-centred development</li> </ul> <p>The following main issues and trend are highlighted in the SDF document:</p> <ul style="list-style-type: none"> <li>• Recurring natural disasters</li> <li>• Pressure for the development of agricultural and forestry landscapes</li> <li>• Development pressure in agricultural and urban areas</li> <li>• Competition between local municipalities for investment</li> <li>• Inappropriate “rural” development</li> <li>• Poor access of rural communities to services and facilities</li> <li>• Competition between maintenance and new infrastructure costs</li> <li>• Poor secondary network of routes</li> <li>• Uncertainty with regards to the timing and alignment of the proposed N2</li> <li>• Uncertainty with regards to the future use of the railway lines</li> </ul>	aligned with spatial proposals within the Eden District area, especially with regard to transportation and main transport corridors linking the district areas.	Linkages highlighted on plan 19.
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## ADJACENT DISTRICT POLICY

	<ul style="list-style-type: none"> <li>• Insufficient access to the Eden District (airport and harbour)</li> <li>• Need for more job creation in the primary economic sectors</li> </ul>		
Cacadu District Municipality, 2009	<p>The CDM faces the situation where the demands and expectations of its community and stakeholders far outweigh its resources and therefore the CDM has to adopt a planning philosophy that seeks to identify how to appropriately allocate scarce resources, which by implication dictates that :</p> <ul style="list-style-type: none"> <li>• The most important need is for local government to supply basic services to its entire community.</li> <li>• Resources should next be allocated where they will be the most effective and the most beneficial as viewed from a District wide perspective.</li> </ul>	Spatial Proposals for the CKDM to be aligned with spatial proposals within the Eden District area, especially with regard to transportation and main transport corridors linking the district areas.	Economic and Transport Linkages highlighted on plan 19.
Pixley ka Seme District Municipality, 2009	<p>The Pixley Ka Seme District borders the Central Karoo District to the north- east.</p> <p>The following key regional spatial issues were identified as the basis to be address by the spatial development framework.</p> <ul style="list-style-type: none"> <li>• Access to land</li> <li>• Land development</li> <li>• Spatial integration</li> <li>• Sustainable land management</li> <li>• Proper distribution network</li> <li>• Land reform and restitution</li> <li>• Land conservation</li> <li>• Water resource challenges</li> </ul> <p>The following development challenges were identified by</p>	Spatial Proposals for the CKDM to be aligned with spatial proposals within the Pixley ka Seme District area.	Economic and Transport Linkages highlighted on plan 19.



## ADJACENT DISTRICT POLICY

the SDF:

- Lack of diversification of the district economy;
- Lack of investment in the region;
- Lack of employment opportunities;
- Rising level of poverty;
- Geographically imbalanced settlement structure;
- Lack of skills;
- Lack of entrepreneurship;
- Small number of SMME's active in the region;
- Underutilization of the regions natural resources and economic opportunities; and
- Lack of water for irrigation.
- Development corridors have been identified along the:
  - N1
  - N10
  - N8
  - N12
- Orange River (irrigation)

### 3. Situational Analysis

#### Chapter 3

This section provides a description and overview of the key aspects and characteristics of the Central Karoo District Municipality. This includes the historical, ecological, biophysical and socio-economic characteristics, which collectively shape the cultural and natural landscapes of the CKDM area and represents its intrinsic, systemic and instrumental values.

#### 3.1 Bio-Physical Environment

##### 3.1.1 Climate

##### **Rainfall**

The semi desert conditions which prevail within the Central Karoo are a result of the harsh arid climate<sup>1</sup>. The average annual rainfall for the district is 260 mm per annum. The highest rainfall occurs to the south with the Groot Swartberg mountain range receiving 500 – 700 mm pa<sup>2</sup>. Approximately 75% of the remaining region received less than 200 mm. The majority of the rain falls during the summer months of November to May; however it is not uncommon for rain to fall throughout the year, particularly the far western portion of the District which experiences almost exclusively winter rainfall (Refer to **Plan 2**).

##### **Temperature**

The mean annual temperature of the district ranges between 0°C in winter (June and July) and 37°C in summer (January). Heat wave conditions are common during summer inducing temperatures in excess of 40°C. Frost is common throughout the entire district with severe frost occurring at the higher altitudes. (Refer to **Plans 3.1 & 3.2**)

##### **Wind**

The predominant wind direction for the District is from the East. The three other common wind directions are West, West-North-Westerly and South-South-West. Easterly winds are of a lower velocity whilst westerly winds tend be of increased velocity.

##### **Climate Change**

Climate change is expected to produce higher temperatures with lower rainfall<sup>3</sup>. Wind velocities are also expected to increase<sup>4</sup>. These conditions will result in a reduction in Karoo vegetation with a potential increase in fires. Additionally, agriculture is expected to be negatively impacted with a decline in productivity and yield, resulting in a potential economic downturn in the region.

The National Climate Change Resource Strategy (2004)<sup>5</sup> identified that desertification would pose a significant threat to the following sectors:

- Agriculture;
- Energy;

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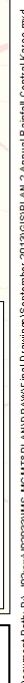
<sup>1</sup> Agricultural Geo-Referenced Information System.

<sup>2</sup> <http://worldwildlife.org/ecoregions/at1203>

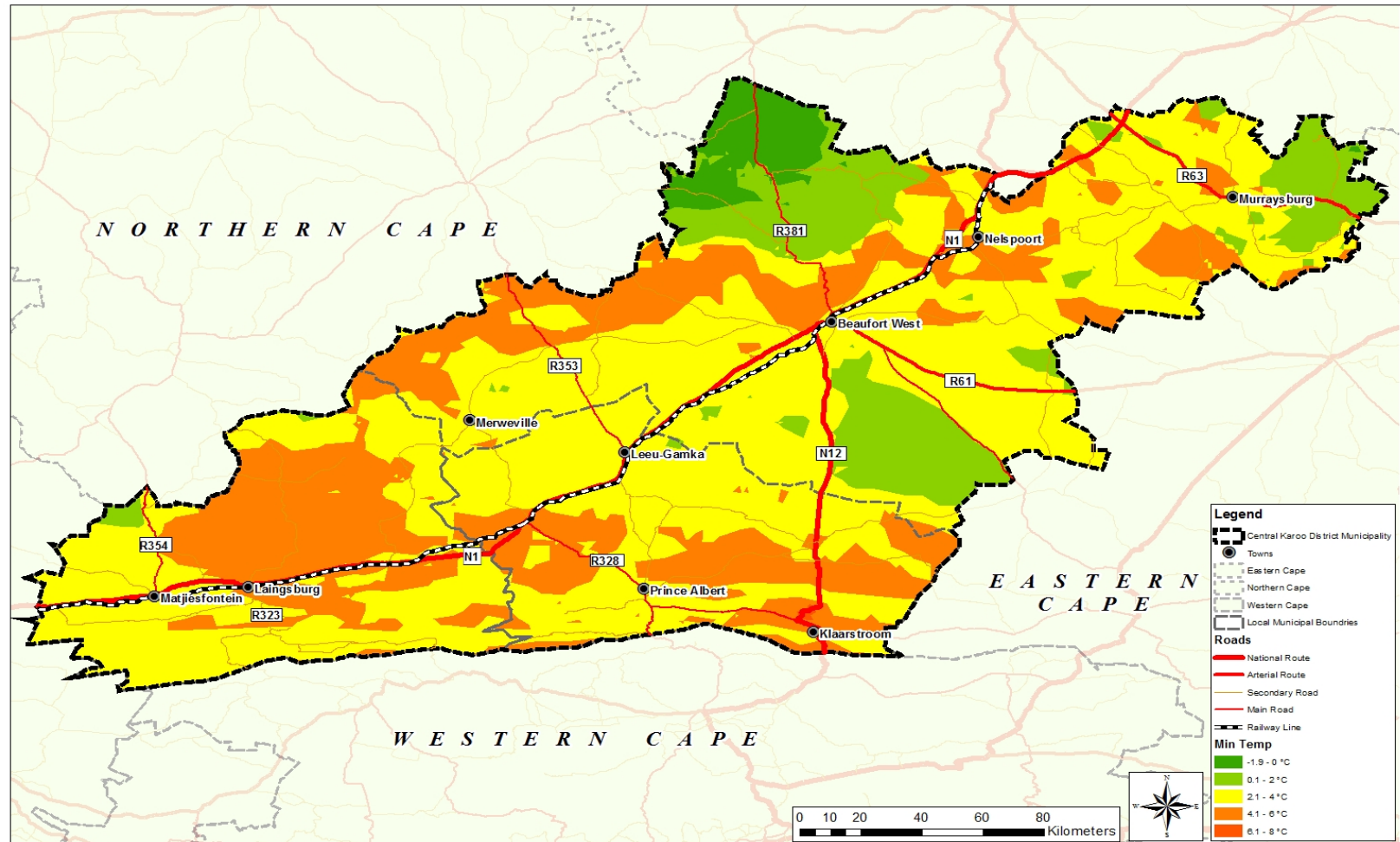
<sup>3</sup> CKDM IDP 2012-2017

<sup>4</sup> BWB: Comprehensive Infrastructure Plan – Bulk Water and Sanitation.

<sup>5</sup> CKDM Last Review for 2007-2011: IDP 2010-2011



PLAN 2  
OCTOBER 2013



**AECOM**

# CENTRAL KAROO DISTRICT MUNICIPALITY - ANNUAL MINIMUM TEMP

Source : Demarcation B, ENPAT

**PLAN 3.1**  
**OCTOBER 2013**

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Source : Demarcation B, ENPAT

www.aecom.com

- Transport; and
- Water resources.

The Climate Change Strategy predicts that the Western Region of Southern Africa would become significantly hotter and drier. It is projected that within the next 50 to 100 years, only the hardiest flora would be able to survive in the increasingly arid climate.

### 3.1.2 Topography and Slopes

The majority of the district consists of gently undulating plains, however, several mountain ranges provide for a dramatic contrast as illustrated on **Plan 4** and **Plan 5** in the following pages. The Swartberg mountain range in the south of the district provides a natural barrier between the interior and the southern Cape coast. This range, one of the longest in South Africa, spans some 230 km from Laingsburg in the west to Willowmore and Uniondale in the east. The highest peak within the range is the Seweweekspoort at 2,325 m above mean annual sea level (amasl). This range of mountains comprises predominantly of the Table Mountain group, boasting many impressive sand stone strata and rock formations. This mountain range was once considered almost impenetrable, but between 1881 and 1888, the Swartberg pass was built by Thomas Bain. Subsequently two other passes have been constructed, namely the Meiringspoort and Seweweekspoort.

The Nuweveld Mountain range to the north of Beaufort West ranges between 825-1,911 m. Toorberg to the south of Murraysburg forms part of the Sneeuberg range which is the divide between the Central Karoo and the Eastern Cape. The peak is 2,400 metres amasl. Toorberg is known for its many watercourses, fed from annual winter snowfalls.

### 3.1.3 Geology and Soils

The district's geology comprises of Beaufort, Bokkeveld, Dwyka, Ecca, Table Mountain and Witteberg Groups, resulting in shallow sandy soils of low fertility. Higher lying areas usually comprise of hard or weathering rock. Alluvial soils are found predominantly in the valley bottoms. **(Refer to Plans 6, 7.1 and 7.2).**

### 3.1.4 Water Resources

Four water catchment areas (illustrated in **Plan 8**), namely Berg River, Fish River to Tsitsikamma, Gouritz and Lower Orange Water Management Areas<sup>6</sup>, exist within the district. Riparian ecosystems within the district, due to their proximity to water, have largely been transformed for agricultural related activities. Based on the National Protected Areas Expansion Strategy (NPAES) freshwater priorities<sup>7</sup>, the district has 6399 km of major river reach, of which 1748 km can be considered critically endangered (27%) and 201 km (3%) endangered. Of the 249 sensitive wetlands identified, 107 comprise vlei type wetlands, 85 pans and 55 dam wetlands<sup>8</sup>.

As a result of the arid climate and the soils inability to hold water, the only notable dams within the district are:

- Floriskraal Dam situated near Laingsburg and serving the needs of the Little Karoo;
- Gamkapoort Dam situated near Prince Albert and serving local agricultural needs;
- Leeu-Gamka Dam situated between Beaufort West and Laingsburg and serving local agricultural needs; and
- Oukloof Dam situated near Prince Albert and serving local agricultural needs.

The Central Karoo is known for its erratic rainfall and also for its adversely hot and dry climate. Most of its rainfall occurs in the summer during the months of February to April. The dry climate and erratic rainfall leads to surface run-off in the

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6 Western Cape Integrated Water Resources Management Action Plan. 2011.

7 National Protected Areas Expansion Strategy for South Africa 2008. Priorities for expanding the protected area network for ecological sustainability and climate change adaptation

8 Central Karoo Biodiversity Assessment – Final Report 27th August 2009

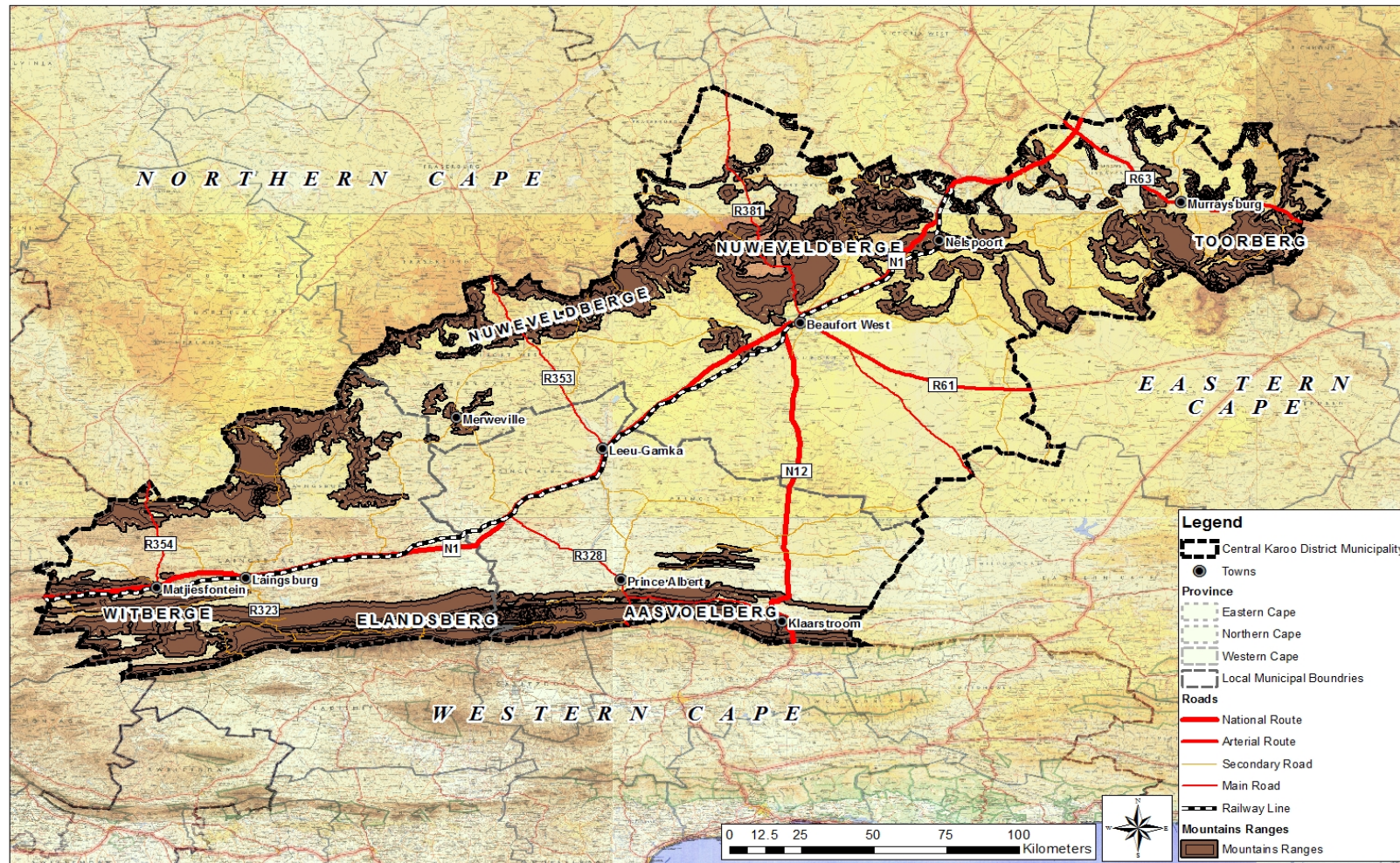
form of flash floods which fill up the usually empty dams. Due to the scarce precipitation and subsequent surface run-off ground water sources is the primarily use for the supply of potable water. Refer to **Error! Reference source not found.** or the mean annual precipitation (MAP).

**Table 3-1: Mean Annual Precipitation**

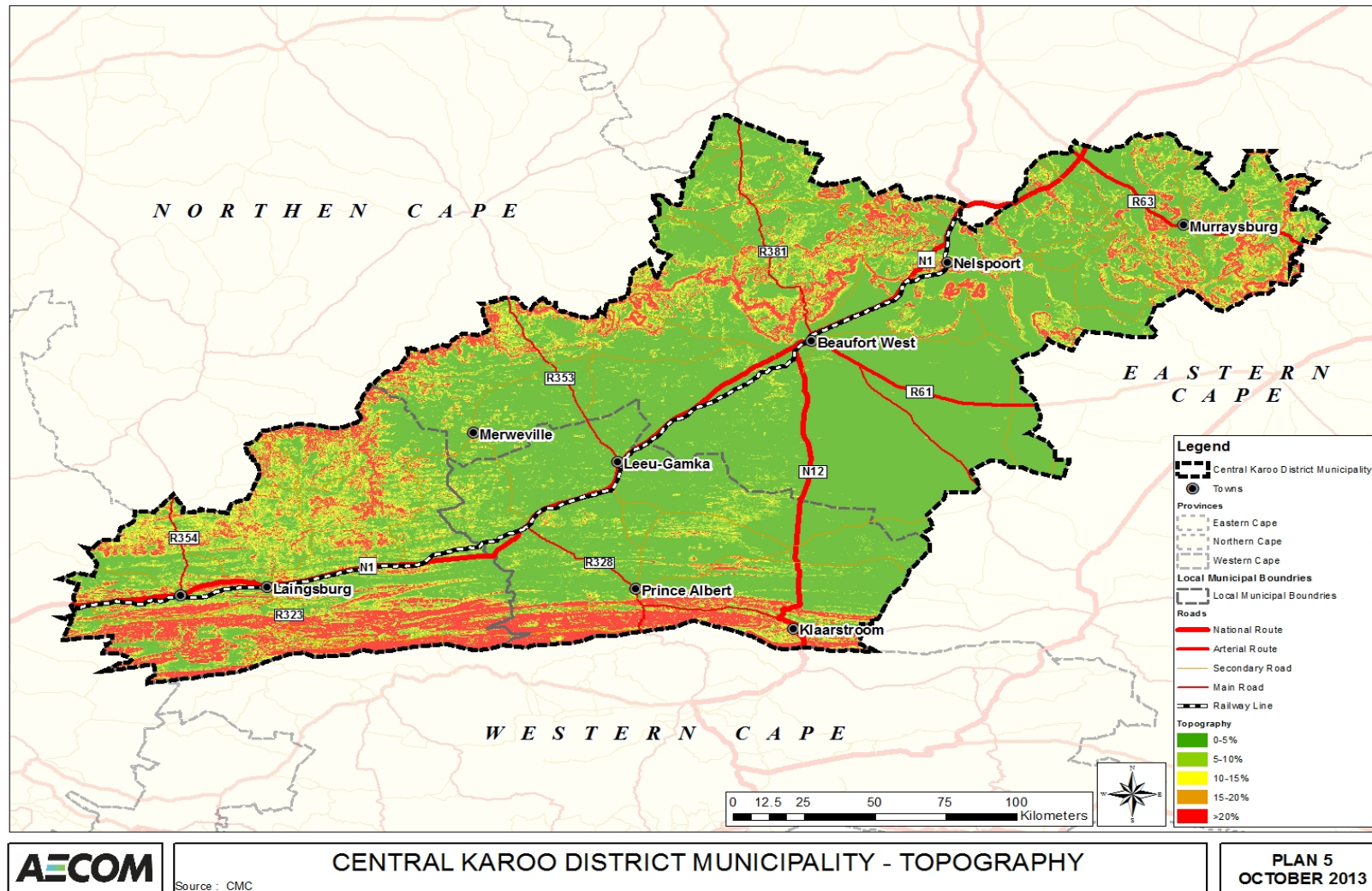
MEAN ANNUAL PRECIPITATION (MAP)		
	MIN (mm/a)	MAX (mm/a)
Beaufort West Municipality	141	215
Prince Alfred Municipality	107	169
Laingsburg Municipality	121	165
Murraysburg	-	289

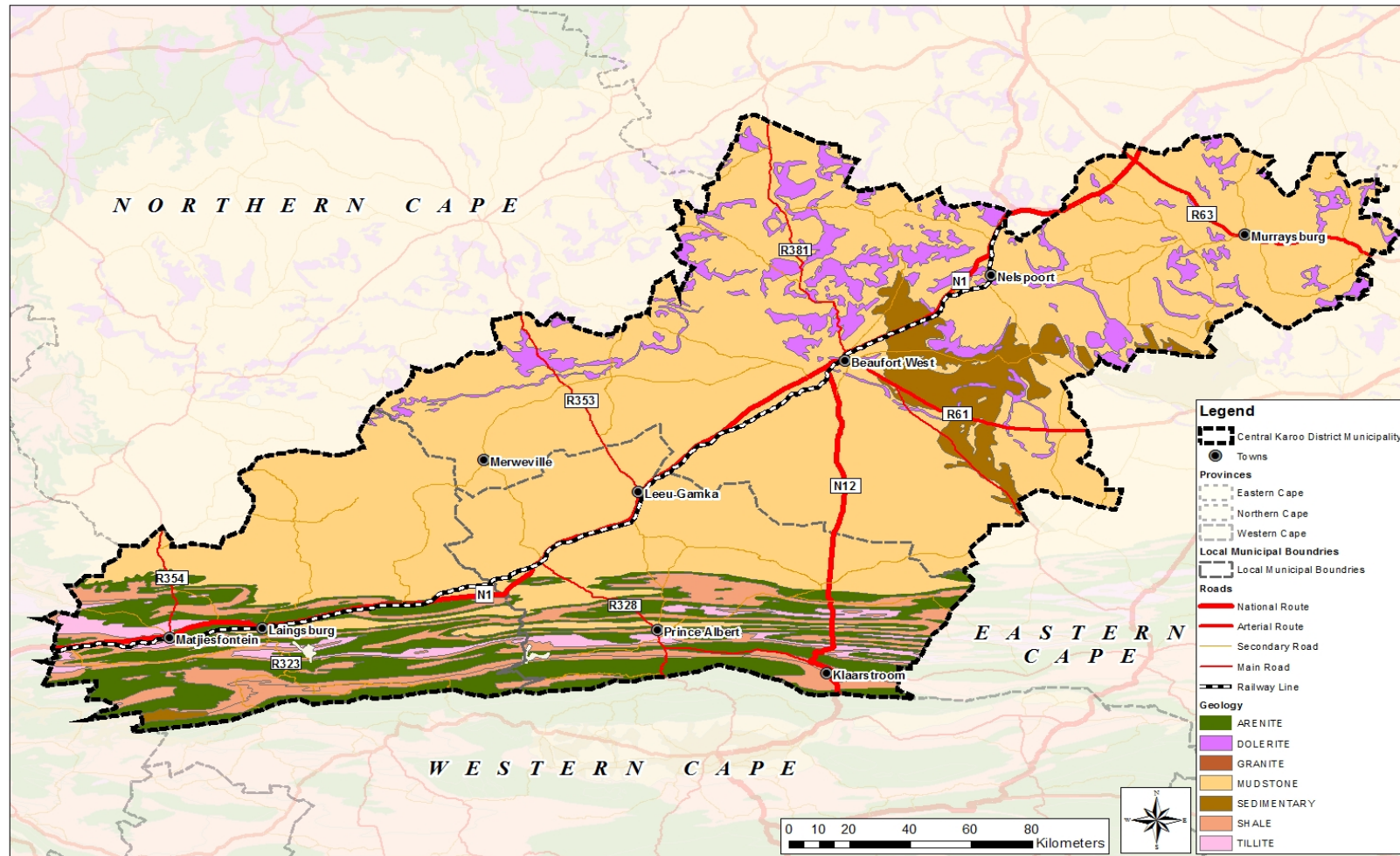
Below find a summary of the current water requirement and supply for the local municipalities within the Central Karoo District Municipality as indicated the Development of Reconciliation Strategies for all *Towns in the Southern Planning Region, Summary Report, Central Karoo District Municipality – Final (October 2011)*.











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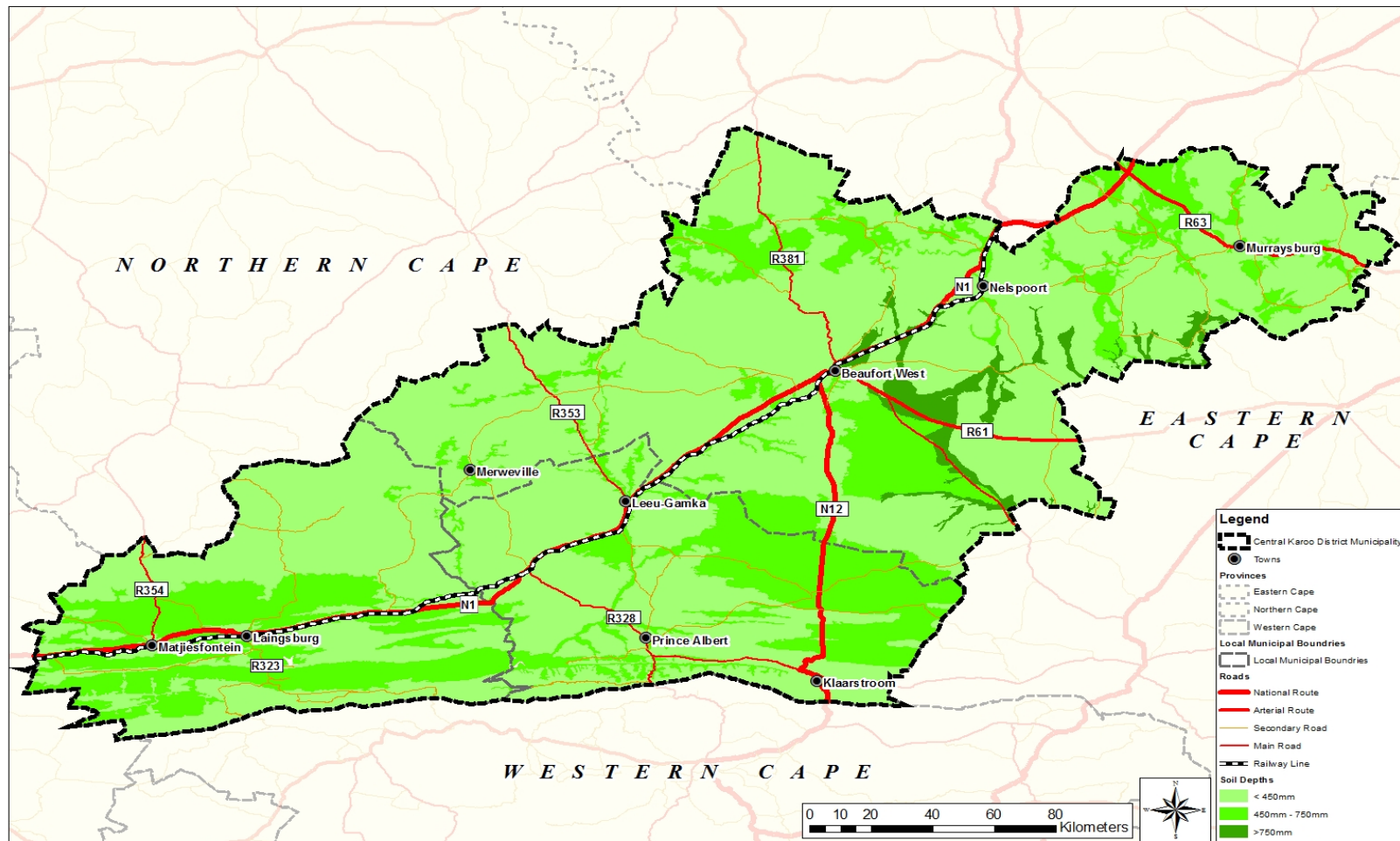
Source : DWAF

## CENTRAL KAROO DISTRICT MUNICIPALITY - GEOLOGY

**PLAN 6**  
**OCTOBER 2013**







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**AECOM**

Source : ENPAT/CMC

## CENTRAL KAROO DISTRICT MUNICIPALITY - SOIL DEPTHS

**PLAN 7.2**  
**OCTOBER 2013**



**PLAN 8**  
**OCTOBER 2013**

### 3.1.5 Biodiversity

In terms of The National Land Cover 2000 model, an estimated 88% of the district comprises natural vegetation, 10.4% is considered degraded whilst 1.5% is transformed by urbanisation, cultivation, mining and dams.

The predominant natural vegetation comprises the semi desert Nama-Karoo Biome<sup>9</sup>. Other biomes noted within the district include: Albany thicket to the east, Fynbos in the southern mountains; grassland on the high altitude slopes of the north east and the succulent Karoo to the south west. Azonal vegetation allied with the drainage lines occur throughout the district. Refer to **Plan 9**.

**Table 3-2: Extent of Biodiversity in Central Karoo District**

Biome	Central Karoo District (ha)	Percentage (%)
Albany Thicket Biome	41,661	1.1
Azonal Vegetation	208,184	5.3
Fynbos Biome	360,804	9.3
Grassland Biome	14,765	0.4
Nama-Karoo Biome	2,745,773	70.7
Succulent Karoo Biome	513,063	13.2
<b>Grand Total</b>	<b>3,884,250</b>	<b>100</b>

This has resulted in 136 habitat types being delineated within the district, culminating in 29 vegetation types with 126 threatened plant species.<sup>10</sup> These plant species are indicative of at least three (3) vegetation types being threatened.<sup>11</sup> Refer to **Plan 10** for the vegetation.

**Table 3-3: Status of the Karoo Vegetation**

Karoo Vegetation	Status	Hectare
Buffels River and Floodplain	Endangered	3,084 ha.
Constabel Apronveld	Critically Endangered	4,463 ha.
Gamka River and Floodplain	Vulnerable	1,411 ha.

From a faunal perspective, 16 species of amphibian, 305 species of birds, 233 species of butterfly and 101 species of reptile have been noted within the District. Habitat diversity is the richest within the south-western portion of the District in the Laingsburg Municipality, with a large proportion of the District being designated as Critical Biodiversity Areas (CBA's). (The CBA's have been categorised in terms of core, buffer, agricultural and urban areas). **Refer to Plan 11**.

### 3.1.6 Conservation

Protected areas within the district comprise 207,917 ha (5.78% of the district), with an additional 9,077 ha (0.23% of the district) under conservation. These protected areas provide varying protection levels (in terms of formal national conservation targets) within the district, namely:

- 1 vegetation type is partially protected;
- 3 are poorly protected;

<sup>9</sup> Central Karoo District Municipality Draft EMF Status Quo Report.

<sup>10</sup> Central Karoo Biodiversity Assessment – Final Report 27th August 2009

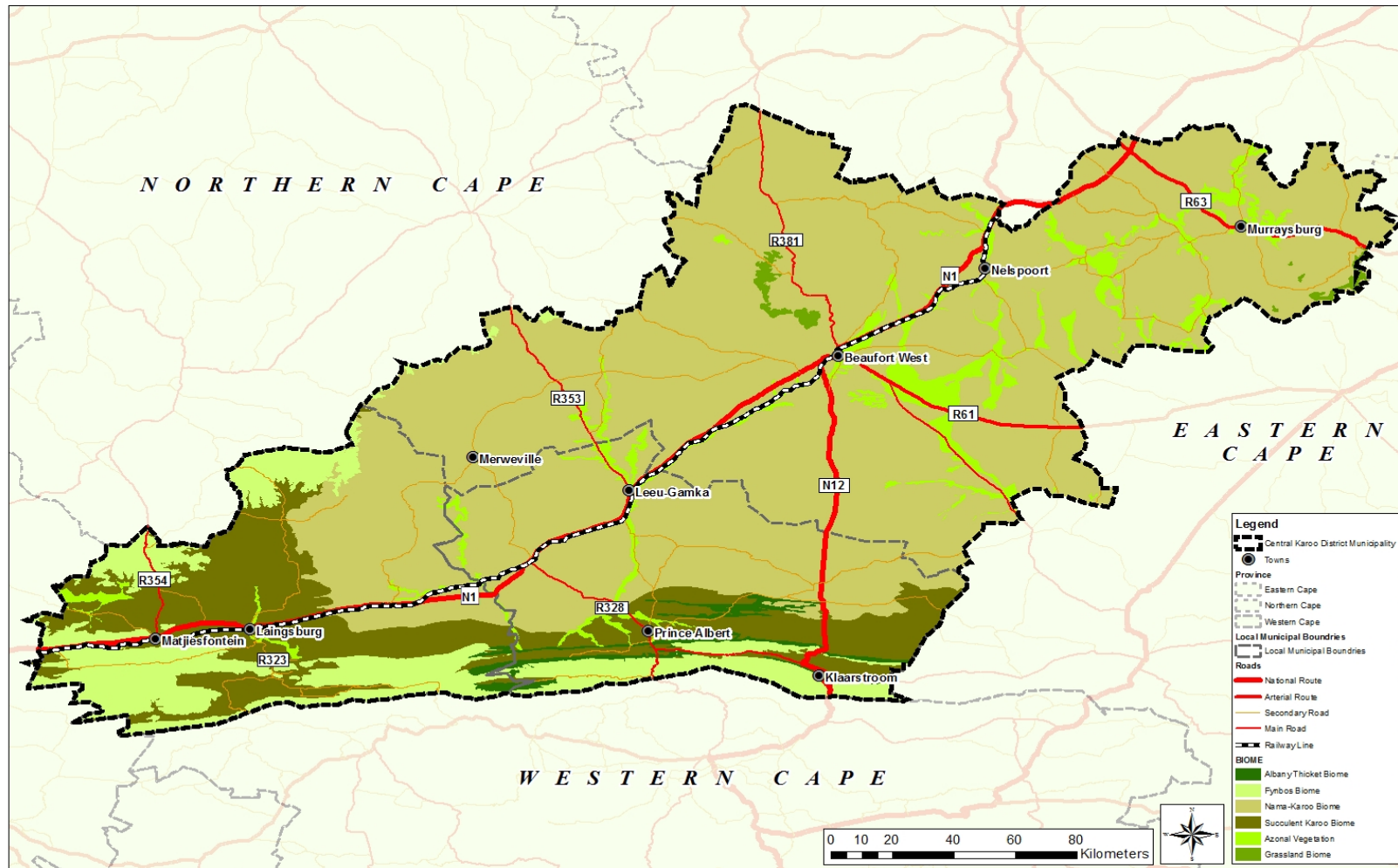
<sup>11</sup> CKDM IDP 2012-2017



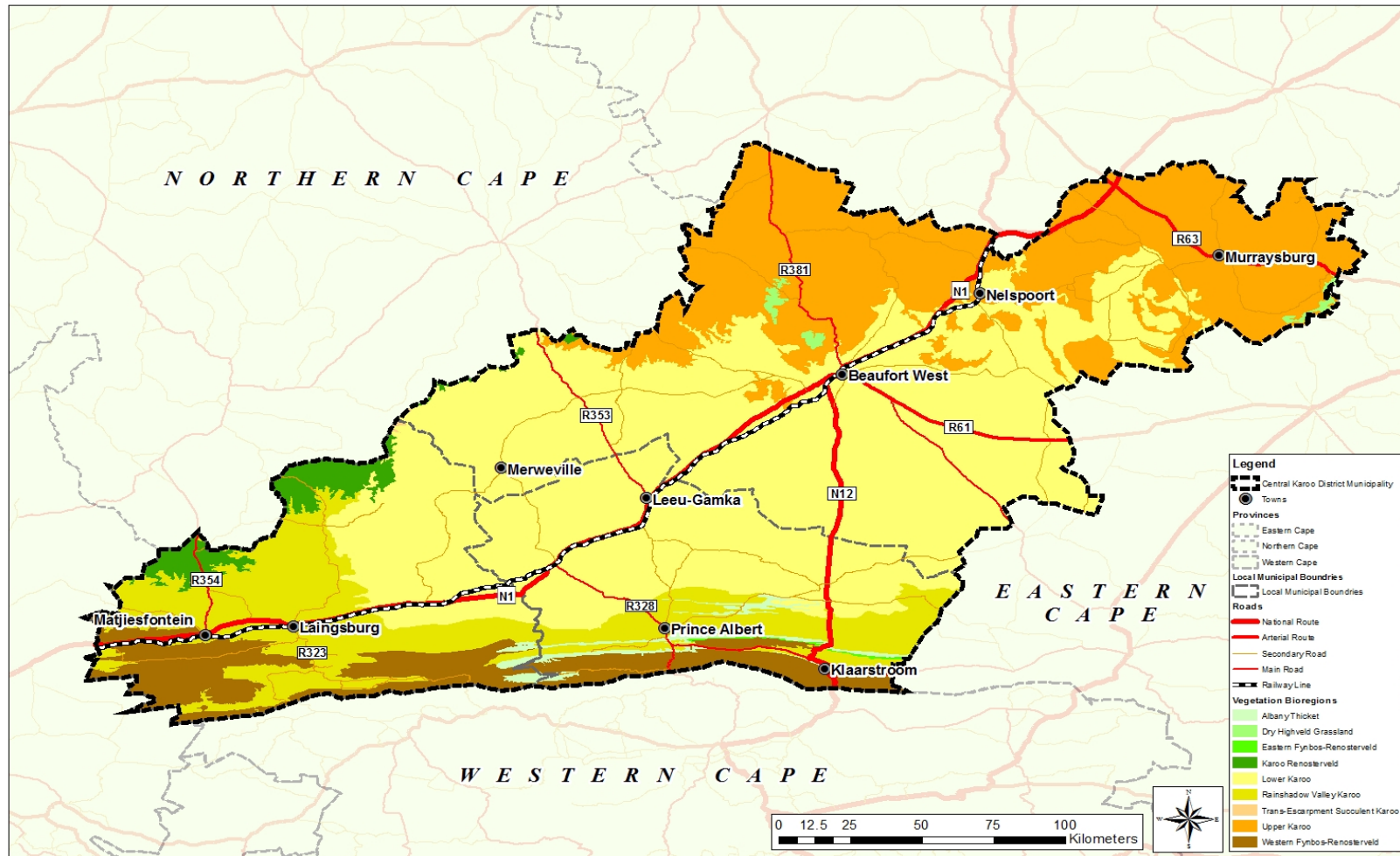
- 8 are very poorly protected;
- 24 have achieved targets in the protected areas network; and
- 100 are not represented within the protected areas network.

The following protection and conservation areas (**illustrated on Plan 12.1 and Plan 12.2**) are present within the district:

- Karoo National Park
- Anysberg Nature Reserve
- Gamkapoort Nature Reserve
- Gamkaskloof Nature Reserve
- Groot Swartberg Nature Reserve
- Swartberg East Nature Reserve
- Towerkop Nature Reserve
- Klein Swartberg Mountain Catchment
- Steenbokkie Private Nature Reserve
- Wolwekraal Nature Reserve
- Drie Riviere Natural Heritage Site







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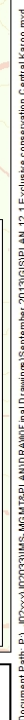
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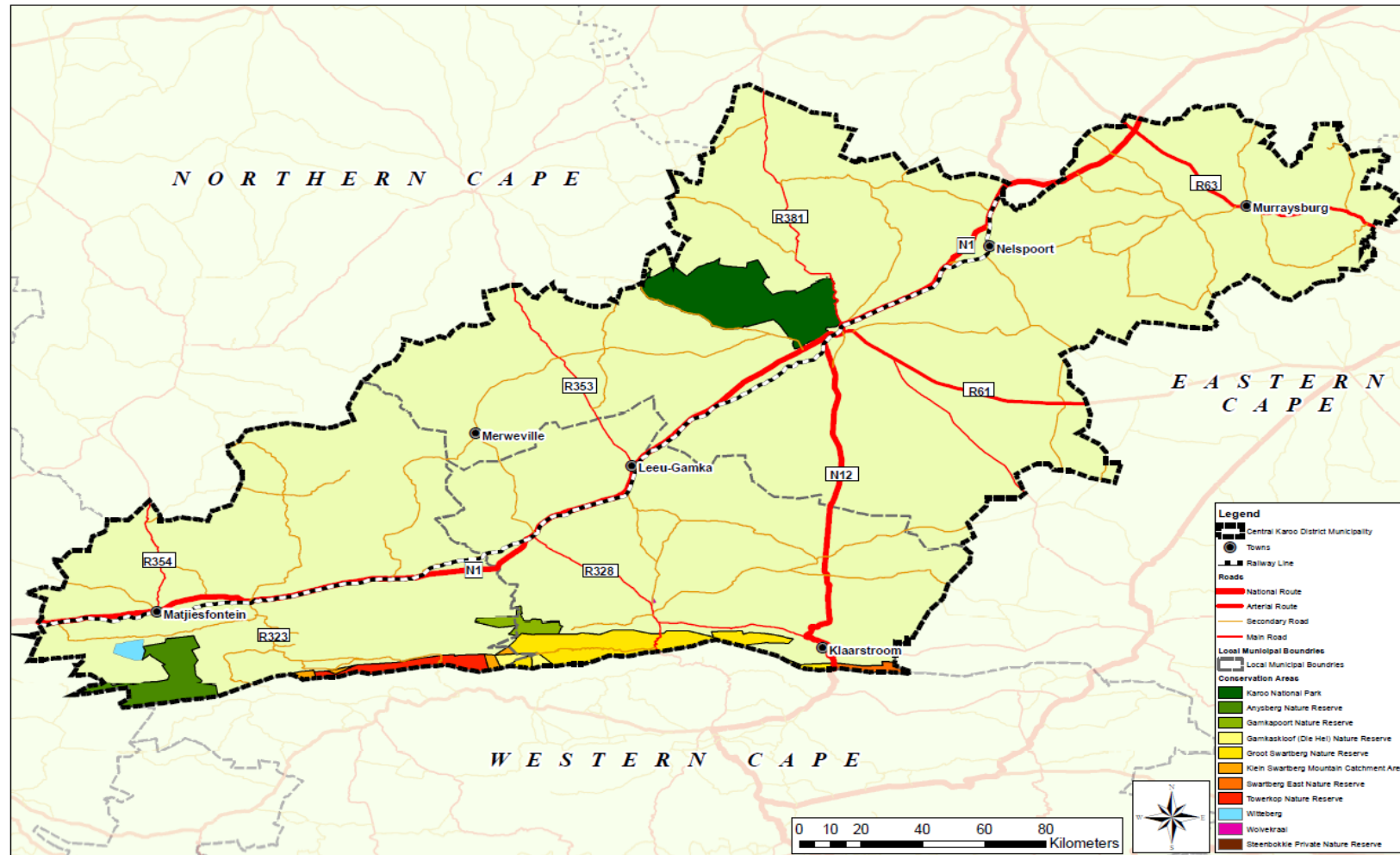
## CENTRAL KAROO DISTRICT MUNICIPALITY - VEGETATION

**PLAN 10**  
**OCTOBER 2013**









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**CENTRAL KAROO DISTRICT MUNICIPALITY - CONSERVATION AREAS (NATURE RESERVES)**

Source: SANBI

**PLAN 12.1  
OCTOBER 2013**

### 3.1.7 Agriculture

#### **Livestock Farming**

The predominant agricultural practice within the district is small stock farming dominated by sheep farming. Breeds favoured include Angora, Boer, Dorper and Merino. However, small scale cattle and ostrich farming also occur. The vegetation of the district provides good grazing whilst sufficient groundwater is accessed via wind pumps. Farms, however, have to be large to provide sufficient carrying capacity for viable livestock practices. Overgrazing is a concern but does not occur on a wide-spread level; severe overgrazing usually occurs on commonage land near the District's main urban settlements. Furthermore, supplementary feeding of livestock is essential during periodic drought periods. The Laingsburg municipal area has the highest grazing capacity at 7.3 hectares per small stock unit (ha/SSU) followed by Prince Albert at 6.0 ha/SSU.

#### **Rain-fed Cultivation**

Rain-fed cultivation (wheat) occurs in a limited capacity in the south-western corner of the District Municipality area; however the low protein content of the wheat, the variability of rainfall and high input costs limits the expansion thereof.

#### **Irrigated Crops**

Irrigated crops are prominent in the southern regions of the District. The main crops are apricot, olive and wine grapes with smaller plantings of peach, pear, prune, quince and table grapes. Annual crops are mostly vegetable seed of which onion seed dominates. Significant areas under lucerne also occur here. Olive plantings are primarily found at Leeu-Gamka and Prince Albert. Dried apricot is a major agricultural product of the Vleiland and Prince Albert areas whilst small plantings of pear, quince, prune and peach also occur (Refer to Plan 12). The main constraints to irrigated crop production in this region is poor road infrastructure for the transport of delicate and fresh produce, distance to the market, availability and quality of water supplies and the reliability of labour.

#### **Agricultural Economy**

The agricultural sector's share of the District economy showed decline between 1999 and 2009 from 15.4% to 9%. This may be as a result of a move from agricultural to tourist and leisure activities as well as deteriorating economic and market conditions for agricultural products. Agri-processing and agri-business opportunities should be further assessed to increase the current 9% agriculture contribution to the district's GDP. **(Refer to Plans 13.1 and 13.2).**

## **SESSION 6: Be lifted as you yield unto Him**

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Greetings to you dear Dance Minister

I pray you are well, and blessed on this Monday! No blueness, as you walk in victory.

In the previous assignment, you had the song “I am in love with the King” you had to minister in the closet time, not to be submitted as such. I pray in that quiet time, you found a new movement, as God moved with you; or you came to new insights in something about you and God. Either way, I pray it blessed you. I also took this song to the closet, and as I danced, I just felt God’s presence brush over me – I thought afterwards, this is not even close to what Moses experienced there on the mountain and it was a ‘wow’ already to me! I hope you had an awesome time with the King.

Then, I gave you a surprise also... Did you get the first two chapters to the e-book “Where are the dance ministers?” I send it late last week? Hope you were elevated by it, and that I made your day.

Let us start today by first praying: “Abba Father, our heavenly father. We stand in Your presence as dance ministers, in anticipation. We are because of you: Nothing out of our own strength or own wisdom. Thank you that we can rest in You, and know that you have us covered and sorted according to your purpose for our lives. We say thank you for what we could accomplished to date, even through this programme. I pray that You are glorified through it, that You are exalted and Your Name is established on earth. Came and take pleasure in this session, as You dwell with us. Be exalted in what we share, and the knowledge we gain. Amen!”

## **1. LECTURE**

The dance ministry and life too, has its ups and downs, and we thank God that in those moments we can call on Him, and depend on Him. Living in obedience with Him, it becomes easier to deal with those ups and downs. Whether it be in those ups or those downs, we can releve (lift ourselves in prayer) unto Him, or that we go down and wait on Him to direct us. In both instance, this means, in faith we take that bold leap “jete”, standing on God’s promises to fulfil His request so that He can be glorified.

Today, lets look at the below scriptures.

- Psalms 3:3 - But You, O LORD, are a shield about me, My glory, and the One who lifts my head.
- Kings 14:7 - "Go, say to Jeroboam, 'Thus says the LORD God of Israel, "Because I exalted you from among the people and made you leader over My people Israel,
- Psalms 145:14 - The LORD sustains all who fall And raises up all who are bowed down.
- Psalms 30:1 - I will extol You, O LORD, for You have lifted me up, And have not let my enemies rejoice over me.

You will notice, each of them refers to being down, and then also to being lifted by God. I want to link this scripture to being **elevated**.

The Greek word underpinning elevated/lifted is extol which means “elevate make exceedingly high, ie to a very high degree; greatly exalt, **extol, to make or declare great**” as well as “enlarge, and to magnify, as to exalt beyond measure”. To the contrary, the Hebrew word from where the root is taken is rum (to be high or exalted/rise) and salal (to be lifted up, cast up), and nansa (to lift, carry or take).

In our dance we make God great, not only through our willing hearts, but also through our movements. Firstly, through big and lavish movements as we consider the space we are moving in. Then secondly, the turns and leaps are not in shyness, but we go foolishly forward as we decree and declare His greatness. We undertake this in boldness and confidence as we praisefully make His name great. And lastly, we lift ourselves, as God raises us up, as we remember how He prevailed for us.

Today, we will focus on two terms used in the dance ministry/ballet, i.e. releve vs plie.

- Releve refers “to be lifted of the ground”, to rise higher and higher.
- Plie means to “bend, go down, or to yield”

But in taking the leap, it can only go as high as how deep we do our plie (to bend/yield). As we bend in total obedience unto Him, following His willing as we want to please him in a worship/reverence manner, we notice that God is not only to do more through us, but also shifting us to another/deeper level.

There are two kinds of plies; i.e.

- Demi-plie: this is a half bend, and the skill lies in the bending the knees.
- Grand plie: this is a total bend, with heels of the ground, and the skill lies in straightening the back/centre your core.

<ul style="list-style-type: none"> <li>• <b>Plie (or Demi Plie) refers to bending of knees, without raising your heels off the floor.</b></li> <li>• Plie always starts with a turned out position.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Releve: A ballet move in which a dancer come up on the tips of their toes (demi-pointe or pointe).</b></li> <li>• The main focus of releve is rising up and up and up.</li> </ul>
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<ul style="list-style-type: none"> <li>• During bending, knees should be rotated completely backwards.</li> <li>• Back should be held completely straight.</li> <li>• Demi plies can be performed in all five basic positions: First, Second, Third, Fourth and Fifth.</li> <li>• Grand Plie refers to bending of knees, allowing the heels to rise off the floor. Keep your hips over your thighs.</li> </ul>	<ul style="list-style-type: none"> <li>• Repeated work of releves will strengthen your calves and ankles, providing stability during pointe.</li> </ul>
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We all know the song “Bent me lower, Holy Spirit, lower down, to Jesus feet. ‘till my body, soul and spirit, be a sacrifice complete.” We sing this song so willingly, but do you see the deeper meaning of it? It requires our spirit and soul submitting so that our obedience is a sacrifice unto Him... a sweet fragrance?

To take that **leap** through the sky; with straight legs, a neat turn out and ending in a **balance manner** back on the feet, takes practice and practice and practice, until we do it in excellence. Starting small, and with consistence, we are able to improve on our skill and deepen our relationship with Him. For us to become more, we need to have more of Christ operating in us. Through His spiritual impartations, this manifest in the physical, material, financial, etc.

## 2. Assignment (due to be submitted)

As we look at our skill and dance technique, let’s focus on these two ones. If you can, you may add a jete.

Find a song that range between 2 and 3 minutes that will allow you to implement these two techniques.

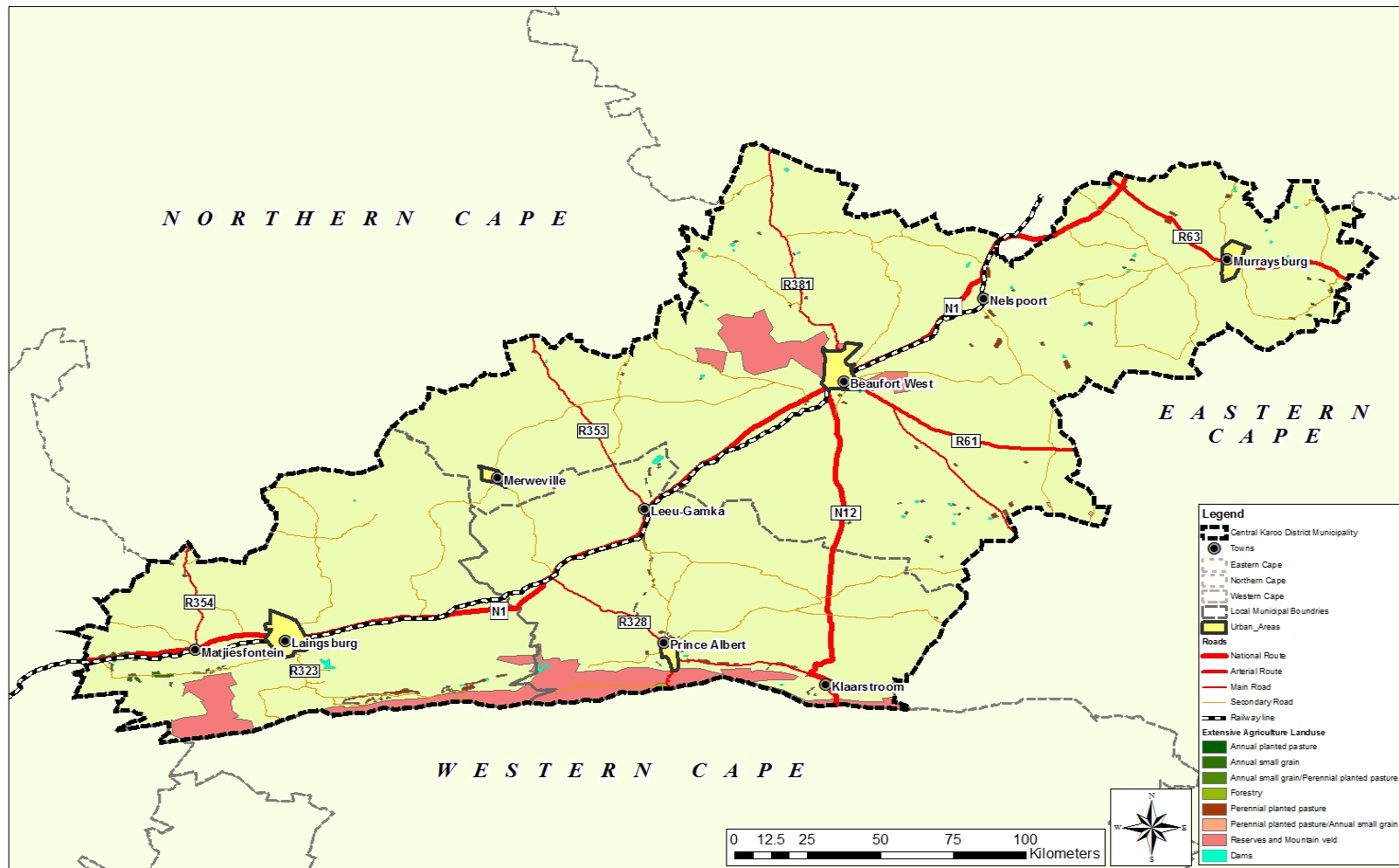
Make sure you include a demi-plie, a grand plie and a releve.

From hereon, try to implement this in your dance/choreography, as it adds depth to your dance.

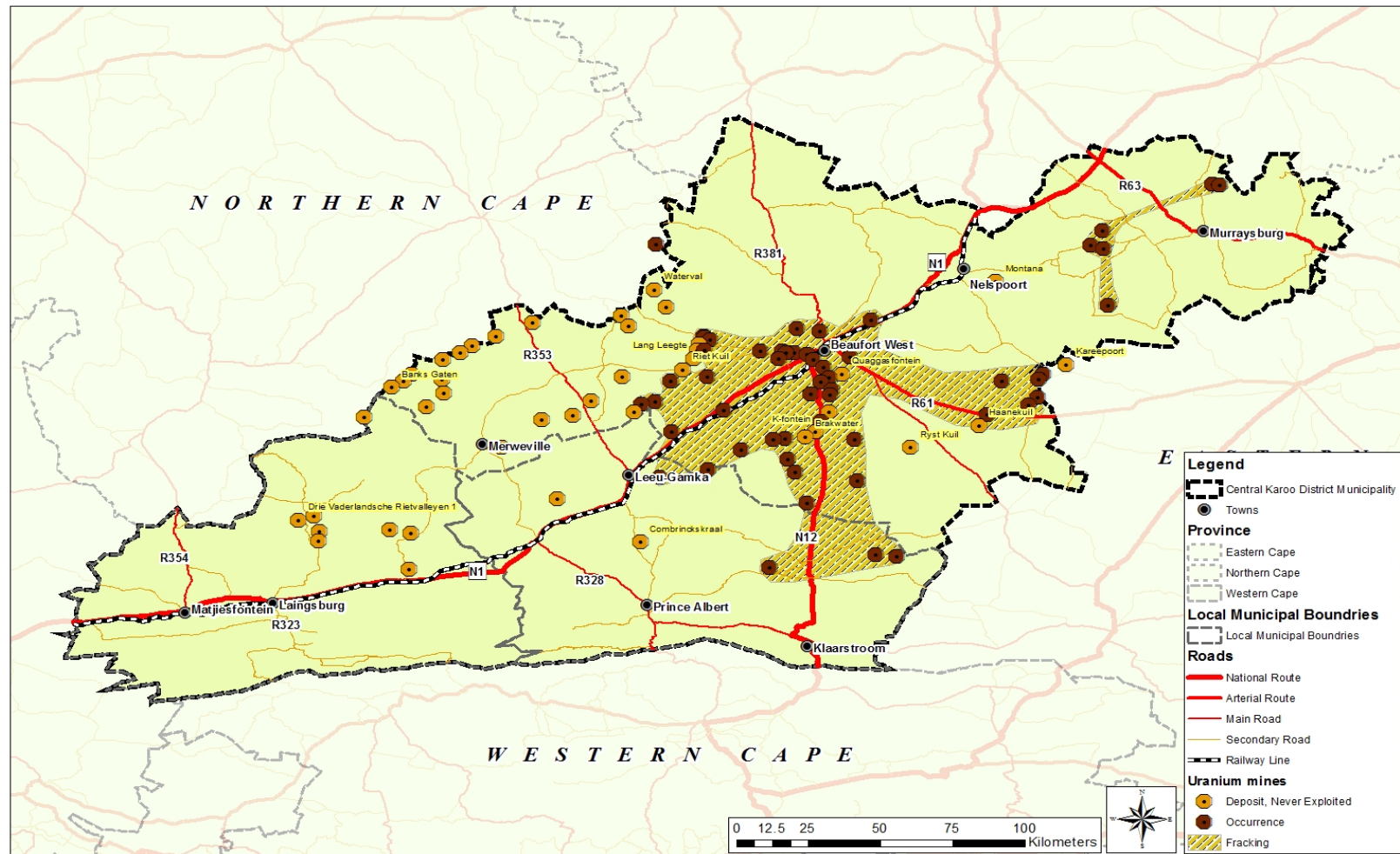
Please submit your recording by next week Monday, 16 February 2015? Shout if you need any assistance or further help. I am here to serve you.

Pray God's favour and presence to cover you as you have a blessed day and week further.





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## CENTRAL KAROO DISTRICT MUNICIPALITY - MINING & FRACKING

Source : Geosience

**PLAN 14**  
**OCTOBER 2013**

### 3.1.8 Implications for the SDF

The following are considered important considerations and informants to the biophysical environment of the Central Karoo District:

- Rainfall in the District is highest in the mountainous areas of the District. The plains are much drier and also receive the highest levels of radiation;
- Existing ecological water reserves and areas need to be protected and adequately monitored, particularly underground water resources;
- The current Protected Areas network is under representative of the District's biodiversity and should be expanded by 180,000 hectares to meet national targets;
- Areas and landscapes subject to severe climate change conditions need to be protected;
- The district comprises largely of poor soil conditions with extremely scarce arable land for intensive agricultural activities. Crop production is primarily found in the Prince Albert municipal area and along river systems and the mountains to the south of Laingsburg. All arable land for crop farming should be protected from all other uses and activities;
- In order to increase stock carrying capacity and improve biodiversity, proper and sustainable veld management practices need to be promoted on farms;
- Existing protected areas should be enlarged where appropriate particularly in respect of riverine areas for the protection of water resources;
- Existing and future mining activities need to consider the availability or supply of water resources. Such activities impact negatively on water resources;
- Mining activities will impact on municipal and transport infrastructure and maintenance within the District. Adequate provision will need to be made in a coherent and sustainable manner to ensure that existing infrastructure will not deteriorate following the start of full-scale mining operations in the region.

### 3.2 Socio-Economic Environment

#### 3.2.1 Demographic Profile

The Central Karoo District Municipality is the smallest of the district municipalities in the Western Cape and accounts for only 1.2% of the Province's population. The District's percentage share of the Province's total population slipped by a minimal 0.1%; from 1.34% in 2001 to 1.22% in 2011 as shown in the table below.

**Table 3-4: CKDM population vs. Western Cape District Municipalities**

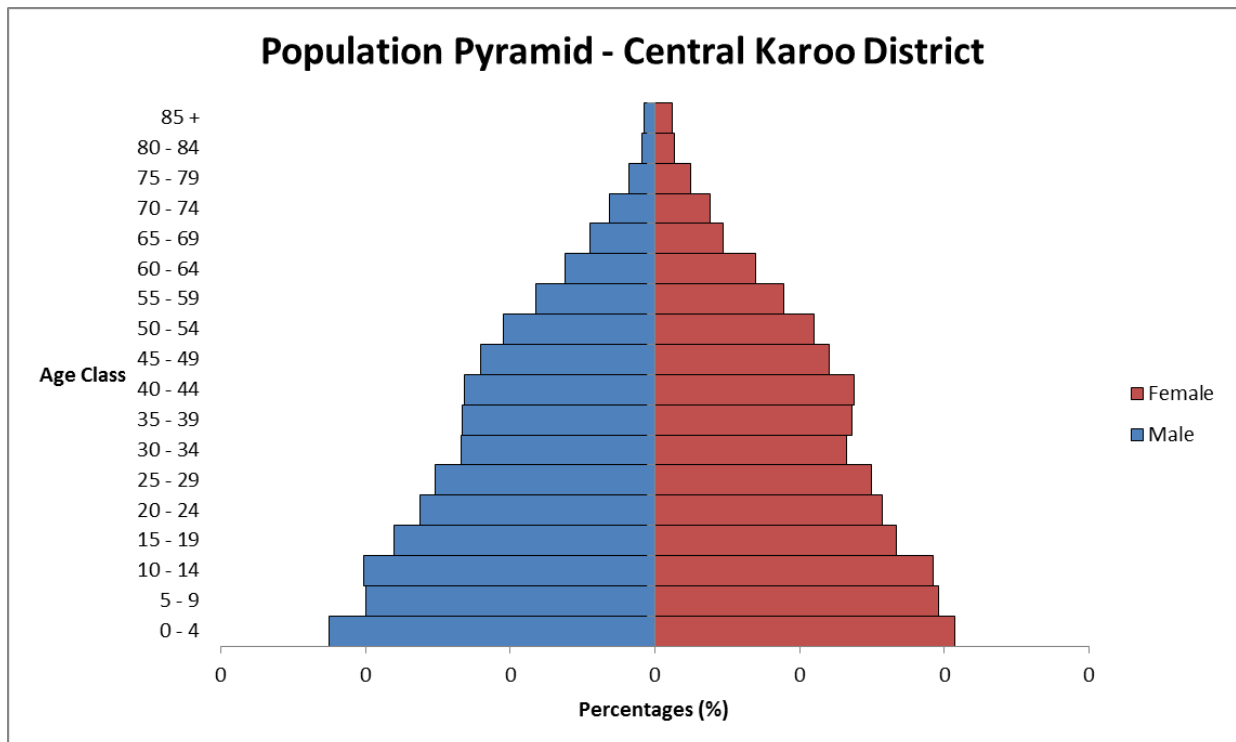
	2001		2011	
West Coast	282 672	6.25%	391 766	6.73%
Cape Winelands	630 284	13.93%	787 490	13.52%
Overberg	203 729	4.50%	258 176	4.43%
Eden	454 924	10.06%	574 265	9.86%
<b>Central Karoo</b>	<b>60 483</b>	<b>1.34%</b>	<b>71 011</b>	<b>1.22%</b>
City of Cape Town	2 892 243	63.93%	3 740 026	64.23%
Western Cape	4 524 335	WC share	5 822 734	WC share

The Census statistics report a total District population of 71,011 in 2011 and 60,482 in 2001. The Community Survey undertaken in 2007 gave an estimated population of 56,230. Census statistics therefore indicate an annual increase of 1.62% from 2001 to 2011 and thus dispute the reliability of the Community Survey which showed a significant population decline of 7% between 2001 and 2007. It is considered unlikely that the District population would have increased by 21% from 56,000 to 71,000 over a period of 4 years from 2007 to 2011. As per the notes of Statistics SA, there were several anomalies in the 2007 data in terms of the following:

- An imbalance in the estimate of men relative to women;
- An underestimate of children younger than 10 years;
- An excess of those aged 85+, in particular among men;
- An undercount of errors in the women aged 20-34 from the Coloured population;
- Mal-distribution of the population by province; and
- Excess of people aged 10-24 in the Western Cape.

The District population as illustrated in the pyramid below has a broad base which suggests an expansive demographic profile with a high birth rate and thus a high young dependency ratio.

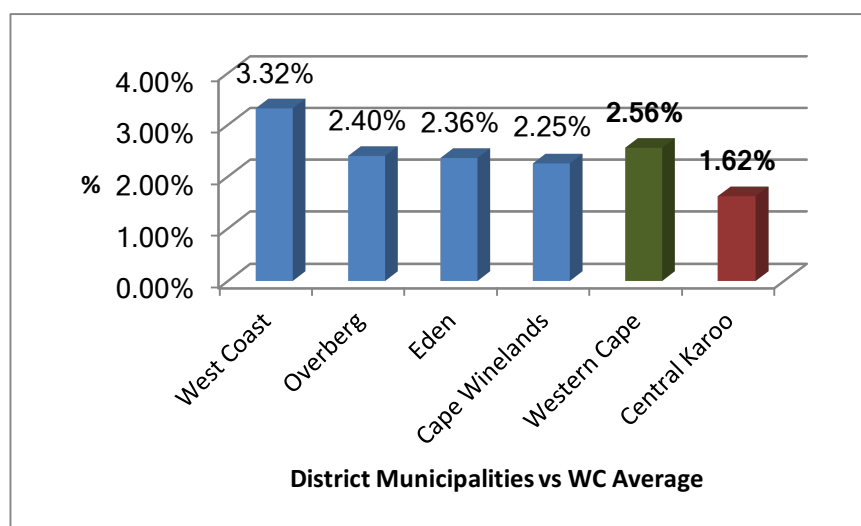
Figure 3-1: CKDM Population Pyramid



30% of the District population is below the age of 15. The slight bulge in the 30 to 45 cohort may suggest a decrease in the mortality rate and/or some level of in-migration. There are no official statistics to prove this hypothesis, however. The sex ratio district-wide is also balanced at 96 males per 100 females; Laingsburg Municipality has the highest at 99 males to 100 females.

Central Karoo District Municipality has the lowest population growth rate of all district municipalities in the Western Cape at 1.62%. The growth is thus well below the provincial average of 2.56% and consistent with the average national population growth rate.

Figure 3-2: CKDM population growth in comparison to WC District Municipalities





Amongst the Local Municipalities within the District, Prince Albert Municipality showed the largest population increase between 2001 and 2011 of 2.25% (2,622) which is above the district average of 1.62% and is also in keeping with the Provincial average growth rate of 2.56% across the same period. Beaufort West Municipality showed the lowest growth rate of 1.37% which is below the Provincial average.

Furthermore, the growth among the various ethnic groups within the District remained consistent between 2001 and 2011 with no significant changes in growth.

**Table 3-5: Population growth of Local Municipalities in CKDM**

	2001	2007	2011	2001 - 2011	CAGR (%)
Central Karoo	60,482	56,230	71,011	10,529	1.62
Beaufort West	43,290	42,699	49,589	6,299	1.37
Laingsburg	6,680	5,156	8,288	1,608	2.18
Prince Albert	10,512	8,374	13,134	2,622	2.25

The statistics show a growing population rate (albeit at a slower pace) in the District rather than a contracting one, as suggested by recent statistical releases published prior to the Census 2011 statistics release.

### 3.2.2 Health

#### **Health Care Facilities**

**Plan 15** shows the distribution of public health facilities within the District Municipality. Four district hospitals provide the highest level of medical care in the Central Karoo District Municipality at the towns of Beaufort West, Murraysburg, Laingsburg and Prince Albert.

Beaufort West district hospital is the only hospital with primary healthcare doctors with an additional 5 doctors serving the town and surrounding areas. Laingsburg and Prince Albert hospitals have one (1) and two (2) doctors respectively whilst Murraysburg does not have a resident doctor. The Beaufort West Municipality has the highest concentration of health professionals with 57 professional nurses, followed by Prince Albert with 11 and Laingsburg with 9. It should be noted that these numbers exclude doctors or health professionals employed in private practice.

**Table 3-6: Health Facilities in the CKDM**

Municipality	Community Health Centre	Community Day Centres	Clinics	Satellite Clinics	Mobile Clinics	District Hospitals	Regional Hospitals
Central Karoo	0	1	8	3	8	4	0
Beaufort West	0	1	1	1	4	2	0
Laingsburg	0	0	5	1	2	1	0
Prince Albert	0	0	2	1	2	1	0

#### **HIV/Treatment and Prevalence**

The District Municipality has a HIV prevalence rate of 9%, the lowest in the Western Cape Province (NDOH, 2011), with only 0.7% of the Province's Anti-Retroviral Treatment (ART) load found in the Central Karoo District. The District has 3 ART sites, of which the third came online during 2010. The HIV transmission rate from mother to child, however, is the highest in the Province at 5.4% compared to a provincial average of 3.2%.

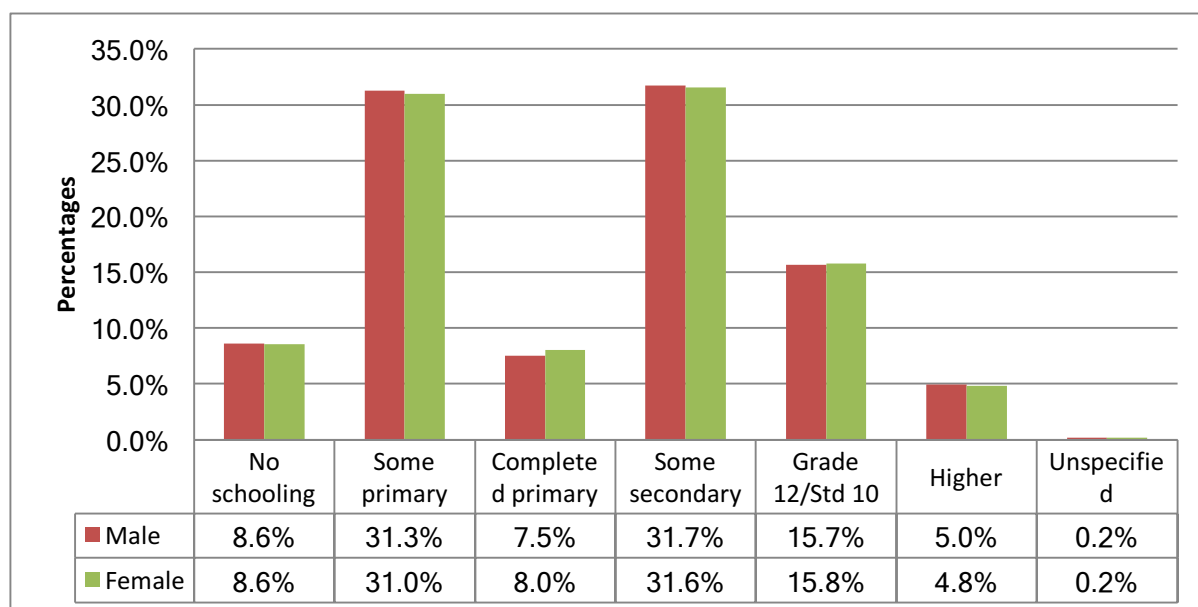
### 3.2.3 Education

#### Literacy Rates

Literacy rates do not show a significant improvement in terms of a comparison between 2001 and 2011 census data. Literacy rates remain at the 60% level which refers to those persons aged 14 years and older having completed primary schooling (Grade 7) and/or higher. This may serve as an indication that adult and other education interventions may not be successful and that alternative options may have to be considered to improve literacy rates in the District. However, the number of persons with no schooling has significantly decreased from 16.82% to 8.59% with a resultant increase in persons with some primary education.

As per below, the level of schooling between men and females is somewhat balanced.

**Figure 3-3: Level of schooling among males and females in CKDM**



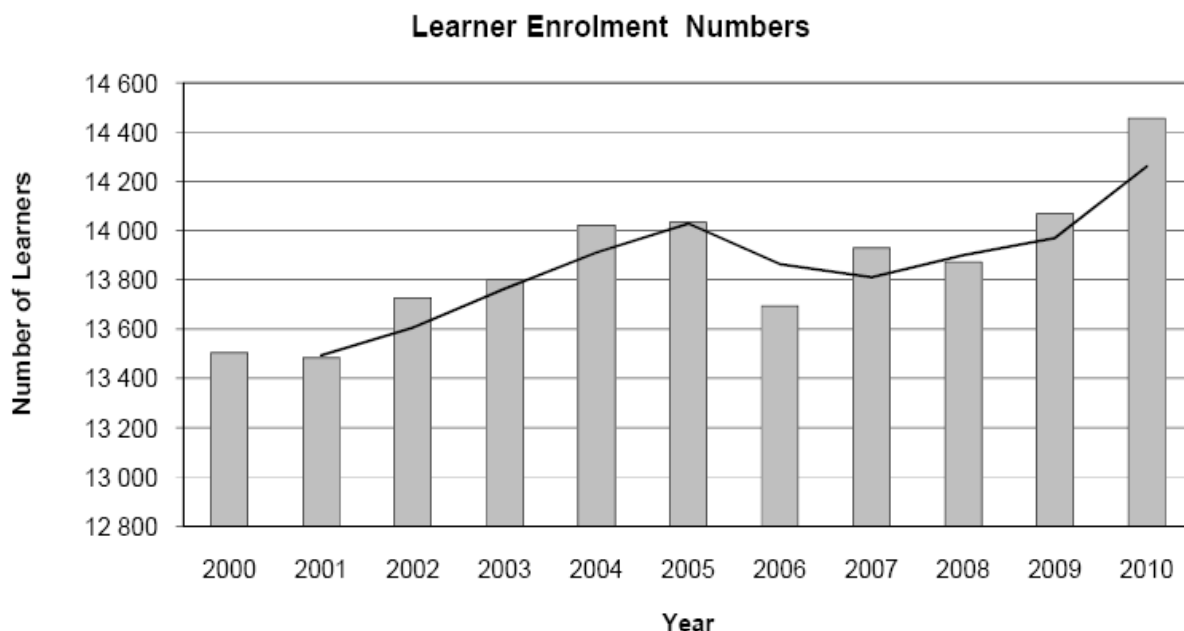
Furthermore, National Department of Basic Education Annual National Assessments for Grade 3 learners undertaken in 2010 indicates that the District Municipality has a literacy and numeracy level of 22% and 7% respectively amongst Grade 3 learners. This serves as an indication of the potential for poor literacy and numeracy levels amongst pupils despite having completed primary school.

#### Learner Enrolment

The number of learners residing in the Central Karoo District Municipality increased by an annual average rate of 0.7%, from 13,504 learners in 2000 to 14,457 learners in 2010. Learner enrolment trend over the ten year period is positive, except for decreases observed during 2001, 2006 and 2008.

In 2010, 4,565 learners (31.6% of total learners) have enrolled in the foundation education phase, ranging from Grade R to 3. The primary phase (Grades 4 to 7) recorded an enrolment figure of 5,350 learners (37%) whilst a total of 4,487 learners (31%) enrolled in the secondary phases (Grades 8 to 12) in 2010.

Figure 3-4: Central Karoo District Municipality learner enrolment numbers from 2000 to 2010



Source: Western Cape Government Treasury, 2010

#### Access to Education Facilities

22 of the District Municipality's 28 public schools are classified as 'No Fee' schools; this includes primary, intermediate and secondary schools. At 78.6%, the Central Karoo District has the highest percentage of 'No Fee' schools in the Western Cape Province, followed by Overberg (75.6%) and the Eden District (71.1%). This may serve as an indication of the link between it and the literacy rate being underpinned by poverty and the ability of households to spend on primary and secondary education.

Figure 3-5: Percentage No Fee Schools for each District in the Western Cape

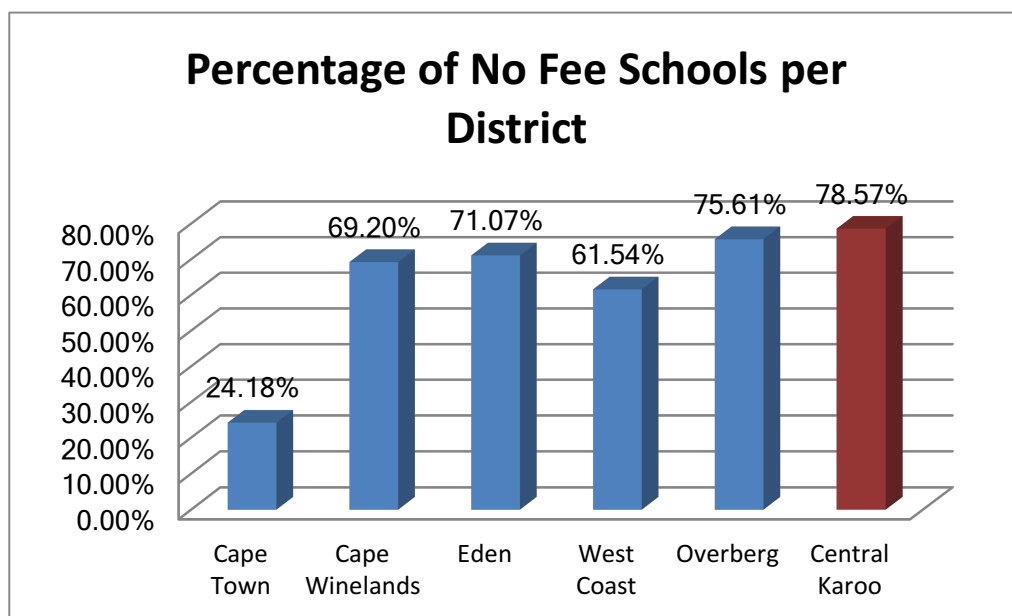
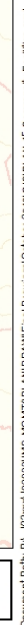


Table 3-7: Schools within Central Karoo District

No	Rural / Urban	Name of School	Town
<b>Laingsburg Municipal Area</b>			
1	Rural	Baardmansfontein Primary	Laingsburg
2	Rural	Rietvlei Primary	Laingsburg
3	Urban	Matjiesfontein Primary	Matjiesfontein
4	Urban	Acacia Primary	Laingsburg
5	Urban	Laingsburg High	Laingsburg
		<b>Total Number of Schools</b>	<b>5</b>
<b>Prince Albert Municipal Area</b>			
1	Urban	Klaarstroom Primary	Klaarstroom
2	Urban	Leeu-Gamka Primary	Leeu-Gamka
3	Urban	Prince Albert Primary	Prince Albert
4	Rural	Seekoegat Primary	Prince Albert
5	Urban	Swartberg High	Prince Albert
		<b>Total Number of Schools</b>	<b>5</b>
<b>Beaufort West Municipal Area</b>			
1	Urban	Murraysburg Primary	Murraysburg
2	Urban	Murraysburg High	Murraysburg
3	Urban	George Fredericks Primary	Merweville
4	Urban	Restvale Primary	Nelspoort
5	Rural	Klawervlei Primary	Beaufort West
6	Rural	Maddison Primary	Beaufort West
7	Rural	Layton Primary	Beaufort West
8	Urban	Beaufort West Primary	Beaufort West
9	Urban	J.D. Crawford Primary	Beaufort West
10	Urban	St. Matthews Primary	Beaufort West
11	Urban	A.H. Barnard Primary	Beaufort West
12	Urban	Teske Gedenk Primary	Beaufort West
13	Urban	Voorbereiding Pre-Primary	Beaufort West
14	Urban	Niko Brummer Primary	Beaufort West
15	Urban	Beaufort West Secondary	Beaufort West
16	Urban	Mandlenkosi Secondary	Beaufort West
17	Urban	Central High	Beaufort West
18	Urban	Bastiaanse Secondary	Beaufort West
		<b>Total Number of Schools</b>	<b>18</b>

The South Cape College has a campus in the town of Beaufort West which is the only tertiary institution in the Central Karoo District Municipal area. People are thus compelled to further their studies elsewhere outside of the District.



**PLAN 15**  
**OCTOBER 2013**

### 3.2.4 Employment, Occupation and Income

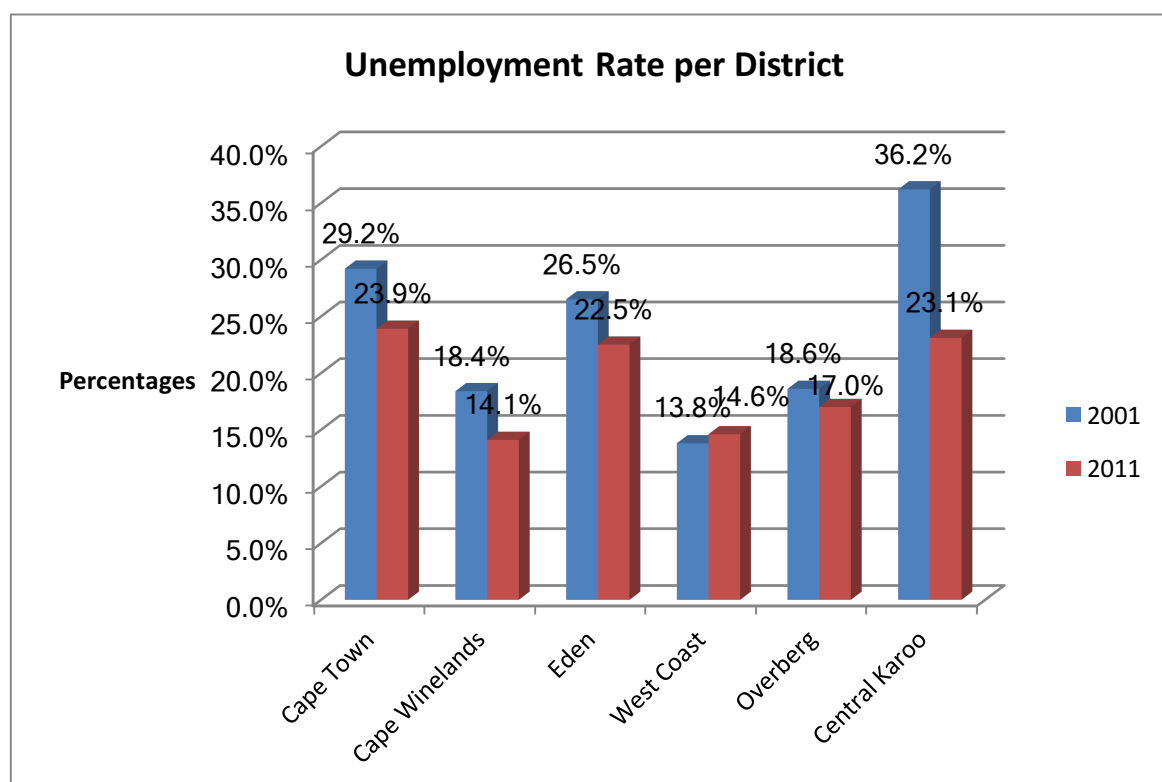
#### Labour Force Characteristics

Information on unemployment represents official unemployment statistics and does not make provision for discouraged workers. The size of the labour force is determined by the potentially economically active population from ages 15 – 64 years.

The potential economically active population in the municipal area increased from 37,458 in 2001 to 44,954 in 2011, meaning that 7,469 more people were available for employment. This represents an annual labour force increase of 1.84% over the ten year period.

The unemployment rate declined from 36.2% to 23.1% over the same period with an estimated 10,384 of people between the ages of 15 and 64 classified as unemployed. This is a considerable decline from 13,560 people considered unemployed in 2001. The District Municipality also had the greatest decline in the unemployment rate of any District Municipality in the Western Cape Province. The data implies that there was high level of labour absorption and activity over this period which may be attached to government policy interventions and growth in the retail and tourism sectors of the economy.

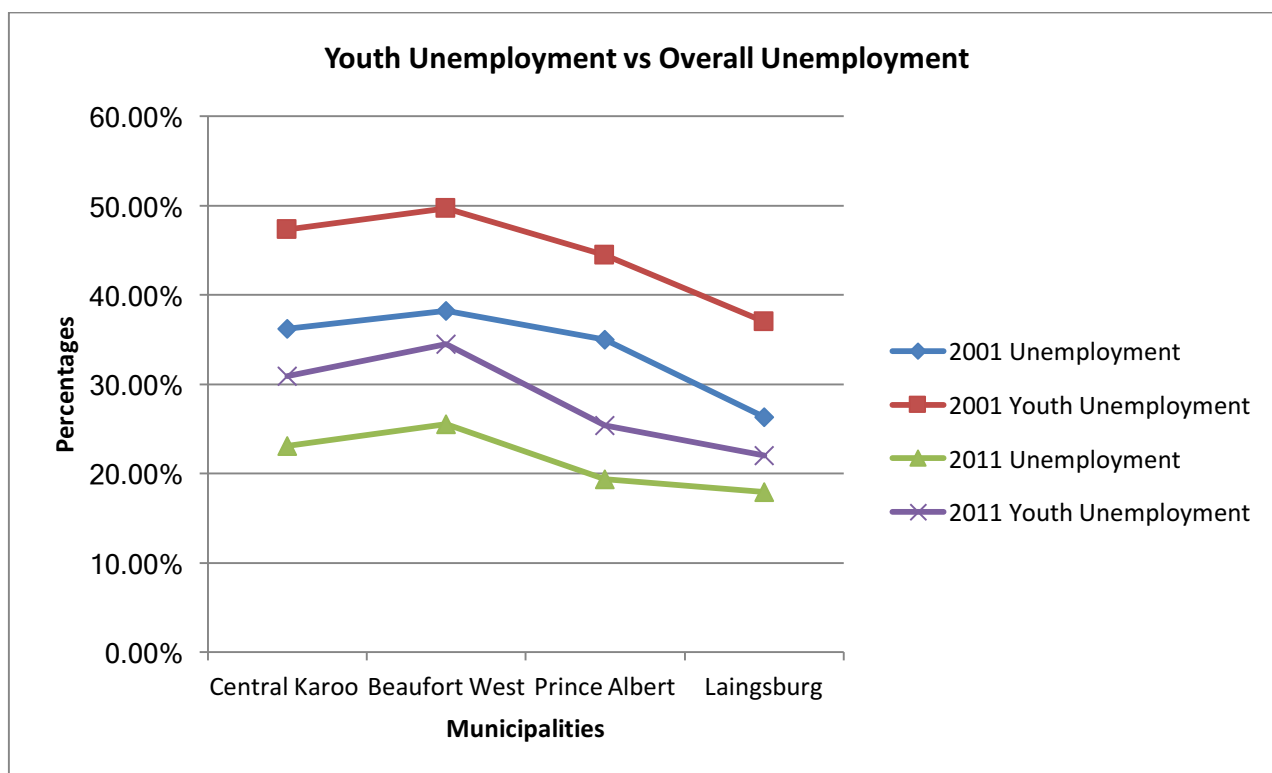
**Figure 3-6: Unemployment rate per District in the Western Cape**



Youth unemployment within the District remains high although significant ground has been gained in decreasing unemployment among the youth; the gap between the unemployed youth rate and that of the general unemployed has decreased between 2001 and 2011 (see Figure 3-7 below). The District still has the highest unemployment rate among the youth in the Western Cape. Among the Local Municipalities, Laingsburg has the lowest youth unemployment rate of

22% whilst Beaufort West has the highest at 34.5%. A high youth unemployment rate means that there is a greater dependence on the 16-64 working population.

**Figure 3-7: Youth Unemployment in the Central Karoo District Municipality**

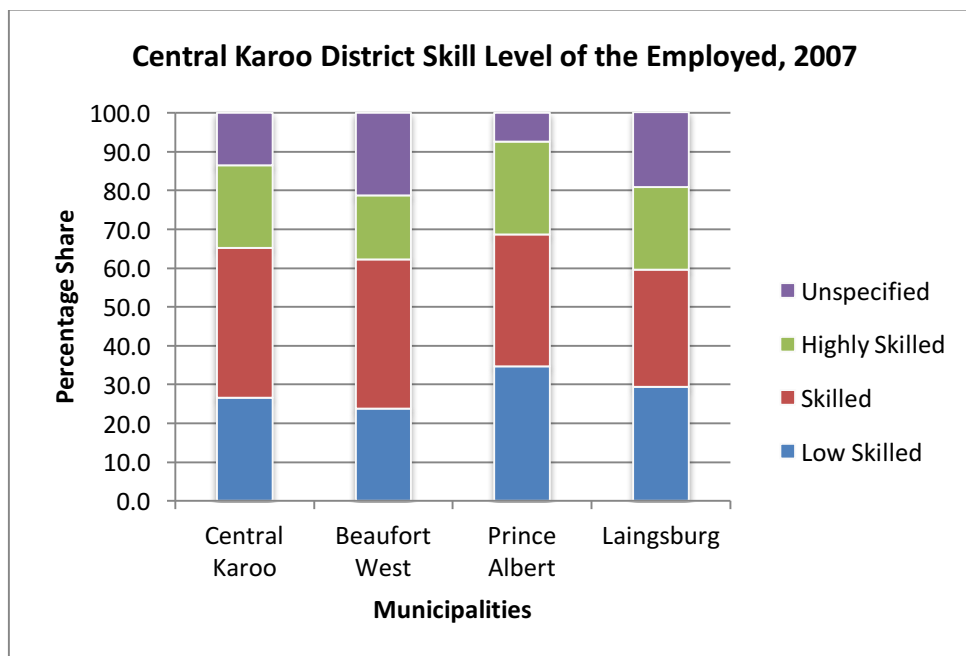


#### Skill Level of the Employed

Almost 40% of all the employed in Central Karoo District hold skilled jobs. Skilled occupations refer to clerical positions, service and sales workers, crafters, tradesmen and artisans. The concentration of employment in skilled work means that there are relatively few opportunities available to those considered as low skilled employees. Highly skilled occupations account for 21% of the employed whilst low skilled occupations add up to 27%.

It is interesting to note that Prince Albert Municipality has the highest concentration of highly skilled<sup>12</sup> workers at 24%. This may be an underlying contributor to the economic growth experienced in this area as discussed further in this document. This municipality also has the highest percentage of low skilled labour and may be as a result of its agricultural characteristics; the agricultural industry is the biggest employer in Prince Albert Municipality. Of concern is that the decline in the agricultural industry may be to the detriment of employment in Prince Albert. Skills development initiatives would therefore be appropriate interventions in this regard in order to ensure that labour is not lost.

<sup>12</sup> Highly skilled occupations refer to professional and managerial occupations such as senior managers and officials, technicians, engineers, doctors, and other professionals.

**Figure 3-8: Central Karoo District Employment Skill Level, 2007**

### District Economic Characteristics

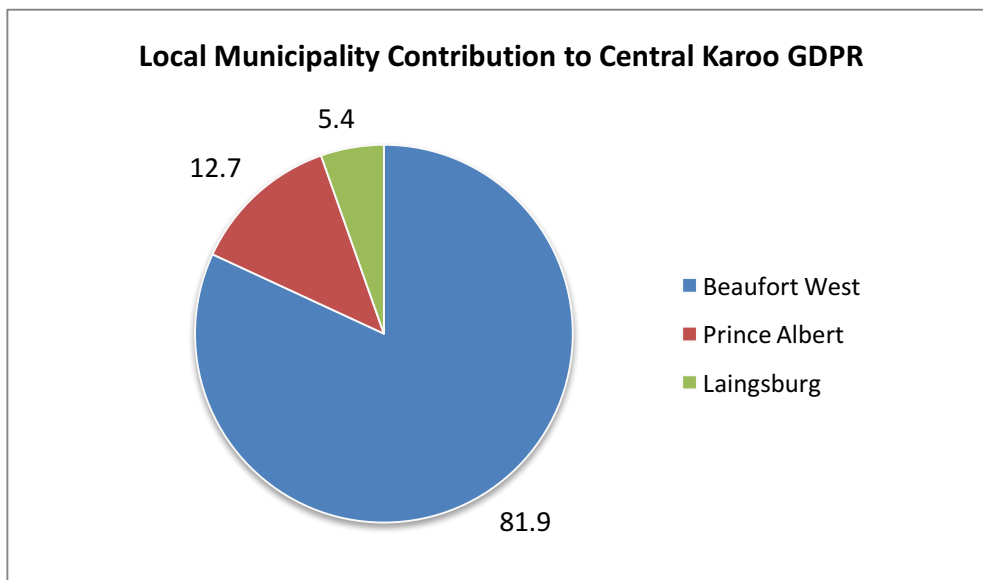
#### Economic Growth

Central Karoo District is the smallest economy of the district economies in the Western Cape and had an estimated gross domestic product per region (GDPR) of R2.096 billion in 2010. As the largest municipality, Beaufort West accounted for 82% of the District's GDPR followed by Prince Albert Municipality at 13% and Laingsburg at 5% (see Figure 3-9 below).

The Central Karoo District has shown strong growth for the period of review (1999 to 2009) averaging a 4.3% growth rate. The District economy, however, contracted by 0.2% in 2009 which can be attributed to the global economic recession of 2008/09. During this period the provincial economy also shrunk by 1.2%. Economic growth in the preceding years was robust and peaked in 2008 with an average growth rate of 7% across the District Municipality. Prince Albert Municipality showed the strongest growth among the local municipalities and managed to maintain growth in 2009 albeit low at less than 0.5%.

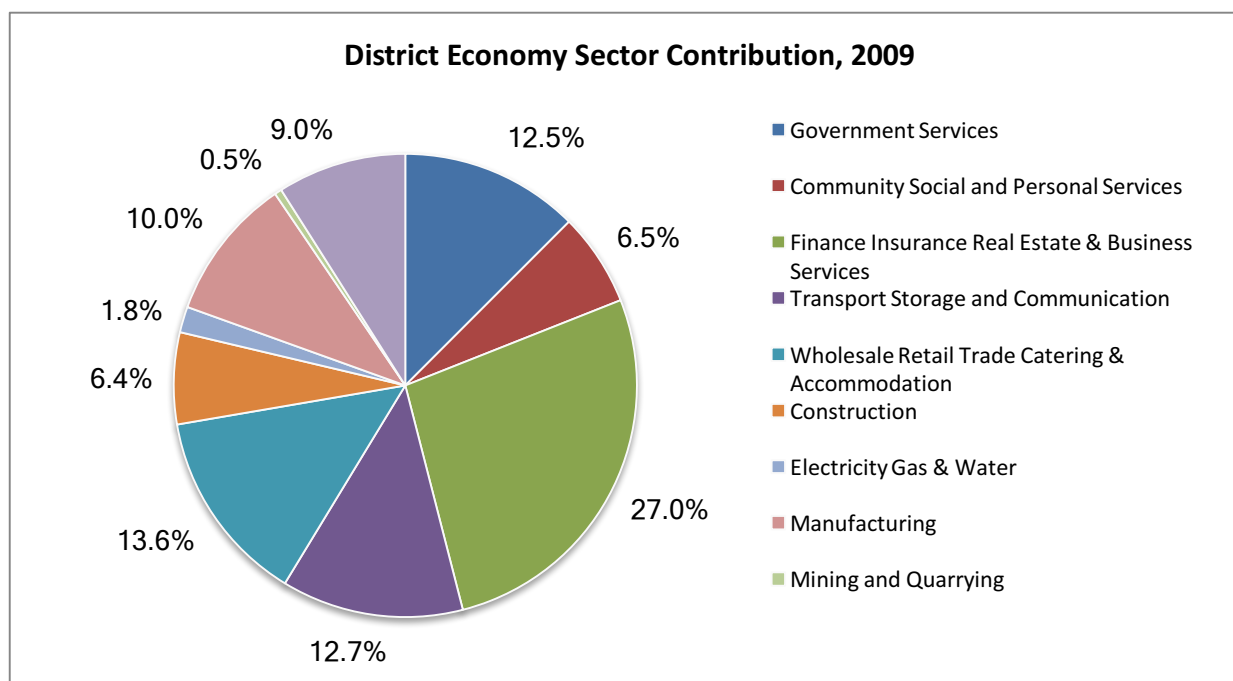
There appears to be an improving outlook on economic growth for Central Karoo District if the Western Cape Province's growth rate of 2011 is used as a yardstick. Central Karoo District had economic contraction in 2009 in line with the Western Cape's decline; the Province however has shown an estimated economic growth rate of 3.6% in 2011 and it is expected that Central Karoo District will follow a similar growth trend.



**Figure 3-9: Local Municipalities' Contribution to Central Karoo District GDPR, 2010**

#### Sector Composition and Growth

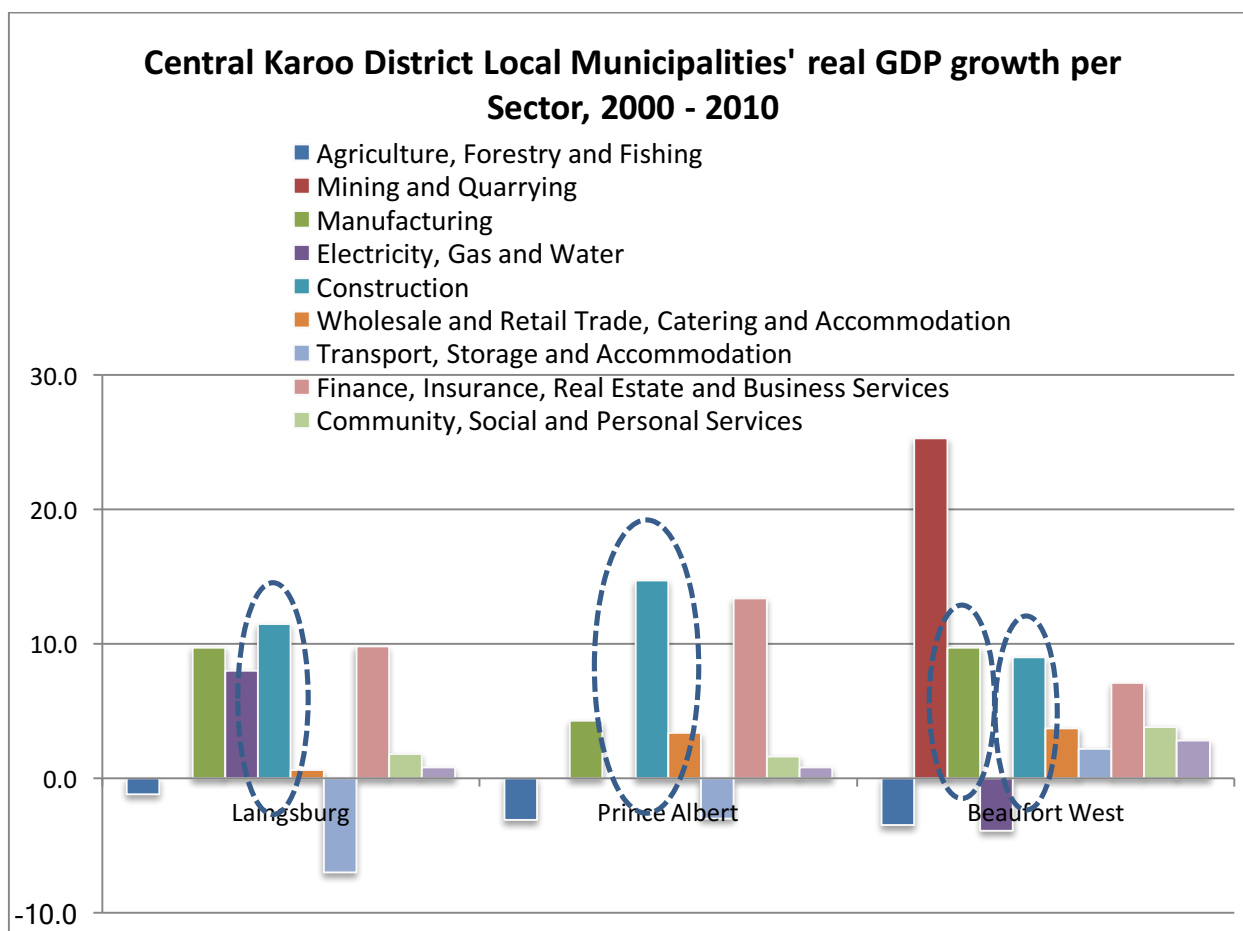
For the period of review, contributors to the District economy changed markedly. The Finance, Insurance, Real Estate and Business Services Sector were the largest sector of the economy accounting for almost 30% of economic activity and recorded the highest average growth rate of 8.9%. The growth in this sector has ultimately supported sturdy overall growth the District economy from 2000 to 2008. The Manufacturing Sector followed with an average growth rate of 4.4% and accounts for 10% of the economy compared to 6.4% in 1999.

**Figure 3-10: District Economy Sector Contribution (2009)**

Source: Western Cape Provincial Treasury, 2011

Other important economic sectors are the Wholesale and Retail Trade, Catering and Accommodation Sector (14%), Government Services Sector (13%) and Transport, Storage and Communication Sector (13%). The Agriculture, Forestry and Fishing Sector's share of the District economy declined from 15.4% in 1999 to 9% in 2009 with an annualised decline of 2%; this is concerning as it is a highly labour intensive sector.

**Figure 3-11: Central Karoo District Municipalities' real GDP growth per Sector for the period 2000 to 2010**



The Mining, Manufacturing, Construction and Finance Sectors showed robust growth in Beaufort West and Prince Albert economies. Mining and Quarrying had the highest growth rate in Beaufort West at 26% whilst the Manufacturing Sector grew at an average rate of 10%. The Construction Sector made the biggest gains at Prince Albert (15%) with the Finance, Real Estate and Business Services Sector marking growth of 14%. The Construction Sector also marked strong growth of 12% in Laingsburg followed by the Manufacturing Sector at 10%.

The Agricultural Sector declined across the board with contractions in Beaufort West and Prince Albert Municipalities exceeding 3%. This decline does not appear to be an anomaly but rather a long-term trend. The underlying conditions which lead to the decline need to be determined in order to formulate policy that would lead to sustained growth in the

agricultural sector. The Transport, Storage and Communication Sector<sup>13</sup> also declined except in Beaufort West Municipality where it posted positive growth of more than 2%; this occurrence may be attributed to centralisation of activities to Beaufort West and decline in some sub-sectors particularly rail transport. Furthermore, the Electricity, Gas and Water Sector<sup>14</sup> in Beaufort West showed reasonable decline of almost 4% which is in contrast to growth at Laingsburg Municipality of 8%.

#### Employment by Sector

The biggest employers in terms of economic sectors for Central Karoo District is Community, Social and Personal Services (17%), followed by Agriculture (16%) and Wholesale and Retail Trade (14%) thereafter. When comparing these sectors' contribution to GDP, the former two sectors are the most labour intensive sectors. Any marked decline in economic activity in these sectors will thus have a significant impact on employment. Further growth however is likely to achieve a greater than proportionate increase in employment.

#### 3.2.5 Land Reform

In 2001, the Department of Rural Development and Land Reform (DRDLR) initiated a programme to establish and promote black emergent farmers; the Land Redistribution for Agricultural Development (LRAD) grant was developed for this purpose. In response to the Land Summit resolutions of 2005, which called for the acceleration of the pace of land reform, the DRDLR introduced the Proactive Land Acquisition Strategy (PLAS). In 2009, the Department conducted a series of consultations with land reform beneficiaries which resulted in the termination of the use of the LRAD and SLAG grants. The focus shifted towards the acquisition of strategically located agricultural land through PLAS and land is made available to beneficiaries by way of lease agreements (DRDLR, 2012).

The majority of land reform projects of the Department of Rural Development and Land Reform are located within the Beaufort West municipal area. The District PLAS Registry indicates a list comprising 6 current projects with a land area of 36,000 hectares. These projects are located on State land and comprise primarily livestock farming.

**Table 3-8: Current PLAS Projects for the Central Karoo District**

PLAS Projects							
	Local Municipality	Town	Project Name	Property Description	Extent (hectares)	Registered Owner	Purchase Price
1.1	Beaufort West	Murraysburg	<i>Naartjieskuil</i>	Ptn 3 of the Farm Belvedere, No 73;	3,519.1313	Republic of South Africa	R2,650,000-00
1.2				Ptn 2 of the Farm Montana 123 Div Beaufort West			
2.	Prince Albert	Prince Albert	<i>Swartrivier</i>	Remainder of the Farm Wolvekraal 211 (Swartrivier)	3647.6702	Republic of South Africa	R5,000,000-00
3.	Beaufort West	Beaufort West	<i>Matjieskloof</i>	Remainder of Farm No 421	4739.9000	Republic of South Africa	R5,403,486-00
4.	Beaufort West	Beaufort West	<i>Tulpleegte</i>	Ptn 1 of Farm Tulpleegte No 357; Remainder of the Farm Tulpleegte No 357	6628.7725	Republic of South Africa	R5,300,000-00

<sup>13</sup> Transport, Storage and Communication Sector refers to industries and activities providing passenger and freight transport, cargo handling and storage, postal and courier activities as well as telecommunication industry activities.

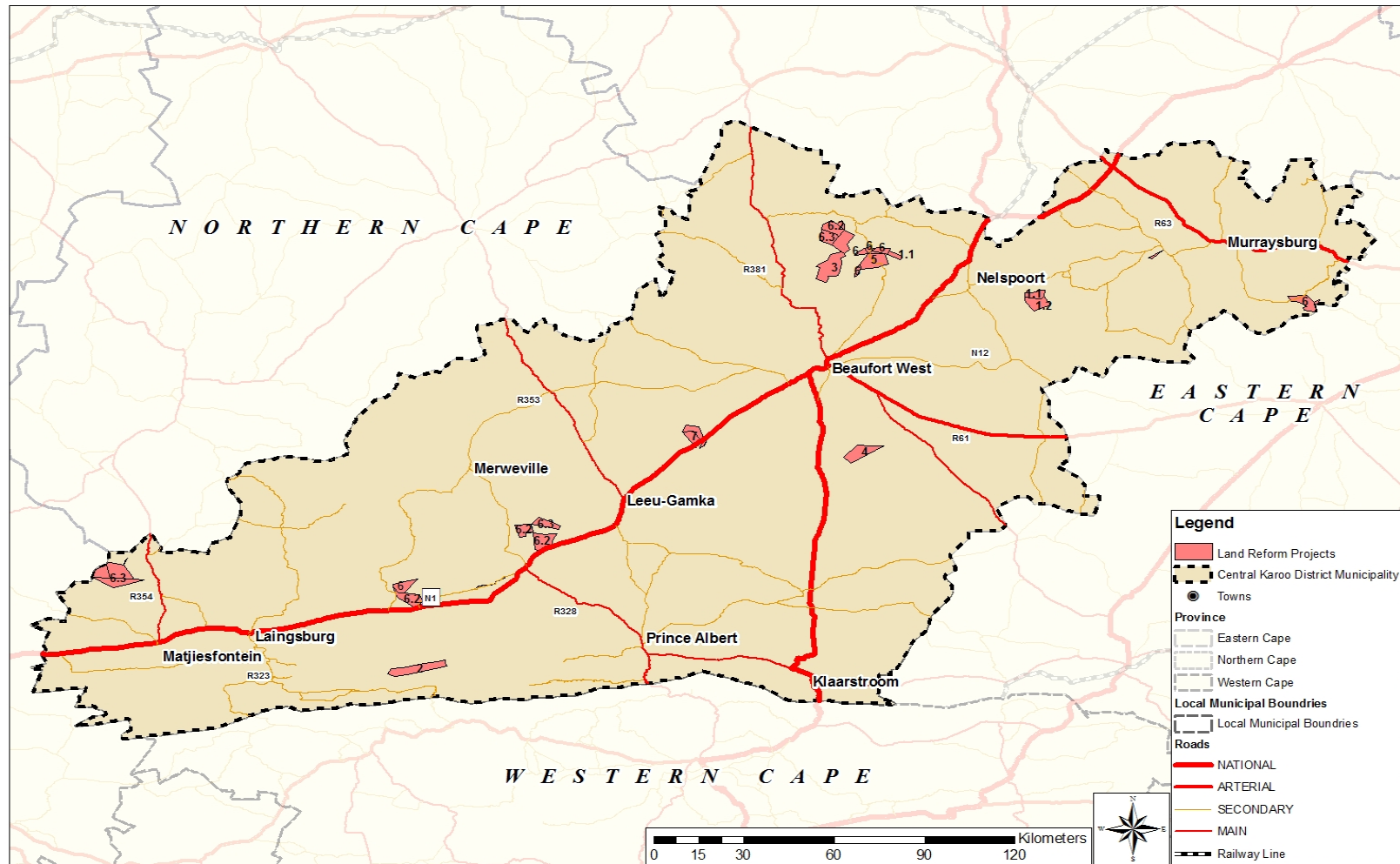
<sup>14</sup> Electricity, Gas and Water Sector refers to industries and activities for the production, collection and distribution of electricity, the manufacturing and distribution of gas as well as the collection, purification and distribution of water.

PLAS Projects							
	Local Municipality	Town	Project Name	Property Description	Extent (hectares)	Registered Owner	Purchase Price
5.1	Beaufort West	Beaufort West	<i>Dassiesfontein</i>	Ptn 6 (South Dassiesfontein) of the Farm Dassiesfontein No.73, Ptn 5 (North Dassiesfontein) (a ptn of Ptn 1) of the Farm Dassiesfontein No. 73	3,280.7445	Republic of South Africa	R14,734,547-00
5.2							
6.1			<i>Rondawel</i>	Ptn 5 of the Farm Bok Poort No. 54, Ptn 6 of the Farm Bok Poort No. 54, Ptn 1 of the Farm Esterville No. 57, Ptn 4 of the Farm Dessisfontein No. 73, Ptn 2 of the Farm Taaibosch hoek No. 75, Ptn 1 of the Farm Scheurfontein No. 112 , Ptn 1 of the Farm Grasplaats No. 113, Ptn 2 (Portion of Portion) of the Farm Grsplaats No. 113	4,932.1822		
6.2							
6.2			<i>Melrose</i>	Ptn 2 of the Farm Adj.Driekop No. 48, Ptn 1 of the Farm Taaibosch Hoek No. 75, The Remainder of the Farm Bronkers Valei No. 76	4,860.0212	Republic of South Africa	R3,365,000-00
6.3			<i>Willemskraal</i>	Ptn 1 of the Farm Bronkers Valei No. 76	1,661.6007		
7.	Beaufort West	Beaufort West	<i>Klein Koedoeskop</i>	Portion 5 of Farm Klein Koedoeskop No.310, Portion 14 of the Farm Leeuwkraal No. 309 & Remainder of Portion 5 of the Farm Leeuwkraal No. 309	2,807.1072	Republic of South Africa	R3,365,000-00

During the previous fifty (50) years farms in the Central Karoo District Municipality have grown larger and fewer with a resultant loss in farm labour. Farmworkers thus migrated to the urban settlements which have increased the urban unemployed. There are some 660 farms in the District and land sales between 2000 and 2006 averaged 150,000 to 200,000 hectares of commercial farm land (Central Karoo District Municipality ABP, 2008). Although providing marginal employment and economic opportunities, the advent of game and 'life-style' farms pushed land prices above productive value.

Challenges in respect of land reform remain; there are fewer strategic agricultural farms on offer for purchase and high land prices prove to be problematic as well.

Refer to **Plan 16** illustrating the above land reform projects.



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### 3.2.6 Cemeteries

Cemeteries are well provided for throughout the District area. The following is a summary of the cemeteries in the Local Municipalities:

#### **Beaufort West:**

The Beaufort West town has eight (8) cemeteries and these are deemed as adequate to meet the needs of the municipality in the medium term.

#### **Laingsburg:**

The Laingsburg town has four (4) cemeteries and Matjiesfontein has one (1). These cemeteries are deemed as adequate to meet the needs of the municipality.

#### **Prince Albert:**

There are four (4) cemeteries of historical significance located in the historical town of Prince Albert which may require special preservation.

### 3.2.7 Heritage

Due to the Central Karoo District Municipality being underlain by the Beaufort Group of rocks consisting of shales, mudstone, sandstone and tillite, with the mountains to the south of the district extending onto these rocks, the district is rich in fossils<sup>15</sup> and is thus of great paleontological importance.

Pre-colonial archaeology is evident across the entire district, with particularly San and Khoi artefacts being evident. The San artefacts include rock paintings (in rocky terrain), stone tools and middens containing *inter alia* bones and food items. The middens were generally found along water courses, pans and flood plains. Beaufort West has a rich collection of rock paintings and engravings, with the most notable being Nelspoort<sup>16</sup>.

Khoekhoen pastoralists are known to have inhabited the district. Several stone kraal complexes have been identified. At about 1200-1400AD, a global climatic fluctuation appears to have caused an increase in rainfall. This may have increased grazing availability, resulting in the introduction of cattle into the district. The current climatic conditions however favour small stock, such as sheep and goats.

The colonial period provides greater recorded in-sight into the district's past. Early nomadic pastoralists (Trekboere) paved the way for increased expansion into the interior. This expansion not only resulted in frequent and violent clashes with the last of the stone-age peoples, but also in the indiscriminate hunting of large game, to near extinction. The establishment of early settlements took place from the late 1700's and early 1800's, generally in close proximity to water resources. This in turn resulted in many skirmishes over the scarce resource. Soon, these settlements developed into what are today the main towns within the district.

Evidence of the Anglo-Boer War in the early 1900s still remains in the form of grave sites and blockhouses along the railway line, and places such as Matjiesfontein and Prince Albert were used as garrisons by the British. There a number of provincial heritage sites across the District Municipality and they include the Swartberg Pass and Gamkaskloof Pass. Provincial heritage sites are also found in the towns of Beaufort West and Prince Albert, a few farmsteads such as Baviaanskloof and Vrolikheid, churches in Merweville and Laingsburg, and a corbelled structure on the farm Vlieefontein near Beaufort West. Many more hundreds of individual sites are worthy of formal protection such as fossil sites,

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<sup>15</sup> Central Karoo District Municipality Draft EMF Status Quo Report.

<sup>16</sup> Technical Report in support of the EMP for the South Western Karoo Basin Gas Exploration Application Project

archaeological sites, farmsteads, corbelled structures, dwellings, religious sites, graves and burial grounds, and military fortifications. Further detailed investigations and assessments will be required to identify these sites.

**Table 9: Heritage Sites in Central Karoo District Municipality**

THEME	ELEMENT	DESCRIPTION
<b>Natural Landscapes</b>	Witberge	Comprises one of South Africa's most characteristic landscape – with vast plains or 'vlaktes', flat-topped koppies and rocky outcrops, and defined by great mountain ranges of the escarpment and Swartberg Mountains.
	Suurberg/Waaihoeksberg	
	Elandsberg	
	Groot Swartberge	
	Oukloofberge / Droekloofberge	
	Klein Roggeveldberg / Brandberg	
	Komsberg	
	Nuweveldberge / Die Rant	
	Karoo Koppies	
	Onder Sneeuwig / Toorberg	
<b>Cultural Landscape</b>	Gamkaskloof rural settlement & reserve	Archaeological remains, stone and fossil sites, San hunter-gatherers & Khoi pastoralists, Trekboer history (Social History) as well as Anglo Boer War remains and relics.
	Nelspoort rock engravings	
	Matjiesfontein Valley	
	Vleiland	
	Scholkloof	
	Klaarstroom	
<b>Scenic Routes and Passes</b>	Seweweekspoort Pass	Historic mountain passes constructed to provide access from the coast to the hinterland, railway history and important transportation linkages and elements.
	Swartberg Pass	
	Gamkaskloof Pass	
	Meiringspoort	
	Molteno Pass & Roseberg Pass	
	R354 Route	
	Rooinek Pass	
	R353 Route and Teekloof Pass	
	R407 Route	
	Kareedouwberg Pass	
	N12 Route & Droekloof	
	R63 Route	
	N1 Route	
<b>Historical Elements</b>	Murraysburg Historic Town	Settlements established as church towns during the 1700's and early 1800's; urban morphology due to river/ribbon and/or grid pattern development; railway and institutional settlements.
	Beaufort West Historic Town	
	Prince Albert Historic Town	
	Merweville Historic Town	
	Matjiesfontein Historic Village	
	Klaarstroom Valley Historic Village	
	Vleiland Valley Historic Valley	

### 3.2.8 Housing

The Central Karoo District Municipality has one of the highest numbers of households with access to formal housing. There has been a marginal decrease in the number of households which reside in informal housing since 2001. According latest census statistics (2011) 95% of all households have access to formal housing whilst an estimated 5%

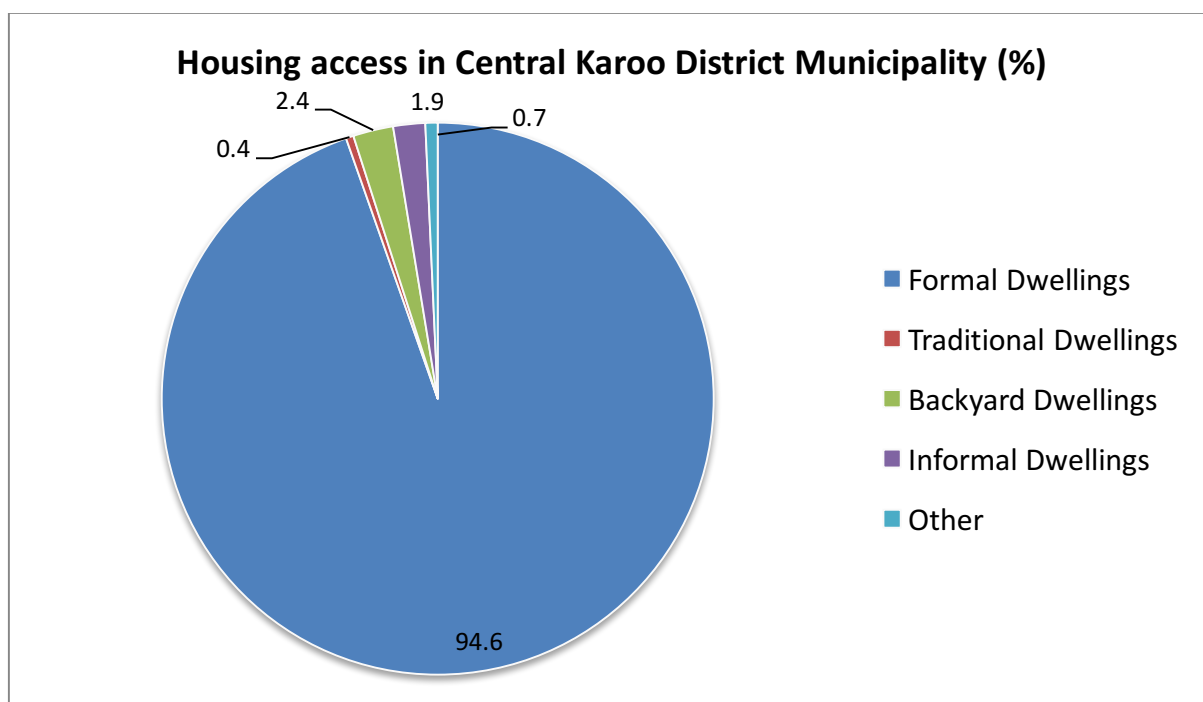
(or 954 households) still have an insecure form of tenure. This amounts to a housing need of a minimum of 954 units, primarily subsidised housing units, in the short to medium term across the District.

The Provincial Department of Human Settlements' Sanitation Backlog Survey however indicates a housing backlog in excess of 2,500 units of which 80% are backyard dwellers with access to shared services. Of concern is that more than 18% of the housing backlog occurs on the District's farms outside of urban settlements with no access to sanitation services. The Department's strategy is the provision of housing in areas of greatest need as well as areas of greatest development potential. Provision is therefore focused on key settlements including Beaufort West, Leeu-Gamka, Laingsburg, and Prince Albert.

Major general challenges in housing provision are the cost and availability of well-located land; the inadequate integration of housing settlements with the broader urban environment; poor provision for the gap market; and delays in transferring title deeds to low-cost housing beneficiaries.

Prince Albert Municipality has the highest percentage number of households living in informal housing at 6.6%, followed by Laingsburg Municipality at 5.4%. An estimated 57% of households living in informal housing reside within the Beaufort West Municipality area.

**Figure 3-12: Level of Access to Housing in the Central Karoo District**



### 3.2.9 Tourism

The Central Karoo District Municipality covers a large area of the Karoo which stretches over several provinces; the Western Cape, Eastern Cape, Northern Cape and Free State. As a result of its natural environment, distinctive



landscape and heritage elements (see Section 3.2.7); it offers a diverse range of tourism activities and attractions in terms of the themes<sup>17</sup> shown in the table below:

**Table 10: Broader Karoo Tourism Themes**

THEME	Element Description
<b>Heritage &amp; History</b>	Fossils, rock-art, Anglo-Boer War, cemeteries, historic towns, monuments and museums.
<b>Architecture</b>	Cape Dutch, Karoo Gothic and Neo-Gothic, Victorian, Railway architecture.
<b>Natural &amp; Environmental Tourism</b>	Game viewing, bird watching, hiking, national parks and resorts.
<b>Adventure Tourism</b>	Paragliding, sky-jumping, abseiling, mountain-biking, hunting.
<b>Arts, Crafts &amp; Literature</b>	Guided literary tours, craft-making, craft-selling, artistry, art galleries and exhibitions.
<b>Cuisine</b>	Restaurants, food, wine-making and wine-tasting, cheese-making.

Accommodation establishments are also growing; for example, Beaufort West had more than 40 establishments in 2010, with an additional 20 guest farms across the hinterland. Each of the major towns in the Central Karoo District Municipality has a distinctive character as described in the table below:

**Table 11: Comparison of the tourism character of Central Karoo District Municipality towns**

TOWN	Heritage & Architecture	Natural & Environmental	Crafts, Cuisine & Other
<b>Laingsburg</b>	Laingsburg flood history and Karoo Architecture.	Star-gazing, nature reserves, Floriskraal Dam.	Craft shopping and overnight accommodation.
<b>Prince Albert</b>	Cape Dutch, Karoo & Victorian architecture.	Die Hel (Gamka's Kloof), Swartberg Pass, Mountains and Reserve, Seweweekspoort, Meiringspoort.	Craft-making and shopping, chef school, agricultural activities (olive, wine and fruit farms) and art galleries.
<b>Beaufort West</b>	Chris Barnard Museum, Block Houses, Khoi-San rock art (Nelspoort).	Karoo National Park, Game hunting, and game farms.	Karoo cuisine, overnight accommodation, crafts shopping, and conferencing.

A much more detailed comparison of the towns needs to be undertaken to enable the identification of collaborative and cross-district marketing opportunities and synergies.

### 3.2.10 Crime

Crime statistics issued by the South African Police Services (SAPS) over the period 2003 to 2012 indicate consistent marginal decreases in the levels of crime in the District. Contact crimes such as murder and attempted murder show decreasing levels. However, assault and assault with the intent to do grievous bodily harm remains stubbornly high at all reporting stations within the District. The statistics point to individuals resorting to violence to solve disputes rather than apply to the justice system for dispute resolution.

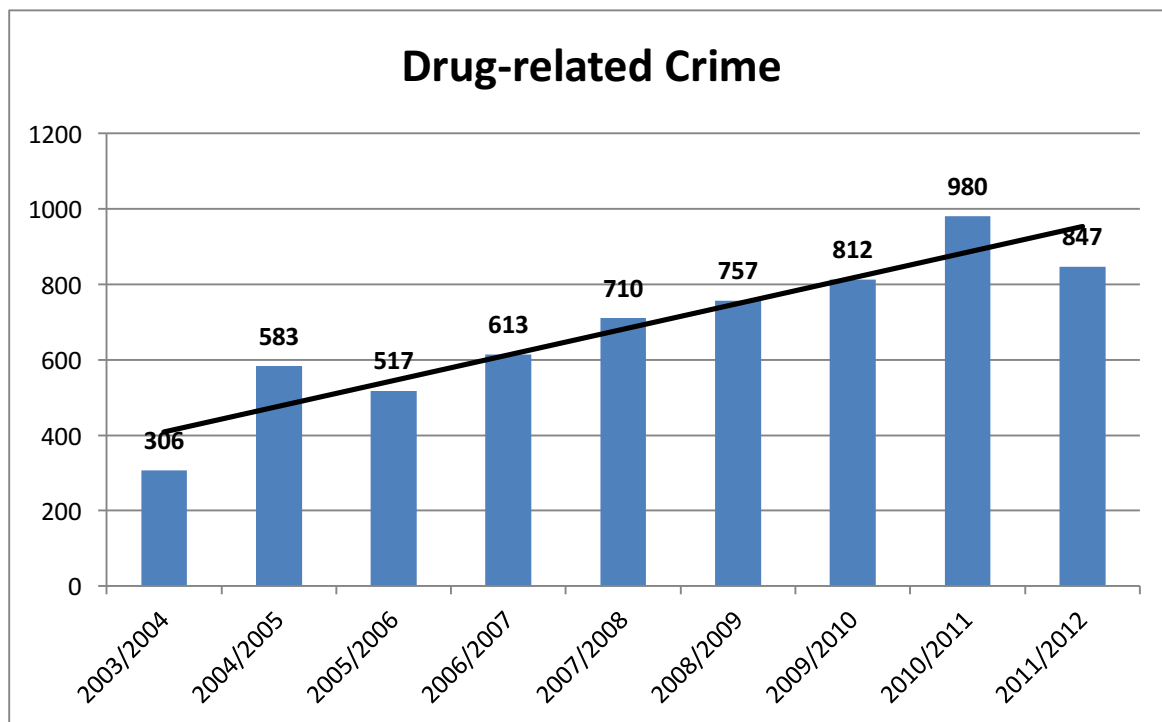
<sup>17</sup> Adapted from The Karoo Tourism Strategy (2012) by the Karoo Development Foundation

Burglaries at residential premises particularly in Beaufort West has seen little change over the reporting period and remains high. However, Prince Albert has seen significant decline in house burglaries from 80 in 2003/04 to 39 in 2011/12.

**Table 3-10: Central Karoo District Crime Statistics, 2003/4 to 2011/12**

	Apr '03/Mar '04	Apr '04/Mar '05	Apr '05/Mar '06	Apr '06/Mar '07	Apr '07/Mar '08	Apr '08/Mar '09	Apr '09/Mar '10	Apr '10/Mar '11	Apr '11/Mar '12
<b>CONTACT CRIMES</b>									
Murder	43	43	29	26	35	20	32	24	27
Sexual Crimes	145	129	82	62	60	79	130	154	140
Attempted Murder	21	27	6	12	6	5	11	12	7
Common Assault	719	900	726	694	696	692	698	805	777
Common Robbery	129	120	61	79	102	80	110	99	118
<b>PROPERTY RELATED</b>									
Burglary (Non-Residential)	191	113	93	90	132	149	166	178	176
Burglary (Residential)	588	513	376	384	447	460	518	456	545
Stock-theft	201	129	100	81	85	93	85	79	119
<b>POLICE DETECTION CRIMES</b>									
Drug-related Crime	306	583	517	613	710	757	812	980	847
Driving Under the Influence	103	120	217	281	254	256	226	252	169

The most alarming increase in reports across the District is for drug-related crimes, as well as driving under the influence of drugs or alcohol. At Beaufort West and Prince Albert stations there are a three-fold increases in such crimes reported. These statistics may be partly attributed to improvements in policing and law enforcement but the most important indicator is the socio-economic circumstances in communities particularly among the youth.

**Figure 3-13: Central Karoo District Drug-Related Crime, 2003/04 to 2011/12**

### 3.2.11 Implications for the SDF

The following are considered important considerations and informants to the socio-economic environment of the Central Karoo District:

- The population growth rate of the District is much lower than the provincial and national average. It is expected that growth will reach a plateau in the medium term. Municipal and state infrastructure and service provision will thus need to be provided accordingly;
- There appears to be an equal spread of health facilities across the District, however, each rural facility may not have resident health professionals available. The Klaarstroom Clinic currently has priority;
- Short and medium term District economic growth will be constrained by current economic difficulties in the national and global economy. This will limit employment opportunities in certain economic sectors particularly the Finance, Real Estate and Business Services Sector which is the most vulnerable during the economic recession;
- Levels of education are low in the District. It impacts on the employability of the economically active population and in turn dents prospects of continued economic growth in the District;
- Skills and literacy training as well as access to some form of vocational and tertiary training are essential to address the skills gap in the District. An FET College which caters to the entire District is an option particularly as the District has the highest youth unemployment in the Western Cape;
- There is a lack of available land in the District on which to undertake sustainable land reform projects. Existing land reform projects are under-capitalised and individual income potential is very low;
- The District has several historic cemeteries which will need proper protection in terms of facility management;
- The District is experiencing a significant increase in crimes related to alcohol and drug use. Policy interventions should target this form of crime.

### 3.3 Built Environment

#### 3.3.1 Hierarchy and Role of Settlements

A settlement hierarchy is known by the way in which settlements are arranged within a certain area and is usually based on the population size of the settlements as well as economic and social importance. The greater the population of a settlement, the larger the geographic area, and the higher the status and the greater the availability of services. Position in a settlement hierarchy can also be dependent on the sphere of influence – such as how far people will travel to use the services of a settlement; if people travel further the town becomes more important and ranks higher in the hierarchy.

The settlement hierarchy of the Central Karoo District Municipality consists of one primary settlement, known as Beaufort West, four secondary settlements, namely Prince Albert, Merweville, Laingsburg and Murraysburg and several small settlements strategically located along the N1 route and other local routes. Beaufort West is seen as the main service centre of the District and provide for medical, educational, commercial and administrative activities. Prince Albert and Laingsburg towns are both strategically located within the District area and mostly serve the surrounding farming communities. Laingsburg is also located on the N1 which link Cape Town and Gauteng and the through traffic create positive spin-offs opportunities for the local economy.

The smaller settlements such as Koup, Leeu-Gamka, Luttig, Matjiesfontein and others as indicated on the map are mostly settlements established around farming activities and historic railway activities within the District. Most of them located on or close to the N1 Highway. Refer to **Plan 17**.

The future expansion of settlements within the District is limited to low-cost housing development. Low-cost housing developments are primarily located at the periphery of towns or are planned for such locations. Industrial land use activity is also not expected to grow significantly due to the slow uptake of industrial zoned land in the main nodal towns of each Local Municipality.

#### 3.3.2 Transportation

##### **Road Network**

The N1 highway forms part of the South African National Roads Agency (SANRAL) road network and bisects Central Karoo District on a northeast-southwest axis through the towns of Laingsburg and Beaufort West. According the Western Cape Department of Transport and Public Works, the N1-corridor between Beaufort West in Central Karoo District and Paarl in the Cape Winelands District carries an average annual daily traffic (AADT) volume of approximately 3,219 vehicles. In addition, the average annual daily truck traffic (AADTT) is 1,180 vehicles of which 73% are longer combination vehicles (LCV's). It is estimated that 19 million tons of goods are transported on this corridor between Cape Town and Gauteng and is a key provincial and national freight corridor.

The N1 runs along Donkin Street, the main road in the centre of Beaufort West's central business district (CBD). The road has for long impacted both negatively and positively on the town's economy and environment; a number of local businesses depend on trade with passing traffic on the N1 whilst the truck freight traffic causes significant noise pollution, traffic safety issues and emissions in the CBD. A by-pass to circumvent the town's CBD has been considered with a specific study undertaken by SANRAL which assessed alternative alignments for heavy vehicle truck movements. In addition, alternative measures have been implemented along Donkin Street in terms of its upgrading to accommodate the future increase in heavy vehicles and other traffic. This element was supported with caution since the elements of cultural and historic interest (such as the street storm-water furrows) could be negatively impacted. On-street parking provision and layout on this stretch of road were also altered and is highlighted as a priority area in the Beaufort West Municipality Integrated Development Plan. Furthermore, the section of the N1 through the town of Laingsburg has been identified for landscaping and traffic calming.

The N12 links with the N1 at Beaufort West and connects with the N2 southwards in the Eden District Municipality. Although it functions as a national route, it is not maintained by SANRAL as a national road and falls under the jurisdiction of the Provincial Government of the Western Cape's Department of Transport and Public Works.

The R61 from the N1 at Beaufort West is an important connector to the N9 and Aberdeen in the Eastern Cape. An Average Speed over Distance (ASOD) system has been implemented on a 71.6km stretch of this road which has suffered from a significant number of road traffic accidents and fatalities. It is considered one of the longest camera networks of its kind in the world.

**Table 3-11: Central Karoo Road Network Lengths**

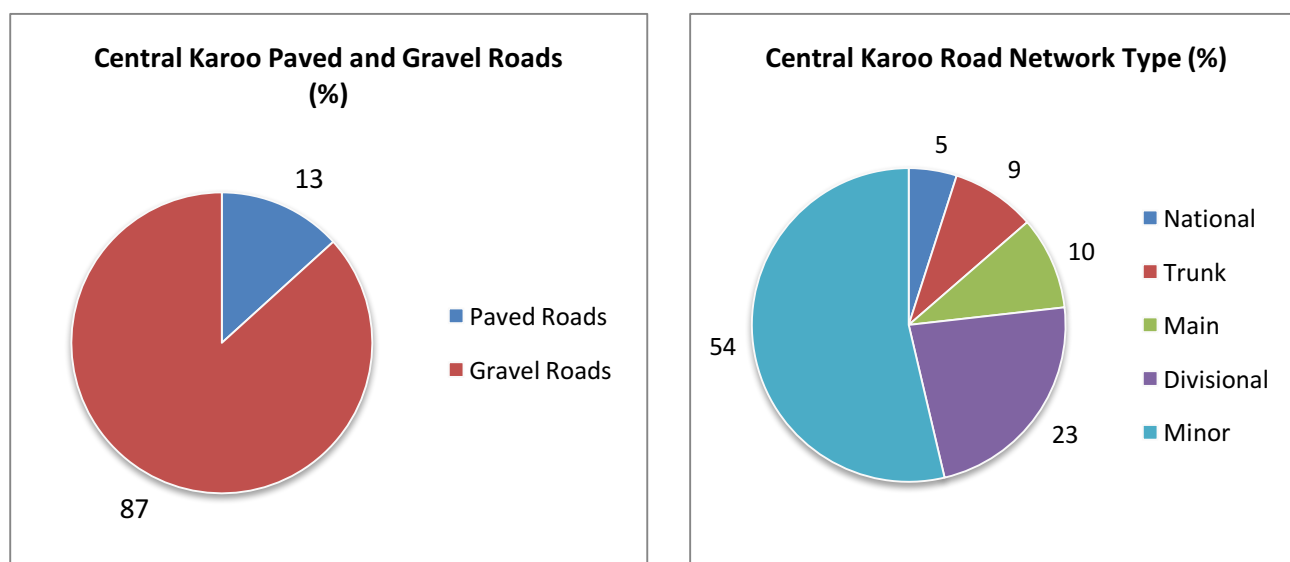
ROAD TYPE	PAVED (km)	GRAVEL (km)	TOTAL (km)	%
National	364	0	364	5%
Trunk	555	83	638	7%
Main	42	662	704	9%
Divisional	15	1684	1699	23%
Minor	0	3945	3945	56%
<b>TOTAL</b>	<b>976</b>	<b>6374</b>	<b>7376</b>	<b>100%</b>

Other roads forming important linkages in Central Karoo District are:

- R328 which connects Prince Albert with the N1 at Prince Albert Road as well as southwards to Oudtshoorn via the Swartberg Pass;
- R407 connecting Prince Albert to the N12 near Klaarstroom;
- R63 connecting Murraysburg with the N1 and Graaff-Reinet in the Cacadu District Municipality;
- R354 connecting the N1 near Matjiesfontein with Sutherland in Namakwa District Municipality;
- R323 from Laingsburg across the Swartberg Mountains on the Seweweekspoort Pass connecting at the R62 near Ladismith;
- R353 from the settlement of Leeu-Gamka towards Merweville and Fraserburg in the Namakwa District Municipality;
- R322 on the R61 near Beaufort West towards Rietbron and connecting at the N12 near Willowmore in Cacadu District Municipality.

Minor and divisional roads account for more than 80% of all roads and are all unpaved; these routes provide primary access to farms and remote rural settlements across the District.

**Figure 3-14: Central Karoo District Road Network Characteristics**



## Railways

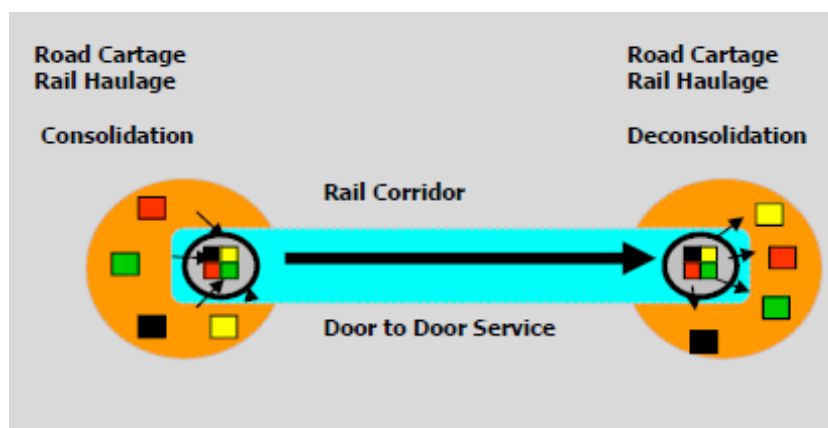
Much of the Central Karoo District towns can ascribe their existence to the major railway line which runs parallel to the N1 highway for its entire stretch through the District. As a result, the national decline in railway services and investment during the 1990's and subsequent years are mirrored in the condition of rural settlements along the railway line. South African railway history is particularly notable at Matjiesfontein station.

The District has two major railway stations; the stations at Beaufort West and Laingsburg accommodates both passenger and freight services. Mainline passenger service Shosholoza-Meyl departs and arrives daily on the Pretoria-Cape Town route as well as on Thursdays for the Cape Town-Durban route. Prince Albert Road station provides access to the town of Prince Albert located 45kms to the southeast. The Rovos Rail and Blue Train luxury services passes through the District several times per week. Nelspoort is also provided with a station that links the town to the main rail network between Cape Town and Gauteng. However, the train to Beaufort West arrives in Nelspoort at 04:00 and returns at 19:00 which does not render it viable as a mode of public transport. The Central Karoo District has significant and relatively modern rail infrastructure which is not used to the benefit of local communities.

## Freight Transport

The town of Beaufort West has been identified as the location for a possible '*transport logistical interchange*' or intermodal freight hub. This is a broad term which refers to the concentration of facilities and services related to the freight and logistics industry where the transfer of goods may occur between two or modes of transport for further distribution to multiple destinations. This may not be a feasible due to the nature of the transshipment industry as illustrated in Figure 3-15.

**Figure 3-15: Transnet Domestic Supply Chain Model**

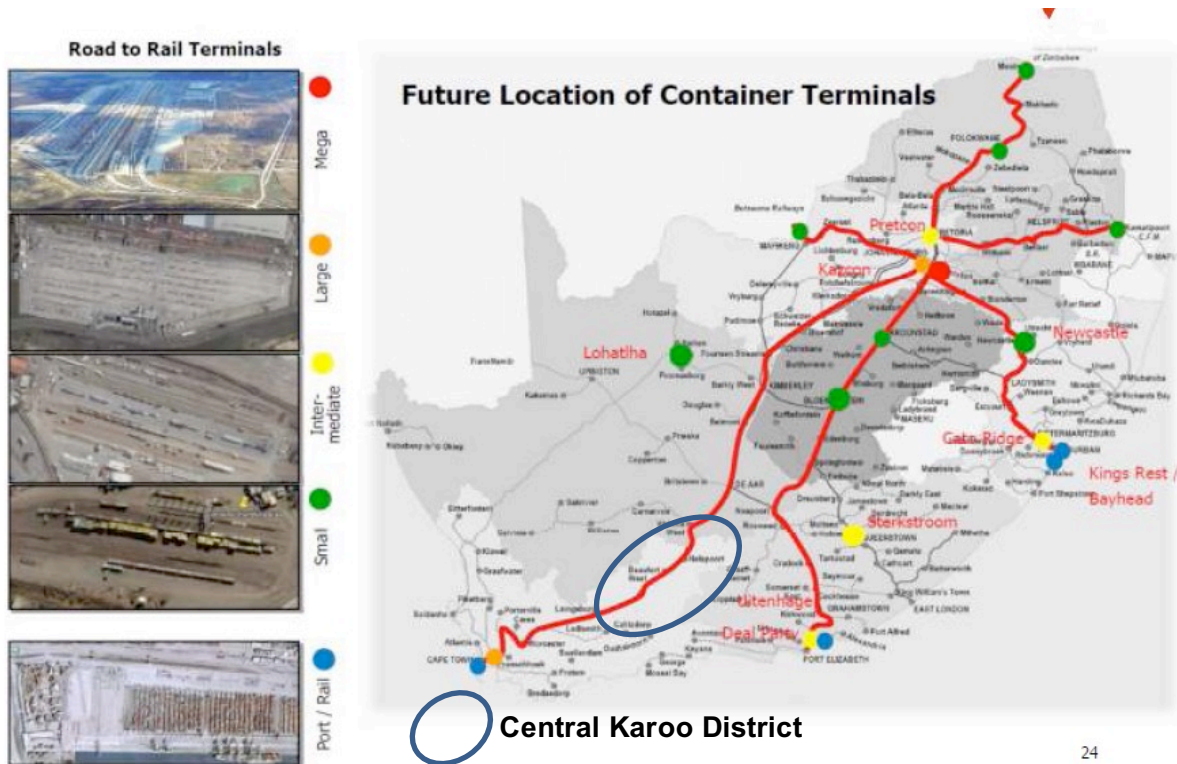


Source: Transnet, 2012

A facility of this nature should be able to provide consolidation and deconsolidation of freight between long haul rail freight (i.e. a distance exceeding 2,000 kilometres) and short haul road freight (i.e. a distance less than 800 kilometres). Short haul road freight requires a large market area similar in characteristics to a metropolitan area. Furthermore, Central Karoo District is not located at the convergence of several national freight routes or corridors as depicted in Figure 3-16. The District is only a transit point for traffic between Cape Town and Gauteng. Moreover, these facilities should ideally be located in close proximity to the trip origin and destination in order to limit costs related to drayage. With an estimated 1,180 heavy vehicles passing through the District daily however there may be opportunities to establish a cluster of road freight industry service businesses in the District.

In order to establish whether a facility of this nature is feasible and to determine the type of facility and operational characteristics, a complete and comprehensive assessment of freight and its movement along the Cape Town – Gauteng freight corridor will be required.

**Figure 3-16: Transnet Freight Rail Container Terminal Proposals**



Source: Transnet, 2012

### Public Transportation

Formal public transport services are limited across the District; mini-bus taxi, sedan taxi and a single bus service are found in the town of Beaufort West; there is thus a mini-bus taxi rank in the CBD of Beaufort West. Irregular mini-bus taxi services operate between settlements across the District in medium to long haul type services. Long distance services are commonly needed for education, healthcare and shopping trips to Cape Town, George, Oudtshoorn and Worcester. District residents have considerable difficulty in accessing transport services for shopping and leisure activities.

Long distance bus operators have scheduled daily stops at Laingsburg, Prince Albert Road and Beaufort West. Destinations include Cape Town, Kimberley, Bloemfontein, Durban, Johannesburg and Pretoria. More than 28 buses (with a potential passenger capacity of 12,000 per week) from established national operators pass through the Central Karoo District daily.

### Non-Motorised Transport

Walking is the primary transport mode for intra-town movement. All three Local Municipalities have constructed bicycle and pedestrian paths and sidewalks to a limited extent. Non-motorised transport infrastructure provision has been criticised for not being undertaken in a holistic or coordinated manner which provides linkages to important settlement areas and activities (e.g. between residential neighbourhoods, schools, clinics, shopping areas, etc.). Further planning and budgetary commitments are required for non-motorised transport across Central Karoo District.



## Air Transport

There are three landing strips or airfields across the District; one each in every Local Municipality. There are a number of other airfields which has fallen in disuse or have limited access in private ownership. These facilities are primarily used by light aircraft for tourism and leisure purposes.

### Central Karoo District Municipality Mobility Strategy

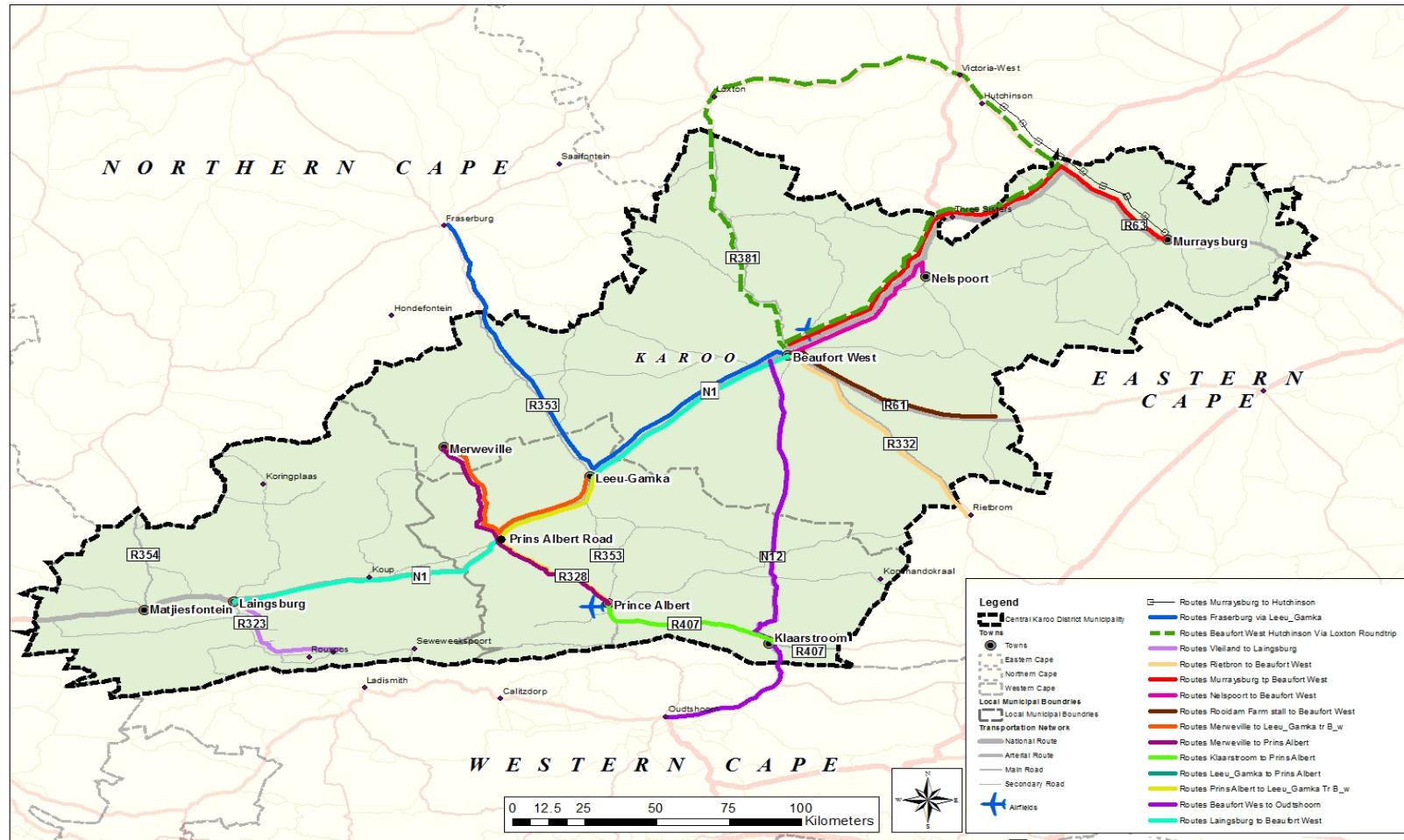
The Western Cape Department of Transport and Public Works commissioned a mobility strategy for the Central Karoo District Municipality of which the draft review document was completed in April 2013. The Mobility Strategy is the precursor to the development of an Integrated Public Transport Network (IPTN) Plan for the District Municipality and entails the institutional, infrastructural and operational aspects of the transport system. The review of the Mobility Strategy is to ensure its alignment as an IPTN in terms of the National Land Transport Act (Act 5 of 2009), provide a cost-model for implementation, and greater clarity on the responsibility and legal implications of providing municipal public transport services within the context of the National Land Transport Act.

Once consensus have been reached by all stakeholders in terms of an cooperative governance agreement on the need of such a system, the appropriate institutional structure(s) need to be established in terms of Section 78 of the Municipal Systems Act (Act 32 of 2000). System implementation, i.e. institutional, infrastructure and operations, may follow thereafter.

The Mobility Strategy proposes up to 15 public transport routes connecting most of the primary towns with outlying rural settlements as well as towns outside of the District Municipality, such as Oudtshoorn and Victoria West. A fleet of 13 vehicles including 4 65-seater buses, 4 25-seater midi-buses, 3 mini-bus taxi's and 2 spare vehicles is proposed. Infrastructural implementation includes bus stops and depots at strategic locations across the District Municipality.

Key issues for the implementation of the IPTN is consensus amongst stakeholders, i.e. the Central Karoo District Municipality, all local municipalities within the District, and the Provincial Government; secondly it is expected that operational costs of the public transport system will not be covered by fare or revenue collection and that a subsidy will be required. It will be essential that agreements be reached with the National Department of Transport to ensure that allocations from the Public Transport Operating Grant (PTOG) are made available to fund operating subsidies of the public transport services in the Central Karoo District municipal area. Refer to **Plan 18 illustrating the integrated public transport network.**





**CENTRAL KAROO DISTRICT MUNICIPALITY - INTERGRATED TRANSPORT NETWORK**

Source : ENPAT

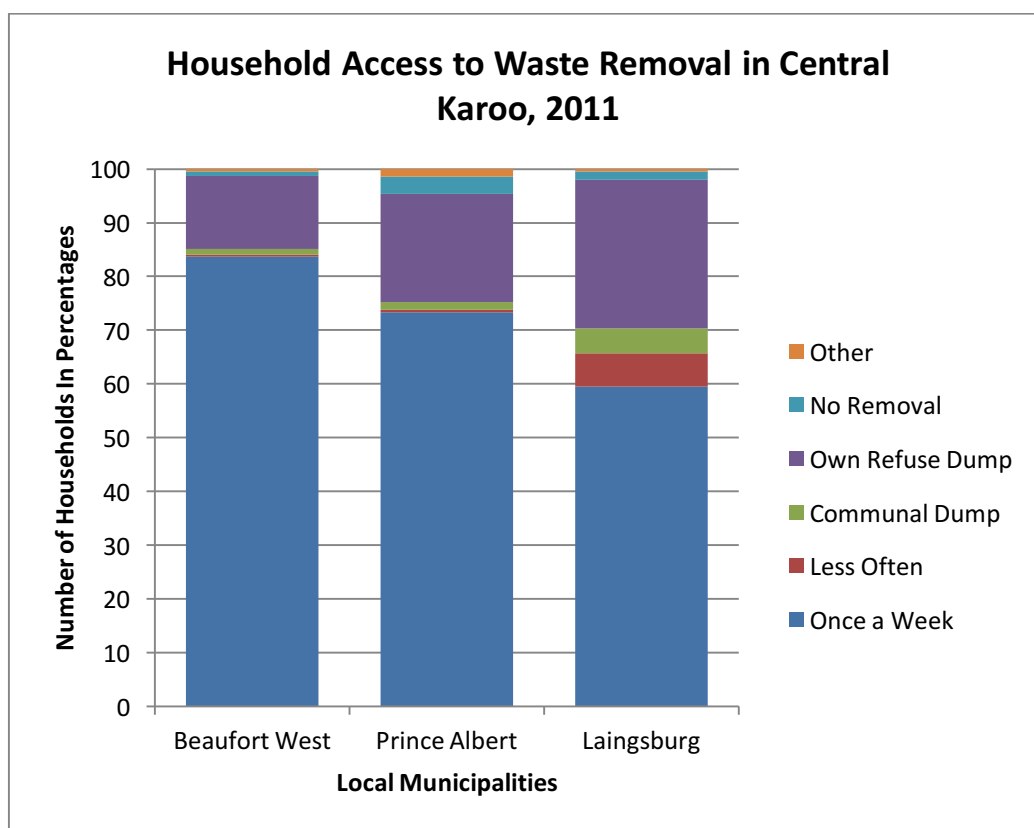
**PLAN 18  
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Document Path: P:\\_022-000203\WMS-MCM\18\LA-ND\FAW\mal Drawings\September 2013\GISPLAN 18 Integrated Transport Network Central Karoo.mxd

### 3.3.3 Solid Waste Management

In the Central Karoo District Municipality 80% of the District's 19,079 households have their waste removed by the local authority or private company at least once a week and 16% of the household needs to dump their own refuse. Laingsburg Municipality has the highest percentage of households with inadequate access to waste removal at 40% compared to 27% and 17% for Prince Albert and Beaufort West Municipalities respectively.

**Figure 3-17: Households with access to waste removal**



Source: Census 2011

Laingsburg Municipality has a single landfill site and no waste transfer stations; alternative waste management measures should be investigated for this Municipality in terms of a waste management plan particularly in light of 30% of households who dump their own waste. The landfill site at the town of Beaufort West has inadequate capacity and is in need of upgrade. The licencing of and resource capacity at landfill sites across the District is also problematic.

### 3.3.4 Water

The majority of the households have immediate access to water at a tap in their dwellings or on the household premises by way of the municipal potable water infrastructure. Around 2% of households obtain water from a public tap located in their surrounding area whilst 113 households (0.6%) do not have access to water.

Boreholes are the largest source of bulk potable water for the Central Karoo District followed by the Gamka Dam. Beaufort West Municipality has won a Blue Drop award in 2011 with a 92% average score. Murraysburg has shown a drop in the Blue Drop score; 45.6% in the 2010 assessment to 11.5% in the 2011 assessment. Prince Albert Municipality has scored 55% during the 2010 Blue Drop assessment and improved to 77.5% in the 2011 assessment. Laingsburg Municipality has scored 63.9% during the 2010 Blue Drop assessment and improved to 80.54% in the 2011 assessment.

Figure 3-18: Number of Households with Access to Running Water

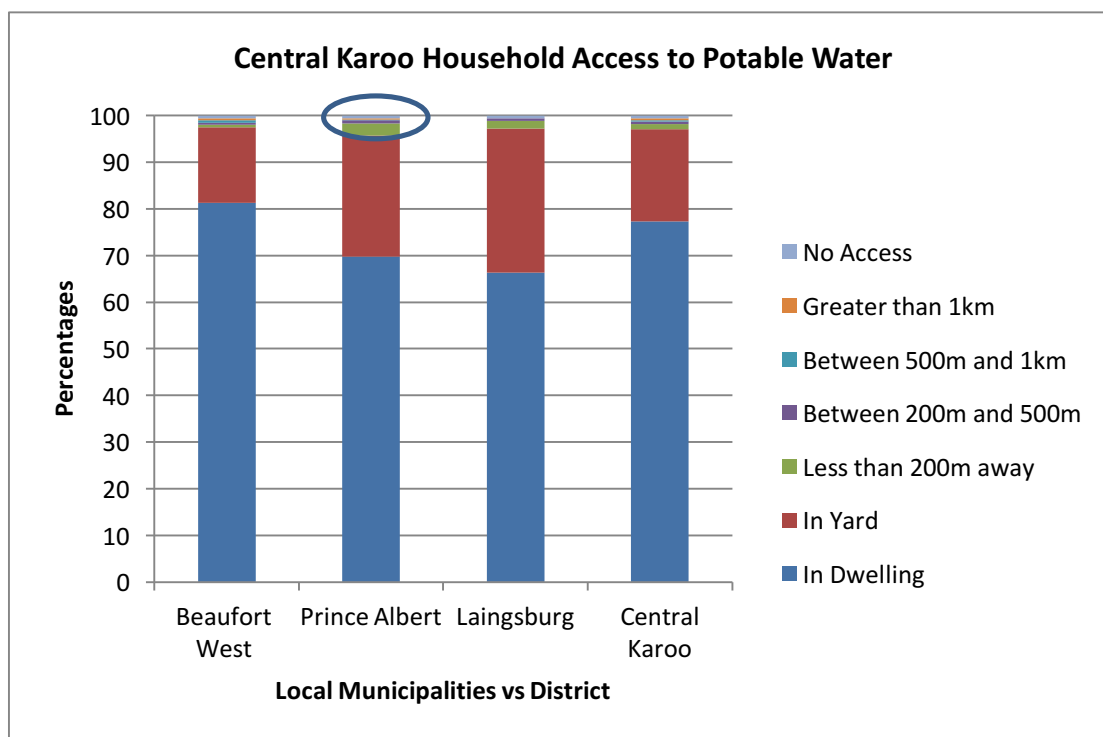


Table 3-12: Summary of water requirement and supply for the towns in Beaufort West Municipality

Town	Population	Water requirement million m <sup>3</sup> /a	Supply source	Current yield million m <sup>3</sup> /a
Beaufort West	33 324	2.517	Gamka Dam	0.5
			17 Boreholes and Two Springs	1.564
Merweville	1 240	0.070	Seven Boreholes	0.119
Nelspoort	1 485	0.101	Sout River (weir)	0.100
			Two Boreholes	0.043
Murraysburg	4 416	0.285	Five river boreholes	0.285

Table 3-13: Summary of water requirement and supply for the towns in Prince Albert Municipality

Town	Population	Water requirement million m <sup>3</sup> /a	Supply source	Current yield million m <sup>3</sup> /a
Klaarstroom	356	0.028	Boreholes	0.031
Prince Albert Road	126	0.003	Boreholes	N/av.
Prince Albert	5 487	0.305	Dorps River	0.471
			Boreholes	0.229
Leeu Gamka and Bitterwater	2 234	0.083	Boreholes	0.095

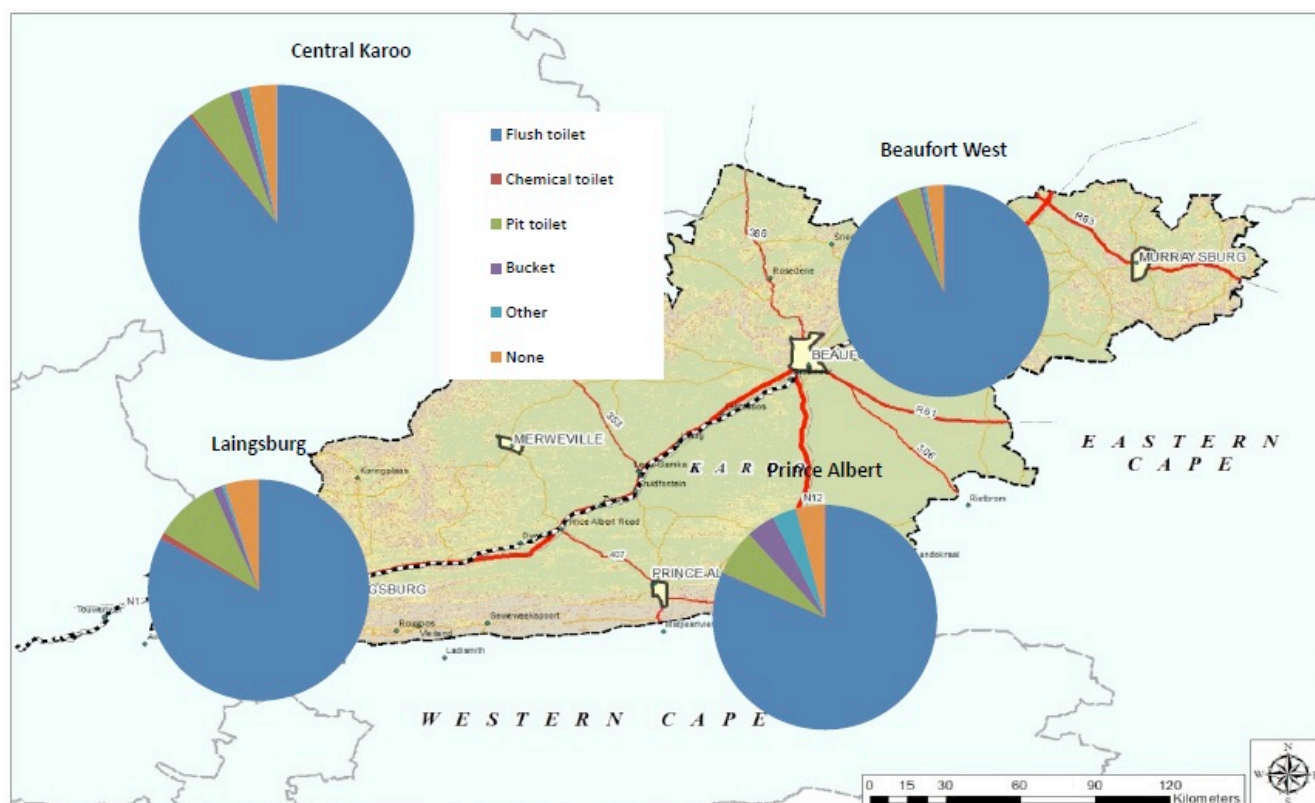
**Table 3-14: Summary of water requirement and supply for the towns in Laingsburg Municipality**

Town	Population	Water requirement million m <sup>3</sup> /a	Supply source	Current yield million m <sup>3</sup> /a
Laingsburg	4 613	0.600	Buffels River	0.118
			One Borehole	0.01
			Southkloof Fountain and Southkloof pit	0.336
Matjiesfontein	405	0.004	Two Boreholes	0.18

The challenge across the District is the commissioning of additional water sources in order to attract industry, particularly in the event of increased mining activity. Moreover, due to periodic drought conditions a district-wide water demand management plan for all water user sectors should be developed to manage water consumption.

### 3.3.5 Waste Water Treatment (Sanitation)

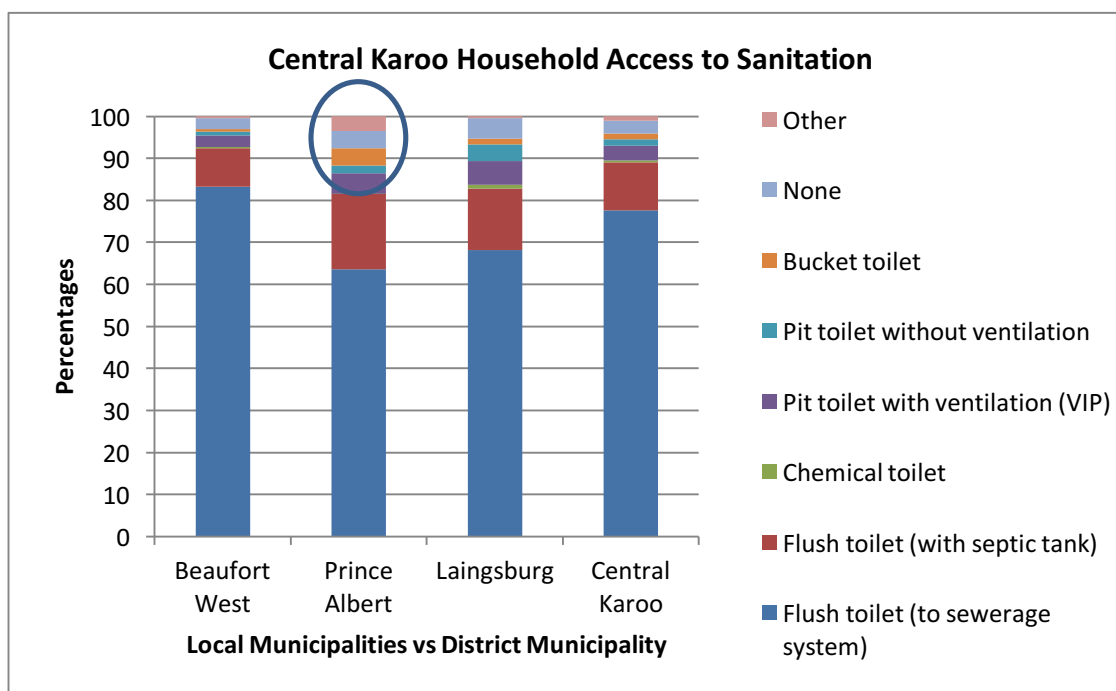
According census statistics 10% of households in Central Karoo District have substandard access to sanitation services. Prince Albert and Laingsburg Municipalities are far above the District average with 18% and 16% of households with poor access to sanitation services respectively. Pit toilets have the highest percentage occurrence in Laingsburg Municipality whilst the bucket system is most prevalent at the town of Prince Albert Road in Prince Albert Municipality. Laingsburg Municipality has the highest percentage of households without sanitation services.

**Figure 3-19: Household access to sanitation across Central Karoo District**



The figure below provides a more detailed representation of household access to sanitation for each Local Municipality as well as the District average.

**Figure 3-20: Access to sanitation per Local Municipality**



There are a total of 8 waste water treatment plants in the District. Generally waste water treatment facilities in the District have the following difficulties:

- Waste water treatment work permits have expired at several sites and the status of permits are unknown;
- Facilities across the District are poorly staffed;
- Monitoring and compliance are also lacking at most facilities;
- Regular detailed maintenance work is not undertaken.

**Table 3-15: Service Levels at Municipal Waste Water Treatment Works**

Treatment Works	Capacity (kl/day)	Staffing Levels	Monitoring	Compliance
Beaufort West	4660	Good	Acceptable	Acceptable
Merweville	111	Poor	Poor	Poor
Nelspoort	434	Poor	Poor	Poor
Prince Albert	1000	Poor	Poor	Acceptable
Leeu-Gamka	300	Poor	Poor	Poor
Prince Albert Road	0	0	0	0
Klaarstroom	50	Poor	Poor	Poor
Laingsburg	750	Acceptable	Acceptable	Poor

The treatment plant at Beaufort West has adequate capacity and is in good condition but will require greater and comprehensive maintenance. The Merweville facility is in poor condition has insufficient capacity and standard maintenance requirements will have to be addressed. At Nelspoort there is sludge build-up due to incorrect operations whilst at the town of Prince Albert there appears to be capacity constraints. The settlement of Prince Albert Road along the N1 still makes use of the bucket system. Buckets are emptied at a central tank with soak-away. The facility at Laingsburg is managed at acceptable levels and is generally in a good condition. However, there are concerns that its design capacity and operation capacity does not match. Also, the town of Murraysburg does not have a water-borne sewerage system.

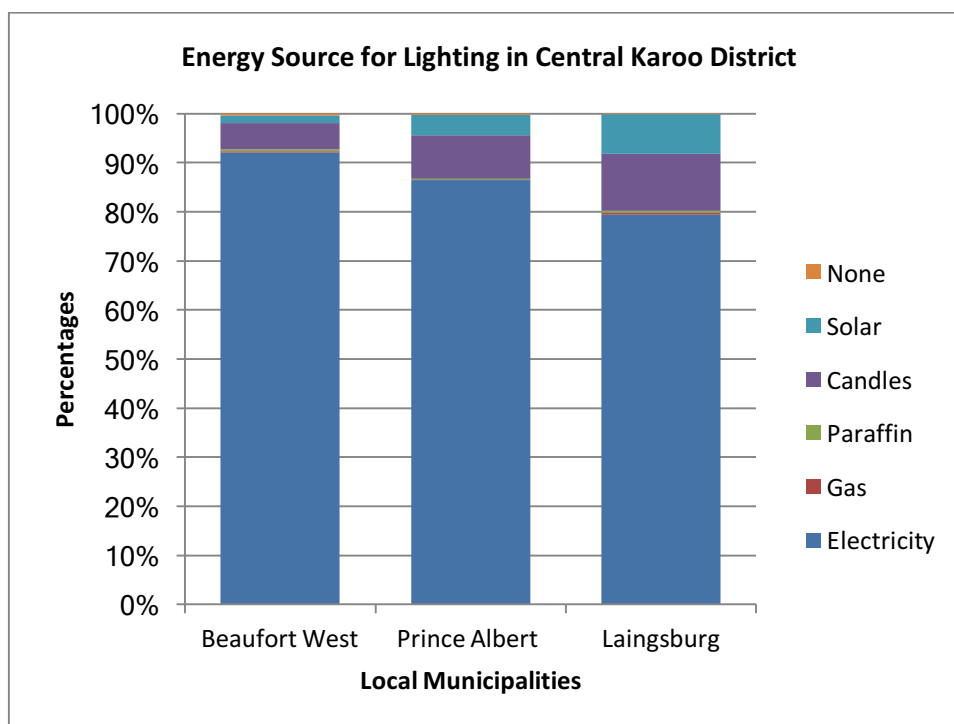
Significant investment will be required in the short to medium term to upgrade waste water treatment facilities across the District in order to provide for existing and future growth in sewer flows.

### 3.3.6 Energy

Several high voltage ESKOM electricity lines cross the District in a southwest – northeast direction and is the primary source of bulk electricity supply; a high voltage line runs south from Beaufort West to the Eden District Municipality at a substation near Dysselsdorp. Medium voltage electricity lines distribute electricity from substations to towns, settlements and farm areas.

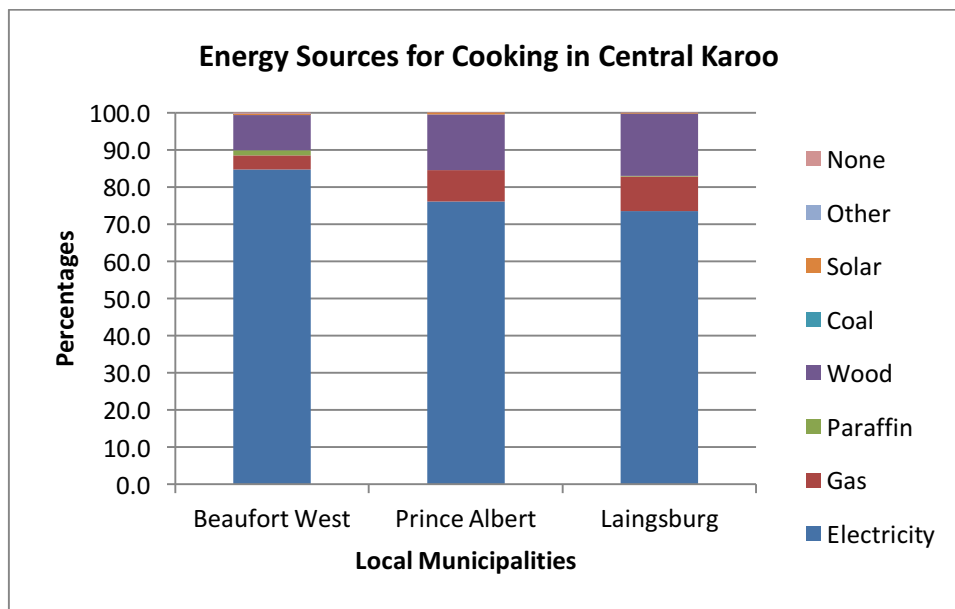
The use of electricity for lighting has significantly increased from 1996; it increased from 79% to 89% in 2011. Laingsburg Municipality has the highest percentage of households using candles (12%) as a source of lighting. In contrast, it has the highest percentage of households making use of solar energy (8%) for lighting, as depicted in 1, when compared to Prince Albert (4%) and Beaufort West (1.6%).

**Figure 3-21: Central Karoo District Energy Sources for Lighting, 2011**



Around 82% of households in the District make use of electricity for cooking and 66% for heating. A notable occurrence is that wood is still used by almost 12% of all households for cooking whilst 21% of households make use of wood for heating. These numbers may relate to the low average household income in the District.



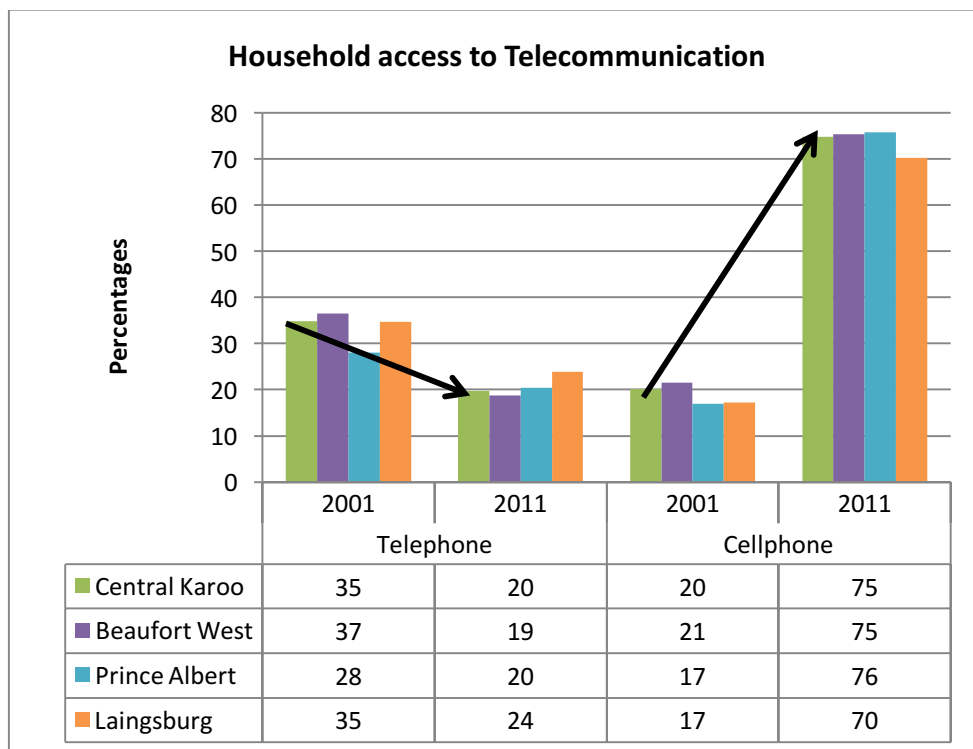
**Figure 3-22: Central Karoo Energy Sources for Cooking, 2011**

Independent power producers (IPP) are investigating the establishment of solar power plants in certain areas of the District. Electricity generated at these plants will be sold to ESKOM and fed into the main power grid.

### 3.3.7 Telecommunications

The majority of the residents in Central Karoo District do not have landline telephones. The use of landline telephones have seen a marked decline since 2001 down from 35% to 20% of households in 2011 across the District. In 2011 more than 3,750 households have access to a landline telephone compared to 14,270 households with access to a cellular phone. Cellular telephone access has increased nearly four-fold from 20% to 75% of households. Prince Albert Municipality has the highest percentage of households with access to cellular telephones at 76%; Laingsburg Municipality falls below the District average of 75% at 70%.

Furthermore, around 4,670 households (or 25%) in Central Karoo District have access to the internet; Prince Albert has 28% (997), Laingsburg has 25% (611) and Beaufort West has 23% (3,066) of households with access to the internet.

**Figure 3-23: Household access to Landline and Cellular Telecommunications, 2001 to 2011**

### 3.3.8 Storm-water

Limited information is available on the storm-water infrastructure and its capacity; storm-water infrastructure primarily consists of open channels which drain to natural water courses with limited formal pipe infrastructure. Furthermore, existing infrastructure does not have the capacity to handle thunder storms and therefore requires upgrading.

A service provider has been appointed to compile the Storm-water Master Plan for Beaufort-West, Laingsburg and Prince Albert. The funding of the available projects is in process and therefore no up to date information is available at this stage. The storm-water master plan information will be obtained and incorporated into the final document.

### 3.3.9 Implications for the SDF

The following are considered important considerations and informants to the built environment of the Central Karoo District:

- The distances between settlements within the District are vast and therefore access to municipal and government services are problematic. The N1 highway forms the backbone of mobility and economic activity in the District and links all the major settlements within the District;
- Higher order government facilities and services should ideally be located in Beaufort West as the District's major settlement as a result of its transportation links as well as infrastructure and economic base;
- The N1 highway is a strength as a result of the economic and locational opportunities; however, its traffic through the CBD's of Laingsburg and Beaufort West poses a threat in terms of noise pollution, traffic safety and infrastructure maintenance and management;
- The implementation of the N1 by-pass at Beaufort West should be carefully considered in terms of its effect on the local economy;

- There is a lack of public transport in the District and the benefits of a comprehensive and integrated public transport system (including school transport services and non-motorised transport) should be investigated particularly to provide mobility and linkages to outlying rural settlements. The implementation of the Mobility Strategy and IPTN for the Central Karoo District Municipality should thus be sought. ;
- Investigations should be undertaken to determine the feasibility of surfacing a number of important gravel roads across the District such as portions of the R323 and R354 in order to improve access to tourism sites;
- Proper and suitable waste management guidelines should be developed to assist the Local Municipalities in achieving optimal levels of service and to ensure compliance with legislation;
- In order to address water resource scarcity, a District wide Water Demand Management Plan for all sectors, i.e. Business, Domestic, Industry and Agriculture, should be developed. This Plan should also address alternative technology in respect of sanitation as oppose to water borne systems;
- An investigation should be considered into a District Energy Conservation Plan which covers demand side management as well as the use of alternative energy resources.

## 4. Towards a Spatial Vision for the Central Karoo District

### Chapter 4

The following section provides description of the spatial vision of the District Municipality as well as the principles to be applied in the development of the Spatial Development Framework which is informed by the issues identified in the preceding chapter.

The preceding analysis phase confirmed the following issues as important to its future development

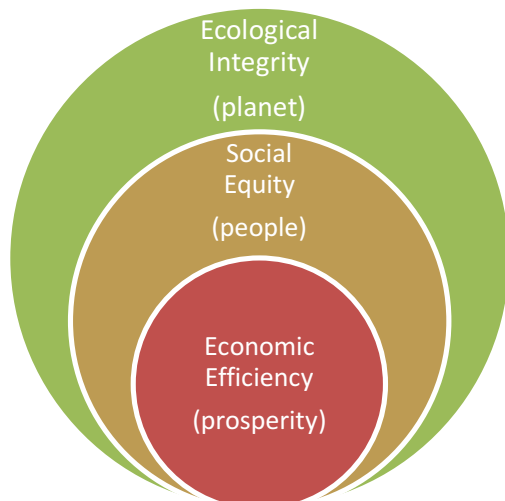
- a) Local Economic Development
- b) Housing
- c) Health
- d) Infrastructure Provision and Maintenance
- e) Environmental Conservation
- f) Disaster Management
- g) Agriculture
- h) Mining
- i) Mobility

In formulating a vision statement for the Central Karoo District Municipality, and to address the issues as mentioned above, the following need to be considered:

According to the *Guidelines for the Development of Spatial Development Frameworks* (2010) by the DRDLR, the vision statement of the SDF should not be a restatement of the Integrated Development Plan (IDP) vision but as the spatial representation of the IDP the SDF vision statement should have the following:

- i. It must have a spatial aspect, implication or inference;
- ii. It can also reflect and capture the unique and distinctive nature and characteristics of the District Municipality; and
- iii. The vision statement should not contradict the principles contained in the Development Facilitation Act, 1995 (Act 67 of 1995).
- iv. The statement should be concise and preferably be in one sentence or several statements that addresses the major concerns, characteristics, opportunities, or policy of the District Municipality.

**Figure 4-1: The Three Pillars of Sustainability (WCPSDF, 2009)**



Further to the above, national and provincial policy and directives must also be considered in the formulation of a vision. *The National Spatial Development Perspective* (2003) supports spatial forms and arrangements that encourage government investment which maximises and achieves sustainable outcomes. One of the normative principles of the NSDP is that urban and rural development of the District Municipality should significantly alter current patterns of resource use so that there is a meaningful reduction in their consumption in order for future generations to also benefit.

The guiding principle of the Western Cape Provincial Spatial Development Framework (WCPSDF) is 'Sustainability in Development' (refer to Figure 4-1). The

term refers to the integration of social, economic and ecological factors into planning, decision-making and implementation to ensure that development serves present and future generations. The WCPSPDF refers to the three (3) pillars of sustainability, i.e. Ecological Integrity (Planet), Social Equity (People), and Economic Efficiency (Prosperity) as shown in the figure below. These three pillars of sustainability can be viewed as providers of the capital necessary for each subsequent pillar to function. Thus, economic capital is dependent on social capital which is in turn dependent on ecological capital.

A similar theme is expressed in the IDP of the CENTRAL KAROO DISTRICT MUNICIPALITY; as its strategic management tool the IDP states that the District Municipality needs the SDF to ensure a sustainable environment for current and future human development needs.

#### 4.1 The Goal of Sustainable Development

Sustainable development is defined as *'development that meets the needs of the present without compromising the ability for future generations to meet their own needs'* (United Nations, 1987). Sustainable development encompasses the integration of social, economic and ecological factors into planning, decision-making and implementation so as to ensure that development serves present and future generations (WCPSPDF, 2009).

**Ecological Sustainability** refers to the protection and conservation of non-renewable natural resources which is important for sustaining land, water, and atmospheric processes, as well as plant, animal and human life. Ecological sustainability in relation to the provision of municipal services means the provision of a municipal service in a manner aimed at ensuring that:

- The risk of harm to the environment and to human health and safety is minimised to the extent reasonably possible under the circumstances;
- The potential benefits to the environment and to human health and safety are maximised to the extent reasonably possible under the circumstances;
- Legislation intended to protect the environment and human health and safety is complied with.

The **Social Equity** pillar refers to both material well-being (the absence of poverty) and spiritual well-being. It involves meeting the basic social needs of all communities and includes security of cultural diversity as well access and participation in democratic processes. Social equity can be achieved by prioritising the needs of the poor and disadvantaged groups, by ensuring transparent and fair planning and allocation processes, the facilitation of community participation in planning and development and creating democratic institutions.

**Economic efficiency** entails the attainment of prosperity or human capital and refers to the optimisation of benefit at the lowest cost, i.e. optimal development must be achieved at the lowest possible ecological and social cost. Moreover, in order to comply with the sustainability principle, it means taking all costs (present and future) into consideration. At a government level, economic efficiency can be achieved by adequate access to education at all levels, instituting policy on the redistribution of wealth, creation of employment opportunities via public programmes, financial and technical support as well as encouraging local production, trading and service provision.

The vision statement of the CENTRAL KAROO DISTRICT MUNICIPALITY as described in its Integrated Development Plan (2012) states the following:

*"Working Together in Development and Growth"*

In keeping with the central theme contained in national and provincial policy directives as well as that of the Central Karoo District Municipality's IDP and the guidelines for the formulation of the SDF's borne in mind, the following vision statement for the Central Karoo District Municipality is proposed:

***"Working Together in Sustainable Spatial Development and Growth"***

The above vision statement is for consultation purposes and a means of starting debate on the appropriate vision statement for the District Municipality and is by no means final. All relevant stakeholders within the District Municipal Area will be consulted throughout the planning process on this matter.

## 4.2 Central Karoo Spatial Principles

In terms of the above, the concept of sustainability brings forward a number of principles which underpins its core values of ecological integrity, social equity and economic efficiency. These principles are adapted from those contained in the Development Facilitation Act, Spatial Planning and Land Use Management Act, and other published material on sustainable development. The Central Karoo District's **Ten Spatial Principles** are as follows:

- i. Poverty Alleviation;
- ii. Focus on Special Needs Groups;
- iii. Gender Equality and Equity;
- iv. Environmental Planning and Management;
- v. Participation and Democratic Processes;
- vi. Local Economic Development;
- vii. Accessibility and Mobility;
- viii. Urban Development and Restructuring;
- ix. Safety and Security;
- x. Variation and Flexibility

These principles should form the basis and part of the key considerations in planning and development in the Central Karoo District Municipality in order to affect the vision of sustainable development. These principles are inter-related and seek to achieve sustainability in a holistic and integrated manner through spatial planning.

### 4.2.1 Poverty Alleviation

Poverty alleviation refers to creating opportunities for people to earn an income to provide for their basic needs. Planning interventions should focus on satisfying the basic needs of communities by ensuring, at a minimum, access to housing, water, sanitation, and other basic needs and services. Realistic and practical mechanisms are required to overcome poverty and should support sustainable living, e.g. home-based agriculture and enterprises. Furthermore, an essential component in respect of poverty alleviation is access to all levels of education.

Spatial planning should identify communities which lack basic services and infrastructure and devise interventions that will change the conditions of that community for the better. These interventions may be infrastructural, such as roads and housing provision, or economic opportunities in the form of Local Economic Development (LED) proposals, or policy proposals to affect social change.

### 4.2.2 Focus on Special Needs Groups

Special needs groups are those members of the community which require additional and special care and consideration. These include children, orphans, homeless children, the physically and mentally disabled as well as the elderly. As part of any planning exercise, such special needs groups need to be identified and their specific needs be reflected in planning solutions. The extent of the application of this principle will depend on local conditions as well as the prescriptions and standards contained in Government policy and regulations.

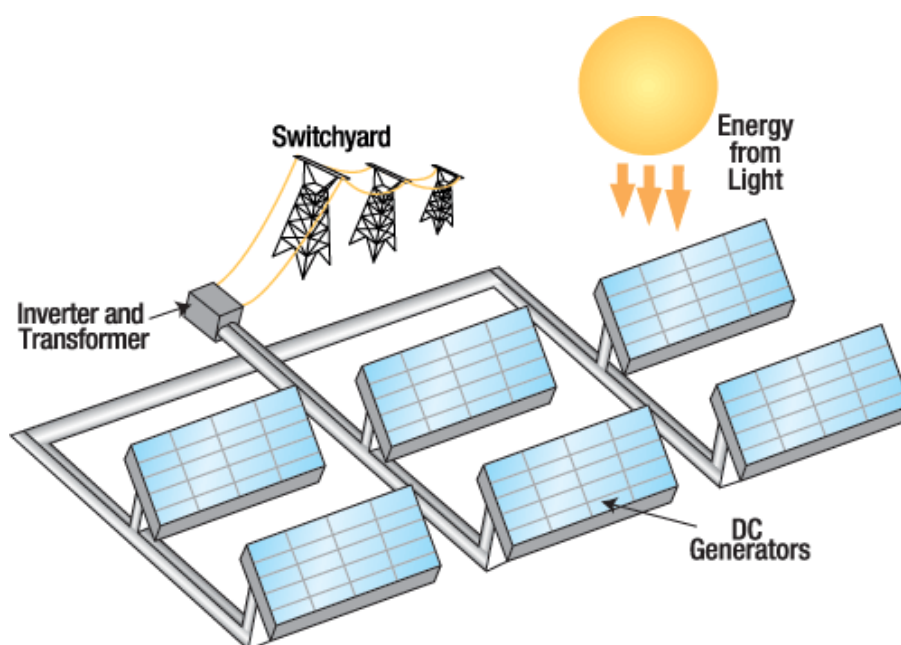
### 4.2.3 Gender Equality and Equity

The "Women Empowerment and Gender Equality Draft Bill" of 2012 defines gender equality as '*equal recognition, enjoyment or exercise by a person, irrespective of his or her sex, of human rights and fundamental freedoms in the political, economic social, cultural, civil or any other aspect of life*'. The Draft Bill also defines gender equity as '*fair treatment and equal opportunities and outcomes for all genders in all sectors of life through the recognition of their respective needs and interests*'.

The importance of advancing and upholding gender equality and equity is that it is a means of achieving social integration and is fundamental to social and economic sustainability. Planning interventions should employ a gender balanced approach in the areas of housing provision, public spaces, safety and security as well as access to public services.

#### 4.2.4 Environmental Planning and Management

The principle of environmental planning involves the integration and inclusion of environmental aspects in all areas of development and implies the protection and sustainable utilisation and management of resources. Environmental Planning and Management encompass the natural and built environment and seeks to achieve a balance between human consumption and need with the carrying capacity of the environment.



This concept principle promotes the development and use of renewable energy resources for domestic and industrial energy consumption, the sustainable implementation of waste management methods, effective pollution control measures, the protection of biodiversity, and historic and cultural preservation. At a District Municipal level, environmental planning will particularly be apparent in the demarcation of areas for conservation and protection. These areas may include nature reserves and other conservation areas of significant ecological importance.

**Figure 4-2: Photovoltaic Plant for solar energy generation**

Source: Tennessee Valley Authority, 2013

#### 4.2.5 Participation and Democratic Processes

Public participation is embedded in the South African Constitution and community participation is an integral part of transparent and accountable democratic processes. Political and administrative systems and processes should provide for participatory approaches at all levels. District and local municipal structures, committees, forums and task teams should actively be used in the planning process. Participation includes access to information, being given opportunities to submit comments and views, involvement in planning, decision-making and implementation processes and mobilisation of people to accept ownership of the development of their communities.

#### 4.2.6 Local Economic Development

The World Bank (2011) describes the purpose of Local Economic Development (or LED) as building up the economic capacity of an area to improve its economic future and the quality of life of its people. It is commonly a process by which the public sector, business and the non-governmental sector work collectively as partners to create improved conditions for economic growth and employment generation.

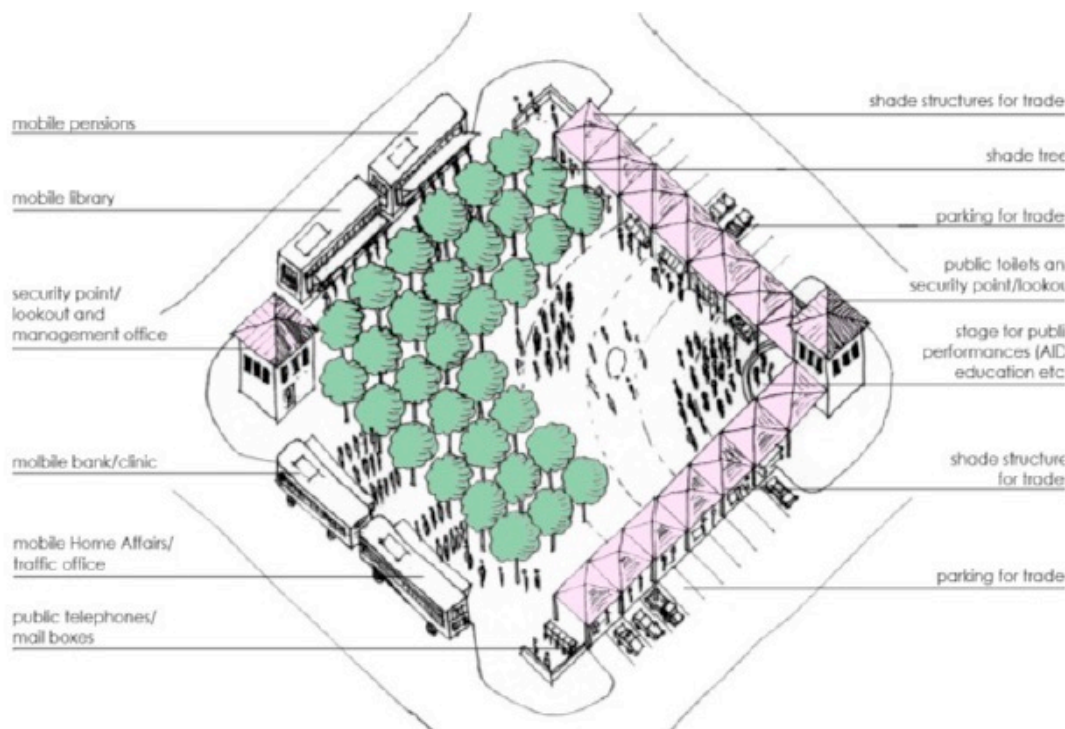


**Photo 4-1: Local economic development project in Kwa-Mandlenkosi at Beaufort West**

LED initiatives should place emphasis on harnessing the resource strength and other unique attributes of the District and local areas to support its objectives. Also of importance is how economic development relates to accessibility; business, both formal and informal, should have access to markets. In this instance, the primary role of municipal government is the provision and maintenance of infrastructure such as roads.

LED initiatives at the District Municipality level should ideally ensure that the local investment climate is functional for the continued growth of local businesses within the District. Support for small, medium and micro-enterprises (SMME's) should be given, when and where possible, and the formation of new enterprises should be encouraged. The ideal is to nurture and expand local spending and revenue generation whilst attracting investment from outside the District. Public sector investments usually include a combination of aspects such as investment in hard infrastructure (such as roads) and soft infrastructure (education, training and institutional support).





**Figure 4-3: Example of Public and Private Investment in support of LED**

Source: DRDLR, 2011

Economic development also includes provision for to the informal economy; informal business activity provides economic opportunities to a significant portion of the population. Support to the informal economy in the planning process may include the demarcation of space for informal business activities with its associated and necessary infrastructure to operate.

#### 4.2.7 Accessibility and Mobility



Accessibility is a primary consideration in spatial planning; all parts of the District must be well connected and accessible through transport and movement networks, particularly public transport, to enable the movement of goods and people. Furthermore, the level of accessibility is affected by the state and extent of roads, the level of public transport provision and the cost of transport and movement. Accessibility also refers to people's ability to access employment, social, recreational,

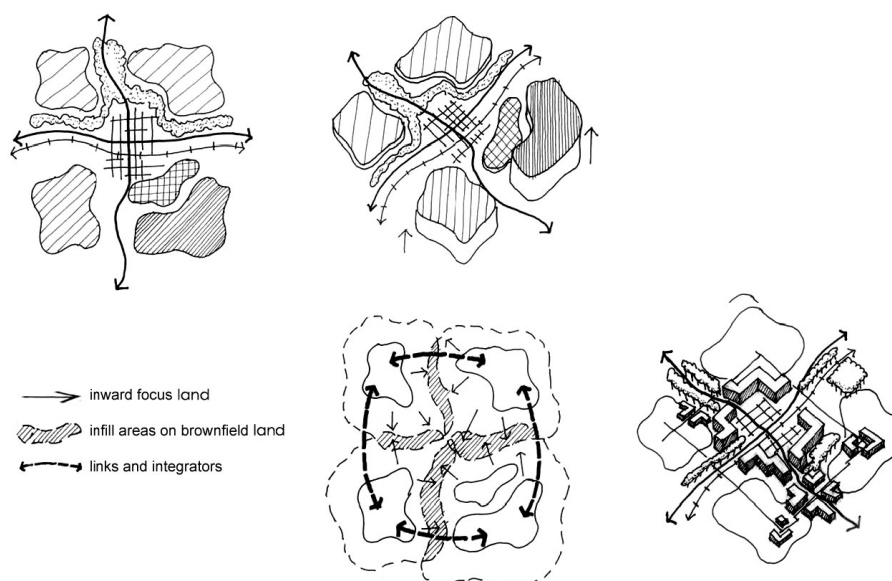
educational, cultural, and government and other public services. It is important that transportation networks provide access to such services to foster sustained economic development as well as social integration.

Specific focus is also needed on non-motorised transport within the rural towns and settlements of the District. Non-motorised transport, particularly pedestrian movement, is the primary transport mode among District residents. Key interventions for implementation in this area are pedestrian walkways, bridges and underpasses, and cycle paths. An important consideration in the planning of such interventions is safety and security. Source: DRDLR, 2011.

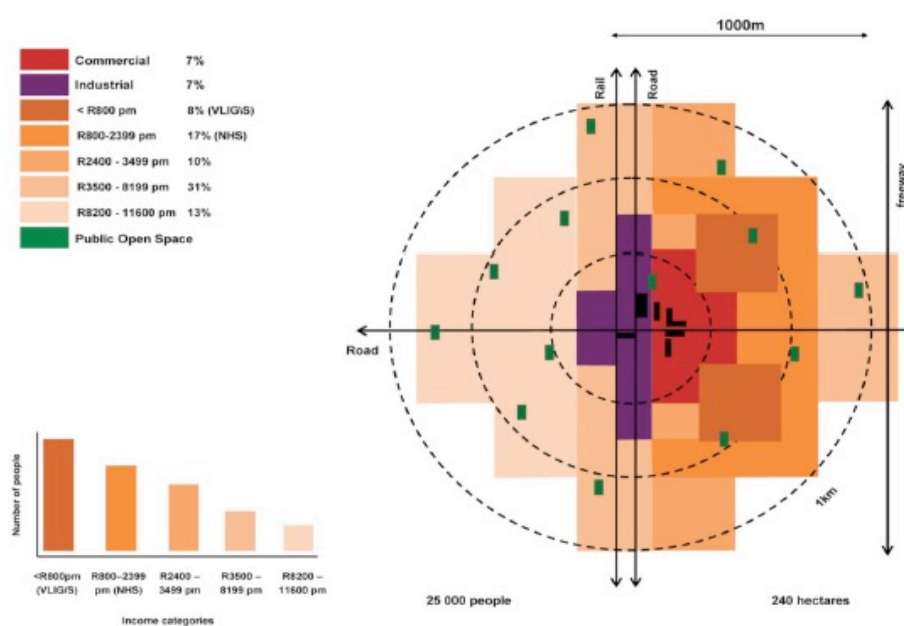
#### 4.2.8 Urban Development and Restructuring

Urban development and restructuring refers to the spatial arrangement of urban uses and activities and its impact on and relatedness to the socio-economic condition of an area. The principle seeks to achieve urban development which encourages functional and socio-economic integration in order to form a foundation for sustainable urban development.

**Figure 4-4: Urban restructuring concept, WCPSDF (2009)**



This principle details key planning concepts such as mixed use development, corridor development, densification and compaction as well as reducing urban sprawl. Development proposals within main urban settlements should clearly indicate their socio-economic linkages as well as elements which encourage the restructuring of its urban environment.



Source: DRDLR, 2008

This principle is also closely related to Environmental Planning and Management; green spaces are an integral part of an urban environment and are a key consideration in the planning process. Urban restructuring also refers to the protection and conservation of cultural areas, and heritage landmarks and buildings.

#### 4.2.9 Safety and Security

Safety and security as a planning principle refers to both technical and social aspects of development. This principle focuses on crime and violence, traffic and road safety as well as on occupational incidents. The principle aims to create environments of a human scale in which people can move freely without fear of crime and where pedestrians are given priority. Urban structure or environments should be designed in a manner that enables social control as well as public surveillance of the public areas.

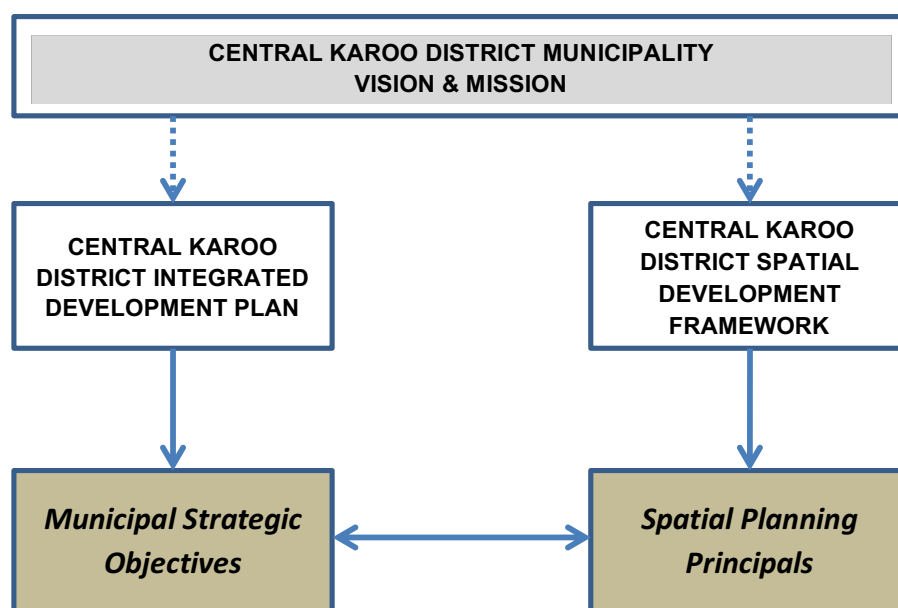
#### 4.2.10 Variation and Flexibility

This principle entails planning and design aspects which encourage differing types of spatial environments and land use activities in an area. The aim is to create attractive, diverse and well-functioning urban areas that can accommodate different socio-economic groups. Variation can be applied in terms of differing housing typologies, building heights, densities, and the provision for different land tenure options which would cater for differing household needs. At a District Municipal level a common concept and understanding of this principle is required as it lends to and can enforce the urban identity of an area. Also, differing solutions and flexibility in terms of land use rights can also be applied in order to achieve the objectives contained in this principle.

### 4.3 Relationship between Spatial Principles and Municipal Strategic Objectives

The table below summarises all the strategic objectives of Central Karoo District Municipality and all its local municipalities and correlates these objectives to the planning principles as described above. It thus forms the relationship between strategic policy and the spatial development of Central Karoo District Municipality.

**Figure 4-5: Relationship between Municipal Strategic Objectives and Spatial Planning Principles**



	LAINGSBURG	PRINCE ALBERT	BEAUFORT WEST	CENTRAL KAROO	CENTRAL KAROO PLANNING PRINCIPLES
<b>Vision</b>	A desirable place to live, invest and visit, where all people enjoy a sustainable quality of life	Prince Albert, an area characterised by high quality of living and service delivery	Beaufort West, land of space in the Great Karoo strives to improve the lives of all its residents by being a sustainable, expanding and safe town	Working Together in Development and Growth	
<b>Mission</b>	<p>To create people-centred and economically viable municipality where all have equal access to:</p> <ul style="list-style-type: none"> <li>• Basic social services;</li> <li>• Educational and skills enhancement programmes;</li> <li>• Entrepreneurial and job opportunities as well as;</li> </ul> <p>Enjoy a clean, sustainable environment embedded in safety and security, which is</p> <p>Governed by a participative, professional, transparent and accountable administration.</p>	To create an enabling environment to achieve our vision, in the delivering of quality and sustainable services to our community	To reflect the will of the South African People as reflected by the Constitution and Parliament	Central Karoo place a high priority upon ensuring that future growth improves the quality of life in the region. It is the desire to be financially sustainable, maintain the rural character and create healthy communities by facilitating economic growth, improving infrastructure and the green energy opportunities, providing and supporting alternative modes of delivery (shared services), improve marketing, branding and	

	LAINGSBURG	PRINCE ALBERT	BEAUFORT WEST	CENTRAL KAROO	CENTRAL KAROO PLANNING PRINCIPLES
				communication with all stakeholders, provide excellent disaster and risk management services, and maintaining housing choices for a range of income levels	
<b>Strategic Objectives</b>					
<b>Economic Development</b>	Create an environment conducive for economic development	To stimulate, strengthen and improve the economy for sustainable growth	Agricultural business to improve the job creation potential	To pursue economic growth opportunities that will create decent work	<i>(i) Poverty Alleviation</i> <i>(ii) Focus on Special Needs Groups</i> <i>(iii) Gender Equality and Equity</i> <i>(vi) Local Economic Development</i>
			Creation of employment to reduce unemployment to acceptable levels		
			To reduce poverty and to promote the empowerment of women		
			HIV/AIDS sufferers involved in economic and household responsibilities		
<b>Standard of</b>	Improve the standards of living of	To improve the	To create a crime free, safe	To ensure a united	<i>(i) Poverty Alleviation</i>

	LAINGSBURG	PRINCE ALBERT	BEAUFORT WEST	CENTRAL KAROO	CENTRAL KAROO PLANNING PRINCIPLES
<b>Living</b>	all people in Laingsburg	general standards of living	and healthy environment	integrated development path in a safe and sustainable environment.	<i>(ii) Focus on Special Needs Groups</i> <i>(vi) Local Economic Development</i> <i>(ix) Safety and Security</i> <i>(x) Variation and Flexibility</i>
	Improve the social environment with community beneficiation, empowerment and ownership			To promote a safe and healthy environment and social viability of residents through the delivery of a responsible environmental health service.	
	Developing a safe, clean, healthy and sustainable environment for communities			To effectively plan to minimise the impact of disasters on the community, visitors, infrastructure and environment	
<b>Service Delivery</b>		To provide equality, affordable and sustainable services on an equitable basis	To create affordable and sustainable infrastructure for all residents and tourists	To improve and maintain our roads and promote effective and safe transport for all	<i>(iii) Gender Equality and Equity</i> <i>(vii) Accessibility and Mobility</i> <i>(viii) Urban Development and</i>

	LAINGSBURG	PRINCE ALBERT	BEAUFORT WEST	CENTRAL KAROO	CENTRAL KAROO PLANNING PRINCIPLES
					<i>Restructuring</i>
<b>Sport</b>			To develop the region as sport and recreational Mecca of the Karoo		<i>(viii) Urban Development and Restructuring</i>
<b>Tourism</b>			Business initiatives and the optimising of tourism (South African and foreign)	To establish an inclusive tourism industry through sustainable development and marketing which is public sector led, private sector driven and community based.	<i>(iv) Environmental Planning and Management</i>  <i>(vi) Local Economic Development</i>
<b>Sound and Credible Municipal System</b>	To provide accountable and ethical leadership that enhance trust in the municipality amongst its stakeholders	To achieve financial viability & sustainability through prudent expenditure, and sound financial systems	An effective municipal system, maintained with the highest standards	To deliver sound administrative and financial services, to ensure good governance and viability	<i>(v) Participation and Democratic Processes</i>
	To achieve financial viability in order to render affordable services to residents		Creating and maintaining an effective financial management system		
<b>Skills Development</b>	To create an institution with skilled employees to provide a professional service to its clientele	To commit to continuous improvement of human skills and	Empowerment of personal, management and Council members for effective		<i>Non-Spatial Element</i>

	LAINGSBURG	PRINCE ALBERT	BEAUFORT WEST	CENTRAL KAROO	CENTRAL KAROO PLANNING PRINCIPLES
	guided by municipal values	resources to deliver effective services	service delivery		
<b>Stakeholder Involvement</b>	To enhance community involvement in municipal planning and implementation	To enhance participatory democracy		To facilitate effective stakeholder participation	<i>(v) Participation and Democratic Processes</i>



## 5. Development Framework

### Chapter 5

This section provides a conceptual development framework for the District Municipality which is informed by the previous status quo analysis and planning principles discussed in the previous section. It provides the foundation for the formulation of spatial planning proposals to follow in Chapter 6.

#### 5.1 Major Structuring Elements

There are two primary structuring elements in the Central Karoo District:

- i. The **Swartberg Mountain Range** in the south and the **Nuweveld Mountains** in the north; both mountain ranges have a differing effect on climatic and environmental conditions in the District. These mountain ranges isolate the District Municipality from neighbouring economic areas such as the Klein-Karoo to the south, the Cape Winelands in the west and the Northern Cape to the north;
- ii. The **N1 highway** and the **north-south railway line** between Cape Town and Gauteng form the major movement corridor through the District and carries significant freight traffic through the country from north to south. It links all major and smaller settlements throughout the District and thus plays a significant role in terms of development, accessibility and integration.

These structuring elements provide the framework for settlement development as well as for inter- and intra-movement patterns. More than 75% of the District population reside along the N1 highway; the towns and settlements were primarily developed in support of the railway and to a limited extent serve as agricultural service centres. The predominant settlement location lends to land use intensification or densification along the N1 corridor. In this rural and sparsely populated area context, densification refers to expanding existing settlements along this corridor at a density and spatial layout suitable to local conditions. Urban restructuring policies particularly urban edges should be applied in terms of Local Municipality SDF guidelines and guidelines by the Western Cape Provincial Government.

Several of the District's towns depend on neighbouring municipal areas for public and business services; socio-economic linkages are maintained in the following manner:

- Merweville, Nelspoort and surrounding rural settlements maintain socio-economic linkages with Beaufort West;
- Prince Albert, Klaarstroom, surrounding rural settlements, and agricultural areas, maintain socio-economic linkages with Oudtshoorn in Eden District Municipality;
- Laingsburg and Matjiesfontein maintains socio-economic linkages with neighbouring Cape Winelands District Municipality (Worcester);
- Murraysburg maintains socio-economic linkages with Graaff-Reinet in Cacadu District Municipality in the Eastern Cape;

There is therefore significant leakage out of the District; as a result of distance, cost and other factors communities are compelled to leave the District to access health, education, shopping and leisure, and other public services. Policy intervention should thus seek to attract and retain essential services within the District to limit leakage from the District.

## 5.2 SWOT Analysis

The overall implications of the various trends, flows and overlays and relationships as identified in the Ecological and Socio-Economic relationship of the area of the Central District Karoo Municipality is hereby highlighted by the SWOT analysis. This includes:



### 5.2.1 Internal Factors

The following Table illustrates the main strengths and weaknesses of the various elements that are generally under the direct influence and control of the Central Karoo District Municipality.

**Table 5-1: Strengths and Weaknesses to Central Karoo District Municipality**

FACTOR	STRENGTHS	WEAKNESSES
<b>Cemeteries</b>	<ul style="list-style-type: none"> <li>Cemeteries of significant historical value.</li> </ul>	<ul style="list-style-type: none"> <li>Poor maintenance of cemeteries.</li> </ul>
<b>Health</b>	<ul style="list-style-type: none"> <li>High level of health care and acceptable distribution of facilities.</li> </ul>	<ul style="list-style-type: none"> <li>Low levels of primary health care practitioners distributed throughout the District;</li> <li>Highest percentage rate of HIV transmission from mother to child in the Western Cape Province;</li> <li>No Regional Hospital within District Municipality.</li> </ul>
<b>Housing</b>	<ul style="list-style-type: none"> <li>High percentage of households with access to formal housing.</li> </ul>	<ul style="list-style-type: none"> <li>Lack of integration amongst housing and/or neighbourhood areas.</li> <li>An estimated housing backlog of 2,500 units across the District</li> </ul>

FACTOR	STRENGTHS	WEAKNESSES
<b>Agriculture</b>	<ul style="list-style-type: none"> <li>Large agricultural sector providing considerable employment.</li> </ul>	<ul style="list-style-type: none"> <li>Poor veld management practices in some areas particularly on commonage land.</li> </ul>
<b>Transportation</b>	<ul style="list-style-type: none"> <li>N1 transverses the District Municipality;</li> <li>Various Regional (R) routes which are in reasonably good condition.</li> </ul>	<ul style="list-style-type: none"> <li>Capacity and safety constraints in the area where N1 runs along the main road of Beaufort West;</li> <li>Poor public transport provision across the District Municipality.</li> </ul>
<b>Solid Waste</b>	<ul style="list-style-type: none"> <li>Most households within the District Municipality have their waste removed at least once a week.</li> </ul>	<ul style="list-style-type: none"> <li>Lack of a district-wide waste management plan.</li> </ul>
<b>Waste Water Infrastructure</b>	<ul style="list-style-type: none"> <li>Sufficient capacity in some areas for the treatment of sewer flows.</li> </ul>	<ul style="list-style-type: none"> <li>Sanitation in Prince Albert Road still consist of bucket system;</li> <li>Concerns towards designs and operational capacities of some of the treatment works.</li> <li>Permits of certain facilities have expired;</li> <li>Monitoring and compliance at facilities are lacking</li> <li>Facilities are poorly staffed.</li> </ul>
<b>Water Infrastructure</b>	<ul style="list-style-type: none"> <li>Consistent positive Blue Drop award across the District.</li> <li>Majority of households have access to a tap and water;</li> </ul>	<ul style="list-style-type: none"> <li>Periods of drought and availability of quality water sources.</li> <li>Irrigation dams primarily provide water to agricultural areas of the Klein-Karoo in the Eden District Municipality.</li> </ul>
<b>Heritage &amp; Tourism</b>	<ul style="list-style-type: none"> <li>Diverse offering of heritage sites across the District Municipality.</li> </ul>	<ul style="list-style-type: none"> <li>Lack of coherent tourism marketing strategy for the District Municipality.</li> </ul>

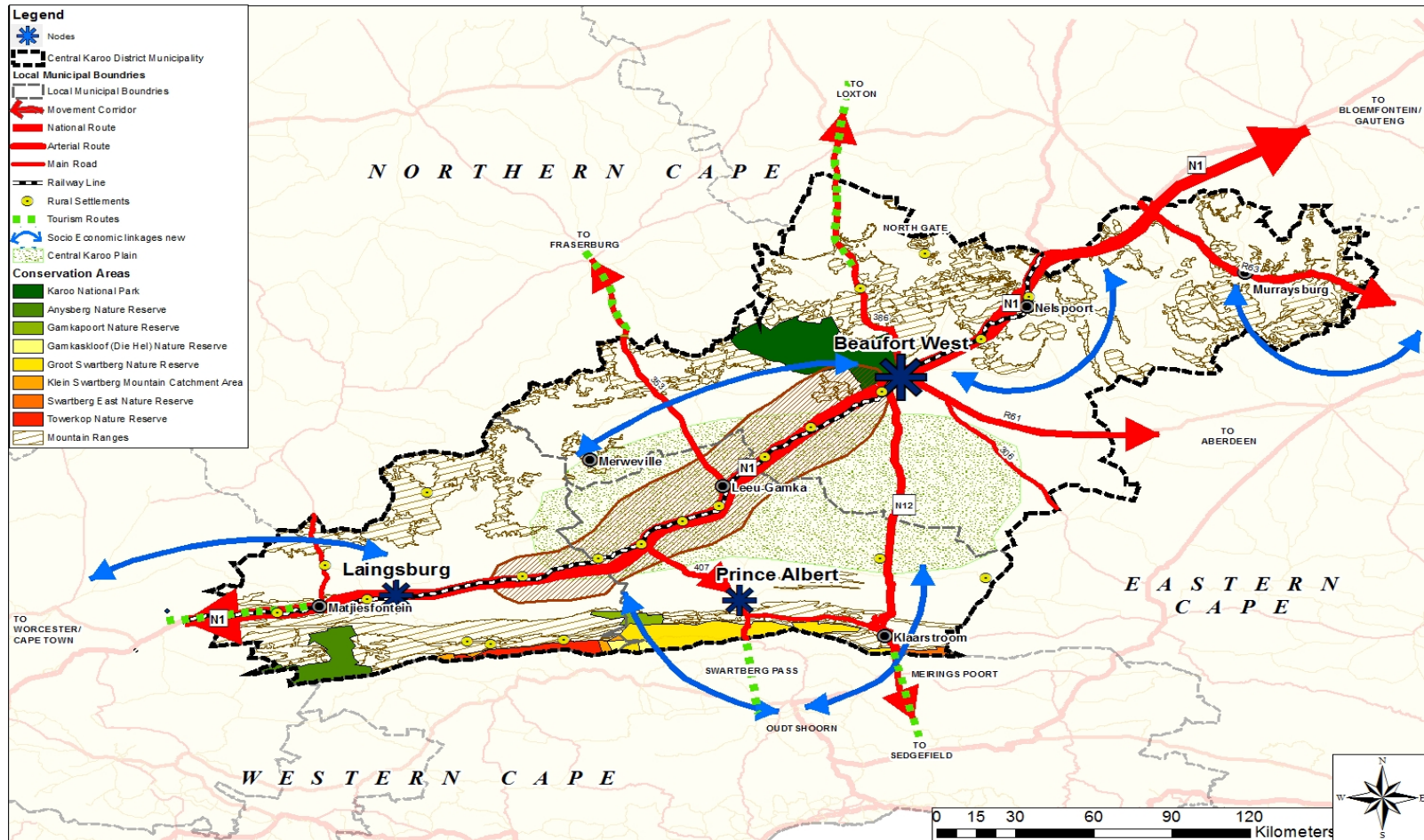
### 5.2.2 External Factors

The following Table illustrates the main strengths and weaknesses of the various elements that generally has an indirect impact on the area and thus not under the direct control of the Central Karoo District Municipality.

**Table 5-2: Opportunities and Threats External to Central Karoo District Municipality**

FACTOR	OPPORTUNITIES	THREAT
<b>Agriculture</b>	<ul style="list-style-type: none"> <li>Small stock farming is prevalent within the District Municipality.</li> <li>Dry land farming is practiced in suitable areas of the District Municipality.</li> </ul>	<ul style="list-style-type: none"> <li>Agriculture sector's share of the economy in the district is declining.</li> <li>Environmental degradation of valuable agricultural land.</li> </ul>
<b>Employment, Occupation and Income</b>	<ul style="list-style-type: none"> <li>Economic growth forecasts for the District Municipal area are positive;</li> <li>Significant growth in the Finance &amp; Business Services and Mining sectors;</li> <li>High percentage of highly-skilled labour in Prince Albert</li> </ul>	<ul style="list-style-type: none"> <li>Steady decline in agriculture as contributor to GDP;</li> <li>Youth unemployment rate remain high although gains have been made;</li> <li>There is a high percentage of unskilled labour in the District Municipality particularly Prince</li> </ul>

		Albert.
<b>Crime</b>	<ul style="list-style-type: none"> <li>Most crime rates and other offences are generally stabilising across the District Municipality.</li> </ul>	<ul style="list-style-type: none"> <li>Significant increase in drug-related crimes.</li> </ul>
<b>Demography</b>	<ul style="list-style-type: none"> <li>Increase in population and high birth rates albeit at a slow pace of less than 2%;</li> <li>District average growth rate in keeping with the provincial growth rate.</li> </ul>	<ul style="list-style-type: none"> <li>High young dependency ratio;</li> </ul>
<b>Education</b>	<ul style="list-style-type: none"> <li>Notable decrease in number of persons with no schooling;</li> </ul>	<ul style="list-style-type: none"> <li>Highest number of “No-fees” schools in Western Cape.</li> <li>Low literacy and numeracy levels amongst current primary school learners.</li> </ul>
<b>Land Reform</b>	<ul style="list-style-type: none"> <li>Past and present land reform projects exceed 36,000 hectares of land.</li> </ul>	<ul style="list-style-type: none"> <li>Fewer strategic agricultural farms on offer as a result of high land prices and a general decline in the agricultural industry of the District.</li> </ul>
<b>Transportation</b>	<ul style="list-style-type: none"> <li>High volumes of freight traffic along the N1 through the District Municipality;</li> <li>Relatively modern under-utilised rail infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>There is continuous immobility amongst Central Karoo District Municipality residents;</li> <li>Negative impact of freight traffic along the N1 on adjacent communities.</li> </ul>
<b>Land Use Management</b>	<ul style="list-style-type: none"> <li>Pending land use management legislation may provide a uniform land use management system for each local municipality within the District and possibly expand the role of the District Municipality.</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate resource capacity at local municipality level and at the District Municipality may hinder the implementation of new land use management legislation.</li> </ul>
<b>Environment &amp; Climate</b>	<ul style="list-style-type: none"> <li>There are at least 3 biomes within Central Karoo District Municipality.</li> </ul>	<ul style="list-style-type: none"> <li>Climate change is expected to produce higher temperatures with lower rainfall in much of the District municipal area.</li> </ul>
<b>Energy</b>	<ul style="list-style-type: none"> <li>There are opportunities for wind and solar energy generation in specific areas of Central Karoo District Municipality.</li> </ul>	<ul style="list-style-type: none"> <li>The domestic use of renewable and alternative forms of energy remains low.</li> </ul>
<b>Settlements</b>	<ul style="list-style-type: none"> <li>Most settlements are located along or in close proximity of the N1 corridor.</li> </ul>	<ul style="list-style-type: none"> <li>Low-cost housing development is located on the periphery of towns.</li> </ul>
<b>Building Materials and Mining</b>	<ul style="list-style-type: none"> <li>Uranium deposits are found across the District Municipality.</li> </ul>	<ul style="list-style-type: none"> <li>The impact of fracking and mining on the District’s environment and infrastructure.</li> </ul>
<b>Telecommunication</b>	<ul style="list-style-type: none"> <li>Large cellular network coverage.</li> </ul>	<ul style="list-style-type: none"> <li>Poor household access to the internet.</li> </ul>



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NOVEMBER 2013

Drawing name: PLAN 19 DEV FRAMEWORK &amp; SYNTHESIS Rev 2

## 6. Spatial Development Framework

### Chapter 6

This section describes the Spatial Development Objectives for Central Karoo District Municipality as well as the Spatial Development Strategies necessary to achieve the desired outcome as captured in the Spatial Vision and to fulfil in the objectives. The draft Spatial Development Framework Plan surmises key concepts and proposals affecting the spatial development of the Central Karoo District Municipality and will inform the Implementation Framework thereafter.

#### 6.1 Spatial Objectives and Strategies

##### 6.1.1 Spatial Challenges

The situational analysis has highlighted several spatial challenges for the Central Karoo District Municipality. These are summarised as follows:

- Poor housing provision and land availability for housing for farm dwellers;
- Lack of adequate and affordable public transportation and non-motorised transportation;
- Lack of land for land reform projects and over-utilisation of commonage land;
- Poor land and land use management particularly in respect of game farms and environmental management;
- Decline in agricultural activity;
- Areas vulnerable to climate change;
- Poor infrastructure maintenance;
- Under-provision of land for conserving biodiversity and water sources (river systems);
- Lack of integrated human settlements;
- Incoherent framework of investment in settlements in terms of public and private investment;
- Uncertainty on mining (fracking) and land, infrastructure and resource availability to support mining.

##### 6.1.2 Spatial Development Objectives

The spatial development objectives are considered as strategic measures to overcome the spatial challenges experienced by Central Karoo District Municipality and are set to achieve the District Municipality's Spatial Vision of "Sustainable Spatial Development and Growth".

Central Karoo District Municipality's Spatial Development Objectives are as follows:

- i. To support the establishment of appropriate and functioning land use management systems;
- ii. To protect and preserve environmentally sensitive areas and areas of significant biodiversity;
- iii. To establish a system of functionally defined development nodes (settlements) to guide priority public and private investment;
- iv. To create an efficient and integrated urban settlement pattern;
- v. To provide a framework for sustainable, strategic and accelerated land, infrastructure and economic development;
- vi. To establish effective linkages for access to and mobility between settlements and locations of important economic, social and tourist interest.

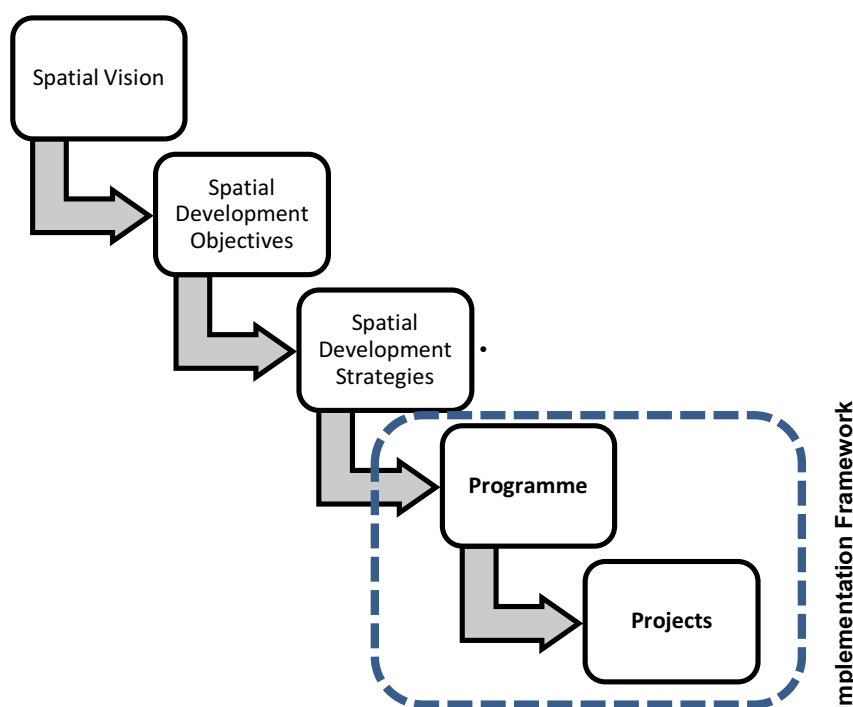
### 6.1.3 Spatial Development Strategies

In order to achieve the desired outcomes in terms of each spatial development objective, the following strategies are proposed to give effect to the Spatial Development Framework vision:

- i. Continue and accelerate improvements in facility management and infrastructure maintenance;
- ii. Expand government employment and skills development programmes particularly amongst the youth;
- iii. Implement alternative energy use plans and support alternative and sustainable energy sources;
- iv. Improve access to as well as resource capacity at health-care centres;
- v. Gaining inroads in eradicating the housing and sanitation backlog amongst farm-dwellers in rural areas;
- vi. Implement alternative and sustainable waste management practices and solutions;
- vii. Improve access to telecommunication and information technology services;
- viii. Implement safe and affordable public transportation and support non-motorised transportation;
- ix. Provide, protect and encourage the sustainable use of scarce and quality water resources;
- x. Support land reform initiatives that strengthen the agricultural sector in order to enable economic and employment growth;
- xi. Support mining activity that applies sustainable resource use, consumption and practices;
- xii. Reinforce development potential and urban efficiencies of towns with economic growth potential;
- xiii. Achieve synergy with veld management programmes that will improve both biodiversity conservation and stock carrying capacity;
- xiv. Establish integrated human settlement planning in order to reduce spatial inefficiencies in urban areas.

The spatial development strategies will form the basis for the development and formulation of project programmes and, consequently, specific projects for the implementation of the spatial development framework.

**Figure 6: Spatial Development Framework Plan Proposal**



The Central Karoo Spatial Development Framework is underpinned by guidelines and principles for the development of the District Municipality and includes the use of (i) the bioregional planning framework (Spatial Planning Categories), (ii) settlement hierarchy, (iii) infrastructure provision and maintenance, (iv) land reform and rural development, and (v) mining and extractive industry.

## 6.2 Spatial Planning Categories (SPC)

Bio-regional Planning focuses on planning and land development management that will ensure sustainable development through an underlain philosophy of the relationship between conservation of environment, the well-being of communities and economic efficiency within a geographical area. In accordance with the bioregional planning framework that the Western Cape has adopted, the Central Karoo District Municipality SDF shall comprise development proposals that are in line with the inherent land use suitability of its varying landscapes.

The SDF Plan comprises the following SPC's:

- i. Core
- ii. Buffer
- iii. Intensive Agriculture
- iv. Human Settlement

CBA MAP CATEGORY						
Spatial Planning Category	Formal Protected Areas	Critical Biodiversity Area (CBA)	Ecological Support Area (ESA)	Other Natural Areas (large intact land or natural remnants adjacent to CBA or ESA)	Other Natural areas transformed or used for extensive agriculture	No Natural Area Remaining
Core 1						
Core 2						
Buffer 1						
Buffer 2						
Intensive Agriculture						
Settlements						

These SPC's are consistent with the principles of bioregional planning and should be interpreted to include zonings and uses as listed in current Zoning Scheme Regulations. SPC's should be aligned over time with land use categories as contained in the Land Use Management System (LUMS) of a municipality.

### a) Core Areas (1 and 2)

<i>Two components of the rural landscape make up Core 1 Areas:</i>	
(i)	All areas with formal conservation status (i.t.o. the Protected Areas Act), namely: national parks; provincial nature reserves; designated mountain catchment areas (i.t.o. the Mountain Catchments Areas Act); forestry reserves; wilderness areas;
(ii)	(ii) Critical Biodiversity Areas (CBA), as identified through a systematic conservation planning process that has no formal conservation status. These may comprise terrestrial or aquatic habitats, remnants or features that must be conserved to meet national biodiversity pattern or process thresholds.



*The purpose of Core 1 is:*

- (i) Designate which parts of the rural landscape are of highest conservation importance, and if they are currently protected or not.
- (ii) Informs expansion of the protected area network.
- (iii) Delineates areas that must be maintained in, or restored to, a natural state in order to sustain biodiversity patterns and processes and the functionality of eco- system services.
- (iv) Identify areas of land that could serve as biodiversity offset receiving areas.
- (v) In combination with Core 2 Areas, they spatially define the 'core' of the rural landscape's ecological network.

*This category includes:*

- (i) Areas currently not yet exhibiting high levels of biodiversity loss, but which should be protected and restored in order to ensure biodiversity pattern and ecological process targets can be met in the most efficient way possible.
- (ii) Ecological Support Areas (ESA) to Critical Biodiversity Areas (i.e. river reaches within priority CBA sub-catchments which prevent degradation of CBA's).
- (iii) CBA aquatic Buffer areas including CBA catchment areas.
- (iv) River and ecological corridors (those not classified essential as per Core 1 definition).

Mountain Catchment Areas.

The purpose of Core 2 is to manage, restore and sustain eco-system functioning, especially ecological processes (i.e. rivers and seep clusters and their respective buffers) in support of wetlands and rivers in Critical Biodiversity Areas.

Formally protected natural areas such as the Karoo National Park, Groot Swartberg Nature Reserve, Anysberg Nature Reserve, Gamkapoort Nature Reserve, Gamkaskloof Nature Reserve, Towerkop Nature Reserve, Klein Swartberg Mountain Catchment Area.

Large Core Biodiversity Areas (CBA's) as identified by the South African National Biodiversity Institute (SANBI) are also included.

## **b) Buffer Areas (1 and 2)**

*Buffer 1 SPC comprises large intact portions and remnants of natural or near natural vegetation not designated as CBA or ESA, especially in proximity/adjacent to CBAs and/or ESA:*

The purpose of Buffer 1 category is:

- (i) To restore & maintain ecological processes.
- (ii) To retain landscape scale biodiversity corridors.
- (iii) To strengthen the conservation and extensive agricultural economies through, incentivising the consolidation and maintenance of extensive agricultural units, and broadening the agricultural economic base through farm diversification of use and revenue generation (e.g. farm tourism).
- (iv) To buffer Ecological Support Areas (including CBA Buffer Areas) which support Critical Biodiversity Areas.
- (v) To enhance biodiversity through innovative agricultural practices (e.g. veld management) and rehabilitation of previously disturbed agricultural land.
- (vi) To buffer against the impacts of climate change.

The Steenbokkie Private Nature Reserve;

Ecological corridors along the Gamka and Dwyka Rivers as well as from the neighbouring Namakwa District at Tankwa National Park across the Karoo National Park to Cacadu District and the Camdeboo National Park.

These areas also include areas for the potential or possible expansion of existing formally protected areas such as the Karoo National Park.

*The Buffer 2 SPC category includes areas designated as Other Natural Areas, located in an extensive and/or intensive*

*agriculture matrix (i.e. livestock production) as the dominant land use*

The purpose of Buffer 2 category is:

- (i) Manage for sustainable development of current land use in the area.
- (ii) Protect existing agricultural activity (i.e. livestock production) to ensure food security, contribution to the regional economy, maintenance and management of rural areas and contributing and to the working agricultural and cultural landscape.
- (iii) Facilitate agricultural diversification and non-agricultural opportunities (e.g. game farming, tourist facilities) and “value-adding” to the primary product (e.g. cheese-making).
- (iv) Accommodate space extensive and nuisance urban uses, and extensive agricultural uses (e.g. waste water treatment plants, piggeries, mushroom growing plants, etc.).
- (v) Enhance biodiversity through innovative agricultural practices (e.g. veld management).
- (vi) Minimize fragmentation of remaining natural habitats and corridors.
- (vii) Reverse lost biodiversity in order to reinstate buffer zones and corridors.
- (viii) Rehabilitate degraded areas (e.g. agricultural, mining).

The predominant land use in Central Karoo District is extensive agricultural activity by way of natural grazing for small livestock farming. Agriculture is the greatest land user in the District at more than 90% and therefore has an immense responsibility in respect of conservation and sustainable development. The low availability of water has limited growth of intensive agricultural activities with extensive agricultural activities dominating the agricultural economy.

**c) Intensive Agriculture**

*The Intensive Agriculture SPC comprises a consolidation of the existing and potential intensive agricultural footprint (i.e. homogeneous farming areas made up of cultivated land and production support areas).*

*The Intensive Agriculture SPC includes:*

- (i) *Irrigated crop cultivation (annual & perennial);*
- (ii) *Dry land crop cultivation including tillage of non- irrigated crops (annual & perennial);*

The purpose of Intensive Agriculture category is:

- (i) Consolidating & protecting existing & potential agricultural landscapes.
- (ii) Facilitating sustainable agricultural development, land and agrarian reform, and food security.

Intensive agriculture is found in areas of adequate water availability for irrigation. The Prince Albert municipal area has cultivated crops such as lucerne and vegetable seeds as well as perennial crops such as olives, peaches and wine grapes. A limited number of olive plantations are also found in the Beaufort West Municipality. Existing intensive agricultural areas which produce crops should be protected to sustain food security. Expanded agricultural activity dependant on irrigation should only be considered with the availability of water resources.

**d) Urban Related Areas**

Urban related areas refer to areas in which a mix of land uses occur such residential, commercial, education and recreational uses. SPC's describe several sub-categories for urban related areas; this report will cover those sub-categories applicable to the Central Karoo District Municipality. The purpose of this category is to develop and manage existing and new settlements on a sustainable basis. Where-ever possible existing settlements should be used to accommodate non-agricultural rural development activities and facilities. This is for reasons of:

- local economic development;
- consolidating, integrating and reinforcing settlement structure;
- improving service delivery;

- strengthening rural-urban linkages;
- promoting socio- economic development; and
- increasing thresholds for service delivery and social facilities

In line with the principles of the Provincial Growth and Development Strategy, new settlements in the rural landscape should only be established in essential circumstances (e.g. power station, mine, etc.). Settlement proposals are further expanded in section 6.3 of this report.

<i>Main Local Town</i>
Beaufort West
<i>Local Towns</i>
Prince Albert
Laingsburg
<i>Rural Settlements</i>
Leeu-Gamka
Klaarstroom
Matjiesfontein
Merweville
Murraysburg
<i>Institutional Settlements</i>
Nelspoort (medical)
Prince Albert Road (railways)

The following are guidelines and proposals for each Category:

<b>Core 1</b>
<ol style="list-style-type: none"> <li>1. Essentially 'no-go' areas from a development perspective. Accordingly they should, as far as possible, remain undisturbed by human impact. Conservation management activities such as alien clearing, research and environmental education should be encouraged. Subject to stringent controls the following biodiversity- compatible land uses (i.e. those of very low impact) may be accommodated in Core areas:</li> <li>2. Non-consumptive low impact eco-tourism activities such as recreation and tourism (e.g. hiking trails, bird and game watching, and visitor overnight accommodation).</li> <li>3. Harvesting of natural resources (e.g. wild flowers for medicinal, culinary or commercial use), subject to EMP demonstrating the sustainability of harvesting.</li> <li>4. Where Core areas are identified on land that has no formal conservation status (e.g. private farm), no further loss of natural habitat should occur.</li> <li>5. Given the often high visual or aesthetic value of these landscapes, no large-scale eco-tourism developments to be permitted.</li> <li>6. Land consolidation should be encouraged and sub-division prohibited.</li> </ol>
<b>Core 2</b>
<ol style="list-style-type: none"> <li>1. Biodiversity – compatible and low impact conservation land uses as per Core 1 Areas, but allowing for a limited increase in scale of development in less sensitive areas (provided ecological processes not disrupted). To be informed by environmental sensitivity mapping, transformation thresholds and cumulative impacts. Biodiversity offsets may be necessary in this case.</li> <li>2. Where existing agricultural activities (e.g. livestock) occur in Core 1 or Core 2 Areas, it needs to be subject to: <ul style="list-style-type: none"> <li>• Lower impact practices</li> <li>• Lower than standard stocking rates</li> <li>• Resting cycles (i.e. rotational grazing)</li> <li>• Wetland &amp; river bank protection to avoid over- grazing, trampling and destabilization</li> <li>• Avoiding areas containing red data species.</li> <li>• Limiting “value-adding” to nature-based tourism.</li> </ul> </li> </ol>

3. Incentivise consolidation of the conservation estate by:
  - Introducing limited low density rural housing development rights
  - Financial incentives
  - Other incentives (e.g. resource economic approaches)
4. No further extensions of intensive or extensive agriculture

#### Buffer 1

- (i) Conservation activities as per Core 1 and 2 Areas including sustainable consumptive or non- consumptive uses.
- (ii) Biodiversity compatible land uses as informed by transformation thresholds, including:
  - Low density Rural Residential Development
  - Resort and holiday accommodation
  - Tourist and recreational facilities
  - Additional dwelling units
- (iii) Development (e.g. structures) in support of both tourism and biodiversity conservation in Core Areas preferably be located in Buffer 1 and 2 if logistically feasible.
- (iv) Extensive agriculture comprising extensive game and livestock farming, subject to the following:
  - Lower impact practices be favoured (e.g. indigenous game farming as opposed to domestic livestock production)
  - Lower than standard stocking rates be employed
  - Resting cycles (i.e. rotational grazing) be employed
  - Buffer areas be protected from over- grazing and trampling in order to avoid wetland shoreline and river bank erosion and destabilization
  - Avoidance of areas containing red data species
  - Strictly limited "value-adding" through intensified tourism (e.g. resort or recreational facilities) or consumptive uses (e.g. hunting).
- (v) Extension of extensive accommodated if accompanied with biodiversity offsets with receiving areas for such offsets being on- site or in other Core 1 areas.

#### Buffer 2

- (i) Activities and uses directly relating to the primary agricultural enterprise
- (ii) Farm buildings & activities associated with the primary agricultural activity, including a homestead, agricultural buildings and worker accommodation.
- (iii) Additional dwelling units, including:
  - units approved under the agricultural-land policy equating to 1 additional non- alienable dwelling unit per 10ha to a maximum of 5 per agricultural unit
  - units permissible in terms of Rural Residential Development
- (iv) Additional land uses to facilitate diversification and "value adding" including:
  - Small-scale holiday accommodation (farmstay, B&B, guesthouse, boutique hotel,);
  - restaurant, lifestyle retail, venue facility;
  - farmstall & farmstore;
  - home occupation
  - local product processing (e.g. cheese-making)
  - tourist & recreational
  - facilities (e.g. hiking trail, 4x4 routes)
- (v) No fragmentation of farm cadastral unit, with spot zoning and consent uses employed to accommodate non-agricultural uses
- (vi) On-farm settlement of farmworkers, using existing housing stock or upgraded hostels.
- (vii) Buffer 2 Areas within the "fringe" of urban settlements to accommodate the following uses not suited to location within the urban edge:
  - space extensive requirements (e.g. regional sports & recreation facilities, tourist facilities)

<ul style="list-style-type: none"> <li>nuisance and buffer requirements (e.g. waste water treatment plants, cemeteries, solid waste disposal sites, airports, feedlots, quarries and mines, truck stops)</li> </ul>	
<b>Intensive Agriculture</b>	
(i)	Activities and uses directly related to the primary agricultural enterprise.
(ii)	Farm buildings and associated structures (e.g. homestead barns, farm worker accommodation, etc).
(iii)	Additional dwelling units approved under the policy of 1 additional non- alienable dwelling unit per 10ha, up to a maximum of 5 per farm.
(iv)	<p>Ancillary rural activities of appropriate scale that do not detract from farming production, that diversify farm income, and add value to locally produced products, e.g:</p> <ul style="list-style-type: none"> <li>small-scale rural holiday accommodation (e.g. farmstay, B&amp;B, guesthouse, boutique hotel);</li> <li>restaurant, rural lifestyle retail; function venue facility;</li> <li>farmstall and farmstore;</li> <li>home occupation (farm product processing);</li> <li>local product processing (e.g. winery, olive pressing); and</li> <li>rural recreational facilities (e.g. riding school)</li> </ul>
(v)	Ancillary on-farm activities in an Intensive Agriculture SPC will be impacted on by surrounding farming activities (e.g. dust generation, spray drift, etc), and these impacts are not grounds for restricting farming production.
(vi)	Large scale resorts and tourist and recreation facilities should not be accommodated within Intensive Agriculture SPCs as they detract from the functionality and integrity of productive landscapes.
(vii)	Intensive-feed farming should not be accommodated in Intensive Agriculture SPCs due to their operational impacts (e.g. odour and traffic).
(viii)	Nurseries in Intensive Agriculture SPCs should limit propagation to local crop types
<b>Settlements</b>	
<p>Agricultural activities of excessive scale and non-agricultural activities not suited for location in the Intensive Agricultural and Buffer 1 and 2 Areas to be located within settlements or their “fringe areas”. These activities include:</p> <ul style="list-style-type: none"> <li>Off-farm residential development and farm worker accommodation (e.g. in “agricultural suburbs”)</li> <li>Agricultural industry (e.g. wine bottling plant) and regional product processing (e.g. fruit cannery)</li> <li>Institutions (e.g. jail or rehabilitation centre)</li> <li>Agricultural colleges and schools</li> <li>Large-scale tourist accommodation (e.g. hotel) and facilities (e.g. waterpark)</li> <li>Service trades</li> <li>Footloose business, including farming co-operatives, agricultural requisites and filling stations</li> </ul>	

Further to the above, the following proposals are also made:

1. Limit the impact and expansion of settlement development within this region with the application of settlement planning tools such as ‘urban edges’ and urban restructuring particularly at Beaufort West.
2. Investigate and identify rural settlements along the N1 for possible railway heritage tourism. These settlements are favourably located along the N1 for ease of access from passing tourists. The intention is to attract passing traffic and have them remain in the District for longer and thus create a positive environment for small business activity;
3. Providing technical support to sustain and maintain key heritage areas in Prince Albert and Laingsburg;
4. Implement landscaping and urban design elements in Prince Albert and Laingsburg Main Roads and Central Business Districts. These upgrades should include appropriate storm-water drainage provision;
5. Implement landscaping and urban design elements in targeted rural settlements where infrastructure need, tourism and development potential has been identified;
6. Investigate in conjunction with CapeNature natural veld management guidelines and management plan for this region to improve veld carrying capacity in support of local sheep farmers.

7. Maintain gravel road network to ensure agricultural area connectivity and access to heritage areas such as block-houses and the Swartberg Mountain Pass;
8. Eco-tourism activities such as mountain-biking and hiking should be supported and promoted in selected locations. Careful consideration should be given to motorised tourism activities such as 4x4 and motorcycle trails. These should not degrade sensitive environmental areas or cause erosion; and
9. Develop a District-wide policy to guide private game reserve development and its economic and environmental impact. Game farm development should ideally occur in terms of an holistic plan targeting specific areas which may benefit from rehabilitation and supports District and Provincial ecological corridors;
10. In the absence of general policy, fracking should only be permitted at the completion of Environmental Impact Assessments (EIA's) which include, amongst others, extensive groundwater, geohydrological, and traffic impact studies to the satisfaction of the District Municipality and the affected Local Municipality;
11. Settlements in support of any major mining activity should be located in existing settlements as far as possible;
12. Due consideration should be given to the Western Cape Province Rural Land Use Planning and Management Guidelines; and
13. Water availability remains crucial in the District and a water management strategy and plan which include conservation and demand management should thus be developed for the region.

### 6.3 Settlement Hierarchy

The town of Beaufort West has the largest population (estimated at 34,000), which is more than the combined population of all other towns and settlements in the District. The town has a high concentration of government and administrative services and serves as an agricultural service centre for the local area.

The town of Prince Albert serve as agricultural service centre for its local area whilst Laingsburg provides essential basic services to local inhabitants.

New settlements should be restricted to:

- Servicing of geographically isolated farming areas;
- servicing rural resource exploitation (e.g. mine);
- servicing significant infrastructural developments (e.g. new power plant) situated in an isolated location.

In terms of the Western Cape Provincial Spatial Development Framework (WCPSDF), the town of Beaufort West has the highest development need followed by Prince Albert and Laingsburg. Prince Albert has shown the strongest growth in economic activity as a result of strong activity in the construction, tourism, real estate and finance and business sectors. The settlements of Murraysburg, Merweville, Leeu-Gamka and Matjiesfontein were seen as settlements of high need and low development.

The following settlement hierarchy is proposed:

- i. **High order investment node** with a population exceeding 10,000 in order to support high order public investment to serve the entire District and has high development and social need.
- ii. **Primary investment node** with a population of more than 5000 residents but less than 10,000 serving as rural and agricultural service centres and has high development potential in terms of agriculture and tourism development, and high social need.
- iii. **Secondary investment node** refers to rural settlements of smaller than 5,000 inhabitants which has a high social need and low development potential.
- iv. **Lower order investment nodes** are rural settlements with low development potential which may experience high social need without appropriate and timeous intervention.

<b>No.</b>	<b>Settlement Type</b>	<b>Location</b>
ST 01	High Order Investment Node	Beaufort West
ST 02	Primary Investment Node	Prince Albert, Laingsburg
ST 03	Secondary Investment Node	Merweville, Murraysburg, Matjiesfontein, Leeu-Gamka
ST 04	Lower Order Investment Node	Klaarstroom, Nelspoort

The WCPSDF is currently under review and it is expected that settlement hierarchies are to change in line with current socio-economic conditions. The proposed hierarchies have been developed with this in mind and will be subject to review based on forthcoming provincial spatial policy.

#### **6.4 Infrastructure**

Planning and infrastructure project proposals include the following:

- A proposed transport logistical interchange facility for the interchange of road freight transported along the N1 highway. The N1 as a freight corridor transports goods through the District between the Western Cape (Cape Town) and Gauteng (Johannesburg/Pretoria) and the District is thus not a destination or a converging point of regional or national freight points. It may therefore be more feasible to investigate a regional truck and freight service centre along the N1 to service road freight along this corridor.
- A District-wide water management strategy and plan in conjunction with the Department of Water Affairs should be developed to provide policy guidance and implementable measures for water management in a water scarce area. Such a plan needs to be sensitive of the impact of mining and hydraulic fracking on the District's water resources.
- The implementation of the District Mobility Strategy in order to provide affordable and meaningful transportation for District inhabitants in terms of patient, scholar and general public transport. Non-motorised transport (NMT) should be prioritised for implementation and accelerated in settlements across the District to establish improved accessibility.
- An investigation of the condition and capacity of waste water treatment works (WWTW's) and implementation and upgrade thereof across the District Municipality, particularly at Merweville and Leeu-Gamka.
- Investigation on obtaining national protection for heritage cemetery sites in the towns of Prince Albert and Laingsburg; the maintenance of these sites must be prioritised in terms of its cultural and tourist value.
- The impact of mining on the road, water, and energy infrastructure must be considered as part of a multi-pronged and multi-disciplinary investigation. Its aim should be the development of strategies and plans for managing public infrastructure investment to support the possible growth of the mining industry in the District.

#### **6.5 Land Reform and Rural Development**

Land reform and rural development should contribute to regional food security as well as provide an income to emerging black farmers through participation in the rural economy. In terms of Central Karoo District it is important to improve the carrying capacity of land by way of veld management interventions. Intensive or planted pastoral agricultural activities

should be investigated on commonage land in close proximity to settlements subject to the availability of water, the suitability of soils and the presence of appropriate institutional structures such as co-operatives.

It is considered that non-urban land or land within Category C of SPC's (excluding Category A and B) should be earmarked for land reform projects, where feasible. Land reform and rural development projects should not only focus on agricultural activities and interventions but seek invest in broader rural development which encourages participation of previously disadvantaged communities in the rural economy.

## **6.6 Principles for Mining and Extractive Industry Uses Guidelines**

The following general principles should be considered when formulating detailed land use management guidelines for mining and other extractive land uses. All other legislation and regulations pertaining to such land uses, such as the National Environmental Management Act, 1998 (Act 107 of 1998), the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) the National Heritage Resources Management Act, 1999 (Act 15 of 1999) and other applicable legislation will still apply. These principles seek to inform and guide the District Municipality and its Local Municipalities on land use change to permit mining.

The following are key considerations in the assessment of land use change applications as recommended by the International Union for the Conservation of Nature and Natural Resources (IUCN):

### **Principle 1:**

Mining operations should be planned to minimise the creation of dust, carbon and other gas emissions such as perfluorinated carbon compounds.

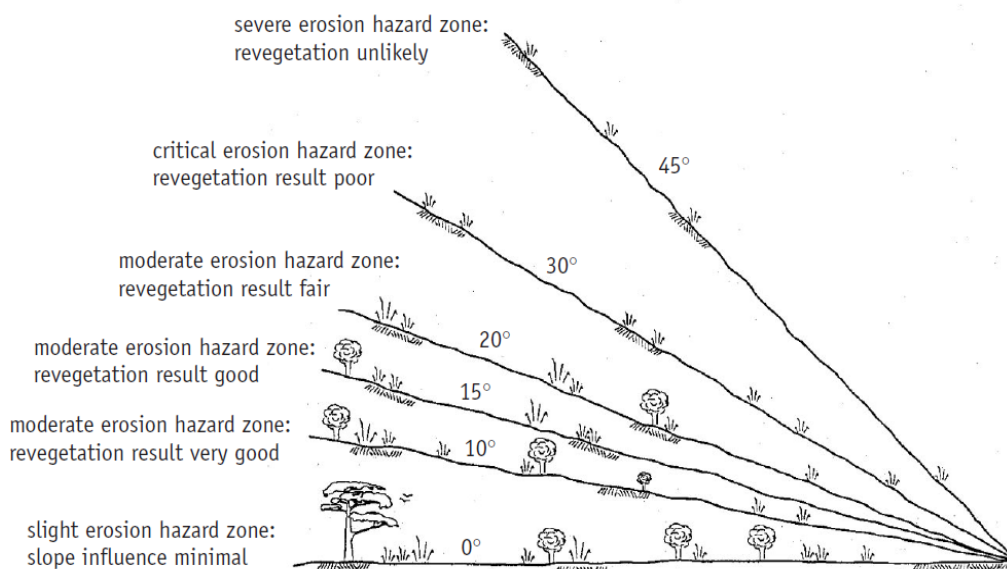
### **Principle 2:**

Topsoil resources in areas subject to mining or extractive land uses shall prior to the commencement of any activities be characterised and mapped in order to determine the quantity of soil, soil texture and depth and the composition of vegetation.

### **Principle 3:**

The District Municipality is subject to brief and severe thunderstorms which causes flash flooding; erosion control shall therefore be applied at all mining activity sites by using appropriate soil stabilisation techniques. These techniques could either be by way of mechanical means to stabilise wind-blown soil or the establishment of permanent plant cover.



**Figure 7: Influence of Angle Slope on Re-vegetation and Erosion****Principle 4:**

Restoration and rehabilitation of landscapes affected by mining and extractive land uses should be agreed to with the District Municipality and affected Local Municipality as part of an application for land use change and prior to the land use and other rights granted in terms of national or provincial legislation being taken up.

**Principles 5:**

Water use should be minimised and water conservation maximised by harvesting rainfall, reinstating the surface hydrological system on completion of the project or increasing the potential for groundwater recharge through the creation vegetated areas and wetlands. A waste management plan drafted in terms of an environmental management plan should also address waste minimisation and the impact of waste on water resources (including minimisation, containment, modification and removal of waste from water resources)

**Principle 6:**

Survey and mapping of plant species shall be undertaken before mining activities are undertaken. The seeds of local plant species and topsoil shall be conserved for rehabilitation and ecosystem restoration.

**Principle 7:**

Surveys of wildlife in affected mining areas shall be undertaken prior to any mining activities being undertaken. If endemic or threatened species are identified, special protection measures must be considered.

**Principle 8:**

Mining companies and developers shall provide adequate protection or support to any affected settlement within the District in respect of relocations, dust pollution, contaminated ground water, noise pollution and any other detrimental impacts as determined by authorities in consultation with affected communities and the Local Municipality and District Municipality. Mining companies and developers shall provide the necessary support through development levies and contributions to improve infrastructure affected by mining operations. These include roads, water, energy, housing and other public services.

**Principle 9:**

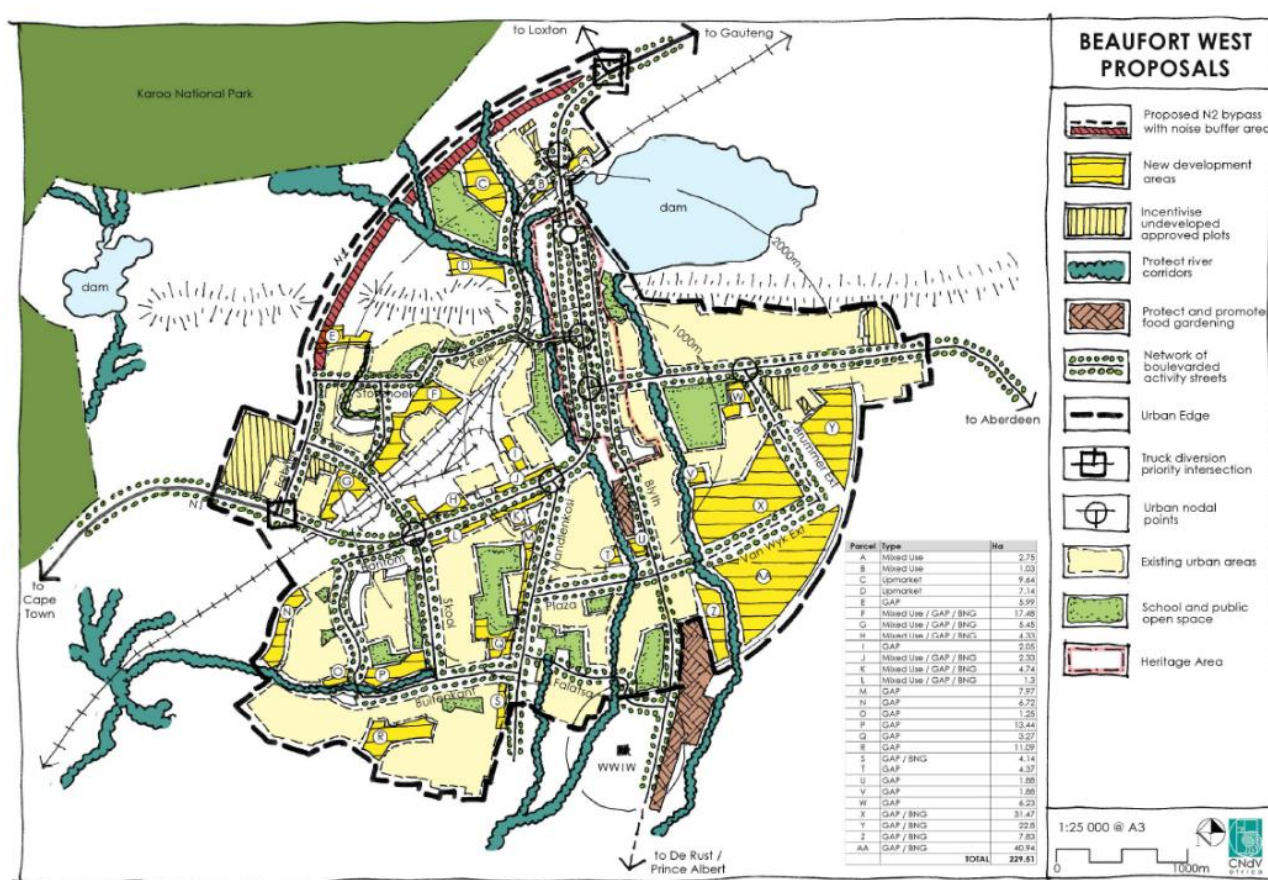
Mining companies and developers shall consult with local communities, Local Municipalities, District Municipality, Provincial and National Government to build local capacity for economic development in industries supplying the mining industry.

**6.7 Linkages with Local Municipalities**

The Local Municipalities of Central Karoo District Municipality have recently commenced a process of SDF formulation. Key spatial proposals of District significance is summarised below.

**6.7.1 Beaufort West Municipality**

The Beaufort West Municipality SDF supports the protection of river corridors in urban areas/towns, provides for a network of integrating boulevards connecting neighbourhoods and economic areas of towns, and the promotion of food gardening or urban agriculture in suitable locations for all areas; the town of Beaufort West, Murraysburg, Nelspoort and Merweville.



The town of Beaufort West is earmarked to provide more than 230 hectares of land for new development. Urban restructuring tools such as an urban edge and integration are adequately applied. Furthermore, the key focus of the town is the proposed N1 bypass which is to primarily divert freight traffic movement from the historic Central Business

District of the town. Heritage areas are also identified for the Central Business Districts of Beaufort West, Murraysburg and Nelspoort.

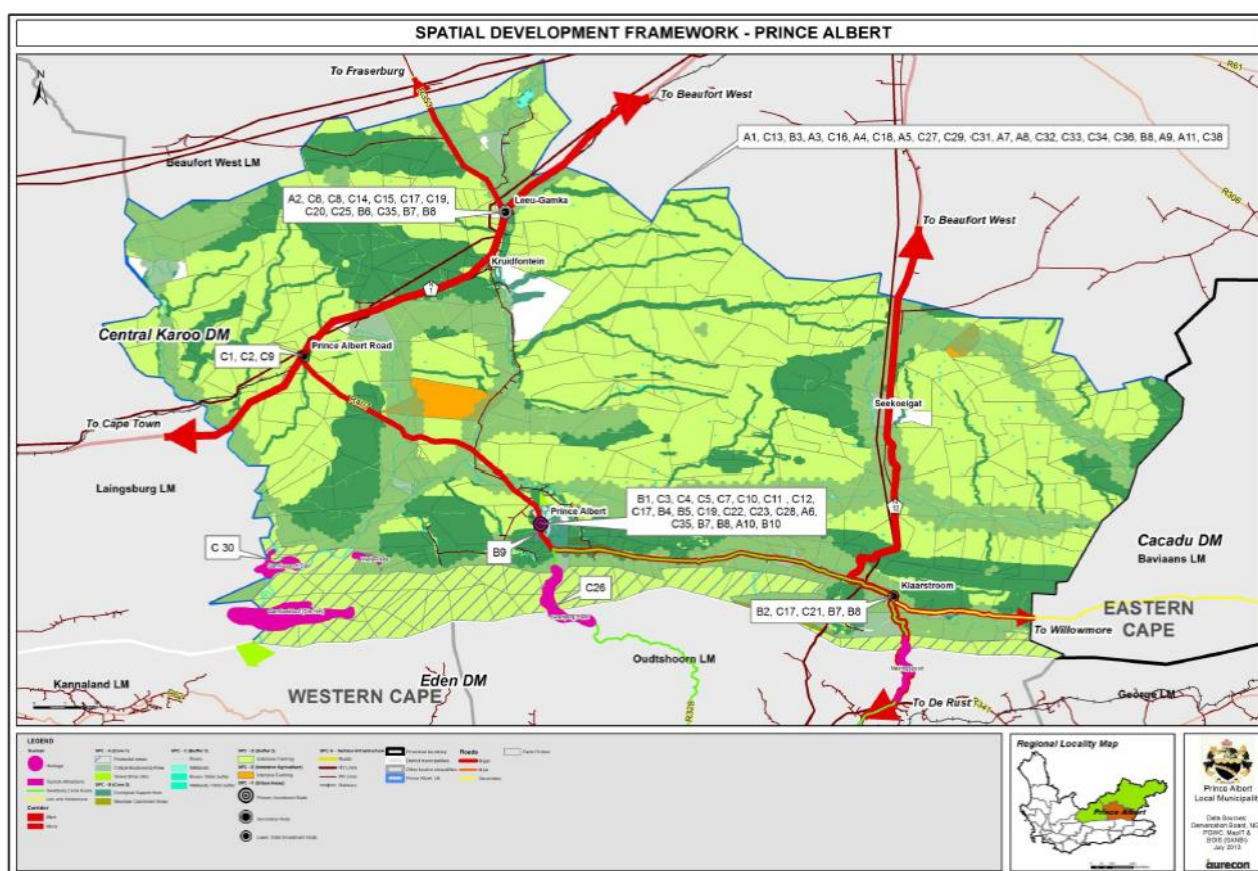
The SDF proposals support the spatial development objectives of the Central Karoo District Municipality in terms of protecting and preserving environmentally sensitive areas, creating efficient and integrated urban settlements and establishing effective linkages for access to and mobility between areas.

#### 6.7.2 Prince Albert Municipality

The Prince Albert Municipality Spatial Development Framework re-emphasise the historic value and significance of the Prince Albert historic town centre. The upgrade of this area is therefore suggested with due consideration of historic and cultural aspects and the special needs of inhabitants particularly the disabled.

The following are key proposals contained in the SDF:

- The N1 and N12 are recognised as significant corridors in the Prince Albert municipal area;
- The town of Prince Albert is the primary investment and tourism node of the municipal area;
- Utilises spatial planning tools such as urban edges, infill development, densification and integration to affect spatial restructuring;
- The upgrading of waste water treatment works at Prince Albert Road;
- The development of a Storm-water Management Plan for the municipal area;
- Waste disposal site upgrades and improvements at Prince Albert and Leeu-Gamka.

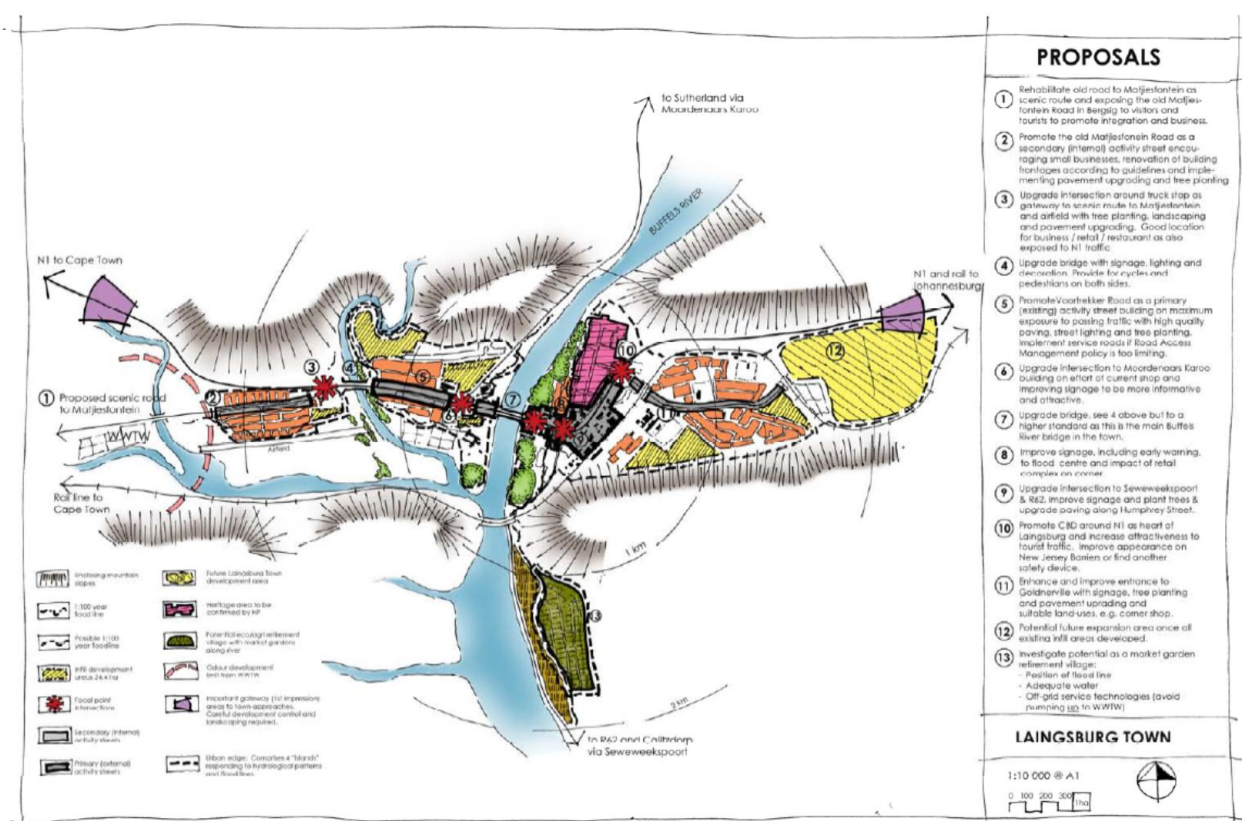




### 6.7.3 Laingsburg Municipality

The Laingsburg Spatial Development Framework focuses on leveraging the benefits of the N1 highway through the town. In terms of urban development, proposals aim to strengthen and improve existing areas by encouraging infill development to expand urban density and reduce sprawl.

The SDF proposes the upgrade of the Laingsburg Central Business District with landscaping, intersection improvements and signage. A retirement village is proposed at Matjiesfontein as well as a possible market gardening scheme on 17 hectares of land. A scenic route between Matjiesfontein and Laingsburg is proposed.



## 7. Implementation Framework

### Chapter 7

This section provides a framework for the implementation of SDF and is informed by the preceding Spatial Development Framework Plan in Chapter 6. A list of projects is provided and, importantly, includes an exercise of prioritisation.

#### 7.1 Spatial Development Framework Project List

The Spatial Development Framework strategies and proposals provide the framework for project formulation and gives effect to the practical implementation of SDF in order to realise the vision of the document. The projects or programmes have its roots in the spatial development objectives as described in the table below.

Proposal No	Spatial Development Objective	Programme/Project	Cost Estimate (R'000)	Implementation Agent
PROP 1	Establishment of functioning land use management system	Integrated Land Use Management System	1 400	Local Municipalities
PROP 2	Protect and preserve biodiversity & conservation areas	Karoo Veld Management Programme	750	Central Karoo District
PROP 3	Protect and preserve biodiversity & conservation areas	Audit & Registration of Key District Historic Sites	500	Central Karoo District
PROP 4	Protect and preserve biodiversity & conservation areas	Prince Albert and Laingsburg CBD Upgrade	1 400	Central Karoo District
PROP 5	Establishment of functioning land use management system	Guidelines for Private Game Reserve Development	900	Central Karoo District
PROP 6	Protect and preserve biodiversity & conservation areas	District Water Demand Management Strategy	1 500	Central Karoo District
PROP 7	Strategic land, infrastructure and economic development	Beaufort West Regional Truck and Freight Centre	900	Central Karoo District
PROP 8	Strategic land, infrastructure and economic development	District Commonage Land Management Plan	600	Central Karoo District
PROP 9	Strategic land, infrastructure and economic development	Regional Landfill Site Study	1 000	Central Karoo District
PROP 10	Strategic land, infrastructure and economic development	Investigation into New Aquifers	60	Central Karoo District
PROP 11	Strategic land, infrastructure and economic development	Investigation on Murraysburg Waste Water Plant	500	Beaufort West Mun
PROP 12	Establishment of functioning land use management system	Laingsburg: Update policies, plans and by-laws	300	Laingsburg Mun

Proposal No	Spatial Development Objective	Programme/Project	Cost Estimate (R'000)	Implementation Agent
PROP 13	Establishment of functioning land use management system	Annual Review of Spatial Development Framework	200	Central Karoo District

PROPOSAL 1			
<b>Spatial Development Objective</b>	To support the establishment of appropriate and functioning land use management systems		
<b>Spatial Development Strategy</b>	Establish integrated human settlement planning in order to reduce spatial inefficiencies in urban areas		
<b>PROJECT NAME</b>	<b>Description</b>	<b>Cost Estimate (R'000)</b>	<b>Implementation Agent</b>
<i>Implementation of Integrated Land Use Management System</i>	The development and planning of an integrated LUMS, comprising SDF's, land use schemes and building control across all Local Municipalities based on an electronic and automated geo-spatial land information management system. The project entails a scoping and stakeholder engagement (Local Municipalities) exercise to determine system requirements and components, human resource capacity issues and service level agreements between / amongst municipalities.	1 400	Central Karoo District Municipality/ Beaufort West Municipality/ Prince Albert Municipality/ Laingsburg Municipality

PROPOSAL 2			
<b>Spatial Development Objective</b>	To protect and preserve biodiversity and conservation areas		
<b>Spatial Development Strategy</b>	Achieve synergy with veld management programmes that will improve both biodiversity conservation and stock carrying capacity		
<b>PROJECT NAME</b>	<b>Description</b>	<b>Cost Estimate (R'000)</b>	<b>Implementation Agent</b>
<i>Karoo Veld Management Programme</i>	Study and planning exercise on suitable Karoo veld management practices for various locations across the Central Karoo District Municipality area, comprising key tasks and an implementation plan.	750	Central Karoo District Municipality/ CapeNature

PROPOSAL 3			
<b>Spatial Development Objective</b>	Protect and preserve biodiversity and conservation areas;		
<b>Spatial Development Strategy</b>			
<b>PROJECT NAME</b>	<b>Description</b>	<b>Cost Estimate (R'000)</b>	<b>Implementation Agent</b>
<i>Central Karoo Audit of Historic Sites</i>	Audit of possible heritage sites, buildings and locations across the District and the registration of key sites	500	Central Karoo District Municipality

PROPOSAL 4			
<b>Spatial Development Objective</b>	Protect and preserve biodiversity and conservation areas; To establish a system of functionally defined development nodes (settlements) to guide priority public and private investment;		
<b>Spatial Development Strategy</b>	Reinforce development potential and urban efficiencies of towns with economic growth potential		
<b>PROJECT NAME</b>	<b>Description</b>	<b>Cost Estimate (R'000)</b>	<b>Implementation Agent</b>
<i>Central Karoo District CBD Upgrade Project</i>	Feasibility study, formulation of a framework, business plan and planning programme for the upgrade of Prince Albert and Laingsburg CBD comprising urban design elements, landscaping, parking, storm-water management, etc.	1 400	Central Karoo District Municipality

PROPOSAL 5			
<b>Spatial Development Objective</b>	To support the establishment of appropriate and functioning land use management systems		
<b>Spatial Development Strategy</b>			
<b>PROJECT NAME</b>	<b>Description</b>	<b>Cost Estimate (R'000)</b>	<b>Implementation Agent</b>
<i>Guidelines for Private Game Reserve Development</i>	The formulation of land use guidelines to inform applications for land use change to game reserves for all areas of the Central Karoo District Municipality.	900	Central Karoo District Municipality

PROPOSAL 6			
<b>Spatial Development Objective</b>	To protect and preserve biodiversity and conservation areas		
<b>Spatial Development Strategy</b>	Provide, protect and encourage the sustainable use of scarce and quality water resources		
<b>PROJECT NAME</b>	<b>Description</b>	<b>Cost Estimate (R'000)</b>	<b>Implementation Agent</b>
<i>District Water Demand Management Strategy</i>	The development of water demand management strategy and plan which include conservation and demand management; The plan is to include clear projects, programmes and initiatives for implementation.	1 500	Central Karoo District Municipality

PROPOSAL 7			
<b>Spatial Development Objective</b>	Strategic land, infrastructure and economic development		
<b>Spatial Development Strategy</b>			
<b>PROJECT NAME</b>	<b>Description</b>	<b>Cost Estimate (R'000)</b>	<b>Implementation Agent</b>
<i>Beaufort West Regional Truck and Freight Centre</i>	Feasibility study and investigation into the establishment of a regional truck and freight centre (or hub) at Beaufort West town which can service the passing trucking and freight industry in terms of servicing, repairs, maintenance, warehousing, administration, etc. Project to include a land identification exercise	900	Central Karoo District Municipality

PROPOSAL 8			
<b>Spatial Development Objective</b>	Strategic land, infrastructure and economic development		
<b>Spatial Development Strategy</b>	Support land reform initiatives that strengthen the agricultural sector in order to enable economic and employment growth		
<b>PROJECT NAME</b>	<b>Description</b>	<b>Cost Estimate (R'000)</b>	<b>Implementation Agent</b>



PROPOSAL 8			
<i>District Commonage Land Management Plan</i>	The development of a comprehensive management plan for commonage land within Central Karoo District Municipality in order to support land reform initiatives and improve carrying capacity of land.	600	Central Karoo District Municipality

PROPOSAL 9			
<b>Spatial Development Objective</b>	Strategic land, infrastructure and economic development		
<b>Spatial Development Strategy</b>			
<b>PROJECT NAME</b>	<b>Description</b>	<b>Cost Estimate (R'000)</b>	<b>Implementation Agent</b>
<i>Central Karoo District Regional Landfill Site</i>	A study, investigation, feasibility and business plan for the establishment of a Central Karoo District regional landfill site; Project includes site identification and environmental scoping.	1 000	Central Karoo District Municipality

PROPOSAL 10			
<b>Spatial Development Objective</b>	Strategic land, infrastructure and economic development		
<b>Spatial Development Strategy</b>	Provide, protect and encourage the sustainable use of scarce and quality water resources		
<b>PROJECT NAME</b>	<b>Description</b>	<b>Cost Estimate (R'000)</b>	<b>Implementation Agent</b>
<i>Investigation into New Aquifers in Central Karoo District</i>	An investigation into the identification of new aquifers within the Central Karoo District Municipality	60	Central Karoo District Municipality

PROPOSAL 11			
<b>Spatial Development Objective</b>	Strategic land, infrastructure and economic development		
<b>Spatial Development Strategy</b>	Continue and accelerate improvements in facility management and infrastructure maintenance		

PROPOSAL 11			
PROJECT NAME	Description	Cost Estimate (R'000)	Implementation Agent
<i>Upgrade of Murraysburg Waste Water Treatment Plant</i>	Undertake an investigation into the major upgrade and expansion of Murraysburg Waste Water Treatment Works	500	Central Karoo District Municipality

PROPOSAL 12			
<b>Spatial Development Objective</b>	Establishment of a functioning land use management system		
<b>Spatial Development Strategy</b>	Establish integrated human settlement planning in order to reduce spatial inefficiencies in urban areas		
PROJECT NAME	Description	Cost Estimate (R'000)	Implementation Agent
<i>Laingsburg: Update policies, plans and by-laws</i>	Update and/or review of municipal policies, plans and by-laws across sector departments in Laingsburg Municipality	300	Central Karoo District Municipality/ Laingsburg Municipality

PROPOSAL 13			
<b>Spatial Development Objective</b>	Establishment of a functioning land use management system		
<b>Spatial Development Strategy</b>	Establish integrated human settlement planning in order to reduce spatial inefficiencies in urban areas		
PROJECT NAME	Description	Cost Estimate (R'000)	Implementation Agent
<i>Annual Review of the Central Karoo District Municipality Spatial Development Framework</i>	Undertake a review of the Central Karoo Spatial Development Framework in line with policy and legislative amendments and changes as well as considering new statistical data and municipal and state initiatives, if deemed necessary.	200	Central Karoo District Municipality

## 7.2 IDP Capital Investment Framework

No	Programme/Project	Implementation Agent	Cost Estimate (R'000)	2013/14	2014/15	2015/16	2016/17
PROP 1	Klaarstroom Community Brickmaking Project	Prince Albert Municipality	100	100	-	-	-
PROP 2	Prince Albert Community Swimming Pool	Prince Albert Municipality	4 000	2 500	1 500	-	-
PROP 3	Upgrading & Development of Sidewalks: Prince Albert	Prince Albert Municipality	5 000	2 500	1 500	1 000	-
PROP 4	Laingsburg: Provision of VIP Toilets & Solar Panels	Laingsburg Municipality	210	70	70	70	-
PROP 5	Nelspoort: New Bulk Water Supply	Beaufort West Municipality	1 200	1 130	-	-	-
PROP 6	New Refuse Transfer Station	Beaufort West Municipality	500	500	-	-	-
PROP 7	Laingsburg: Greening Project - Building Town Pride	Laingsburg Municipality	330	310	-	-	-
PROP 8	Central Karoo Integrated Public Transport System	Central Karoo District Municipality	26 000	-	-	-	-
PROP 9	Non-Motorised Transport Infrastructure	Central Karoo District Municipality	-	-	-	-	-
PROP 10	Upgrade Gravel Roads: Beaufort West	Beaufort West Municipality	2 500	2 463	-	-	-
PROP 11	Upgrade Gravel Roads: Murraysburg	Beaufort West Municipality	4 000	3 972	-	-	-
PROP 12	Rehabilitate Gravel Roads: Beaufort West	Beaufort West Municipality	9 000	-	9 000	-	-
PROP 13	Rehabilitate Gravel Roads: Rustdene, Kwa-Mandlenkosi, Hillside	Beaufort West Municipality	2 900	2 836	-	-	-
PROP 14	Upgrade of Recreational Facilities: Prince Albert	Prince Albert Municipality	2 900	2 900	400	400	-
PROP 15	Nelspoort: Upgrade Waste Water Treatment Plant	Beaufort West Municipality	2 000	2 000	-	-	-
PROP 16	External Stormwater: Buitenkant St - Beaufort West	Beaufort West Municipality	5 200	5 131	-	-	-
PROP 17	New Stormwater Retention - Hillside	Beaufort West Municipality	450	451	-	-	-
PROP 18	New High Mast Lighting: Beaufort West, Merweville, Nelspoort	Beaufort West Municipality	700	-	-	-	-

### 7.3 Project Prioritisation

The projects and programmes identified needs to be prioritised in terms of each project's importance to the Central Karoo District Municipality and how each project relates to its vision and objectives. The prioritisation of projects is done through the utilisation of specific prioritisation criteria. The identified prioritisation criteria will form the basis of a prioritisation model and ultimately assist in the identification of anchor projects for the implementation of the Central Karoo District Municipality Spatial Development Framework.

The number of criteria has been specifically selected for the highest level of convenience and simplicity. The following prioritisation criteria have been identified for the Central Karoo District Municipality Spatial Development Framework proposals:

- (i) The strategic importance of the project;
- (ii) The public desirability of the proposal;
- (iii) The environmental impact of the project;
- (iv) The broader socio- economic impact and benefits of the project;
- (v) The feasibility of the proposal.

#### 7.3.1 Strategic Importance

The strategic importance of a project refers to the degree of compliance with or adherence to municipal and government policies, directives and objectives. Furthermore, this criterion identifies projects that are multi-sectoral and indispensable to other municipal and government facilities and services. Projects with a high degree of adherence to municipal and government policies and objectives and are multi-sectoral shall score highest in terms of priority.

#### 7.3.2 Public Desirability

This criterion measures the responses, perceptions and opinions of different stakeholder groups to a specific proposal. It looks into the political support within the administration and whether there has been a negative or positive response from resident groups, non-governmental organisations, or the public at large.

#### 7.3.3 Environmental Impact

The direct and indirect environmental impacts of a project are identified as part of this criterion. These impacts may be locally or at a regional level within the urban and natural environments. Higher scores should be given to projects that make an improvement to living standards, conservation and protection.

#### 7.3.4 Socio-economic Impact

This criterion refers to projects that improve societal and economic qualities for citizens; it emphasises projects that improve overall quality of life. Projects with a pro-poor focus are given a higher ranking as well as those which create significant local employment and contribute to local or regional economic growth and development.

#### 7.3.5 Feasibility

Feasibility of projects measures the likelihood for the implementation of projects measured in terms of cost, funding and resource capacity. The capital and/or operating costs of a project must be carefully considered against funding capabilities of the Municipality as well as its resource capacity to affect implementation. A reasonable balance between these factors will ensure the most favourable ranking in terms of prioritisation.

#### 7.3.6 Project Prioritisation Model

The prioritisation model should be populated by the above criteria elements to which each will be assigned a weighting which adds to a factor of 1.0. Each project is assessed in terms of the scale table of low, medium, and high level importance and given a score. The scores per criteria are tabulated and the sum of scores of all criteria per project is summed up.

The weighting for each criterion, and ultimately the project prioritisation process, is to be determined through and informed by the Central Karoo District Municipality IDP consultation process with the involvement of Councillors, Council structures, non-governmental organisations, and other interest groups.

See table on reverse for example of the project prioritisation matrix.

		Criteria	Strategic Importance	Public Desirability	Environmental Impact	Socio-Economic Impact	Feasibility	TOTAL
	R('000)	Weight	0.20	0.15	0.15	0.25	0.25	1.0
Integrated Land Use Management System	1 400	Central Karoo District						
Karoo Veld Management Programme	750	Central Karoo District						
Audit & Registration of Key District Historic Sites	500	Central Karoo District						
Prince Albert and Laingsburg CBD upgrade	1 400	Central Karoo District						
Guidelines for Private Game Reserve Development	900	Central Karoo District						
District Water Demand Management Strategy	1 500	Central Karoo District						
Beaufort West Regional Truck and Freight Centre	900	Central Karoo District						
District Commonage Land Management Plan	600	Central Karoo District						
Regional Landfill Site: Beaufort West	1 000	Central Karoo District						
Investigation into New Aquifers	60	Central Karoo District						
Investigation: Murraysburg Waste Water Plant	500	Beaufort West Municipality						
Laingsburg: Update policies, plans and by-laws	300	Laingsburg Municipality						
Annual Review of Spatial Development Framework	200	Central Karoo District						
Scale			1-4 Low level Importance		5-7 Medium-level Importance		8-10 High level Importance	

# LEGEND

## Spatial Planning Categories

- Core 1a
- Core 1b
- Core 2a
- Core 2b

## Environmental

- Visual Impact Policy
- Ecological Corridor Buffer (1)
- Conservation of Karoo Viewsheds (2)

## Agriculture

- Extensive Agriculture with Veld Mangement (3)
- Sustainable Commonage Land Mangement (4)

## Settlements

- High Order Investment Node  
- Beaufort West
- Primary Investment Node  
- Prince Albert, Laingsburg
- Secondary Investment Node  
- Merweville, Murraysburg, Matjiesfontein, Leeu-Gamka
- Lower Order Investment Node  
- Klaarstroom, Nelspoort

## Transportation

- Railway line
- Movement Corridor
- Non-Motorised Transport Infrastructure (5)

## Infrastructure

- Regional Truck & Freight Centre (8)
- Waste Water Treatment Works Upgrade (7)
- Regional Waste Disposal Site (8)

## Heritage

- Khoi-San and Anglo Boer Heritage Sites Initiatives (District Wide) (9)

- Cemeteries (10)

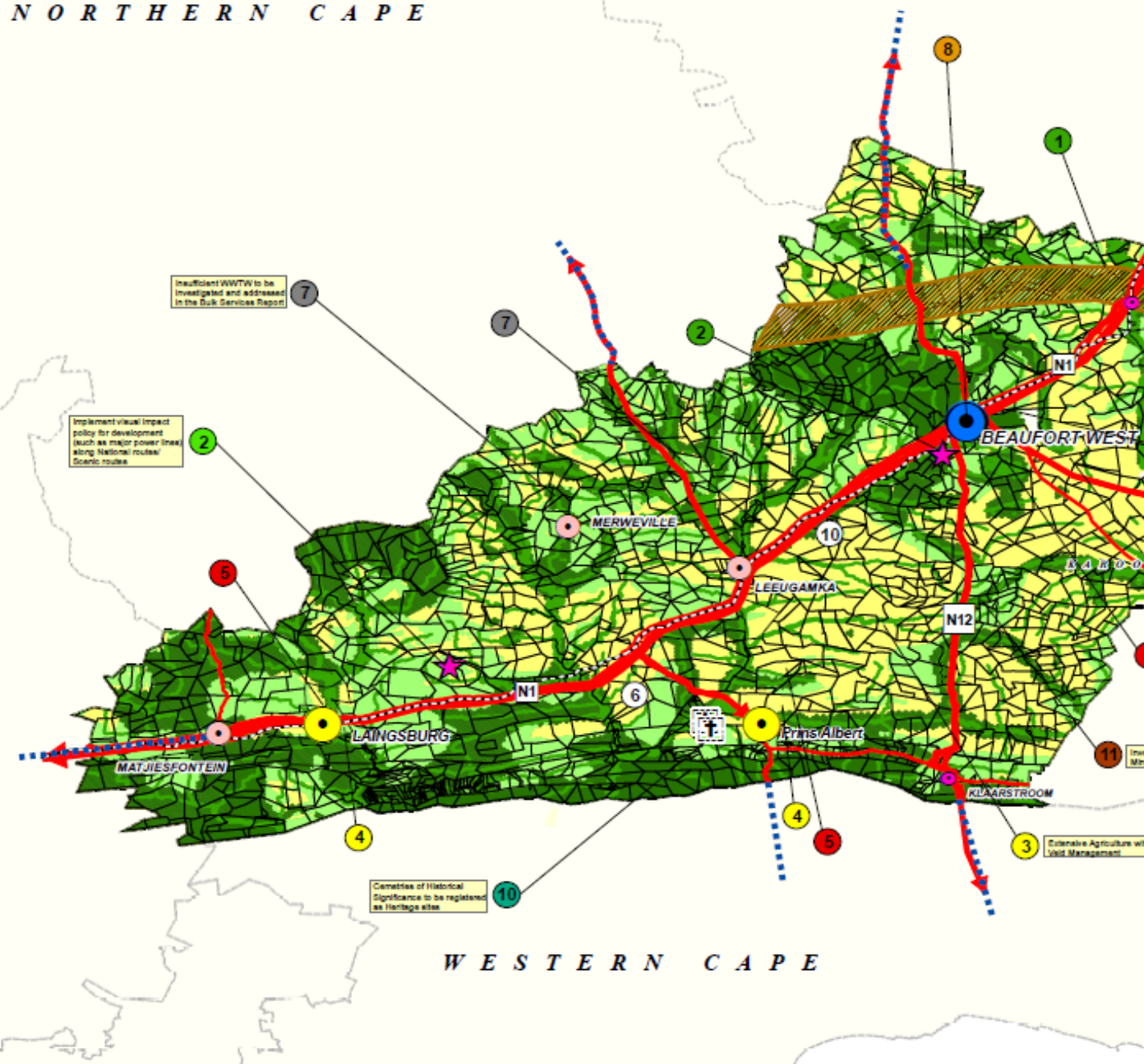
## Tourism

- Tourism Routes

## Mining

- Investigate Impact of Mines on Infrastructure (11)

N O R T H E R N C A P E



W E S T E R N C A P E

# ANNEXURE L





## **Municipal Infrastructure Support Agent (MISA)**

**Cooperative Governance & Traditional Affairs (CoGTA)  
REPUBLIC OF SOUTH AFRICA**

**Technical Support Programme, MISA**

# **MUNICIPAL TECHNICAL SUPPORT PLAN**

## **CENTRAL KAROO DISTRICT MUNICIPALITY IN WESTERN CAPE PROVINCE**

**Plan Period: 1 March 2017 to 31 March 2018**

### **ADMINISTRATIVE DETAILS**

<b>District:</b>	Central Karoo District Municipality
<b>Province:</b>	Western Cape Province
<b>Municipal Manager:</b>	Mr Stefanus Jooste
<b>Technical Director/ Manager:</b>	Mr Kobus Theron
<b>MISA Provincial Programme Manager:</b>	Ms Nomaza Mzaidume-Nkopane
<b>Acting Head, TS, MISA:</b>	Mr Timothy Seroka

## **Municipal Technical Support Plan**

# for the Provision of MISA Technical Support to

**Municipality:** Central Karoo District Municipality

**Province:** Western Cape Province

## THE SUPPORT PLAN SUBMITTED BY:

Eduard Lotz

22 February 2017

\_\_\_\_\_  
MISA Consultant's Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Mr Stefanus Jooste

22 February 2017

\_\_\_\_\_  
Municipal Manager's Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## RECOMMENDATION AND APPROVAL

DOCUMENT	SIGN-OFF		
Municipal Technical Support Plan for the Provision of MISA Technical Support	By	SIGNATURE	DATE
	Recommended by:		22/02/2017
	_____ WC Provincial Programme Manager		
	Approved by:		
	_____ Acting Head, Technical Support Programme		_____

VERSION: **22 February, 2017**

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# **Technical Support Plan for the Provision of MISA Technical Support to**

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**Municipality: Central Karoo District Municipality**

**Province: Western Cape Province**

## **1. MUNICIPAL INFRASTRUCTURE SUPPORT AGENT (MISA)**

### **1.1. MISA Business Vision, Mission and Strategic Objectives**

As a government component under the Portfolio of Cooperative Governance and Traditional Affairs (COGTA), Municipal Infrastructure Support Agent (MISA) derives its broad mandate from the same legislation as the portfolio as a whole. Its specific mandate is, however, captured in the Government Notice on Administration and Operations of the Municipal Infrastructure Support Agent gazetted on the 5<sup>th</sup> of July 2013, in accordance with the Public Service Act, 1994.

Although MISA's operations are ring-fenced it operates as an integral part of the Department of Cooperative Governance that is legally designated as the parent department for the Agent.

As iterated in the 2014-2019 Strategic Plan, the following are MISA's vision, mission and strategy to provide technical support to municipality.

#### ***Vision:***

- ☐ Sustainable municipal infrastructure and service delivery

#### ***Mission:***

- ☐ The main objective of the Municipal Infrastructure Support Agent (MISA) is to render technical advice and support to municipalities to enable them to optimise municipal infrastructure provisioning.
- ☐ By optimising the provision of infrastructure, municipalities will be able to deliver municipal services to the right quality and standards.

#### ***Strategy:***

MISA has aligned its mandate with the government Medium Term Strategic Framework 2014-2019 (MTSF 2014-2019) Outcome 9 that seeks to **build a “Responsive, accountable, effective and efficient developmental local government system”**.

MISA is positioned to provide technical support to municipalities in the achievement of Sub-outcome 1 of the Outcome 9 that strives for **“Members of society have sustainable and reliable access to basic services”**.

COGTA Budget Vote of 2014, set out the Back to Basics (B2B) approach, which was subsequently presented at the Presidential Local Government Summit in September 2014 and widely endorsed by all local government role players and stakeholders.

The B2B programme is designed to ensure that all municipalities perform their basic responsibilities and functions without compromise. The programme is built on 5 pillars:

- ❑ Put people and their concerns first and ensure constant contact with communities through effective public participation platforms.
- ❑ Create conditions for decent living by consistently delivering municipal services to the right quality & standard. This includes planning for and delivery of infrastructure and amenities, maintenance and upkeep, including the requisite budgeting to do this & ensuring there are no failures in services and where there are, restore services with urgency.
- ❑ Be well governed and demonstrate good governance and administration, this includes cutting wastage, spending public funds prudently, hiring competent staff, and ensuring transparency and accountability.
- ❑ Ensure sound financial management and accounting, and prudently manage resources so as to sustainably deliver services and bring development to communities.
- ❑ Build and maintain sound institutional and administrative capabilities, administered and managed by dedicated and skilled personnel at all levels.

The methodology to operationalise the B2B approach is based on a more integrated and hands-on approach to DCoG that reasserts the unitary nature of the South Africa state. More broadly DCoG aims to mobilise a coalition of stakeholders around the B2B approach that unlocks the creative energies across all spheres of government and sectors of society, incl. the private sector.

MISA, as an Agent to DCoG has been mandated to provide technical support to municipalities in realizing the Pillar 2 and to a reasonable extent to Pillar 5 target in cooperation with relevant stakeholders. In delivering its mandate, MISA has specifically defined 7 key areas of providing support to the municipalities clustered in 3 sub-programmes, viz., Infrastructure assessment and analysis, Technical support and Infrastructure coordination. These sub-programmes fall under **MISA Programme 2: Technical Support**. The key support areas in brief are given hereunder.

1. Municipalities assisted with infrastructure assessment (Ref: MISA KPI 2.1.1, APP 2016-2017);
2. Annual Technical Support Plans for municipalities developed (Ref: MISA KPI 2.2.1, APP 2016-2017);
3. Municipalities assisted in development or reviewing of their infrastructure master plans (Ref: MISA KPI 2.2.2, APP 2016-2017);
4. Municipalities assisted in development or reviewing of their Spatial Development Frameworks (SDF), Land Use Management Schemes and Land Audits (Ref: MISA KPI 2.2.3, APP 2016-2017);
5. Municipalities assisted in development or reviewing of their infrastructure Operation and Maintenance plans, and/or policies and/or procedures. (Ref: MISA KPI 2.2.4, APP 2016-2017);
6. Municipalities are provided with training in using MISA MIPMIS Asset Register module and/or other relevant modules (Ref: MISA KPI 2.2.5, APP 2016-2017); and
7. Regional Management Support Contracts (RMSC) awarded to assist municipalities in changing their business management (Ref: MISA KPI 2.2.6, APP 2016-2017).

All Technical Support to the municipality has been agreed through mutual discussions with MISA and is planned fully aligned with the above-described MISA Vision, mission and strategy, the B2B approach and the municipal Integrated Development Plan (IDP).

## 2. SELECTION OF MUNICIPALITY

### 2.1. Basic Criteria

In selecting a municipality for MISA Technical Support following steps and decision-making process are followed.

**Step 1:** Identify Priority 1 and Priority 2 municipalities according to DCoG Back to Basic ranking

**Step 2:** Identify Priority 1 and Priority 2 municipalities according to MIG Spending

**Step3:** Combine scores according to MISA scoring criteria

MISA Priority Score	Back to Basic Priority	MIG Spending Priority
Priority 1	Priority 1	Priority 1
Priority 2	Priority 1	Priority 2
Priority 3	Priority 2	Priority 1
Priority 4	Priority 2	Priority 2

**Decision Level 1:** Check whether the municipality is priorities by government (e.g. SONA)

Step 4: If 'YES', rank as Category 1

Step 5: If 'NO', rank as Category 2 (apply decision level 2)

**Decision Level 2:** Check whether the municipality has governance issues

Step 6: If 'YES', refer to DCoG

Step 7: If 'NO', select according to Apply MISA Priority

**Central District Municipality** has been considered by MISA for providing technical support, as the status of the municipality according to the above-mentioned criteria is identified as below:

Selection Criteria	Status							
Position according to B2B assessment	Priority level ( <i>'X' appropriate Box</i> )	1	X	2				
Average MIG expenditure (2010-2015)	Priority level ( <i>'X' appropriate Box</i> )	1	X	2				
<b>MISA Priority Level</b> ( <i>'X' appropriate Box</i> )	1	X	2		3		4	
Government Prioritized	Prioritized ( <i>'X' appropriate Box</i> )	Yes	X	No				
<b>DECISION Level 1</b> ( <i>'X' appropriate Box</i> )	Category 1 Prioritized	X		Category 2 Refer to Level 2				
<b>DECISION Level 2</b> ( <i>'X' appropriate Box</i> ) Compliance to Good Governance	Yes (Referred to DCoG)	X		No (Applied MISA Priority)				

## **2.2. Reasoning the Selection**

Central Karoo District Municipality (CKDM) is the largest District in the whole of Western Cape Province and has the lowest population which implies that CKDM has a very low income base. CKDM is experiencing increasing pressure to improve service delivery in the District and due to financial constraints there is low technical capacity to do so (especially in respect of technical response to Shale Gas Development / “Fracking”, Uranium mining, Agri Parks, etc)

It was subsequently agreed at a meeting held on 12 January 2017 between the Municipal Manager of CKDM and MISA’s WC PPM that MISA will contribute towards the appointment of a Professional Service Provider to assist CKDM with the compilation of a Revenue Enhancement Strategy.

## **3. THE MUNICIPALITY**

### **3.1. Municipal Location**

Central Karoo District Municipality is located in Western Cape Province (GPS Coordinates: 32°20'55.06"S 22°34'57.77"E).

The municipality is very accessible from Johannesburg, being located right adjacent to the N1 highway, in the main road (63 Donkin street) passing through the centre of Beaufort West town.


The municipality covers an area of 38 854 sq. km.

### **3.2. Demography**

According to the Census 2011, Central Karoo District Municipality has a total population of 71 011 with 19 076 households. The male to female population composition 95.9 males per 100 females. The growth rate of the population is 1,6% per year.

	<b>2016</b>	<b>2011</b>
<b>201 Population</b>	74 247	71 011
<b>Age Structure</b>		
Population under 15	25.4%	30.5%
Population 15 to 64	67.4%	63.3%
Population over 65	7.2%	6.2%
<b>Dependency Ratio</b>		
Per 100 (15-64)	48.3	58.0
<b>Sex Ratio</b>		
Males per 100 females	93.8	95.9
<b>Population Growth</b>		
Per annum	1.01%	n/a
<b>Labour Market</b>		
Unemployment rate (official)	n/a	23.1%
Youth unemployment rate (official) 15-34	n/a	30.9%
<b>Education (aged 20 +)</b>		
No schooling	5.8%	10.1%
Matric	29.5%	21.5%
Higher education	3.2%	7.1%
<b>Household Dynamics</b>		
Households	21 980	19 076
Average household size	3.4	3.6
Female headed households	40.8%	38.2%
Formal dwellings	97.8%	97.0%
Housing owned	68.1%	56.9%
<b>Household Services</b>		
Flush toilet connected to sewerage	93.7%	77.6%
Weekly refuse removal	90.8%	78.7%
Piped water inside dwelling	73.8%	77.2%
Electricity for lighting	95.1%	89.4%



All values: R'000	2015/16	2014/15	2013/14	2012/13
<b>AUDIT OUTCOME</b> 	n/a	Financially unqualified with findings	Financially unqualified with findings	Financially unqualified with findings
<b>FINANCIAL PERFORMANCE</b>				
Property rates	-	-	-	-
Service charges	-	-	-	-
Investment revenue	484	446	178	99
Transfers recognised - operational	28 985	26 989	21 128	47 355
Other own revenue	49 147	40 785	38 795	4 239
<b>Total Revenue (excluding capital transfers and contributions)</b>	<b>78 616</b>	<b>68 221</b>	<b>60 101</b>	<b>51 693</b>
Employee costs	10 274	26 312	7 940	7 802
Remuneration of councillors	3 179	3 074	2 978	3 214
Depreciation & asset impairment	-	849	340	613
Finance charges	-	743	704	1 036
Materials and bulk purchases	-	-	-	-
Transfers and grants	-	-	-	-
Other expenditure	64 559	35 142	45 334	39 984
<b>Total Expenditure</b>	<b>78 011</b>	<b>66 120</b>	<b>57 296</b>	<b>52 649</b>
<b>Surplus/(Deficit)</b>	<b>605</b>	<b>2 101</b>	<b>2 805</b>	<b>(956)</b>
Transfers recognised - capital	-	-	-	-
Contributions recognised - capital & contributed assets	-	-	-	-
<b>Surplus/(Deficit) after capital transfers &amp; contributions</b>	<b>605</b>	<b>2 101</b>	<b>2 805</b>	<b>(956)</b>
Share of surplus/(deficit) of associate	-	-	-	-
<b>Surplus/(Deficit) for the year</b>	<b>605</b>	<b>2 101</b>	<b>2 805</b>	<b>(956)</b>
<b>CAPITAL EXPENDITURE &amp; FUNDS SOURCES</b>				
<b>Capital expenditure</b>	<b>55</b>	<b>319</b>	<b>397</b>	<b>68</b>
Transfers recognised - capital	-	-	-	-
Public contributions & donations	-	-	-	-
Borrowing	-	-	-	-
Internally generated funds	55	319	397	68
<b>Total sources of capital funds</b>	<b>55</b>	<b>319</b>	<b>397</b>	<b>68</b>
<b>FINANCIAL POSITION</b>				
Total current assets	4 835	9 946	6 484	5 012
Total non current assets	14 409	13 785	12 461	11 432
Total current liabilities	7 861	11 101	9 989	11 363
Total non current liabilities	16 889	16 889	15 299	14 238
<b>Community wealth/Equity</b>	<b>(5 506)</b>	<b>(4 259)</b>	<b>(6 343)</b>	<b>(9 157)</b>
<b>CASH FLOWS</b>				
Net cash from (used) operating	(6 539)	3 320	2 686	2 357

<b>All values: R'000</b>	<b>2015/16</b>	<b>2014/15</b>	<b>2013/14</b>	<b>2012/13</b>
Net cash from (used) investing	(55)	(912)	91	(150)
Net cash from (used) financing	-	(51)	(52)	(56)
<b>Cash/cash equivalents at the year end</b>	<b>3 606</b>	<b>6 913</b>	<b>4 556</b>	<b>1 887</b>
<b>UNAUTHORISED, IRREGULAR, FRUITLESS &amp; WASTEFUL EXPENDITURE</b>				
Unauthorised expenditure	n/a	-	4 564	491
Irregular expenditure	n/a	434	64	2 813
Fruitless & wasteful expenditure	n/a	13	-	-
<b>SOURCE</b>	S71 Unaudited	S71 Audited	S71 Audited	S71 Audited

	<b>2015/16</b>	<b>2014/15</b>	<b>2013/14</b>	<b>2012/13</b>
<b>Employment</b>				
Employment Costs (R'000)	26 312	7 940	7 802	9 316
Remuneration of councillors (R'000)	3 074	2 978	3 214	2 820
Total Employee Positions	144	135	134	151
Total Vacant Employee Positions	13	9	8	7
Total Vacancy Percentage	9.03%	6.67%	5.97%	4.64%
Managerial Positions - S57	4	4	4	4
Vacant Managerial Positions - S57	1	1	1	0
Managerial Positions - by organogram	8	8	9	4
Vacant Managerial Positions - by organogram	0	0	0	0
Community And Social Service Positions	0	1	1	4
Vacant Community And Social Service Positions	0	0	0	1
Finance And Administration Positions	18	18	15	29
Vacant Finance And Administration Positions	1	1	0	3
Electricity Positions	0	0	0	0
Vacant Electricity Positions	0	0	0	0
Enviromental Protection Positions	2	2	4	0
Vacant Enviromental Protection Positions	0	0	0	0
Health Positions	4	4	4	5
Vacant Health Positions	1	1	0	0
Public Safety Positions	0	0	0	1
Vacant Public Safety Positions	0	0	0	0
Road Transport Positions	108	98	97	101
Vacant Road Transport Positions	10	6	7	3
Sport And Recreation Positions	0	0	0	0
Vacant Sport And Recreation Positions	0	0	0	0
Waste Management Positions	0	0	0	0
Vacant Waste Management Positions	0	0	0	0
Waste Water Management Positions	0	0	0	0

Vacant Waste Water Management Positions	0	0	0	0
Water Positions	0	0	0	3
Vacant Water Positions	0	0	0	0
Other Positions	0	0	0	0
Vacant Other Positions	0	0	0	0

	2014/15	2013/14	2012/13	2011/12
<b>Water</b>				
Blue Drop Score	n/a	n/a	n/a	n/a
Is the municipality responsible to provide?	No	No	No	No
Does the municipality have infrastructure to provide?	No	No	No	No
Does the municipality actually provide?	No	No	No	No
Is the service outsourced/commercialised?	No	No	No	No
Number of households and non-domestic customers to which provided	0	0	0	0
Number of domestic households/delivery points	0	0	0	0
Inside the yard	0	0	0	0
Less than 200m from yard	0	0	0	0
More than 200m from yard	0	0	0	0
Domestic households with access to free basic service	0	0	0	0
<b>Electricity</b>				
Is the municipality responsible to provide?	No	No	No	No
Does the municipality have infrastructure to provide?	No	No	No	No
Does the municipality actually provide?	No	No	No	No
Is the service outsourced/commercialised?	No	No	No	No
Number of households and non-domestic customers to which provided	0	0	0	0
Domestic households with access to free basic service	0	0	0	0
<b>Sewerage and Sanitation</b>				
Green Drop Score	n/a	n/a	n/a	0
Is the municipality responsible to provide?	No	No	No	No
Does the municipality have infrastructure to provide?	No	No	No	No
Does the municipality actually provide?	No	No	No	No
Is the service outsourced/commercialised?	No	No	No	No
Number of households and non-domestic customers to which provided	0	0	0	0
Number of households using				
Flush toilet - public sewerage	0	0	0	0
Flush toilet - septic tank	0	0	0	0
Ventilated pit latrine	0	0	0	0
Bucket system	0	0	0	0
Other	0	0	0	0
Domestic households with access to free basic service	0	0	0	0

Solid Waste Services				
Is the municipality responsible to provide?	No	No	No	No
Does the municipality have infrastructure to provide?	No	No	No	No
Does the municipality actually provide?	No	No	No	No
Is the service outsourced/commercialised?	No	No	No	No
Number of households and non-domestic customers to which provided	0	0	0	0
Domestic households with access to free basic service	0	0	0	0

### 3.3. Institutional Arrangements regarding services entity

The below table show the entities and responsibility regarding various services of the municipality.

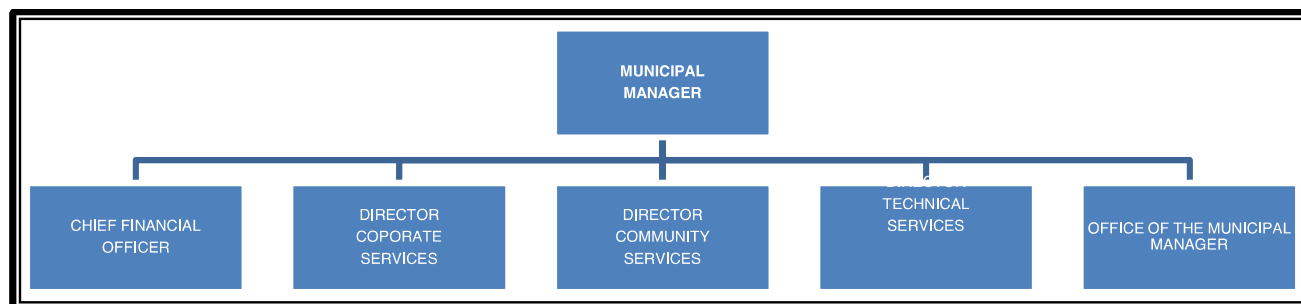
Service Element (operations, maintenance, planning or delivery / implementation)	Sector	Responsible Entity/ies	Contact Person within Unit and contact details
Development of Roads and Storm Water	Roads & Storm Water	CKDM	Kobus Marais Tel: 023 449 1000 <a href="mailto:kobus@skdm.co.za">kobus@skdm.co.za</a>
Operation and Maintenance of Roads and Storm Water	Roads & Storm Water	CKDM	Kobus Marais Tel: 023 449 1000 <a href="mailto:kobus@skdm.co.za">kobus@skdm.co.za</a>

### 3.4. Overview of Municipal Management

The Central Karoo District Municipality has an Executive Mayor (Cllr Noel Constable) who is the political champion of the Integrated Development Plan (IDP) and budget processes. The municipality has 3 standing committees, which are chaired by the Mayor & Standing Member of the Mayoral Committee (Cllr Rabie). These standing committees report to the CKDM Council that is chaired by the Speaker. The political components and their functional relations are presented here under :



The Municipal Manager and his Top Management team of four Section 57 Managers administratively lead the municipality. The Top Management is responsible for preparation and submission of agenda items to Council and ensuring implementation of the Council resolutions. All the Top Management positions are filled in. The structural arrangement of the Top Management is given here under :



The contact details of the political head and the top management are given her under.

Position Held	Name	Contract Details
Executive Mayor	Cllr Noel Constable	Tel: 023 449 1000 Cell: 0784118113 Email: <a href="mailto:mayor@skdm.co.za">mayor@skdm.co.za</a>
Municipal Manager	Mr Stefanus Jooste	Tel: 023 449 1000 Cell: 0845816362 Email: <a href="mailto:stefanus@skdm.co.za">stefanus@skdm.co.za</a>
Acting Chief Financial Officer (CFO) / Manager Corporate Services	Mr J. Jonkers	Tel: 023 449 1000 Email: <a href="mailto:jjonkers@skdm.co.za">jjonkers@skdm.co.za</a>
Manager Technical Services	Mr Kobus Theron	Tel: 023 449 1000 Email: <a href="mailto:kobus@skdm.co.za">kobus@skdm.co.za</a>

### 3.5. Municipal Services Delivery Challenges

As has been reported by municipal officials and leadership the followings are the challenges in respect of municipal services delivery.

1. Low revenue
2. Lack of Technical capacity
3. Low population densities – low critical mass

## 4. MUNICIPALITY IDENTIFIED MISA SUPPORT REQUIREMENT

### 4.1. List of Projects

The Central Karoo District Municipality has identified following projects to get support from MISA's Programme 2: Municipal and Sectoral Technical Support namely :

<b>Id</b>	<b>Project Name<sup>1</sup></b>	<b>Sector</b>	<b>Area of Support Requested</b>
1	Appointment of a Professional Service Provider (PSP) to compile a Revenue Enhancement Strategy for CKDM	Financial	Appointment of PSP & management of project
2	Relevant technical support to engagement with key stakeholders regarding exploration for shale gas / "Fracking" in Central Karoo	Planning & Engineering	Facilitate meetings, engage with key stakeholders and comments on technical reports
3	Relevant technical support to packaging of Green Energy Projects (e.g. Solar project at Beaufort West)	Planning & Engineering	Facilitate meetings, engage with key stakeholders and comments on technical reports
4	Relevant technical support to Local Contractor Development in Central Karoo	Planning & Engineering	Facilitate meetings, engage with key stakeholders and comments on technical reports
5	Relevant technical support to applicable licences to ensure compliance	Planning & Engineering	Facilitate meetings, engage with key stakeholders and comments on technical reports
6	SDF / IDP / LED strategy alignment	Planning & Engineering	Facilitate meetings, engage with key stakeholders and comments on technical reports
7	Youth Café / Youth Centre in Beaufort West	Planning & Engineering	Facilitate meetings with SUFF Academy

#### 4.2. Projects Brief per Project

PROJECT TITLE	4.2.1 Appointment of a Professional Service Provider (PSP) to compile a Revenue Enhancement Strategy for CKDM
PROJECT OVERVIEW	
Project Description	MISA to appoint of a Professional Service Provider (PSP) to compile a Revenue Enhancement Strategy for CKDM
Sector/s	Financial
Project Category	Revenue Enhancement
MISA Support Area	PSP appointment & Project Management support
Municipal Capacity Building	Revenue enhancement
Objectives	Increase CKDM’s revenue
Key Risks and Mitigation	Quality control and stakeholder input is critical – MISA’s WC PPM to ensure proper Project Management
Job Opportunities	PSP to be appointed will provide jobs for 4-6 people
Summary of Development Impact	Improved revenue will enhance the ability of CKDM to appoint more Technical Staff members and improve service delivery
PROJECT FUNDING	
Sources of Funding :	Amount :
MISA	Estimated at ±R1 500 000

PROJECT TITLE	4.2.2 Relevant technical support ito engagement with key stakeholders regarding exploration for shale gas / “Fracking” in Central Karoo District	
PROJECT OVERVIEW		
Project Description	CKDM needs technical assistance from MISA ito facilitation of engagements with key stakeholders ito exploration for Shale Gas Development in Central Karoo District and responding to key issues	
Sector/s	Planning & Engineering	
Project Category	Mining (“Fracking”)	
MISA Support Area	Planning & Engineering	
Municipal Capacity Building	Planning & Engineering	
Objectives	Ensure CKDM can effectively engage with key stakeholders to the benefit of the people and economy of the Central Karoo	
Key Risks and Mitigation	Water pollution – proper baseline & regular monitoring & testing Air pollution – proper baseline and regular monitoring & testing	
Job Opportunities	Shale Gas Development could deliver more than 2000 new jobs	
Summary of Development Impact	Exploration of Shale Gas has huge potential to bring vast investment and development to Central Karoo, but this needs to be well manage to have a sustainable impact	
PROJECT FUNDING		
Sources of Funding :		Amount :
Private		n.a.

PROJECT TITLE	4.2.3 Relevant technical support ito packaging of Green Energy Projects (e.g. Solar project at Beaufort West)	
PROJECT OVERVIEW		
Project Description	CKDM needs technical assistance from MISA ito engagements with key stakeholders ito packaging Green Energy project at Beaufort West	
Sector/s	Engineering	
Project Category	Energy	
MISA Support Area	Engineering	
Municipal Capacity Building	Engineering	
Objectives	Ensure CKDM can effectively engage with key stakeholders to the benefit of the people and economy of the Central Karoo	
Key Risks and Mitigation	CKDM needs to acquire land for this project – CKDM needs to negotiate with Beaufort West Municipality to assist in acquiring land	
Job Opportunities	Green Energy projects could deliver many new jobs but the number of jobs still needs to be quantified	
Summary of Development Impact	Green Energy project could assist in stimulating investment and help to grow the economy of the Central Karoo	
PROJECT FUNDING		
Sources of Funding :		Amount :
n.a.		n.a.

PROJECT TITLE	4.2.4 Relevant technical support ito Local Contractor Development in Central Karoo	
PROJECT OVERVIEW		
Project Description	CKDM needs technical assistance from MISA ito securing a contract with EPWP's Vuk'uphile programme for Local Contractor Development	
Sector/s	Engineering	
Project Category	Construction	
MISA Support Area	Engineering	
Municipal Capacity Building	Engineering	
Objectives	Ensure CKDM can effectively engage with EPWP's Vuk'uphile programme to develop Local Contractors in Central Karoo District	
Key Risks and Mitigation	Quality of local Contractors – mitigation is to provide proper training and business support to empower local Contractors	
Job Opportunities	Contractor development could deliver many new jobs in Central Karoo but this can only be quantified once specific projects has been identified	
Summary of Development Impact	Contractor development is critical in terms of ensuring local benefits to the local communities of Central Karoo, especially ito potential construction opportunities ito Fracking, Uranium mining, Agri Parks,etc	
PROJECT FUNDING		
Sources of Funding :		Amount :
Private		n.a.

PROJECT TITLE	4.2.5 Relevant technical support ito applicable licences to ensure compliance	
PROJECT OVERVIEW		
Project Description	CKDM needs assistance ito engagements with key stakeholders & authorities to ensure compliance ito relevant required licences	
Sector/s	Engineering	
Project Category	Licencing / Compliance	
MISA Support Area	Engineering	
Municipal Capacity Building	Engineering	
Objectives	Ensure CKDM can effectively engage with key stakeholders and relevant licensing authorities to ensure compliance	
Key Risks and Mitigation	If CKDM and its B Municipalities is not compliant there may be penalties and even jail time for the relevant Municipal Managers so pro-active engagements with stakeholders & authorities is critical	
Job Opportunities	n.a.	
Summary of Development Impact	Compliance to licencing requirements is critical ito effective and sustainable service delivery	
PROJECT FUNDING		
Sources of Funding :		Amount :
Private		n.a.



PROJECT TITLE	4.2.6 SDF / IDP / LED strategy alignment	
PROJECT OVERVIEW		
Project Description	CKDM needs technical assistance ito engagements with DEA&DP and key stakeholders regarding SDF / IDP / LED strategies to ensure proper alignment	
Sector/s	Planning	
Project Category	Planning / Alignment	
MISA Support Area	Planning	
Municipal Capacity Building	Planning	
Objectives	Ensure proper alignment of IDP / SDF / LED Strategies to promote sustainable development in the Central Karoo District	
Key Risks and Mitigation	Lack of alignment will have negative effect on local development and service delivery on the Central Karoo District	
Job Opportunities	n.a.	
Summary of Development Impact	CKDM doesn't have the technical capacity to effectively align IDP / SDF / LED strategies and although DEA&DP has offered to assist CKDM with this the Municipality still needs MISA's Technical support in terms of future engagements with DEA&DP & Key Stakeholders	
PROJECT FUNDING		
Sources of Funding :		Amount :
n.a.		n.a.

PROJECT TITLE	4.2.7 Youth Café / Youth Centre in Beaufort West	
PROJECT OVERVIEW		
Project Description	CKDM needs assistance ito facilitation of engagements between CKDM & SUFF Academy towards the development of a Youth Café / Youth Centre in Beaufort West (and later in other nodal areas also)	
Sector/s	Planning	
Project Category	Youth Development	
MISA Support Area	Planning	
Municipal Capacity Building	Planning	
Objectives	Ensure that CKDM signs an agreement with SUFF academy so that they can develop a business plan and secure resources for CKDM	
Key Risks and Mitigation	If CKDM doesn't timeously sign a MOU with SUFF Academy and secure the relevant targeted Transnet land then this project can't proceed. Municipal Manager of CKDM to give priority attention to this	
Job Opportunities	More than 1000 youth can be provided with opportunities and training through the Beaufort West Youth Café	
Summary of Development Impact	CKDM needs to secure land and sign a MOU with SUFF Academy in order to conclude Business Plan and secure resources & support for Youth Café / Youth Development Centre	
PROJECT FUNDING		
Sources of Funding :		Amount :
Department of Social Development & CKDM		R800 000

## **5. OPERATIONAL (ACTION) PLAN FOR THE IDENTIFIED PROJECTS**

A detailed operational plan for the identified MISA Technical Support is given in Appendix 1.

## **Appendix 1 – Operational Plan for MISA Technical Support**

## Appendix 2 – Guideline for Risk Management

### A. Project Risk Management.

Risk	Consequence (C)	Likelihood (L)	Score C x L	Risk rating	Risk Mitigation Action/Proposed Solution	Time scale
Lack of good compliant tender bids	2	1	2	Tolerable	Timeous advertising of the Tender in a national newspaper and good tender briefing session	Within 1 month
Insufficient co-operation / inputs from relevant key stakeholders	2	1	2	Tolerable	Active involvement of the Municipal Manager & Mayor in project to ensure stakeholder buy-in and support	Within 6 months
PSP not receiving due timeous payments	2	2	4	Tolerable	WC PPM to ensure timeous processing of due payments	Within 6 months

### B. Guidelines for Risk Rating and Risk management actions.

Assessment values		Classification of risk rating (C x L = score)		Action from risk rating	
consequence (C)	likelihood (L)	score	risk rating	Action (specify details)	time scale
Marginal - 1 (slight consequence)	unlikely - 1	1	Trivial	No further action required	-
Dangerous - 2 (serious consequences)	likely - 2 (to occur at some time)	2	Tolerable	Keep control measures under review	within 3 months
		3-4	Moderate	Fine tune control measures	within 3 months
Very dangerous - 3 (could cause termination of technical support)	very likely - 3	6	Substantial	Urgent control measures needed	within 1 month
		9	Intolerable	Stop activity until risk reduced	immediately